

WATER *is* LIFE

WATER *is* LIFE:
WOMEN'S HUMAN RIGHTS IN NATIONAL
AND LOCAL WATER GOVERNANCE IN
SOUTHERN AND EASTERN AFRICA

Edited by

Anne Hellum, Patricia Kameri-Mbote,
and Barbara van Koppen



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Starting out with different women's struggle for livelihoods in Kenya, Malawi, South Africa and Zimbabwe the research compiled in this book demonstrates the indivisibility of the right to water, health and food and the right to meaningful participation in water governance. Applying socio-legal methodology and theories of legal pluralism and power the research provides a contribution to the understanding of water governance as a gendered, plural, multi-sited and complex field. On the basis of national and local level case studies from selected rural, peri-urban and urban areas in Kenya, Malawi, South Africa and Zimbabwe, the research uncovers the complex and conflicting legal situations that the interplay between international, national and local norms and institutions governing water gives rise to in different political and economic contexts. It points to the need to intensify measures to hold states accountable, not just in provision of water for domestic and personal needs but also in protecting and promoting water to produce food for livelihood.

We have many people to thank in the production of this book. We are grateful to the Norwegian Research Council's Global Partner programme and the Norwegian Embassy in Harare for economic support to

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Part I

Introduction

Chapter 1

The Human Right to Water and Sanitation in a Legal Pluralist Landscape: Perspectives of Southern and Eastern African Women¹

Anne Hellum, Patricia Kameri-Mbote
and Barbara van Koppen

1. WATER AND SANITATION AS AN INTERSECTIONAL GENDER AND HUMAN RIGHTS ISSUE

This book approaches water and sanitation as a gender and human rights issue focusing on the situation in four southern and eastern African countries: Kenya, Malawi, South Africa and Zimbabwe. The relationship between gender, human rights and water governance is examined through the lens of national and local case studies from selected rural, peri-urban and urban areas. Applying socio-legal methodology and theories of legal pluralism, the authors, who are lawyers, political scientists, sociologists and anthropologists, seek an understanding of water governance as a gendered, plural, multi-sited and complex field. Cognizant of the apparent failure to deliver the projected human rights benefits and protections to

1 We would like to thank the authors in this book for fruitful discussions and inputs to this chapter.

vulnerable groups and women within them, the authors seek an understanding of the complex interplay among the coexisting international, national and local norms and institutions that shape women's access to water and participation in water governance.

These four southern and eastern Africa countries were selected because they represent both similarities and variations regarding colonial political and legal history, the degree of government commitment through incorporation of human rights obligations, the economic conditions, the scale of donor influence, the degree of democracy and the strength of civil society and women's organizations. The legal systems in all these countries, which are former European colonies, are made up of a mixture of inherited western law, customary laws developed by the colonial and post-colonial courts, and post-independence legislation. In recent years, these countries have also ratified most of the international and regional human rights instruments that embody the human right to water and sanitation and the right to gender equality.²

Together, these international and regional documents are gradually making their mark on national water laws and governance systems. In South Africa, the Water Service Act from 1997 operationalizes the right to sufficient water and the right to participation embedded in the 1996 Constitution. The 2010 Kenyan Constitution recognizes the right to water and reasonable sanitation and the right to gender equal participation to a larger extent than the country's Water Act from 2002. The 2013 Zimbabwean Constitution recognizes the right to water and the right to gender equal participation at all levels of governance. The right to sanitation is not directly addressed but is implicit in the right to an environment that is not harmful to health and wellbeing. In Malawi, the Water Resources Act from 2013 and the Gender Equality Act from 2013 recognize the right to drinking water and the right to gender equal participation.

In spite of the increasing legal recognition of the right to water and sanitation, States fail to live up to this obligation in practice. The human right to water and sanitation is yet to be enjoyed by large groups of people. Southern and eastern African countries are off track from meet-

² These are the International Convention on Social, Cultural and Economic Rights (IESCR), the Convention on the Rights of the Child (CRC), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (Maputo Protocol).

ing the United Nations water-related Millennium Development Goals (MDGs) with just 61% water coverage.³ Access to safe water supplies throughout Kenya is estimated at 59%.⁴ In Malawi, the proportion of households with access to 'an improved water source' is about 85%.⁵ South Africa stands out with over 85% its population having access to water of an acceptable standard, but with huge variation among the provinces in the country.⁶ Between 1990 and 2008, access to urban water supply in Zimbabwe decreased from 97% to 60%, while 75% of rural hand pumps became non-functional.⁷ In Africa alone, people spend 40 billion hours every year just walking to collect water. Women, in particular, carry two-thirds of the burden of drinking water collection, leaving less time for other socio-economic activities (UNICEF, 2012).

While the lack of water and sanitation is felt across society, African women within vulnerable ethnic and socio-economic communities are disproportionately burdened as child bearers and family providers.⁸ The lack of water and sanitation provision interacts with the division of household labour to reinforce deep gender inequalities.⁹ Thus, from a gender perspective, the human right to water and sanitation is both a right in and of itself and a condition for the realization of other rights, most im-

3 <http://www.un.org/waterforlifedecade/africa.shtml>, last visited 15 December 2013.

4 See Joint Monitoring Programme for Water Supply and Sanitation, WHO Report 2012.

5 See National Statistics Office. Available on <http://www.nsomalawi.mw/> [accessed on 03/08/2013].

6 Key Results from the 2011 Statistics South Africa (StatsSA).

7 Zimbabwe's National Water Policy, 2012.

8 See Report by the High Level Panel of Experts on food security and Nutrition, Committee on World Food Security (CFS), 25 May 2015; Report of the Special Rapporteur on Adequate Housing, Raquel Rolnik, A/HRC/19/53, 26 December 2011; Report of the Independent expert, Magdalena Sepúlveda Carmona, on the Question of Human Rights and Extreme Poverty, UN Doc. A/64/279, 11 August 2009; Report submitted by the Special Rapporteur on the Right to Food, Olivier De Schutter, 'Women's rights and the right to food,' UN Doc. A/HRC/22/50, 24 December 2012; Report of Catarina de Albuquerque, UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, 'Integrating non-discrimination and equality into the post-2015 development agenda for water, sanitation and hygiene,' UN Doc. A/67/270, 8 August 2012; Report of the Working Group on the issue of discrimination against women in law and practice presented to the 26th session of the Human Rights Council, see A/HRC/26/39, 1 April 2014.

9 UNDP, 2006, pp. 47-8.

portantly the right to food, the right to health, the right to life, the right to a healthy environment, the right to education, the right to participation, and the right to gender equality. The indivisibility of socio-economic rights is especially important for poor African women's right to sufficient water for domestic and livelihood uses. Water-dependent gardening, cropping, livestock-raising, brick-making, crafts, and small-scale enterprises are the mainstays of their diversified livelihoods. Against this background, this book focuses on the indivisibility and interrelatedness of the right to an adequate living standard, the right to food, the right to water and sanitation, the right to participation, and the right to gender equality.

Women often experience intersecting and overlapping marginalizations on the basis of gender, race, ethnicity, political exclusion, and social economic class; thus, if one fails to look at the whole picture, it is easy to miss their experiences (Crenshaw 1989). Recognizing that women are not a homogenous group, this book addresses the way in which women's experiences of water-related disadvantage and discrimination vary between and within countries, particularly in terms of socio-economic class, race, ethnicity, age, marital status, disabilities, and sexual identity. In line with the right to substantive gender equality, embedded in different human rights instruments, attention is given to how different groups of women experience marginalization and rights violations, which is linked not only to sex and gender, but also to other aspects of their identities: so-called 'intersectional discrimination.'

The realization of the interrelated social, economic, civil, and political rights that form the right to water and sanitation requires the recognition of African women's coping strategies and experiences of marginalization and poverty. To contribute to a water rights discourse that takes African women's lived realities into account, this book combines a top-down and bottom-up perspective (Dahl, 1987; Bentzon et al., 1998; Hellum et al., 2007; Tsanga and Stewart, 2011; Fredman, 2013; Ikdahl, 2013a). The book thus contains and combines studies that focus on different levels: local, national and international. On the basis of social actors' experiences and perceptions, local-level case studies from selected rural, peri-urban and rural areas in Kenya, Malawi, South-Africa and Zimbabwe explore the plural, unsettled, and contested terrain where human rights, state law, customary law, and local norms coexist and interact (Chapters 4, 5, 6, 8, 9, 11, 12, 13, and 16). How national water laws and policies from the colonial era up to date have been shaped by a mixture of international, national, and local norms and considerations is described in the national-level

cases from the same four countries, presented in Chapters 3, 7, 10 and 14. Approaching the themes at the level of international law, Chapter 2 sets out a human rights framework that discusses some of the challenges that the plurality of coexisting, interacting, and sometimes conflicting water governance norms and institutions give rise to from the perspectives of different African women.

This introduction addresses the overall research questions and perspectives of this book, and introduces key findings from the case studies. The overall aims and perspectives are described in Section 1. The legal pluralist framework, which is used to analyze the cases studies, is presented in Section 2. It is used to address a situation in which statutory law, in spite of the State's formal status as the main duty-bearer under international law, does not provide the sole means of regulating people's access to water and sanitation and their participation in the institutions that govern water and related natural resources. Section 3 situates present laws, policies, and governance structures in the four countries in a broader historical and political context. A key question is how the right to affordable water for personal, domestic and livelihood uses is respected, protected and fulfilled in national water laws and policies. A closely related question is how community-based water norms and institutions, which constitute the lifeline for poor rural and peri-urban families and women within them, are recognized and protected in national water laws and policies. The local case studies from rural, peri-urban, and urban areas, presented in Section 4, show how different women are accessing water for multiple uses and participating in water governance on the basis of a plurality of norms and institutions ranging from community-based customary water governance systems to local government institutions, humanitarian agencies, and non-governmental organizations (NGOs). By way of conclusion Section 5 points to the need for greater integration and harmonization between international, national and local norms. The need to carefully consider how legal pluralities in some situations may be a resource that facilitates poor and marginalized women's access to water, while in other situations it may produce and reinforce intersecting gendered and classed forms of exclusion is emphasized.

2. LEGAL PLURALITIES AND MULTIPLE WATER GOVERNANCE STRUCTURES

In southern and eastern African countries, where states to a large extent are failing in their duty to provide water and sanitation services, water is often drawn from common pool water resources that are governed by

community-based norms and institutions. The community-based water governance systems anchored in local norms and values form the basis for rural and peri-urban women's multiple water uses, not only for domestic uses and sanitation, but also for growing, preparing and selling food and other products that are vital for family welfare (Van Koppen et al., 2007). It is thus imperative that these local arrangements be explored, as they provide an opportunity to bring food security and poverty prevention on board in the development of gender-equal water laws and policies. A key question in this respect is how community-based water norms and institutions, which constitute the lifeline for poor rural and peri-urban families and women within them, are recognized and protected in national water laws and policies. A related question is whether and to what extent women's right to participation is recognized in the multiplicity of coexisting water governance structures.

Taking account of the multiplicity of state and non-state actors, norms, and institutions that are in practice involved in the governance of water and sanitation, this book approaches water governance as 'the system of actors, resources, mechanisms and processes which mediate society's access to water' (Franks and Cleaver, 2007). Through this broad definition of water governance, it explores how national and local government agencies, development agencies, humanitarian organizations, non-governmental organizations, human rights and women's rights organizations, traditional leaders, local communities, families, and individual women navigate a plural legal terrain where international and national law co-exists and interacts with local norms and practices. An understanding of water governance as a plural, multi-sited and complex field is, in our view, required both in order to assess whether the state and other duty-bearers are fulfilling their obligations and in order to advise on ways forward within international, regional and national laws and policies.

The local-level rural, urban, and peri-urban case studies from Kenya, Malawi, Zimbabwe and South Africa highlight widespread local investments in water infrastructure, operation, maintenance, and conflict resolution for self-supply and water sale, largely outside the ambit of the state. Access to these resources enables African women to play a crucial role in the food security of households; women are estimated to contribute up to 80% of labour for food production (FAO, 2004). In peri-urban areas, and also to some extent in urban areas, these arrangements are the fallback options where public services are absent, broken down, or unaffordable for the poor. The community-based water governance systems anchored

in unwritten customary norms and values thus shape perceptions of water rights and water governance at local levels.

Acknowledging the significance of these local norms and institutions in water governance, this book has adopted a legal pluralist approach which takes account of the 'living customary laws' that in practice govern local communities' water access, use, and control. To come to grips with the legal pluralities that have a bearing on the way in which people access, use and share water, this book moves beyond a statist conception of law and governance, which is limited to the exercise of State authority through institutions, laws, policies, and procedures. Local case studies from rural and peri-urban areas in Zimbabwe, Malawi, Kenya, and South Africa describe women's multiple uses of community-based water sources, not only for domestic uses and sanitation but also for growing, preparing, and selling food and other products that are vital for family welfare and food security.

In Zimbabwe, for example, the Shona proverb 'water is life' is based on the idea that to deny water is to deny life (Sithole, 1999; Matondi, 2001; Derman and Hellum, 2002). This proverb forms part of a broad right to water for livelihood: for humans, animals, and nature. Research carried out in Mpemba and Nkolokoti in Malawi shows that people associate access to water with the right to life. People see themselves as free to draw water and believe that no person can take away that freedom. According to a female water user in Mpemba, 'Water is freedom. If I have water in my home, I am free to do other productive work in my house. If I don't have water, I am not free to do other things. The freedom that water gives me allows me to live my life. If there is no water, I don't have a life' (Chapter 7).

These community-based norms and practices, often referred to as 'living customary law,' have endured in spite of efforts by both colonial and independent African governments to redefine citizens' relationship to water through state laws and policies (Van Koppen et al., 2007). The case studies from Domboshawa Communal Area in Zimbabwe (Chapter 12) and Marakwet in Kenya (Chapter 6) show how the residents have, from the colonial era up to date, invested in different forms of water infrastructure and developed norms and institutions that govern their uses. How urban citizens are resorting to customary norms and practices when public provision of water and sanitation is breaking down is demonstrated by the study from Harare's high density areas (Chapter 11).

To describe and analyse the multiplicity of norms and institutions that

different women rely on to access, use, and control water, this book applies socio-legal research methods. Drawing attention to the fact that the same social space and the same activities often are subject to more than one body of law, a legal pluralist perspective has been applied (Griffiths, 1986; Griffiths, 2002; Von Benda-Beckmann, 2002; Meinzen-Dick and Nkonya, 2007; Van Koppen et al., 2007). A key question is how access to water and sanitation is realized when rights embedded in international, national and local norms and practices coexist, interact and sometimes conflict. Seeing the coexistence of human rights principles, statutory law, and formal and informal customary norms has helped the authors to explore how the same social space and the same activities are subject to more than one body of law: 'legal pluralism.' As such, the legal pluralist perspective facilitates analysis of how the right to access water and sanitation and the right to participate in water governance are realized or not realized within a scenario of coexisting, overlapping, and conflicting norms.¹⁰ In this book, legal pluralism thus refers to situations which are 'characterized by the presence in one social field of more than one legal order' (Griffiths, 1986). In line with John Griffiths, we use the term 'weak legal pluralism' to refer to situations where the State legal order recognizes a plurality of normative orders and the term 'strong legal pluralism' about situations where regulatory and normative orders other than the formal State law (statutory and customary) affect and control people's lives.

Seeing local communities, and women within them, not as passive victims but as actors in the struggles over control of water resources, the authors in this book explore the norms which are evolving through local water management practices. These dynamic and flexible norms, which vary with time and space, are termed 'living customary law.' Because very few cases concerning women's access, use, and control of water are handled by the State courts, the authors in this book explore how problems concerning distribution and sharing of water are solved at the level of the local community and most importantly in 'trouble-less cases' of everyday life. According to the legal anthropologist J.F. Holleman, 'In order to discover current and newly emerging regularities of popularly accepted conduct as evidence of the internal growth of law through changes in social relations and economic traffic, also a fair sample of what I have called the trouble-less cases of prevalent and trouble-avoiding practices should be included in the focus of attention.' Like Holleman, the authors in this book see these practices as emerging norms. We agree with Hol-

¹⁰ See ICHRP, 2009.

leman that ‘These may still be insufficiently developed and not widely enough accepted to be considered truly normative, but they deserve close attention as indicators of the direction and future that shape the internal growth of living law’ (Holleman, 1973, p. 61).

The inclusion of trouble-less cases in everyday life as a source of ‘living customary law’ is particularly valuable from a gender perspective because it indicates how women negotiate access, use, and control of water in the family and in the local community. They provide a perspective that takes into account the fact that women are not only individuals, as sometimes assumed in international human rights literature, but are also embedded in social and economic relationships that have a bearing on their ability to negotiate access to power and resources (Hellum, 1999, 2013; Ik Dahl, 2013b).

3. THE BROADER HISTORICAL, POLITICAL, AND INTERNATIONAL CONTEXT OF WATER REFORM: SETTING THE SCENE

This book is premised on the notion that any consideration of the relationship among gender, human rights and plural water laws must be understood within a broader analysis of regimes of governance, power relations, history and political context (Sieder and McNeish, 2013). Chapters 3, 7, 10, and 14 describe the processes whereby the human right to water and sanitation and the right to gender equal participation in water governance have been, or have not been, translated into national laws and policies in the four countries. The aim of the national background chapters is to situate existing water laws and policies in these four countries within the broader historical, political, and legal context that have a bearing on the realization of these social, economic, civil, and political rights. They provide the backdrop for the local case studies which show how national laws and policies have been put into practice in selected rural and urban areas in Kenya, Malawi, South Africa, and Zimbabwe. In the following subsections, we will briefly highlight variations and similarities among the four countries regarding colonial history, influence of international water policies, incorporation of human rights treaties, and political and economic conditions.

3.1 Colonial continuities

A key challenge in all the four countries, which are former European colonies, is to unmake the racialized, classed, and gendered patterns of distribution of land and water that have been carried over from the colo-

nial era. These inequalities are closely linked to the plural legal systems ('weak legal pluralism') that were put in place in the colonial era. A characteristic feature of most colonial legal systems was their dual character: imported western law applied to the European settlers, whilst the customary law of the different ethnic groups applied to the black population. Colonial law implied a formal shift away from family- and tribe-based adjudication towards the jurisdiction of State-administered customary courts. Through the establishment of native administration and separate customary law courts for natives, European judicial officers became the main interpreters of African customary laws. The customary laws that were developed by the colonial legal institutions and carried over after independence have been termed 'State-court customary law' (Woodman, 1988). This is in contradistinction to the 'living customary law' of the African communities that developed largely outside of the colonial legal framework (Bentzon et al., 1998).

Colonial water laws, which have largely been continued by the independent states, emphasized the use of water for commercial agriculture and provision of water services to the settler population and largely ignored the black population's need for water for domestic and productive purposes. The unjust land distribution, in which Africans in former settler states like South Africa, Kenya, and Zimbabwe were forced out of the best land, also meant that they lost access to wetlands, lakes, and rivers.¹¹ This alienation was reinforced through colonial land and water law regimes, stemming from Roman-Dutch law or British common law, which enabled the new white land owners in South Africa, Zimbabwe, and Kenya to obtain land and water rights. The black population in these countries was by various means pushed into the water-scarce and less fertile areas, while colonial land and water laws barred them from owning land or applying for water rights. In South Africa, the Land Acts of 1913 and 1936 and forced removals dispossessed Africans of their water rights. The Irrigation and Water Conservation Act of 1912, based on the riparian principle, implied that the loss of their land also stripped the Africans of their water rights. In Malawi, white missionaries and traders first acquired tracts of land from African chiefs (Silungwe, 2010). These land acquisitions were formalized under land concession treaties. The declaration of British colonial sovereignty over Nyasaland (as it was then called) served as an official ratification of the land transactions by the

11 The extent of dislocation differed from country to country, with South Africa recording perhaps the greatest extent.

missionaries and traders. The colonial State put in place a legal and policy framework that legitimized land alienation in favour of white economic enterprise and sought to develop a 'capitalist' economy based on large estate agriculture. In a system known locally as 'thangat,' the black population was often conscripted to work on these estates. The goals of the colonial scheme were to entrench colonial capitalism and to modernize black Malawians through commercial farming. While there has been detailed discussion of land alienation and the court cases over time, little of it has focused on the implications for Malawians' access to water.¹²

In settler colonies like Kenya, South Africa, and Zimbabwe, the residents in the areas that were assigned for black subsistence agriculture were utilizing existing water resources like rivers, dambos,¹³ and wetlands, without asking permission from colonial authorities. In some countries, for example in Rhodesia, legislation required the colonial authorities to respect the primary-use rights of Tribal Trust Land inhabitants. In southern and eastern African countries, small scale rural farmers have, from the colonial era up to date, invested in different forms of water infrastructure and developed norms and institutions that govern their uses (Sithole, 1999; Juuti et al., 2007; Derman et.al., 2007; Ferguson and Mulwafu, 2007). Unlike in other areas of customary law, there has been no recording or formal recognition of the customary norms that guided the rural black population's water access, use, and control. This socio-legal development is reflected in a situation of 'strong legal pluralism' where national water laws interact and coexist with the living customary law that is developed through community-based water management. The various ways in which these living customary norms and institutions have persisted and evolved in rural, semi-urban, and also urban areas in post-colonial Kenya, Zimbabwe, Malawi, and South Africa are described in the local case studies presented in Chapters 6, 7, 11, 12, and 16 in this book.

3.2 The first wave of post-colonial water reform: The Dublin Principles and IWRM

When these countries became independent democratic countries, the

12 Between 1887 and 1891, an estimated 405,000 hectares of arable land had been alienated under these transactions in southern Malawi. This represents about 4.2 per cent of the total land (arable and non-arable) across the country (Silungwe, 2010, pp. 97-98). Land alienation continued throughout Malawian history.

13 *Dambo* is a word used for a class of complex shallow wetlands in central, southern, and eastern Africa, particularly in Zambia and Zimbabwe.

new African governments were faced with deep class, race, and gender inequalities. In Zimbabwe and South Africa, more than 85% of the land and its related water was owned by the white minority, while the majority of the population living in homelands or communal areas had no formal water rights.

Democratization, integration, decentralization, and sustainable water management were key concerns in the international water policies that swept through Zimbabwe, Malawi, Kenya, and South Africa, like in the rest of the world, in the 1990s. These reforms were partly informed by a quest to do away with the racially and socially skewed distribution of water that was carried over from the colonial era, but partly also by the global focus on the perceived strengths of the Integrated Water Resources Management policy (IWRM). IWRM was based on the Dublin Principles, which attempted to balance the prevailing neo-liberal economic discourse, voiced by actors such as the International Monetary Fund (IMF) and the World Bank, with the growing movement for human rights, participatory natural resource management, and sustainable development.¹⁴ Principle No. 4 of the Dublin Principles states that ‘water has an economic value in all its competing uses, and should be recognized as an economic good,’ but, to strike a balance, it continues, ‘within this principle, it is vital to recognize the basic right of all human beings to have access to clean water and sanitation at an affordable price.’¹⁵

When translated into national water laws and policies, these human rights dimensions were accorded little, if any, weight in practice, as shown by the national case studies from Kenya, Malawi and Zimbabwe.¹⁶ Instead, the Dublin Principles heralded a global policy shift that led many southern and eastern African governments to replace supply management systems with demand-based systems. Furthermore, global actors such as the World Bank, the UN Food and Agricultural Organization (FAO)

14 For gender analysis of the adoption of IWRM in African context, see Derman and Prabhakaran (2015).

15 The Dublin Statement on Water and Sustainable Development 1992. It was adopted at the International Conference on Water and the Environment (ICWE) in Dublin, Ireland, 26–31 January 1992, which was attended by 500 participants, including government-designated experts. The Dublin Statement on Water and Sustainable Development was commended to the world leaders assembled at the UNCED Conference in Rio de Janeiro in June 1992. See *Report of the United Nations Conference on Environment and Development* (UNCED) (Rio de Janeiro, 3–14 June 1992. UN Doc A/CONF 151/26).

16 South Africa was different, due to the recognition of social and economic rights, including the right to water, in the 1996 Constitution.

and the Global Water Partnership (GWP) promoted permit systems as a component of the broader reform package of IWRM (Van Koppen, 2015). It was, according to Van Koppen (2015), expected that water permit systems would ensure ‘more efficient and better allocation of water resources,’ and thus the ‘most beneficial use of available water resources, satisfying the public interest in the best way.’¹⁷ The aim of the IWRM permit model was, according to Van Koppen, to ensure that water was allocated for the highest economic returns to cities, industry, and commercial agriculture. Water for livelihood was given minimal attention.

These recommendations were followed throughout Sub-Saharan Africa, and laws and policies prescribing that all earlier water uses under different systems must be ‘regularized’ or ‘converted’ into the updated permit system were put in place.¹⁸

The Kenyan Water Act from 2002 made it an offence to construct or employ – without a permit – any works for a purpose for which a permit is required. Furthermore, it excludes large segments of the population from water rights by establishing that only land owners can acquire permits.¹⁹ The Malawian Water Resources Act of 2013 provides that a person who has lawful access may extract water without obtaining a license from the water authorities. The Zimbabwean Water Act of 1998 requires a water permit for commercial water use, with the exception of water for primary use. ‘Primary water’ is defined in Section 2 of the Water Act, in line with earlier legislation, as water for household needs, animals, and bricks to build houses.²⁰ According to Schedule 1 of the South African National Water Act, water for domestic use and non-commercial small gardening

17 See Global Water Partnership (GWP), Toolbox 2006, available at <http://www.gwpforum.org>; World Bank, ‘Staff Appraisal Report, Tanzania’, in *River Basin Management and Smallholder Irrigation Improvement Project*, Report No. 15122-TA (Washington: Agriculture and Environment Operations, Eastern Africa Department, 1996; H. Garduno, *Water Rights Administration: Experiences, Issues, and Guidelines*, FAO Legislative Study No. 70. (Rome: FAO, 2001).

18 The laws include National Waters Law of 1992 (Mozambique), Water Statute 1995 (Uganda), Water Resources Commission Act 1996 (Ghana), Water Resources Management Act of 2009 and 1997 and 2002 Amendments to Water Ordinance (Control and Regulation) Act No. 42 of 1974 (Tanzania), Water Act No 31/1998 (Zimbabwe), National Water Act 1998 (South Africa), Water Act 2002 (Kenya), Loi d’orientation relative a la gestion de l’eau 2001 (Burkina Faso) Water Act 2002 (Swaziland).

19 Section 8 (1) (c) and (d) and Section 27 (1) (a) of the Water Act 2002, Ibid.

20 National Water Policy, Government of Zimbabwe, August 2012, p. 17.

and watering of animals can lawfully be accessed without a license, if the use is not excessive in relation to the capacity of the water resources and the needs of other users. While the Zimbabwean and South African legislation allow the use of water for non-commercial small gardens without registration or license, these uses are not recognized by legislation as a right to water with corresponding duties, as are water rights obtained through the license system. The adoption of this water allocation model thus reinforced the historical injustices by which colonial powers had captured ownership of water resources, by leaving the black population's customary water uses without formal legal recognition.

3.3 The second wave of post-colonial water reforms: The MDGs and the human right to water and sanitation

With the Millennium Development Goals (MDGs) in 2000, water for domestic uses and sanitation for the poor moved centre stage in international and national development policies. All states committed themselves to halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. While the MDGs have been criticized for failing to fully recognize the importance of addressing inequality and for focusing on the most vulnerable groups, they were complemented by the rights-based approach to development in general and the emerging human right to water in particular (Seymour, 2013).²¹

The human right to water has itself evolved through piecemeal international law-making over time, through dynamic interpretation by UN human rights treaty bodies such as the Committee on Economic, Social and Cultural Rights (CESCR), and to a certain extent also through building on state practice. The importance of water for human rights is recognized in a wide range of international conventions, declarations and other standards, including explicit references in the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of

²¹ In order to integrate human rights into development planning, the Secretary-General of the UN called for the mainstreaming of human rights across the entire UN system in 1997. As a follow up, in 1998, the United Nations Development Programme issued a policy paper entitled 'Integrating human rights with sustainable development' (UNDP 1998), in which it views human rights and sustainable development as being inextricably linked. In a statement on poverty of 10 May 2001, the UN Committee on Economic, Social and Cultural Rights considered poverty as a multi-dimensional denial of human rights and strongly advocated a human rights approach to poverty reduction. In 2002 the OHCHR published 'the Draft Guidelines: A Human Rights Based Approach to Poverty' (OHCHR 2002).

All Forms of Discrimination Against Women (CEDAW). Although water is not explicitly mentioned in the International Covenant on Economic, Social and Cultural Rights (ICESCR), the CESCR, in its General Comment No.15 (2002), elaborated the content of the human right to water as embedded in several of the covenant's articles.²² Concluding that water is a human right, the Committee emphasizes the interdependence between human rights in general – the right to health, the right to food, the right to life and human dignity enshrined in the International Bill of Human Rights – and access to water. Recognizing that water is required for a range of different purposes that are essential for human life, the CESCR signalled four elements: water must be adequate for human life, it must be safe, available, and affordable. In principle, this focus on indivisibility thus opens the door for including all types of water use, as long as they are significant for livelihood, health, and life. In contrast, the UN General Assembly Resolution 64/292 (passed in 2010) on the Human Right to Water and Sanitation, despite its general title, focused more narrowly on drinking water and sanitation, while remaining silent on the right to water for broader livelihood needs.

At a regional level, the Southern African Development Community (SADC) water policy of 2005 went a long way toward recognizing the need to prioritize water for sanitation, domestic, and livelihood needs in order to promote food security, better health, and poverty prevention.²³ This policy is backed up by the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (the Maputo Protocol), which obliges contracting States to take all appropriate measures to 'provide women with access to clean drinking water, sources of domestic fuel, land and the means of producing nutritious food.'²⁴ In discussions at the regional level, African countries have considered the inter-relatedness of the right to water with other issues such as sanitation and human settlements, water for food security, protecting ecosystems and livelihoods, water and climate, financing water infrastructure, integrated water resources management, water allocation, water wisdom, and water governance.²⁵ The African Union heads of state at the African Union

22 CESCR (2002); CESCR (2000).

23 Southern African Development Community (SADC) Regional Water Policy, August 2005.

24 Adopted by the 2nd Ordinary Session of the Assembly of the Union, Maputo, CAB/LEG/66.6 (Sept. 13, 2000), *entered into force* Nov. 25, 2005.

25 See e.g. Pan-African Implementation and Partnership Conference on Water: 8-12 December 2003 in preparation for the CSD Meeting.

Summit on Water and Sanitation held in Sharm El-Sheikh in Egypt in 2008 committed to accelerating the achievement of water and sanitation targets set in the Millennium Development Goal (MDG). They noted that many countries were not on track to meet the MDG target of reducing by half the proportion of people with access to drinking water and sanitation by 2015.²⁶

The *Kenyan* study (Chapter 3) explores how the human right to water is adopted and resisted in a post-conflict country where land and water have been privatized and reforms that require redistribution are highly contested. Kenya is signatory to the CEDAW, the Maputo Protocol, and the ICESCR, but abstained from voting for the UN General Assembly Resolution 64/292 ‘The human right to water and sanitation.’ The Kenyan government has mainstreamed the MDGs in the country’s Vision 2030, a policy blueprint launched in 2008 that seeks to transform Kenya into a middle-income economy by the year 2030. The Constitution of Kenya promulgated in 2010 includes the rights to water and sanitation in the Bill of Rights.²⁷ By grouping the right to water together with other social and economic rights, the Constitution implies a right to affordable water for personal, domestic and livelihood uses. It abolishes the age-old exemption of tradition and culture from the requirements of gender equality, thus making areas that were previously shielded from the application of constitutional principles of equality and non-discrimination subject to the gender equality principle (Musembi et al, 2010). There is, however, a disjuncture between the dictates of the right to water in the Constitution and the Water Act of 2002. The latter is in line with Kenya’s adoption of the IWRM policy based on the cost-recovery principle resulting in high water tariffs that make water unaffordable for the poor. In urban areas, many Kenyan households use a minimum of 20-25% of their monthly income on water (see Chapter 5). The crafting of a revised water law, aligned to the Constitution, to replace the 2002 Water Act is at an advanced stage. A Water Policy was also prepared in 2012, incorporating the spirit of the Constitution.

The Malawi study (Chapter 7) addresses the options of using the human right to water as a means of addressing water poverty in a country that has ratified the CEDAW, the Maputo Protocol and the ICESCR. Malawi, like Kenya, abstained from voting for the UN General Assembly Resolution on ‘The human right to water and sanitation.’ The Malawi

26 Assembly/AU/Decl. 1 (XI) 2008.

27 Constitution of Kenya (2008) Article 43 (1)(d).

study reveals that relevant state institutions have failed to implement the right to water in the country. It has taken about fifteen years for the Water Resources Bill to be passed by Parliament. Despite being assented to by the President, the Water Resources Act of 2013 is yet to come into force. However, a progressive interpretation of the Constitution does provide for the right to water in the country. While the Water Resources Act 2013 is gender blind, the Gender Equality Act of 2013, which is in force, has no provision on water. The two pieces of legislation are, however, complementary in nature and equal in status by virtue of Section 48(2) of the Constitution, and the two have to be read together. This implies that women, on paper, have a right to access water and participate in water governance on an equal basis with men. The Malawian water policy (2005), which has been under revision since 2000, is based on the user pay principle, which implies that communities, NGOs, and the private sector will bear the cost of maintenance and operation. The Malawi National Water Policy is, in the same vein, guided by the principle that the protection and use of water resources for domestic water supply shall be accorded the highest priority over other uses. The Water Resources Act 2013 adopts this policy approach by providing for the right to abstract or harvest rain-water for domestic purposes without obtaining a license from the minister, so long as one has lawful access thereto.

The *Zimbabwean* study (Chapter 10) illustrates challenges associated with the adoption and implementation of human rights in the context of a continuous political and economic crisis which has led to breakdown of the public water and sanitation infrastructure, political freedom, and the rule of law. The Zimbabwean economic and political economic crisis culminated in the breakdown of the water management system and cholera outbreaks in 2008. Zimbabwe has ratified the CEDAW, the Maputo Protocol, and the ICESCR. In 2010, the Government of National Unity (GNU) voted for the UNGA Resolution 64/292. Section 77 of the new Constitution, which was proposed by the Zimbabwean GNU²⁸ and adopted by Parliament in May 2013, includes the right to water but not the right to sanitation. It also provides protection against gender and sex discrimination in all economic, social, cultural, and political spheres. Defining gender balance as a national value, the 2013 Constitution calls for proactive measures to promote the full participation of women in all

28 Agreement between the Zimbabwe African National Union Patriotic Front (ZANU PF) and the two Movement for Democratic Change (MDC) formations, on Resolving the Challenges Facing Zimbabwe (2008).

spheres of Zimbabwean society on the basis of equality with men. The new Water Policy, which was adopted by the GNU, recognizes the right to clean drinking water and primary water and the right to gender equal participation at all levels of governance. There is, however, no discussion of the uncertain status of customary water uses. Furthermore, there is an unresolved tension among the right to water in Section 77 of the Constitution, the National Water Policy of 2012, and existing legislation that lacks a clear obligation to provide water for an affordable price.

The South African study (Chapter 14) asks why the post-colonial state, with its highly developed water infrastructure, well trained expertise, and advanced legal framework, has failed to reduce the unequal distribution of water. South Africa has ratified CEDAW and the Maputo Protocol but not ratified ICESCR. However, the country voted for the UN General Assembly Resolution 64/292. South Africa's strong protection of women's right to equality and public participation is enshrined in the Constitution of 1996. The right to sufficient water and food is embedded in the Constitution and The National Water Act of 1998, with the overarching goal of redressing race and gender inequities of the past. The Water Act stipulates a Basic Human Needs Reserve, alongside an Ecological Reserve. In 1999, a Free Basic Water policy was adopted that guarantees every citizen a minimum quantity of safe and accessible water for free. The study points to the continuities with the past and a too narrow interpretation of the right to sufficient water in the Constitution, as well as to water users' inability to hold policy-makers and service providers accountable in operationalizing the policy promises and implementing the services. Chapter 14 elaborates the need for a broader interpretation of the constitutional right to sufficient water with reference to the inequalities that are upheld by the national license system. South Africa has a clear policy of redistributing access to water resources, which was virtually entirely in the hands of white men, to black people. However, the current operationalization of existing license systems ignores the constitutional imperative of redressing inequities of the past by continuing to ignore customary water uses in former homelands. Moreover, this system is to the disadvantage of small-scale users who are obliged to apply for a license. A straightforward possibility of redesigning the license system continues to be ignored as well.

3.4 Legal gaps, tensions, and challenges

By grouping of the right to water together with other social and econom-

ic rights (most importantly the right to food and health), the ICESR, the Maputo Protocol, and the Kenyan, South African, and Zimbabwean constitutions imply a right to affordable and available water for personal, domestic and livelihood uses. All these international, regional, and national instruments recognize the indivisibility of human dignity, social justice, equality, and non-discrimination and protection of the poor and marginalized as basic principles.²⁹

Nonetheless, the laws and policies that frame water governance in these four countries have remained divided between water resources management for commercial and for domestic water supply. This division also reflects the disjuncture between the norms that guide communities' management of water and the state-laws carried over from the colonial era. The lack of legal recognition of local customary water uses, as shown above (3.2), leaves water for livelihoods, which is vital for women as providers of family food and income, in an uncertain legal position and deprived of state investments in water infrastructure. Furthermore, there is, in many of these countries, a gap between the international and constitutional right to water and sanitation that are based on the affordability principle, on the one hand, and existing laws and policies that are based on the cost recovery principle, on the other.

4. LOCAL PERSPECTIVES

The local case studies from Kenya, Malawi, South Africa, and Zimbabwe describe how women – poor, middle class, married, single, elderly, and disabled – are accessing water and sanitation and are participating in water governance in selected rural, peri-urban, and rural areas. Applying the broad definition of water governance described above, they explore how different institutions that are involved in water governance at the local level navigate in a plural legal terrain where international and national law coexist and interact with local norms and practices. The studies demonstrate disconnects between local customary water governance systems that are based on a holistic perception of water (use and management) and statutory water governance systems that are based on a strict division between domestic water service provision and productive water resource management. They show how these disconnects affect women's rights to access water for personal, domestic and livelihood needs and their right to participate in water governance.

29 Article 10.

4.1 Engendering the right to water: water for personal, domestic and livelihood use

Women, as shown by the case studies from all the four countries, are bearing primary responsibilities for fetching, storing, protecting, and managing the household or family's waters in urban, peri-urban, and rural areas. As part of their day to day chores, they take water from multiple sources for multiple uses. In accessing water, they interact with a plurality of institutions ranging from customary water governance systems and local government institutions to humanitarian agencies, NGOs, and private water vendors. The case studies describe how water is governed in rural and peri-urban areas where the residents, from the colonial period up to date, have been left to manage water with little if any state assistance. It is thus not surprising that water governance in rural and peri-urban areas is strongly influenced by the norms and practices that have been developed by the local communities themselves. Making no strict division between water for domestic and for productive uses, these local norms respond to women's needs as providers of care and food. On the other hand, they reinforce the gendered division of labour and distribution of resources and power in the family and in the local community.

Kenya, as described in the case of the Marakwet water governance system (Chapter 6), has a long history of customary institutions for governance of water resources. These institutions play a vital role in water resource management, particularly in the rural areas where two-thirds of the country's population lives. They have prevailed in spite of comprehensive legislative and institutional water sector reform intending to create a single legal and institutional framework. In view of the lack of public investment in rural water infrastructure, customary institutions have to a large extent provided the framework through which users develop water infrastructure and manage the allocation and distribution of water resources. The Marakwet study shows how the furrow system continues to provide the primary source of water for both productive and domestic uses among the group. The norms and institutions that govern access to water and participation in water governance have their origin in the construction of the furrows. They have evolved over generations in response to the gendered division of labour, resources and power in the community. While women are responsible for child care, household chores, and farming, the men are responsible for clearing land and maintaining the water furrows. Women are, on the basis of their male family members' contribution to maintenance of the furrow system, allowed access to water for

domestic, livelihood, and productive purposes. Since women do not participate in the maintenance of the furrows, they are not included in water governance. Due to the poor quality of the furrow water and the lack of investment in drinking water infrastructure, the women are required to walk long distances to access clean drinking water from public boreholes. The Marakwet case study thus points to the disjuncture between national and community based norms and institutions. Above all, it demonstrates the need for a contextual and integrated approach that, by taking into consideration the legal pluralities that are at work, may contribute to the realization of the right to water for livelihood.

The water governance system in Domboshawa communal land in Zimbabwe, which is described in Chapter 12, is embedded in a complex structure of formal and informal institutions guided by a mixture of statutory and customary norms operating at household, local, district, and even national government level. So far, neither Zimbabwe National Water Authority (ZINWA) and the catchment and sub-catchment councils, which are in charge of water resources management, nor the Rural District Council, which is in charge of domestic water supply, have had much presence in the area. The residents have, from the colonial era up to date, been left to utilize existing water resources without asking permission from local or central authorities. They have, like the Marakwet in Kenya, invested in different forms of water infrastructure and developed norms and institutions that govern their uses. There is hardly any recording of the customary norms and practices that guide the management and use of the common water sources in the area. Although the villagers are free to avail themselves of water for gardening from rivers and dig wells at their homesteads, there are, due to different investment capacities and increasing pressure on land and water, significant differences between richer and poorer families (and their womenfolk). The burden of women's work with regard to carrying water and watering vegetable gardens depends on whether the family is wealthy enough to invest in pumps, dig wells, and hire labour, and on the number of male household members involved in gardening. In a situation of increasing competition over resources, poor users, particularly poor and elderly women, are pushed to the margins with regard to sanitation, safe drinking water, and water to grow food for subsistence. Government plans to promote a more effective use of water in communal areas, through implementation of the national water permit system, do not sit well with the holistic way people in these areas manage water. The study concludes that enforcement of the permit system will

strengthen the position of the larger water users at the expense of smaller and poorer users. Most importantly, it will undermine the customary right to water for livelihood.

Malawi's water governance structure is in the throes of change. The government has, in line with the 1999 National Decentralization Policy and the 2005 National Water Policy, committed itself to empowering citizens to make decisions about the provision, operation and maintenance of water facilities for domestic and irrigation uses at district level. The study of local water governance in Blantyre Rural Area, presented in Chapter 9, focuses on the lowest local level unit related to water governance, which is the Water Point Committee (WPC). This is a ten-member volunteer committee, elected by the user community and accountable to their constituents to manage community boreholes. The WPC's governance of water is guided by the Community Based Management approach adopted by the government in 2002. The study illustrates how state and community governance frameworks run concurrently in rural areas in Malawi. It describes how state laws and policies interact with local norms in the regulation of access to and control of water facilities and resources in a situation where the majority of community members are unaware of government laws and policies. The WPC's regulatory functions are, in practice, based on a mixture of government policies and the unwritten customary norms and values that the people in the area are familiar with. An example is the regulation of borehole water. The borehole rules that have been developed by the WPC give community members who have made a monthly contribution access to water for domestic uses without restriction on the volume of water collected. Domestic use has, with a view to women's critical role in the provision of food, been defined broadly so as to include water for growing food in homestead gardens. On the other hand, the WPC members have not taken any initiatives to ensure that poor community members who cannot afford to make monthly payments, most importantly poor women with children, get access to borehole water. This draws attention to the mixed role of WPC members as mediators between state policy, which is based on the cost recovery principle, and community norms and values emanating from the perception of water as life. The study also points to the lack of knowledge about the human right to water and the lack of a sense of a duty to engage with state authorities to ensure that all the community members have access to safe water.

The local case study in South Africa (Chapter 16) on the Flag Boshielo

scheme analyses the implications for women of the revitalization policy of irrigation schemes in former homelands. In the past, these schemes were mainly cultivated by women, but managed by apartheid governance structures. The schemes largely collapsed when these structures were dismantled post-1994. The revitalization policies continued the apartheid model of centralized and highly mechanized large-scale farming, in which government subsidizes expensive irrigation equipment. In the Flag Boshielo scheme, the government also experimented with the untested technology of floppy systems. In the adopted model of the joint venture, the (white and male) strategic partner obtained half of the profits, while the other half was for 'the' community, represented primarily by young men. Thus, elder women especially lost their already very limited rights to irrigated land and water, as well as their chances of participating in irrigation governance. Moreover, their earlier use of canal water for informal and formal gardening and other uses became forbidden. As a coping strategy, women started using a new separate water supply system, supposedly for domestic uses only, for gardening, without paying the extraordinarily high water bills. The whole irrigation revitalization project became a failure. All five communities chased out the strategic partner during or after the first contract, with major intra-community tensions. In three communities, the irrigation schemes have been abandoned. In the fourth scheme, the government continues subsidizing even the operational costs. In the fifth scheme, the conflicts escalated to the extent that the house of the female leader of the cooperative was burnt, so she had to flee the village, while young men engaged with a new strategic partner.

Providing access to water for not only for domestic uses, but also for growing, preparing and selling food and other products that are vital for family welfare and food security local customary norms is, as we have seen, a key element in the realization of the right to water as a part of the right to food, the right to health, and the right to an adequate living standard. As shown by the research, the customary norms that oblige the community members to share water with those in need have been weakened through reforms that, to enhance a more effective use of the communities' water resources, have introduced measures like membership fees. While there is, on the one hand, a need to ensure that customary norms recognizing women's water needs as providers of care and food are respected and protected, there is, on the other hand, a need to consider how these customary norms are also placing a series of water-related duties on women and girls that are not shared by men and boys. The capac-

ity of living customary law to evolve and reflect the changing demands of sustainability and substantive gender equality should, however, not be overlooked. Recognition of a broad notion of a right to water for livelihoods is important in that it overcomes the disjuncture between customary and statutory law and also the conceptual and administrative divides between productive and domestic spheres: these norms and spheres are in practice often indivisible for poor rural and peri-urban African women.

4.2 Intersectional perspectives: vulnerabilities of poor women and the environment

Human rights demand that attention be given to how different groups of women experience marginalization and rights violations, which is linked not only to sex/gender, but also to other aspects of their identities. The case studies presented in this book demonstrate that although poor and marginalized women should, from a human rights and constitutional rights perspective, be given priority, they often find themselves at the bottom of the water hierarchy.

In Malawi, the cost recovery principle, which forms the backdrop of Malawi's decentralized water governance system, is implemented without due consideration of the needs of poor users. This is described in the studies of rural water point committees and peri-urban water user associations presented in Chapters 8 and 9. The study of Nkoloti Water User Association (WUA) in Blantyre shows how the introduction of this governance model led to an increase in water kiosks providing safe water. Yet the WUA, who oversees the pricing of water, made no efforts to ensure a pricing system that catered for the needs of the very poor. The local community was treated as a homogeneous group that was equally able to afford the increasing cost of water. As a consequence, the most vulnerable groups, such as widows looking after HIV orphans, the elderly, and the disabled who could not afford to pay, had their needs met through an array of other sources, a majority of them classified as unsafe.

In Zimbabwe, the breakdown of the country's rural and urban water infrastructure has led to a situation where poor users are pushed to the margins (Chapters 11, 12 and 13). Those who have suffered most from the breakdown of public water and sanitation services are poor women nursing infants, caring for children, or looking after the disabled, the sick, and the chronically ill. The 'rights based' emergency interventions by humanitarian agencies and international donors have, as shown by the Zimbabwean case studies, not taken the necessary measures to ensure

that elderly, disabled and displaced rural and urban women have access to clean water and sanitation. In Harare's high density areas these developments have led to an increased use of alternative water sources, particularly shallow wells in backyards and wetlands. The customary norms that guide people's use of these sources are prohibited by state laws and municipal by-laws for health reasons and to preserve ground water resources. With water metres being introduced without due consideration for the increasing number of poor urban people who are unable to pay for water, poor people's reliance upon open-access water sources and the subsequent depletion of the environment are increasing.

In Zimbabwe, the Fast Track Land Reform Programme further demonstrates how intersectional discrimination shapes access to water as well as environmental concerns. The programme, which involved the invasion of white-owned large-scale commercial farms, resulted in a dramatic change of circumstances for farm workers. As a result of violent evictions, they lost their jobs and homes, including access to sanitation and water for domestic and livelihood use. The study of A1 resettlement farms in Mazowe Catchment in Zimbabwe (Chapter 13) shows how displaced farmworker women's urgent need for clean water and sanitation was neglected by national, local and international humanitarian actors in the aftermath of the cholera outbreaks in 2008. This study also illustrates the limit of the community based customary norms that establish a duty to share clean drinking water. Viewing the farmworkers as aliens, the new settlers, who had taken over the formerly white-owned farms, did not see themselves as obliged to share available sources of clean drinking water with them. However, in some instances, local traditional leaders, making reference to the customary norms guaranteeing everybody water and food, gave displaced farmworker women permission to access garden land close to the rivers in the area. In these instances, the customary right to livelihood prevailed, despite the traditional leaders' duty to protect the land close to the river bank in conjunction with the Environmental Management Agency (EMA).

At the bottom of the water hierarchy in Kenya are, contrary to international and constitutional priority principles, farmworker women. The study of migrant farmworker women in the flower and horticulture growing industry in the Lake Naivasha Basin in Kenya (Chapter 4) demonstrates significant differences between women belonging to socially disadvantaged minority groups and women belonging to ethnic majority groups. The research shows that the human right to water for farm work-

ers living in the informal settlements is at the bottom of the water use hierarchy even though it should be given priority from a human rights and constitutional rights perspective. Furthermore, it demonstrates how individual and corporate owners of land around the lake limit access to water from the lake for domestic and livelihood use by subsistence farmers and farm workers by fencing off their land, which they use to grow flowers and vegetables for commercial purposes. There is disproportionate allocation of water resources from the lake, with the poor having the least while the rich take up most of the water.

All in all there is, as demonstrated by these studies, a close link between the intersecting vulnerabilities of women from poor and stigmatized groups and the increasing pressure on the environment. Poor women's use of unsafe open access water sources is often a response to a situation where the state fails its duty to provide. Clearly, there is a lack of water services delivery that acknowledges the right to water for domestic and livelihood uses as a means of preventing poverty, inequality and environmental degradation.

4.3 Water access through participation, legal knowledge and empowerment

The right to water and sanitation is not only a right to the actual delivery of water or toilets. From a gender, human rights, and development perspective, these rights are seen as closely intertwined with the right to participation. International human rights discourse on water and development assumes that empowering women may be one of the most successful mechanisms for better delivery of water and sanitation at the level of local and national government.³⁰

Gender representation in national and local water governance structures is, in all the four countries, required by law or policy. However, the national and local water governance structures, which on paper set out to democratize and decentralize water management, are often not operational or play a marginal role in comparison with other customary, social, and political structures. In Kenya and Malawi, water user associations requiring women's participation have been made part of a decentralized water governance structure (Chapter 3 and 7). The South African governance system of stakeholder-based catchment management agencies, which makes female participation mandatory, has only been fully implemented in two out of nine catchments (Chapter 14). Zimbabwe's

30 UNDP, 2006, pp. 47-8.

stakeholder-based governance structure, which due to the political and economic crisis is dysfunctional, has until the 2012 Water Policy lacked provisions for women's participation (Chapter 10).

In rural areas, where community-based water management structures have prevailed, the role of women in water governance is highly dependent on the way in which gender relations are defined through family and kinship relations. Among the Marakwet in Kenya, women's access to water for their diversified livelihood strategies is dependent on their rights and duties within the family and the group. In this patrilineal group, male-dominated norms concerning design, construction, and maintenance of furrows constitutes an exclusion of women from the direct role of decision making (Chapter 6). Yet these customary norms are not written in stone. Younger women who are taking up commercial farming are acquiring knowledge about the operation of the furrow system and are gradually assuming a role in water governance. This shows how the customary furrow governance system constitutes a form of living customary law which is evolving in response to changes in society. Similarly, the study of water governance in Domboshawa communal land in Zimbabwe (Chapter 12) shows how the work of NGOs seeking to enhance women's access to resources and participation in natural resource management is making its mark on the coexisting forms of natural resource governance, ranging from chiefs and headmen to local government.

Where participatory water governance structures have been put in place, women's actual influence on the governance of water is often limited, despite increasing numbers of women in local water governance. The study of Nkolokoti Water User Association (WUA) in Blantyre in Malawi, presented in Chapter 8, shows how the gendered division of labour was manifest at the operational, management, and decision-making levels. At the operational level, women served as sellers of water, while men were serving as inspectors, guards, plumbers, and administrators. The decision-making level was, however, dominated by men. This was ascribed to a combination of stereotypical gender perceptions and lack of clear and consistent rules concerning the inclusion of women in the WUA decision-making structures.

Furthermore, downward accountability is often lacking in the implementation of decentralized and participatory plans and policies for water governance. The Nkolokoti case study of Water Users Associations (WUA) is again illustrative: in these decentralized water institutions, focus on notions of sustainability and water bills recovery is overshadowed

owing other goals, including user participation and social equity. The rhetoric on women's participation was more about paying for water bills and selling water than influencing the actual decision making. Furthermore, as shown by the study of rural Water Point Committees in Blantyre (Chapter 9), the effective control over the decision-making process is often not entirely within the hands of the committees on which women sit as members. Elite male hijack often stalls women's ability to exercise positive influence in decentralized water governance structures such as WPCs. Lack of knowledge about international human rights, in combination with the unclear status of the right to water under Malawian law, is another factor that weakens the ability to negotiate improved access to water in the shadow of law.

The Mathare case study from Nairobi in Kenya shows that Water User Associations created under the Water Act (2002), intended to facilitate citizen participation in water governance, have not made their presence felt at the community level (Chapter 5). The study, which shows a low level of awareness about these bodies, suggests that the state has failed to take measures to promote community awareness of their existence. Moreover, provision of water and sanitation services is intertwined with insecurity, subjecting women to harassment from youth gangs and warring political factions. Yet the most significant barrier to realization of the right to sanitation and the right to water in this context is not ascribed to the lack of participation, but to the lack of regulation of the conduct of private land owners and landlords.

The Zimbabwean peri-urban and urban studies (Chapters 11 and 12) show how women's influence on local water governance is negatively affected by the highly violent political climate in which water and sanitation, both at the national and local level, has become an arena of political contestation between the ZANU-PF and MDC parties. Women in peri-urban areas and in Harare's high density areas are, under these difficult circumstances, providing the critical co-ordination required for the management of public boreholes and have stepped in to clean up sewage from burst pipes in urban neighborhoods. This has, however, put an additional burden on them, as they still have to attend to their own household duties as wives and mothers. Even though many women are aware of their rights, attempts to make local and national government accountable are inhibited by the highly polarized and often hostile male-dominated political environment. Yet residents' organizations in both peri-urban and urban high density areas are, within these social and political limits, us-

ing the right to water embedded in international human rights law and the Zimbabwean Constitution to hold national and local government accountable.

Women's ability to enhance the right to water through participation in water governance is influenced and shaped by a range of factors. These include gender stereotypes, but also political processes resulting from the interaction and contestation of diverse stakeholders involved in the 'governing' of access to water, as these stakeholders are endowed with differing forms and varying degrees of power, authority and influence. Whether and to what extent women will be able to use the right to water and the right to participation as a tool for change depends on a clearer construction of the right to water for personal, domestic and livelihood uses under national law, as well as on women's legal knowledge about their social, economic, civil, and political rights, and on women's agency, power, and capacity to make duty bearers liable.

5. CHALLENGES FOR INTERNATIONAL AND NATIONAL LAW

The national and local case studies presented in this volume demonstrate the complex legal situations that the realization of the human right to water and the right to participation in water governance give rise to in the context of a plurality of coexisting, interacting, and sometimes conflicting norms and institutions. From a grounded and intersectional gender perspective, this book points to the need for greater integration and harmonization between international, national and local norms. In particular, it points to the need to carefully consider how legal pluralities in some situations may be a resource that facilitates poor and marginalized women's access to water, while in other situations it may produce and reinforce intersecting gendered and classed forms of exclusion.

The human right to water as embedded in constitutional law in the four countries conceives of water for life, health, and food as intrinsically linked. The indivisibility of socio-economic rights is especially important for poor African women's rights to sufficient water for drinking, cooking, cleaning, gardening, cropping, and small-scale enterprises that are the mainstay of their diversified livelihoods. The statutory laws, policies, and institutions that govern water in these four countries are nonetheless based on a strict division between productive and domestic uses. They operate, like the colonial water laws, without due consideration for the existence and effectiveness of integrated local community-based norms, customs, and practices whereby the majority of poor rural and peri-urban

women obtain access to water for domestic and livelihood use.³¹ These customary norms and institutions constitute key elements in the realization of food security and poverty reduction, particularly given the concerns of women as food producers. Therefore, states have an obligation to ensure that these norms and institutions are respected and protected in national water laws and policies. Under growing competition for water, these uses should be legally protected, which may imply that large-scale water users have to give up some of their water uses. A possible way forward, implying water reallocation from the haves to the have-nots, is the transformative legal tool of priority General Authorizations for black female and male small-scale users, which is currently being considered in South Africa and is described by Van Koppen and Schreiner in Chapter 15 in this volume.

Another key concern is the gap between the international and constitutional right to water and sanitation for an affordable price, on the one hand, and existing law, policies and practices that are based on the cost recovery principle, on the other. At the bottom of the water hierarchy are, contrary to international and constitutional priority principles, the poorest and most vulnerable women such as displaced women, farmworker women, and poor widows looking after HIV orphans. While decentralized water governance has led to improved access to water for those who can pay, it has also led to a situation where poor users are excluded and have to resort to unsafe common water resources. From this perspective, the cost recovery principle needs to be reconsidered in the light of the right to affordable water for domestic and livelihood uses as a means of preventing poverty, inequality and environmental degradation.

The legal recognition of women's right to participation is reflected in an increasing number of women in local water governance institutions that form part of a decentralized state governance structure. Yet the customary norms that have developed outside the realm of the national laws, policies, and institutions are often based on a gender hierarchy that reflects the gendered division of labour, resources, and power within the community. These norms often assign women an inferior position in the community's governance of water, and have a spillover effect on women's

31 See e.g. the interface between water reforms in Kenya and established traditional water governance norms and institutions among pastoralist communities in Northern Kenya in Kameri-Mbote, P. and Kamau Mubuu, 'The Role of Traditional/Religious Institutions in Influencing Gender Relations and Gender Discriminative Practices and Scope for Changing the Negative Trends', Study carried out for SNV (2014) On file with the authors.

participation in local institutions that are part of the national water governance system. Thus, without an ‘empowerment’ component addressing water-related gender stereotypes as well as women’s agency to assert their social, economic, civil and political rights and their capacity to hold water service providers accountable, there is a danger that the concerns of women will continue to be neglected in both local and national water governance.

Chapter 2

Turning the Tide: Engendering the Human Right to Water and Sanitation

Anne Hellum, Ingunn Ikdahl and Patricia Kameri-Mbote

1. WATER AS A HUMAN RIGHTS ISSUE: SOUTHERN AND EASTERN AFRICAN PERSPECTIVES ON GENDER AND WATER GOVERNANCE

The observance of human rights, including socio-economic rights, participation rights and non-discrimination rights, is critical to good water governance. International human rights norms demand that priority be given to water and sanitation for vulnerable groups such as the very poor, displaced, disabled and elderly, and for women and children within all these groups. Gender-equal participation in water governance is, in human rights theory, seen as one of the most important mechanisms to realize the right to water and sanitation. If implemented, these human rights have the potential to combat poverty, promote health and food security, and ease the caring and household burdens that hamper the realization of African women's enjoyment of a wide range of social and economic rights.

The human right to water and sanitation is receiving increasing attention, and its normative content is becoming clarified through international human rights scholarship and statements from a range of UN institutions.¹ Through national and local studies from southern and eastern Africa, this book explores how the right to water and sanitation is respected, protected and fulfilled by international, national and local actors

¹ There is a growing body of legal literature addressing the human right to water, see McCaffrey, 1992; Gleick, 1996, 1998; Salman and McInerney-Lankford, 2004; Filmer-Wilson, 2005; Riedel and Rothen, 2006; Cahill-Ripley, 2011; Winkler, 2012; Windfuhr, 2013; Bulto, 2014; Langford and Russel (2015 forthcoming).

involved in water governance. Water governance, in a narrow sense, consists of the exercise of state authority through national institutions, laws and policies in order to provide access to water and sanitation. However, the studies presented in this book provide a picture of the multiplicity of norms that are applied by different co-existing and overlapping national and local institutions that in practice govern water. These are national and local government bodies, international and national development agencies, humanitarian organizations, non-governmental organizations (NGOs), local communities and families. Together, these constitute 'plural water governance' in the broad sense defined in Chapter 1 (Franks and Cleaver, 2007).

This plurality of co-existing, interacting and sometimes conflicting norms and institutions pose challenges regarding the interpretation and implementation of the human right to water and sanitation. Inequality in access to water supply and water resources tend to disproportionately affect poor and marginalized women, men and children and is due in part to prevailing cultural, gendered and socio-political norms (HLPE 2015, 26). The overall aim of this chapter is to set out a human rights framework that addresses some of the challenges that plural water governance poses from a gender perspective. Two lines of inquiry follow from this aim. Firstly, while the right to water and sanitation is a human issue, its interpretation must, as pointed out in Chapter 1, be 'engendered' to respond to the concerns and experiences of socially and economically marginalized women in different social, cultural and economic contexts (Fredman, 2013). Given the legal pluralities that have a bearing on water related rights and duties, this requires a dual perspective of women as members of a group that both controls and holds water and land collectively, and as individual citizens with a right to equality and protection against discrimination. Secondly, the implications that the plurality of norms, actors and institutions involved in water governance have for the interpretation and the realization of both rights and duties must be considered. Insofar as duties are concerned, the multifaceted character of water governance complicates the question of attendant responsibilities: which actors hold human rights obligations, and how can specific actors be held accountable for the outcomes?

Against this background, this chapter sets out a human rights framework that addresses the rights of individuals and groups and the corresponding obligations of the actual duty bearers. Three rights form the centre of attention: the right to water and sanitation, the right to partici-

pation, and the right to equality and non-discrimination.

The chapter unfolds in ten sections.² Following the introduction in Section 1 an ‘engendered’, integrated and contextual approach to the human right to water and sanitation is presented as the methodological point of departure for the analysis in Section 2. Section 3 shows how the location of water at the intersection of environmental concerns and human needs, and its multiple uses for drinking, health and food production, have shaped its path towards being considered a human right. The chapter proceeds by presenting key elements of the right to adequate, available and affordable water (Section 4), and the right to sanitation (Section 5). Section 6 turns to the content of state duties, focusing on the duty to respect and protect the right to water in contexts of plural water governance, while Section 7 highlights *duties* associated with non-discrimination. The right to participation in water governance is discussed in Section 8. In Section 9, the obligations of international development actors are outlined. By way of conclusion Section 10 points to the contextualization of the right to water may as the pathway for looking beyond water for drinking purposes and including water for livelihood – life, food and health.

2. TOWARDS AN ‘ENGENDERED’, INTEGRATED AND CONTEXTUAL APPROACH

The human right to water and sanitation arguably reflects the growing recognition of the significance of social and economic rights in addressing poor urban and rural women’s basic concerns as providers of food and care for young, sick and elderly family members. Overall, this right enhances the degree to which international law responds to the concerns of socially and economically marginalized women.³

Furthermore, the human right to water and sanitation illustrates the indivisibility and interrelatedness of human rights. Superseding the divides among civil, political, social and economic rights, it is closely related to the rights to life, health, food, livelihood and equality, and is embed-

2 Sections 2, 3 4,6, 7, and 8 are based on Anne Hellum’s article ‘Engendering the human right to water and sanitation’, forthcoming in Langford and Russel (forthcoming 2015). Sections 3 and 5 are based on a draft by Patricia Kameri-Mbote and Sections 5 and 9 on a draft by Ingunn Ikdahl. The authors have commented and contributed to all the sections.

3 As the principal forms of oppression against large groups of women operate in the socio-economic domain, feminist scholars have argued that international law, by according priority to civil and political rights, has little to offer women, see Charlesworth et al. (1991).

ded in the ICESCR, the CEDAW and the CRC.⁴ Feminist social rights scholars, such as Dianne Otto (2001), have emphasized the potential of the concept of indivisibility of human rights as a principle that can assist in protecting and promoting women's social and economic entitlements. Otto sees the indivisibility principle, embedded in a number of declarations, as:

...a response to the gendered hierarchies and exclusions of human rights law itself. The appeal of the idea of indivisibility is that it suggests an organizing principle that highlights interconnections, interdependencies, and holism in the increasingly fragmented paradigm of human rights. (Otto, 2001: 66)

The indivisibility of socio-economic rights is especially important for poor African women's rights to sufficient water for domestic and livelihood uses. Water-dependent gardening, cropping, livestock, brick-making, crafts and small-scale enterprises are, as shown in this book, the mainstays of their diversified livelihoods (Chapter 1). In this context, a right to water is also a prerequisite for the realization of the rights to food, health and livelihood.

However, the indivisibility of the rights associated with water and sanitation is not fully recognized. A pertinent example is that while Article 11 of the ICESCR, stating the right to an adequate living standard, is a key foundation for the right to water, the UN General Assembly Resolution 64/292 on the Human Right to Water and Sanitation⁵ remains silent on water for broader livelihood needs, thus apparently limiting the right to merely sanitation, clean drinking water, and water for domestic and personal use. This interpretation does not sit well with the holistic way in which southern and eastern African women manage water from different sources for multiple uses: water is not only necessary for domestic uses and sanitation, but also for growing, preparing, and selling food and other products that are vital for family welfare and food security. The multifaceted character of community-based water rights, which constitute the lifeline for many poor rural and peri-urban families and women within them, calls into question the strict division between water for domestic and for productive uses underlying the UN General Assembly Resolution (2010).

4 International Covenant on Economic, Social and Cultural Rights, Convention to Eliminate all Forms of Discrimination against Women, Committee on the Rights of the Child.

5 UN General Assembly Resolution 64/292 on the Human Right to Water and Sanitation (3 August 2010) A/RES/64/292.

The question of which specific types of water use are covered by the right is examined in further detail below. But at a general level it also points to the question of whether the human right to water and sanitation is merely 'extended to women' or whether it is truly 'engendered', in line with the distinction drawn in Sandra Fredman's approach to social and economic rights:

As a start it is necessary to recognize the distinctive nature of women's experience of poverty and disadvantage. This suggests that it is not sufficient simply to extend socio-economic rights women. Instead, socio-economic rights need to be recast in the light of the demands of substantive gender equality. Substantive gender equality goes beyond treating women in the same way as men and requires transformative measures. This in turn entails reconceptualizing the rights themselves. (Fredman, 2013: 218)

In order to contribute to an 'engendered' interpretation of the right to water and sanitation that responds to the way in which southern and eastern African women access and use water, this chapter takes a contextual approach to human rights. The case studies inform both the legal problems we address and the interpretations we provide. In its General Comments, the Committee on Economic, Social and Cultural Rights (CESCR) has acknowledged the importance of cultural contexts in defining the content of rights.⁶ In sub-Saharan Africa, where appropriation of land and water for commercial purposes is escalating, poor rural and peri-urban communities' customary uses of land and water are endangered.⁷ This has severe consequences for African women's crucial role in the food security of households: women produce between 60 and 80% of food crops.⁸ These developments underscore the need for context-sensitive interpretations of the right to an adequate standard of living, as found in Article 11 of the ICESCR, including the right to food and water for personal, domestic and broader livelihood uses.

The recognition of the indivisibility of rights and the need for 'engenderment' of rights further calls for an integrated approach to the different

6 See for example CESCR General Comment No. 4, The right to adequate housing (1991), E/1992/23, annex III.

7 See the Final Study of the Human Rights Council Advisory Committee on Rural Women and the Right to Food, A/HRC/22/72 (2012) and the Report of the Special Rapporteur on the Right to Food, A/HRC/13/33 (2009).

8 See Final study of the Human Rights Council Advisory Committee on Rural Women and the Right to Food, A/HRC/22/72 (2012).

parts of the human rights system. Rather than looking at the human right to water under article 11 of the ICESCR in isolation, this chapter includes the regulatory framework offered by CEDAW and the Protocol to the African Charter on the Rights of Women (the Maputo Protocol).⁹ The added value of these instruments is that they take a gender-specific approach (Farha, 2008: 553; Holtmaat, 2013; Hellum and Aasen, 2013: 634). CEDAW Article 14 (1) addresses the social and economic rights of rural women and obliges states to ‘take into account the particular problems faced by rural women’ as well as the ‘significant roles that rural women play in the economic survival of their families.’ Furthermore, CEDAW and the Maputo Protocol address the gender stereotypes that underlie rural and peri-urban women’s and girls’ disproportionate responsibility for domestic chores, including fetching and securing safe water for domestic, personal and livelihood uses. Article 5(a) of the CEDAW and Article 2.2 of the Maputo Protocol place an obligation on State Parties to take all appropriate measures to eradicate gender stereotypes embedded in norms, beliefs or practices. As gender-specific instruments seeking to transform asymmetrical gender relations, these instruments constitute an important supplement to the international water rights discourse, which takes a gender-neutral and symmetrical approach to social and economic rights in general and to the human right to water and sanitation in particular.

3. BACKGROUND: FROM THE STOCKHOLM AND DUBLIN PRINCIPLES TO THE HUMAN RIGHT TO WATER AND SANITATION

Water not only has multiple uses such as drinking, health and production of nutritious food but is also located at the intersection of environment and human needs. These intersections form the broader international policy context that has shaped the path towards water’s being considered a human right.

The international environmental discourse has a long-term history of recognizing the relationship among environment, human needs, and equality. A foundational document is the Stockholm Declaration of 1972,¹⁰ which provides, in Principle 1, that:

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of

9 The Protocol to the African Charter on Human and Peoples’ Rights on the Rights of Women in Africa, 11 July 2003, hereinafter ‘the Maputo Protocol’.

10 Declaration of the United Nations Conference on the Human Environment, adopted June 16, 1972, hereinafter The Stockholm Declaration.

dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.

To support the realization of this principle, the Declaration called for an end to segregation, discrimination, colonialism, and other forms of oppression. Principles 2 and 3 proceed to underscore both that ‘the natural resources of the earth, including the air, water, land, flora and fauna... must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate’¹¹ and that ‘the capacity of the earth to produce vital renewable resources must be maintained and, wherever practicable, restored or improved.’¹²

The Stockholm Declaration sowed the seeds for the concept of sustainable development. As subsequent international agreements¹³ have elaborated on this concept, they have continued to attend to the relationship between environmental protection, livelihood needs, equality and human rights.¹⁴

In a similar vein, the international water policy discourse contains recognition of the range of needs and concerns that must be balanced. Principle No. 4 of the Dublin Principles¹⁵ states that ‘water has an economic value in all its competing uses, and should be recognized as an economic

11 Stockholm Declaration, Principle 2.

12 Stockholm Declaration, Principle 3.

13 World Charter for Nature, adopted in UN General Assembly Resolution 37/7 (28 October 1982) A/RES/37/7; Our Common Future, report by the Brundtland Commission on Environment and Development 1987 A/42/427; and the Rio Declaration on Environment and Development, adopted at the UN Conference on Environment and Development (June 14, 1992).

14 The principle of sustainable development seeks to resolve tensions between eco-centric and anthropocentric approaches to natural resource management. Approaches that seek the preservation of environmental resources for their own sake have been termed eco-centric (Goulder and Kennedy, 1996). Approaches that value the maintenance of environmental resources on the basis of their contribution to human satisfaction and welfare have been termed anthropocentric (Cobb, 1988).

15 The Dublin Statement on Water and Sustainable Development (hereinafter The Dublin Principles) was adopted at the International Conference on Water and the Environment (ICWE) in Dublin, Ireland 26-31 January 1992. The conference was attended by 500 participants, including government-designated experts. The Dublin Statement on Water and Sustainable Development was commended to the world leaders assembled at the UN Conference on Environment and Development in Rio de Janeiro in June 1992, see Report of the United Nations Conference on Environment and Development (UNCED), A/CONF 151/26.

good,' but, it continues, 'within this principle, it is vital to recognize the basic right of all human beings to have access to clean water and sanitation at an affordable price.' Taking account of the close relationship among water, gender and sustainable development, a common reference point is Principle No. 3 of the Dublin Principles, which states that 'Women play a central part in the provision, management, and safeguarding of water.'

In practice, democratization, decentralization, good governance, gender equality and sustainable water management have taken the stage alongside economic considerations in international and national water laws and policies informed by the Dublin Principles and by the Integrated Water Resources Management (IWRM) approach.

With the adoption of the Millennium Development Goals (MDGs) in 2000, water for the poor moved to centre stage in international and national development policies. Sanitation was added as a target of the MDGs in 2002. States agreed to halve by 2015 the proportion of people without sustainable access to safe drinking water *and* basic sanitation.¹⁶ We are now in 2015, and many African countries are yet to meet these targets. Not surprisingly, water and sanitation for all are included in the proposed Sustainable Development Goals (SDGs) for the post-2015 period.¹⁷ While the MDGs and the proposed SDGs also include targets on water, sanitation and gender equality, they have been criticized for the lack of explicit links to human rights. However, they have been complemented by the rights-based approach to development in general, and the development of the human right to water in particular.¹⁸

The human right to water has evolved through piecemeal international

16 See the UN General Assembly Resolution 55/2, the United Nations Millennium Declaration (18 September 2000), A/RES/55/2.

17 See the Report of the Open Working Group of the General Assembly on Sustainable Development Goals, (12 August 2014), A/68/970.

18 In order to integrate human rights into development planning, the Secretary-General of the UN called for mainstreaming of human rights across the entire UN system in 1997. As a follow up, in 1998, the United Nations Development Programme issued a policy paper entitled 'Integrating human rights with sustainable development' (UNDP, 1998), in which it views human rights and sustainable development as being inextricably linked. In a statement on poverty of 10 May 2001, the UN Committee on Economic, Social and Cultural Rights considered poverty as a multi-dimensional denial of human rights and strongly advocated a human rights approach to poverty reduction (CESCR statement, Poverty and the International Covenant on Economic, Social and Cultural Rights, (May 10, 2001) E/C.12/2001/10).

law-making over time, through dynamic interpretation by UN human rights treaty bodies such as the Committee on Economic, Social and Cultural Rights, and by analysis from UN special mechanisms such as the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation. The importance of water for human rights is now recognized in a wide range of international Conventions, declarations and other standards. Some elements of the right to water are given explicit recognition in various treaties. The Convention on the Rights of the Child (CRC) Article 24 gives the child a right to clean drinking water as an element of the right to health. Article 14.2 h of the Convention on the Elimination of All Forms of Discrimination against Women states that rural women have a right to 'enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications.' In Africa, the most recent manifestation of the human right to water is Article 15a of the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa. Addressing food security issues, this provision obliges contracting states to take all appropriate measures to 'provide women with access to clean drinking water, sources of domestic fuel, land and the means of producing nutritious food.'

Although water is not explicitly mentioned in the International Covenant on Economic, Social and Cultural Rights, the CESCR, in its General Comment No.15 (2002), elaborated the content of the human right to water, with foundations in several of the covenant's articles.¹⁹ Water's centrality for basic needs led the Committee to approach the human right to water as an element of the right to an adequate standard of living in Article 11.1. This article establishes the right to an adequate standard of living, 'including adequate food, clothing and housing.'²⁰ According to the dynamic interpretation of the Committee, the term 'including' indicates that the catalogue of rights encompassing the right to livelihood is not exhaustive. It must be adapted to changing social and economic concerns, such as the global water crisis. Moreover, the Committee emphasizes the interdependence between access to water and the right to health in Article 12.1, the right to food in Article 11.1 and the right to life and

19 CESCR General Comment No. 15, The right to water (2002), E/C.12/2002/11, hereinafter CESCR GC 15. See also CESCR General Comment No. 14, The right to the highest attainable standard of health (2000), E/C.12/2000/4.

20 CESCR GC 15, see also CESCR General Comment No. 6, The Economic, Social and Cultural Rights of Older Persons (1995), E/1996/22, paras 5 and 32.

human dignity enshrined in the International Bill of Human Rights. In principle, this focus on indivisibility could lead to considering all types of water use under the right to water, as long as they are significant for livelihood, health and life.

In 2006, the right to sanitation was included in the Guidelines for the Realization of the Right to Drinking Water and Sanitation, adopted by the UN Sub-Commission on the Protection and Promotion of Human Rights.²¹ In 2007, the question of the ambit of the right to water was again brought up when the UN Human Rights Council appointed an Independent Expert (from 2011 Special Rapporteur) on the issue of 'human rights obligations related to access to safe drinking water and sanitation.'²² While the mandate thus supported the recognition of a right to sanitation, it demonstrated a more narrow approach to the types of water use included in the human rights protection. The UN General Assembly Resolution 64/292 on the Human Right to Water and Sanitation was adopted in 2010, and despite its general title the resolution focused on drinking water, while remaining silent on the right to water for broader livelihood needs. The sharp distinction between water for domestic and for productive water use has been understood as an attempt to protect the right to water for basic personal and domestic needs against commercial agriculture, which is one of the largest water users (Windfuhr, 2013). It has also been seen as reflecting efforts to balance the right to water against the concerns of the environment (Tulley, 2005).

However, other strands of international legal development have retained a broad approach to the scope of the right, encompassing a wider range of uses of water. In February 2012, the HRC Advisory Committee presented its 'Final study on the Advancement of the Rights of Peasants and Other People Working in Rural Areas' to the Human

21 The guidelines were adopted by the Sub-Commission in its Resolution 2006/10, Promotion of the Realization of the Right to Drinking Water and Sanitation (24 August 2006) A/HRC/Sub.1/58/L.11. The full text of these guidelines is found in 'The Realization of the Right to Drinking Water and Sanitation, Report of the Special Rapporteur, El Hadji Guissé' (2005), E/CN.4/Sub.2/2005/25, July 2005). Hereinafter, 'the UN Sub-Commission Guidelines.'

22 Human Rights Council Resolution 7/22 on Human Rights and Access to Safe Drinking Water and Sanitation (2008), A/HRC/RES/7/22.

Rights Council.²³ The report of the Advisory Committee takes steps to recognize and to strengthen the protection of a wider right to livelihood, encompassing both the right to land and the right to water. The failure of states to harness water resources for both irrigation and drinking water (for people and livestock) is seen by the Advisory Committee as a key factor explaining the vulnerability of people working in rural areas.²⁴ Annexed to the report is the Advisory Committee's proposal for a Declaration on the Rights of Peasants and Other People Working in Rural Areas, which recognizes the rights enshrined in existing international instruments but also articulates new rights of peasants and other people working in rural areas, such as the rights to land, seeds, and the means of production, including water for livelihood production.

Overall, the very existence of the human right to water and sanitation is no longer contested. While the question of which types of water use can claim human rights protection remains an unsolved issue in the international debates, the legal foundations from which the right has emerged form the point of departure for analysis of this question in the next part of this chapter.

4. THE RIGHT TO WATER: ADEQUATE, AVAILABLE, ACCESSIBLE, SAFE AND AFFORDABLE

What does the human right to water entail? As noted above, the multiple legal bases for the right to water imply that an integrated approach, emphasizing the role of water for a range of rights embedded in different international and regional instruments, is key to delineating the constituent elements of the right. However, to structure the analysis, we make use of the analytical framework provided in CESCR General Comment No. 15.

The latter presents several elements of the normative content of the right to water.²⁵ The Committee emphasizes that water must be *adequate for human dignity, life and health*. The adequacy should not be interpreted

23 See The Final Study of the Human Rights Council Advisory Committee on the Advancement of the Rights of Peasants and Other People Working in Rural Areas (2012), A/HRC/19/75, paras 23 and 24. The Advisory Committee was mandated by the Human Rights Council to undertake a study on ways and means to further advance the rights of people working in rural areas, Human Rights Council Resolutions on The Right to Food, No. 13/4 (2010, A/HRC/RES/13/4) and No. 16/27 (2011, A/HRC/RES/16/27).

24 The Final Study of the Human Rights Council Advisory Committee on the Advancement of the Rights of Peasants and Other People Working in Rural Areas (2012), A/HRC/19/75, paras 31 and 35.

25 CESCR GC 15 paras 10-16.

ed narrowly, and the factors of availability, quality and accessibility must always be part of the assessment of adequacy.²⁶ Furthermore, enjoyment of water shall be without discrimination and in line with the principle of equality.²⁷

This section analyses the elements of adequacy, availability, quality, and physical and economic accessibility from a contextual and 'engenderment' perspective. The non-discrimination component is elaborated in more detail in Section 7.

4.1 Adequate water for what? Personal, domestic and livelihood uses

Concerning the right to adequate water, a key question from the perspective of rural and peri-urban African women is whether the right to water should be defined narrowly, covering only water for personal and domestic use, or whether water for livelihood uses such as food production in kitchen gardens should be included. As noted above, this has been a contested question.

The CESCR General Comment No. 15 is itself ambiguous. It repeatedly uses the term 'water for personal and domestic use,' defined as water that is necessary for drinking, personal sanitation, washing of clothes, food preparation, and personal and household hygiene.²⁸ The amount necessary to satisfy personal and domestic needs will, according to the Committee, vary with climatic conditions as well as individual health conditions, such as people living with HIV/AIDS and pregnant and lactating women.²⁹ While it is difficult to convert these varying needs into general standards, the World Health Organization has held that 20-25 litres per person per day constitute the absolute minimum. The right thus clearly extends beyond the right to 'safe drinking water', which was the focus of the UN General Assembly's Resolution 64/292.

However, while the CESCR General Comment No. 15 states that priority in the allocation of water must be given to such personal and domestic uses, it also demonstrates a wider understanding. Priority should *also* be given to water resources required to prevent malnutrition, starvation and disease.³⁰ The scope and extent of the human right to water is thus defined through its link to the right to life, the right to food, and the

26 Ibid. paras 11-12.

27 Ibid. paras 13-16.

28 Ibid. para. 2.

29 Ibid. para. 12a.

30 Ibid. para. 6.

right to health. Along the same lines, the Committee argues that priority must be given to water required to meet the core obligations of *each* of the Covenant rights (emphasis ours).³¹

Further elaborating the indivisibility of the right to water, the right to adequate food, and the principles of non-discrimination and equality, the CESCR Committee placed particular emphasis upon access by disadvantaged and marginalized farmers: 'Attention should be given to ensuring that disadvantaged and marginalized farmers, including women farmers, have equitable access to water and water management systems, including sustainable rain harvesting and irrigation technology.'³²

The UN Sub-Commission Guidelines (2006) take a similarly ambiguous approach. A statement demanding priority to essential personal and domestic uses of water is accompanied by the statement that 'marginalized or disadvantaged farmers and other vulnerable groups should be given priority to water resources for their basic needs' in order to realize the 'right to adequate nutrition and the right to earn a living through work.'³³

Some human rights scholars have argued for a strict distinction between rights, emphasizing that water for growing family food in kitchen gardens should be considered as a form of farming, and as such covered by the right to food and not by the right to water (Winkler, 2012: 129-31). However, other scholars disagree on the basis of both practical and legal arguments (Cullet, 2009:194; Hellum, 2007b: 297, 301; Langford, 2009). As shown by the case studies in this book, a sharply defined contrast between domestic and productive water uses does not respond to the integrated way in which poor rural and peri-urban southern and eastern African women use water for a multiplicity of purposes, ranging from drinking and washing to the watering of vegetables (Chapter 1). Access to water resources enables African women to play a crucial role in the food security of households: women are estimated to contribute up to 80% of labour for food production (FAO, 2004). Furthermore, access to water for livelihood uses enables women to raise money for school fees and medicine, and is thus vital for the fulfillment of children's rights to education and health.

Excluding water for livelihood uses from the right to water is inconsistent with the CESCR Committee's own view, presented in General Comment No. 15, that the rights to life, food and health form the basis

31 CESCR GC 15 para 6.

32 Ibid. para 7.

33 The Sub-Commission Guidelines 4.3.

for establishing the very existence and content of the right to water. Similarly, in its General Comment No. 14 on the right to health, the CESCR explicitly included access to water as a necessary condition for a healthy life.³⁴

The indivisibility of rights is also a dominant argument in the Right to Food Guidelines that were adopted by FAO in 2004.³⁵ Seeing the right to life, food, health and water as indivisible, Section 8 of the Right to Food Guidelines includes improved, non-discriminatory and secure access to water resources as one of its central obligations towards ensuring secure food production for livelihood. In striking a balance between conflicting water uses – particularly between large agricultural companies and poor small-scale farmers – these guidelines require that the situation of vulnerable groups be considered, in order to ensure that they have secure access to productive resources, most importantly water, to grow food for livelihood needs (Windfuhr, 2013). According to Guideline 8.6 of the Right to Food Guidelines, states must ensure women's access to productive resources, including credit, land and water. In a similar vein, the report on 'Women's right and the right to food' submitted by the HRC Special Rapporteur on the Right to Food³⁶ argues that states are required to enhance women's access to productive resources through their food security strategies.

Relatedly, Article 24 of the CRC links the right to health, clean water, and nutritious food, establishing a State duty 'To combat disease and malnutrition, including within the framework of primary health care, through inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution.' An inclusive interpretation of domestic and personal use, which includes water for broader livelihood uses, would therefore be in line with the rights of vulnerable groups of rural children.

At a regional level, women's role in food security is linked to the right to water when the Maputo Protocol Article 15 obliges contracting states to take all appropriate measures to 'provide women with access to clean

34 CESCR GC 14 para. 4.

35 The Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security, adopted by the FAO in 2004 (FAO 2005).

36 Report submitted to the UN Human Rights Council by the Special Rapporteur on the Right to Food, Olivier De Schutter, Women's Rights and the Right to Food, (24 December 2012). A/HRC/22/50.

drinking water, sources of domestic fuel, land and the means of producing nutritious food.' The Southern African Development Community (SADC) regional water policy of 2005 goes a long way in recognizing the need to prioritize water for sanitation, domestic and livelihood needs, so as to promote food security and poverty prevention.³⁷

A sharp distinction between water for domestic and for productive purposes is particularly problematic in relation to Article 14 of CEDAW. This article addresses the disadvantages experienced by rural women in accessing water, land, and food. Article 14(1) obliges states to 'take into account the particular problems faced by rural women' as well as the 'significant roles that rural women play in the economic survival of their families.' Article 14(2) provides that rural women have a right to 'enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications' on an equal basis with men. Furthermore, the CEDAW Committee, in its General Recommendation No. 21, states that women's domestic work should be put on an equal footing with productive work.³⁸ Applying this principle to the right to adequate water, the right should encompass rural and peri-urban women's integrated livelihood strategies and the way in which they use water for both domestic and productive purposes. The wording of Article 14(2)(h), which links 'water supply' to 'the right to adequate living conditions', must be seen as entailing a broad definition of the right to water which includes water to produce food or other items that are necessary to prevent poverty, starvation and malnutrition.³⁹

37 Southern African Development Community (SADC) Regional Water Policy, August 2005.

38 CEDAW General Recommendation No. 21, Equality in Marriage and Family Relations (1994), paras. 11-12, 32. See also CEDAW General Recommendation No 17, Measurement and Quantification of the Unremunerated Domestic Activities of Women and their Recognition in the GNP, (1991).

39 The CEDAW Committee has not addressed the human right to water and sanitation in any of its general recommendations or in its reporting guidelines. In its concluding remarks to States Reports, it asks States to provide information on the issue. On the basis of Article 14 in the Convention, the Committee regularly refers to the holistic relationship between women's right to participation and their right to development in terms of access to resources, such as land, water, credit and health services (Hellum, 2015). The Committee's concluding observations are nonetheless of a general character. Most of the time, the Committee simply reiterates the formulations in Article 14(2)(h) of CEDAW. The CEDAW Committee has, since 2013, been working on a general comment on the rights of rural women.

On the basis of the indivisibility of the right to life, the right to food, the right to health and the right to equality, as well as the duty to take into consideration the concerns of vulnerable groups, embedded in the ICESCR, CEDAW, CRC and the Maputo Protocol, a sharp division between water for domestic and productive uses should therefore be avoided. 'Adequate water' should be interpreted to encompass water necessary to prevent malnutrition, starvation and disease. As the countries whose experiences are discussed in this book seek to frame and implement the right to water, they will thus have to balance it against the right to a healthy environment, the right to health, and the right to food. This broader contextualization of the right to water may be the pathway to looking beyond water for drinking purposes and including water for livelihood – life, food and health.

4.2 Accessible and safe water

The right to physically accessible and safe water is a key concern in Africa, where people spend 40 billion hours every year just walking to collect water, and women and girls carry two-thirds of this burden (UNICEF, 2012). For water to be considered physically 'accessible', there must be water infrastructure that ensures access to sufficient quantities of water. Access to water services must be guaranteed in households, schools, hospitals, work places and public places.⁴⁰ It has been argued that the water source should not be further than 1,000 meters away from the household, which means 30 minutes collection time. Yet this cannot be applied automatically: It has to be taken into consideration that individual collection time will vary with gender, age and health. To make water accessible for the elderly or people with disabilities, specific measures must be put in place. Water sources must also be located in places where women can safely access water without the risk of rape or sexual abuse.

In line with the interdependence between water and health, the CESCR in General Comment No. 15 states that water must be of such a quality that it does not pose a threat to human health.⁴¹ Again, differences between individuals and groups must be considered: the Committee refers to the World Health Organization's Guidelines for Drinking Water

40 CESCR GC 15 para. 12 (c).

41 Ibid. para. 12 (b).

Quality (WHO, 2011), which defines safe drinking water as ‘water that does not represent any significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages.’

4.3 Affordable water

The provision of water that is affordable for the poor poses a major challenge for post-colonial states that inherited water infrastructures designed to serve the needs of the male-dominated white settler economy. In line with the aim of greater racial justice and in order to bring black commercial farmers and industrialists on board, the Integrated Water Resource Management (IWRM) policy became the dominant template for water reform in post-colonial Africa in the 1990s. Privatization, decentralization, and demand management became the main modalities for laws and policies. The user-pays principle was, in many countries, adopted without due consideration of the situation of poor water users.

The case studies in this volume show how women within the most vulnerable and marginalized groups, including poor women, farmworker women and displaced women, are resorting to unsafe water because they cannot afford to pay water fees (Chapters 4, 8, 11 and 13). A related research observation is how the customary norms, which oblige the community members to share clean drinking water with those in need, have been weakened through the introduction of a decentralized water governance model which, on the basis of the user pay principle, requires membership fees (Chapter 9). While decentralized water governance has, in some instances, led to improved access to water for those who can pay, the research shows that it has also led to a situation in which poor community members who are unable to pay are excluded and have to resort to unsafe common water resources.

According to CESCR General Comment No. 15, water cannot be considered accessible unless it is also *economically* accessible, i.e. affordable: ‘Water, and water facilities and services must be affordable for all. The direct and indirect costs and changes associated with securing water must be affordable and must not compromise or threaten the realization of other Covenant rights.’⁴² The Committee went on to opine that governments must therefore adopt the necessary measures to ensure that water is affordable, for example through appropriate pricing policies such as free or low-cost water.⁴³ Water pricing policies should be based on the equity

42 CESCR GC 15, para. 12 (c) (ii).

43 Ibid., para. 27 (b).

principle, ensuring that water and sanitation services are ‘affordable for all, including socially disadvantaged groups’ and that ‘poorer households should not be disproportionately burdened with water expenses compared to richer households’.⁴⁴ In the same vein the Committee emphasized that ‘The direct and indirect costs and charges associated with securing water must be affordable, and must not compromise or threaten the realization of other Covenant rights.’⁴⁵ Most importantly, General Comment 15 establishes an immediate obligation to ‘ensure access to the minimum essential amount of water, that is sufficient and safe for personal and domestic uses to prevent disease.’⁴⁶ Thus, under no circumstances shall an individual be deprived of the minimum essential level of water.

The same argument is emphasized in the UN Sub-Commission Guidelines, which indicate that water and sanitation services ‘should be supplied at a price that everyone can afford without compromising their ability to acquire other basic goods and services.’⁴⁷ To realize this, the guidelines suggest cross-subsidies from high-income users and state subsidization for poor areas. Establishing that a person’s ability to pay should be taken into account before reducing access, the Guidelines conclude that ‘No one should be deprived of the minimum essential amount of water or access to basic sanitation facilities.’⁴⁸

Thus, although the state can exercise some choice in its pricing policies, the right to water is not fulfilled in a situation where individuals, for reasons beyond their control, such as poverty and discrimination, are unable to pay and therefore cannot access water. At the very minimum, questions of affordability for different disadvantaged groups must be given close attention in policy-making processes where systems for payment for water are an issue. Any payment for water services has to be based on the principle of equity, ensuring that these services, whether privately or publicly provided, are affordable for all, including socially disadvantaged groups.

5. THE HUMAN RIGHT TO SANITATION

The absence of sanitation facilities threatens people’s health and dignity. Despite the progress made in providing improved sanitation globally and the notable increase in the number of people who have sanitation

44 Ibid., para. 26.

45 Ibid., para. 12 (c) (ii).

46 Ibid., para. 37 (a).

47 UN Sub-Commission Guidelines Section 1.3(d).

48 Ibid. Section 6.4.

services, over 2.5 billion people lack access to adequate sanitation and one billion people still practice open defecation.⁴⁹ The areas studied in this book illustrate that for women across southern and eastern Africa, limited access to adequate sanitation facilities is frequent, and has direct consequences for health and physical safety. Farmworker women are, as shown in Chapter 4 and Chapter 13, on the bottom of both the national and local hierarchy.

While access to sanitation facilities is an urgent concern for many groups of women, this does not necessarily translate into infrastructure investments or policies. The case study from Mathare, Kenya (Chapter 5), demonstrates that for residents in informal settlements, sanitation was experienced as a most pressing need, even above water and housing improvement. However, this local prioritization was not reflected in similar levels of attention or investments by donors or official programmes. In Zimbabwe, access to sanitation facilities has dropped dramatically over the last years, but the new Water Policy does not set out a minimum level of sanitation access in the way it does concerning access to water for domestic use (Chapters 10 and 11).

Although the human right to sanitation has received less attention than the right to water, its existence is now widely recognized and has solid basis in international legal documents. It is also increasingly recognized in national constitutions, including in Kenya.⁵⁰ The right to sanitation is not directly addressed in the Zimbabwean Constitution of 2012 but it is implicit in the right 'to an environment that is not harmful to their health for well-being.'⁵¹ The Malawian Constitution does not address the right to sanitation.

Sanitation is mentioned explicitly in CEDAW Article 14(2) h with water supply as elements of the right of rural women to equal enjoyment of adequate living conditions. While the International Covenant on Economic, Social and Cultural Rights does not mention sanitation explicitly, it is highly relevant for the right to an adequate standard of living, as established in Article 11, as well as for the right to health found in Article 12. Giving explicit support to this argument, CESCR General Comment No. 15 finds that the right to health and the right to adequate housing imply that states have an obligation to 'progressively extend safe

49 Data from the Human Rights Council Resolution 27/7 on The Human Right to Safe Drinking Water and Sanitation (2014), A/HRC/RES/27/7.

50 Article 43 (1) (b), Constitution of Kenya, 2010, see also Winkler 2012, p. 173.

51 Section 73 (1) (a), Constitution of Zimbabwe.

sanitation services, particularly to rural and deprived urban areas.⁵² The Committee further emphasizes that ‘access to adequate sanitation’ is fundamental for human dignity and privacy, as well as a mechanism for protecting the quality of water resources.⁵³ To ‘ensure access to adequate sanitation’ is mentioned specifically as an element of the immediate core obligation of states to take measures to prevent, treat and control diseases linked to water.⁵⁴

The right to sanitation was included in the UN Sub-Commission Guidelines (2005), where Article 1.2 states that ‘Everyone has the right to have access to adequate and safe sanitation that is conducive to the protection of public health and the environment.’ Sanitation was also explicitly included in the mandate when the Human Rights Council appointed its Independent Expert in 2007 (from 2011 Special Rapporteur) on the right to water, and her first report was devoted to the theme.⁵⁵ Moreover, in 2010, sanitation was recognized as a human right in resolutions by both the Human Rights Council⁵⁶ and the General Assembly.⁵⁷

However, the more specific content of the right is still less developed. While CESCR General Comment No. 15 refers to ‘adequate’ and ‘safe’ sanitation services, it neither defines these two terms nor clarifies whether they carry different human rights’ obligations.⁵⁸ In her 2009 report, the Independent Expert draws on the concepts employed by the CESCR Committee in their analysis of the right to water⁵⁹ when she stresses that

States must ensure without discrimination that everyone has physical and economic access to sanitation, in all spheres of life, which is safe,

52 CESCR GC 15 para. 29.

53 Ibid.

54 Ibid., para. 37(i).

55 Human Rights Council Resolution 7/22 (2008); Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque (2009), A/HRC/12/24.

56 Human Rights Council Resolution 15/9 on Human Rights and Access to Safe Drinking Water and Sanitation (2010) A/HRC/RES/15/9.

57 General Assembly Resolution 64/292 on the Human Right to Water and Sanitation (2010).

58 ‘Personal sanitation’, in CESCR GC 15 para. 12.a, is merely defined as ‘disposal of human excreta.’

59 See Section 4 above.

*hygienic, secure, socially and culturally acceptable, provides privacy and ensures dignity.*⁶⁰

This statement was reiterated by the CESCR in its 2010 Statement on the Right to Sanitation.⁶¹

The principles of equality and non-discrimination apply also to the right to sanitation, as explicitly stated by the CESCR in the context of the ‘obligation to progressively extend safe sanitation services, particularly to rural and deprived urban areas, *taking into account the needs of women and children*’ (emphasis ours).⁶² For the right to sanitation to be both non-discriminatory and ‘engendered’, a key concern is to ensure that facilities satisfy gender-differentiated needs. A contextual and integrated approach to human rights points to several themes that require attention.

The case studies in this book demonstrate that lack of sanitation facilities is a widespread phenomenon, experienced by poor urban women as well as rural farmworker women (Chapters 4 and 13). The requirement that sanitation services must be *available* has been stated as requiring ‘a sufficient number of sanitation facilities (with associated services) within, or in the immediate vicinity, of each household, health or educational institution, public institutions and places, and the workplace.’ In practice, sanitation facilities are central to ensuring women’s equal access to public services and the related human rights. As pointed out by a number of studies, young girls are less likely to attend school if suitable sanitation facilities are lacking (Stewart, 2007). It has been estimated that about half of the girls in sub-Saharan Africa who drop out of primary school do so because of lack of adequate water and

60 Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque (2009), A/HRC/12/24, para. 63.

61 CESCR Statement (2010), The Right to Sanitation, E/C.12/2010/1, para. 8. Similar concepts were included in the Sub-Commission Guidelines, where guideline 1.3 stressed that both water and sanitation services must be physically accessible, of sufficient and culturally acceptable quality, in a location where physical security can be guaranteed, and affordable.

62 CESCR GC, 15 para. 29. A similar call for non-discrimination is also found in the Human Rights Council in Resolution 27/7 (2014) on The Human Right to Safe Drinking Water and Sanitation, when it calls upon states ‘to identify patterns of failure to respect, protect or fulfil the human right to safe drinking water and sanitation for all persons without discrimination and to address their structural causes in policymaking and budgeting within a broader framework, while undertaking holistic planning aimed at achieving sustainable universal access’.

sanitation facilities (UNICEF, 2005). Recognizing that seemingly gender-neutral facilities often overlook socially-constructed gender differences related to sanitation and hygiene, the CESCR emphasized in its statement on the right to sanitation that ‘...girls do not go to school in many parts of the world for lack of toilets, or lack of separate toilets for them.’⁶³

Furthermore, lack of sex-segregated toilets in hospitals may discourage women from seeking treatment there,⁶⁴ and workplaces lacking sanitation facilities affect women, in particular during menstruation and pregnancy.⁶⁵ To consider the *quality* of sanitation facilities, women’s need for menstrual hygiene and mechanisms for disposal of menstrual products must be taken into consideration.⁶⁶ Human Rights Council Resolution 27/7 points at the relationship between lack of access to adequate water and sanitation services, ‘including menstrual hygiene management, and the widespread stigma associated with menstruation,’ and gender equality and the human rights of women.⁶⁷

The requirement that facilities be *physically accessible* calls for attention to the need to provide security for women who are vulnerable to attacks and violations in secluded areas. In the case study from Mathare, Kenya, women’s access to toilets at night is inhibited, either due to insecurity or because they are simply locked (Chapter 5). Rural women without access to sanitation may choose to defecate in the open under the cover of darkness in order to ensure a minimum of privacy, but at considerable risk to their physical security.⁶⁸ According to the Independent Expert, the location of sanitation facilities must ensure minimal risks to the phys-

63 CESCR statement (2010), Statement on the Right to Sanitation, 19 November 2010, E/C.12/2010/1, para. 5.

64 Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque (2009), A/HRC/12/24, para. 23. For a similar argument, see Ali (2007).

65 Ibid., para. 38.

66 Ibid., para. 72.

67 Human Rights Council Resolution 27/7 (2014). The Special Rapporteurs on torture and on the right to education have also specifically referred to the sanitary needs of menstruating women as relevant to their mandates, see references in Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque (2009), A/HRC/12/24, paras 51-52.

68 Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque (2009), A/HRC/12/24, paras 43-44.

ical security of users, and the facilities should be constructed in a way that minimizes the risk of attack, 'particularly for women and children.'⁶⁹ Ensuring that toilets are open and the roads lit at night in poor urban settlements is one measure to achieve this.

The case studies from Mathare and Harare's high-density areas (Chapters 5 and 11) further document the lack of toilets allowing access for women with disabilities. To design facilities that are *physically accessible* for everyone requires attention to the practicalities of physical access and use for a wide range of users, such as 'children, persons with disabilities, elderly persons, pregnant women, parents accompanying children, chronically ill people and those accompanying them.'⁷⁰

In Zimbabwe, water cut-offs due to lack of payment also have implications for the sanitary conditions for urban women (Chapter 11). The Independent Expert has drawn explicit attention to this theme, holding that 'Water disconnections resulting from an inability to pay also impact on waterborne sanitation, and this must be taken into consideration before disconnecting the water supply.'⁷¹ The right to sanitation demands that access to sanitation facilities be *affordable* for all people, and a range of technical and financial mechanisms can support the realization of this goal.⁷²

Sanitation should be approached as a right closely related to the rights to non-discrimination; to physical security, to human dignity and protection against gender violence; and to education, health and work. The indivisibility of human rights is thus a key argument to develop an 'engendered' interpretation of the right to sanitation. Furthermore, access to sanitation facilities is not only a right in itself, but also a central element of ensuring women's equal enjoyment of other human rights. Thus, a contextual and integrated approach to human rights calls for more sustained attention to the *sanitation* dimension of development and infrastructure projects, on an equal footing with water.

6. THE DUTY TO RESPECT AND PROTECT THE RIGHT TO WATER AND SANITATION IN THE CONTEXT OF PLURAL WATER GOVERNANCE

While the previous sections outlined the *rights* to water and sanitation, the goal towards which all actors must strive, this section further details

69 Ibid., para. 75, see also Sub-Commission Guidelines section 3.1.

70 Ibid., para. 76, see also para. 73.

71 Ibid., para. 77.

72 Ibid., paras 78-79.

the *duties* of states as to how they must act to realize this goal. While all aspects of the right may not be capable of immediate fulfilment, states do have immediate obligations to act, or refrain from acting (Fredman, 2006: 77). A first immediate obligation, cutting across all activities, is to ensure that the right is exercised without discrimination.⁷³ A second is to take deliberate, concrete and targeted steps towards full realization.⁷⁴ According to some authors, the provision of a minimum essential level of the right ('the core obligation') is also an immediate obligation (Winkler, 2012: 117-25).

In presenting these steps, this section makes use of the generally recognized tripartite framework of types of obligations, distinguishing among the obligations to respect, to protect, and to fulfil the right(s) in question.⁷⁵ In short, the obligation to *respect* implies that the state refrain from interfering directly or indirectly with the enjoyment of the right to water.⁷⁶ *Protecting* the right requires the state to prevent third parties from interfering with the enjoyment of the right.⁷⁷ *Fulfilling* the right refers to the state's positive action to ensure that the right to water can be enjoyed fully, and can be disaggregated into obligations to facilitate, to promote, and to provide.⁷⁸

The complex nature of water governance gives rise to particular questions for all three levels of obligations, as the multitude of actors and the plural and interacting normative orders at play must be recognized and considered. As demonstrated by the case studies, the duties to respect and protect raise particularly pressing questions of interpretation in the context of plural water governance.

6.1 The duty to respect

The obligation to respect, demanding that the state refrain from interfering with the enjoyment of the right to water, has important implications for how the state deals with customary and informal water management. In southern and eastern Africa, land tenure and access to related natural resources, such as water, have for centuries been regulated by local com-

73 ICESCR articles 2.2 and 3, see also CESCR GC 15, para. 17.

74 ICESCR article 2.1, see also CESCR GC 15, paras 17-18.

75 This analytical framework was originally proposed by Henry Shue (1980) and further developed by Asbjørn Eide (1984). It has been applied in several general comments from the CESCR Committee since GC 12 (1999) on the right to food, so also GC 15 on the right to water.

76 CESCR GC 15, paras. 21-22.

77 Ibid, paras. 23-24.

78 Ibid, paras. 25-29.

munity-based arrangements (Hodgson, 2004). These informal water governance regimes, which have co-existed with the received western water laws since the colonial period, often recognize a right to clean drinking water and a broad right to livelihood in terms of access to land and water that is necessary for livelihood. Access to these resources enables African women to play a crucial role in the food security of households.

The local practices and norms that govern water access, use, and control constitute a dynamic and responsive form of law, often referred to as 'living customary law.' As shown in this book, local water rights often lack formal legal recognition and are not integrated and protected by the laws and policies that frame the national water governance systems. Rural communities' use of and control over water sources is often threatened by large-scale development and industrialization initiatives that are using national permit and licensing systems to garner water resources without due attention to local users. They often form part of larger deals between national governments and national and international investors in the growing drinking water or agro-food-energy businesses. The downside of these deals is that they often result in uncompensated loss of livelihood resources for poor and marginalized groups: so-called 'land and water grabbing.'

According to the CESCR, the obligation to *respect* the human right to water includes a duty to refrain from interfering arbitrarily with customary or traditional arrangements for water allocation, unlawfully polluting water, or destroying water services and infrastructure as a punitive measure.⁷⁹ In articulating the content of the right to food, and taking note of the duty in Article 1(2) of the ICESCR, which provides that people cannot 'be deprived of their means of subsistence', the CESCR has also opined that States Parties should ensure that there is adequate access to water for subsistence farming and for securing the livelihoods of indigenous peoples.⁸⁰ This implies a duty to respect traditional water uses.

6.2 The duty to protect

Recognizing the role of customary or local/informal water management for access to water in practice will also have implications for the duty to *protect*, i.e. ensuring that third parties do not interfere. The obligation to protect, as part of all human rights treaties and conventions, requires State Parties to put in place laws and policies that protect the enjoyment of the human right to water and sanitation against third parties.

⁷⁹ CESCR GC 15, para. 21.

⁸⁰ Ibid, para. 7.

State Parties thus have a duty to prevent third parties, whether individuals, groups, corporations or other agents, from interfering with the right to water and sanitation. One example of a statement to this effect is found in the UN Sub-Commission's Guidelines: 'States should enact and implement legislation to protect access by persons to traditional water sources in rural areas.'⁸¹

Moreover, the obligation to protect is important when water service provision is privatized. As also noted by the CRC Committee, privatisation or outsourcing does not exempt the state from its responsibility.⁸² An effective regulatory system must be established, including independent monitoring, genuine public participation, and imposition of penalties for non-compliance.⁸³ In a similar manner, decentralization of control over water and sanitation is not *per se* a violation of human rights. However, safeguards may be necessary to avoid negative effects on the enjoyment of the right to water, including discrimination in access and participation. States Parties are thus under an obligation to prevent both formal and informal private water service operators and providers from compromising the right to safe and affordable water. Where the state privatizes the provision of water services, it must ensure that regulatory systems, including independent monitoring, public participation, and penalties for non-compliance, are put in place.⁸⁴

7. THE DUTY TO MAKE WATER AND SANITATION ACCESSIBLE WITHOUT DISCRIMINATION

Human rights demand that attention be given to how different groups of women experience marginalization and rights' violations, which is linked not only to sex/gender but also to other aspects of their identities. The case studies presented in this book demonstrate that, although poor and marginalized women should, from a human and constitutional rights perspective, be given priority, they often find themselves at the bottom of the

81 Sub Commission Guidelines, section 3.4.

82 CRC General Comment No. 16 on State Obligations regarding the Impact of the Business Sector on Human Rights (2013), *CRC/C/GC/16*, para. 33, see also *CESCR GC 15*, para. 48.

83 *CESCR GC 15*, para. 24. See also Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2011a), *A/66/255*, para. 36, and Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque (2010a), *A/HRC/15/31*.

84 *CESCR GC 15*, paras 23-24

water hierarchy.

Water and sanitation services should be made accessible to everyone without discrimination, and this is an immediate duty of states. For the human right to water and sanitation to be 'engendered', it must be interpreted so that it can contribute to substantive equality for women and girls in different social, economic and cultural contexts. The human right to water and sanitation thus needs to be infused with protection against direct, indirect, structural and intersectional discrimination.

CESCR General Comment No. 15 states that 'whereas the right to water applies to everyone, States Parties should give special attention to those individuals and groups who have traditionally faced difficulties in exercising this right.'⁸⁵ The CESCR has addressed discrimination in relation to the right to water in light of Article 2(2) of the ICESCR: discrimination on the grounds of sex, 'which has the intention or effect of nullifying or impairing enjoyment or exercise of the right to water,' is said to contravene the Covenant.⁸⁶ The importance of eliminating substantive inequality was further articulated in CESCR General Comment No. 20 on Non-Discrimination.⁸⁷ It states that states have a duty to immediately adopt measures necessary to prevent, diminish and eliminate the conditions and attitudes that cause or perpetuate substantive or de facto discrimination. By way of example, it provides that 'ensuring that all individuals have equal access to adequate housing, water and sanitation will help to overcome discrimination against women and girl-children and persons living in informal settlements and rural areas.'⁸⁸

7.1 Direct discrimination

Direct discrimination occurs when a difference in treatment relies directly and explicitly on distinctions based exclusively on sex and characteristics of men or women, and these distinctions cannot be justified objectively.⁸⁹ While direct discrimination may be explicit in laws and guidelines, legislative amendment is not always sufficient to remove it from practice. Direct discrimination is often related to gender stereotypes embedded in social, religious or cultural notions of how men and women are expected

85 CESCR GC 15, para. 16. See also the Sub Commission Guidelines.

86 *Ibid*, para. 13.

87 CESCR GC No. 20, Non-Discrimination in Economic, Social and Cultural Rights (art. 2, para. 2) (2009), E/C.12/GC/20.

88 *Ibid* 20, para. 8.

89 CESCR GC No. 16 (2005) Article 3: the equal right of men and women to the enjoyment of all economic, social and cultural rights (2005), E/C.12/2005/3.

to behave. Thus, the duty to remove direct discrimination is intimately linked to the duty to combat structural discrimination (7.3).

7.2 Indirect discrimination

Indirect discrimination occurs when a law, policy or programme does not appear discriminatory on its face, but has a discriminatory effect when implemented. It can often stem from the uneasy relationship between gender-neutral laws and the gendered uses of land and water in practice (Kameri-Mbote, 2013; Hellum, 2015). Inappropriate resource allocation can lead to discrimination that may not be overt (Ik Dahl et al., 2005).

Injustices deriving from the gendered division of labour and gendered uses of land and water must be addressed. Article 14.1 of the CEDAW states that: 'States Parties shall take into account the particular problems faced by rural women and the significant roles which rural women play in the economic survival of their families, including their work in the non-monetarized sectors of the economy.' CESCR General Comment No. 15 indicates that investment should not disproportionately favour expensive water supply services and facilities that are only available to a small fraction of the population.⁹⁰ This can occur, for example, when water infrastructure is located so that it can be used in men's agricultural production, but is out of reach for women's kitchen gardens.

Thus, indirect discrimination may occur when policies, programmes, and plans for improvements and investments in water, by overlooking the gendered character of land and water uses, leave in place or exacerbate existing gender inequalities. Water policies and practices that appear at face value to be gender neutral need to be scrutinized with a view to ensuring that women's water uses, such as watering of kitchen gardens, are considered on an equal footing with irrigated agriculture, which is often controlled by men. Agricultural water supply services often exclusively target large-scale irrigation. This may result in a disproportionate share of resources and efforts being devoted to a small fraction of male commercial farmers.

Gender mapping of agriculture is therefore an important means to ensure that male and female land and water uses receive the same level of attention and consideration. It is a method that focuses on distinctions among three types of farming systems: (i) male farming systems, where most production sub-units are managed by men, but often with major contributions by women; (ii) female farming systems, where most pro-

⁹⁰ CESCR GC 15, para.14.

duction sub-units are managed by women; and (iii) separate male/female systems, where similar proportions of production sub-units are managed by men and women (Van Koppen, 2011).

7.3 Gender stereotypes, systemic discrimination and cultural change

Due to the gendered division of labour, women and girls, in large parts of Africa, spend far more time fetching water than do men and boys. Such practices are often underpinned by gender stereotypes embedded in customary or religious norms and beliefs. Gender stereotypes, according to Cook and Cusack (2010: 1), degrade women when they assign them subservient roles in society. Prejudices about women's inferiority generate disrespect and devaluation of women.

The duty to address negative gender stereotypes is found in several conventions. Article 5(a) of CEDAW places an obligation on States Parties to 'take all appropriate measures to modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices which are based on the idea of the inferiority or superiority of either of the sexes or on stereotyped roles for men and women.' In a similar vein, Article 2.2 in the Maputo Protocol requires that 'States Parties shall commit themselves to modify the social and cultural patterns of conduct of women and men through public education, information, education and communication strategies, with a view to achieving the elimination of harmful cultural and traditional practices and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes, or on stereotyped roles for women and men.'

While the ICESCR contains no similar regulation of gender stereotypes, the CESCR has developed an understanding of gender discrimination that also encompasses practices and cultural attitudes that create and uphold gendered hierarchies. The Committee has defined *systemic* discrimination as follows: 'legal rules, policies and practices or predominant cultural attitudes in either the public or the private sector which create relative advantages for some groups and disadvantage for others.'⁹¹ To come to grips with systemic discrimination, states must take proactive measures.

The Special Rapporteur on the Right to Food has also highlighted the relationship between structural causes of discrimination and gender division of work. To break the cycle of discrimination requires 'that the

91 CESCR GC 20, para. 12.

structural causes of *de facto* discrimination be addressed. In particular, measures should be taken to relieve women of the burden imposed on them by the duties they assume in the “care” economy.⁹² In his view, this requires ‘the right combination of measures that recognize the specific obstacles women face (particularly time, poverty and restricted mobility resulting from their role in the “care” economy) and measures that seek to transform the existing gender division of roles by redistributing tasks both within the household and in other spheres.’⁹³

Water and sanitation policies need to adopt the transformative approach embedded in CEDAW Article 5(a) and the Maputo Protocol Article 2.2, as well as the duty to combat systemic/structural discrimination. This implies that policies which seek to accommodate the specific needs of women, for example by protecting community-based water management practices, should also seek to subvert traditional gendered norms placing on women and girls the duty to fetch and manage water for domestic use.

Changing gender stereotypes and societal structures will require close and nuanced attention to the local dynamics of cultural change. Recognizing that the universal principle of equality could be achieved through different means the CEDAW Committee has gradually developed a jurisprudence that accommodates different cultural traditions with the aim of achieving substantive, rather than just formal, equality. In its concluding comments to State Parties, the CEDAW Committee encourages them to see culture as something that can be changed (Holtmaat, 2013). One example is the concluding observations to Malawi’s sixth report, where the Committee urged

*... the State party to view culture as a dynamic dimension of the country’s life and social fabric, subject to many influences over time and therefore to change. It recommends that the State party adopt without delay a comprehensive strategy, including clear goals and time-tables, to modify or eliminate negative cultural practices and stereotypes which are harmful to, and discriminate against, women and to promote women’s full enjoyment of their human rights in conformity with articles 2(f) and 5(a) of the Convention.*⁹⁴

A second example of how the CEDAW Committee views the state’s responsibility for changing culture is found in its recommendations in

92 Special Rapporteur on the Right to Food (2012), A/HRC/22/50, para. 39.

93 Ibid, para. 42.

94 CEDAW/C/MWI/CO/6, para. 21.

an individual complaints case in which customary inheritance law in Tanzania was found to constitute a violation of the Convention.⁹⁵ The Committee does not merely request the state to amend the formal legal framework: recognizing the relationship among discriminatory customs, gender stereotypes and discriminatory attitudes about the roles and responsibilities of women (s. 7.5), it also recommends that the state seek to encourage dialogue ‘between civil society and women’s organizations and local authorities, including with traditional leaders at the district level’ as a path to induce change in practice.⁹⁶

Seeing culture as contested and dynamic, the UN Special Rapporteur in the Field of Cultural Rights emphasizes that ‘the critical issue, from the human rights perspective, is not whether and how religion, culture and tradition prevail over women’s human rights, but how to arrive at a point at which women own both their culture (and religion and tradition) and their human rights.’⁹⁷ The report of the Special Rapporteur thus ‘proposes to shift the paradigm from one that views culture merely as an obstacle to women’s rights to one that seeks to ensure equal enjoyment of cultures’ rights; such an approach also constitutes a critical tool for the realization of all their human rights.’⁹⁸ It calls for a strategy addressing not only the restrictive impact of custom, culture and religion on women’s human rights, but also women’s agency to assert their right to culture in spaces where customary and religious norms are interpreted and applied, so as to empower women as agents of political, legal, cultural and legal change.

This approach resonates with the overall findings of the national and local level case studies presented in this book. From a grounded gender perspective, the research uncovers the complex and conflicting legal situations that the interplay among international, national, and local norms and institutions governing water gives rise to. In Chapter 1 it points to the need for a human rights based approach to water that considers how legal plurality in some situations may be a resource that facilitates poor and marginalized women’s access to water, while in other situations it may produce and reinforce intersecting gendered and classed forms of exclusion.

95 CEDAW Committee (2015) Communication No. 48/2013, CEDAW/C/60/D/48/2013.

96 CEDAW Committee (2015) Communication No. 48/2013, CEDAW/C/60/D/48/2013, section 9.b(v).

97 Report of the Special Rapporteur in the Field of Cultural Rights (2012), A/67/287, para. 4.

98 Ibid, para. 5.

7.4 Intersectional discrimination

As shown by the studies presented in this book, the poorest and most vulnerable women (such as displaced women, farmworker women, and poor widows looking after HIV orphans) are at the bottom of the water hierarchy, contrary to international and constitutional priority principles. The duty of a state to combat discrimination goes beyond considering sex/gender alone. Intersecting vulnerabilities related to gender, class, health and disability may result in intersectional discrimination: that is, discrimination that cannot be ascribed to a cause.

The CEDAW Committee has defined intersectionality in the following manner:

Intersectionality is a basic concept for understanding the scope of the general obligations of States parties contained in article 2. The discrimination of women based on sex and gender is inextricably linked with other factors that affect women, such as race, ethnicity, religion or belief, health, status, age, class, caste, and sexual orientation and gender identity. Discrimination on the basis of sex or gender may affect women belonging to such groups to a different degree or in different ways than men. States parties must legally recognize and prohibit such intersecting forms of discrimination and their compounded negative impact on the women concerned. They also need to adopt and pursue policies and programmes designed to eliminate such occurrences, including, where appropriate, temporary special measures.⁹⁹

Addressing the multiple disadvantages experienced by rural women, including the poor, elderly and disabled, Article 14 of the CEDAW Convention sets out an intersectional approach to gender discrimination (Banda, 2012: 359). The CEDAW Committee has also drawn attention to the particular disadvantages experienced by vulnerable groups of women in accessing water and sanitation. It highlighted the situation of elderly rural women in General Recommendation No. 27:

In many countries the majority of older women live in rural areas where access to services is made more difficult due to their age and poverty levels. Many older women receive irregular, insufficient or no remittances from their migrant worker children. Denial of their rights

99 CEDAW General Recommendation No. 28 on the Core Obligations of States Parties under Article 2 of the Convention on the Elimination of All Forms of Discrimination against Women (2010), CEDAW/C/GC/28.

*to water, food and housing is part of the everyday lives of many poor, rural older women.*¹⁰⁰

In its concluding observations to the report of the Kenyan State, the Committee expressed worries regarding the situation of both rural women and refugee women residing in urban slums, and urged the State to:

*Ensure effective policing in the slums and informal settlements and to address the issue of gender-based and other forms of violence, inter alia by urgently providing sanitation facilities in the immediate vicinity of each household.*¹⁰¹

The CESCR has emphasized the importance of recognizing the experience of ‘social groups that are vulnerable and have suffered and continue to suffer marginalization,’ as well as intersectionality, in order to fully combat discrimination.¹⁰² In General Comment No. 15, the CESCR repeatedly demands attention to marginalized groups, thus also recognizing the multiple types of vulnerabilities experienced by poor women in enjoying the right to water and sanitation:

*States parties should give special attention to those individuals and groups who have traditionally faced difficulties in exercising this right, including women, children, minority groups, indigenous peoples, refugees, asylum seekers, internally displaced people, migrant workers, prisoners and detainees.*¹⁰³

8. THE RIGHT TO EQUAL, FREE AND MEANINGFUL PARTICIPATION IN WATER GOVERNANCE

Participation is a human rights principle which is important in order to ensure that livelihood resources like land, water, food, health and housing are managed and distributed by institutions that are representative and accountable. International human rights and development discourse assumes that women’s participation may be one of the most successful mechanisms for more gender-sensitive consideration of demands for water and sanitation at the international, national and local level.

The right to participation is enshrined in Article 25 of the International Covenant on Civil and Political Rights (ICCPR). Articles 7 and

100 CEDAW General Recommendation No. 27 on older women and protection of their human rights (2010) CEDAW/C/GC/27, para. 24.

101 CEDAW/C/KEN/CO/7, para 42(b).

102 CESCR GC 20, para. 27.

103 CESCR GC 15, para. 18.

14 (2) of the CEDAW guarantee women equal right to participation at all levels of government. The right to equal participation of persons with disabilities is specified in Article 29 of CRPD. Children's rights to participate and to express their views are embedded in Article 12 of CRC. Participation is also a key element in the human rights based approach to development.¹⁰⁴

The principle of participation requires that all relevant stakeholders must be enabled to take part in the decision-making process and have the opportunity to express their demands (Filmer-Wilson, 2005: 233; Winkler, 2012: 220-21). The UN Sub-Commission Guidelines on the Promotion of the Realization of the Right to Drinking Water and Sanitation specify several dimensions of participatory rights. Emphasizing the equal rights to participate of all individuals, these guidelines state that 'Everyone has the right to participate in decision-making processes that affect their right to water and sanitation. Special efforts must be made to ensure the equitable representation in decision-making of vulnerable groups and sections of the population that have traditionally been marginalized, in particular women.'¹⁰⁵ The guidelines also draw attention to the rights of communities as groups: 'Communities have the right to determine what type of water and sanitation services they require and how those services should be managed and, where possible, to choose and manage their own services with assistance from the State.'¹⁰⁶

As women are the day-to-day managers of water and sanitation, their participation is recognized by international policy makers as contributing to more just, effective and locally appropriate uses of resources. The need to ensure women's participation is found across a range of documents. The Dublin Principles, which provided the international blueprint for water reform in southern and eastern Africa (as elsewhere in the world) during the 1990s, took the close relationship among water, gender, and sustainable development into account. The gender dimension of sustainable water management was anchored in Principle 3: 'Women play a central part in the provision, management, and safeguarding of water'. Although the Dublin Principles made no explicit reference to CEDAW, this recognition of women's role as local water managers shares the foundational argument of Article 14.2(a) in CEDAW, which obliges State Parties to

104 On the human rights-based approach to development and women's land rights in Southern and Eastern Africa, see Ikdahl et al. (2005).

105 UN Sub-Commission Guidelines, section 8.1.

106 Ibid. section 2.

ensure that rural women have a right to participate in the elaboration and implementation of development planning at all levels, as well as a right to participate in all community activities. Furthermore, CESCR General Comment No. 15 on the human right to water emphasizes the need to ensure that 'Women are not excluded from decision-making processes concerning water resources and entitlements. The disproportionate burden women bear in the collection of water should be alleviated.'¹⁰⁷

The duty to ensure women's participation is also strongly emphasized in human rights documents at a regional level in Africa. Article 9.1.c of the Maputo Protocol obliges the states to take specific positive action to ensure that 'women are equal partners with men at all levels of development and implementation of state policies and development programs.' According to Article 9.2, States Parties shall ensure increased and effective representation and participation of women at all levels of decision-making.' Seeing participation rights as part and parcel of the right to sustainable development, the Maputo Protocol Article 19.c obliges states to take all appropriate measures to 'Ensure participation of women at all levels in the conceptualization, decision-making, implementation and evaluation of policies and programs.' In the SADC (1997), heads of state or government laid the political foundation for the implementation of women's participation rights by committing themselves to take measures to ensure 30% representation of women in all political decision-making structures by 2005.

The CEDAW Committee has not yet addressed the human right to water and sanitation in any depth in its general recommendations or in its reporting guidelines.¹⁰⁸ However, in its examination of State reports, the Committee regularly uses Article 14.2(h) of the Convention as a point of departure for urging states to take measures to ensure women's right to participation and their right to development in terms of access to resources, such as land, water, credit and health services. The following recommendation has been made in its concluding comments to states such as Mozambique,¹⁰⁹ South Africa¹¹⁰ and Kenya:¹¹¹

That the State party take measures to increase and strengthen the par-

107 CESCR GC 15, para. 16.

108 The CEDAW Committee is, as we write, working on a general recommendation on rural women.

109 CEDAW/C/MOZ/CO/2, para. 41.

110 CEDAW/C/ZAF/CO, para. 38.

111 CEDAW/C/KEN/CO/7, para. 42(a).

ticipation of women in designing and implementing local development plans, and pay special attention to the needs of rural women, particularly women heads of household, ensuring that they participate in decision-making processes and have improved access to health, education, clean water and sanitation services, fertile land and income-generation projects.

In a similar vein, the Sub-Commission Guidelines state that special efforts must be made to ensure equitable representation in decision-making processes that affect the right to water and sanitation.¹¹²

The Human Rights Council's Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation pointed out that, as the most disadvantaged generally tend to have less ability to voice their opinions and needs, decision-making processes that do not ensure meaningful participation by these groups and individuals will further impair the use and sustainability of decisions aimed at ensuring access to water and sanitation.¹¹³ Thus, participation is not only a right in itself; by shedding light on different situations and views, it may strengthen the likelihood of achieving a water supply and governance that are consistent with human rights.

The right to participation extends to all levels of decision-making, whether policy-making processes at national level or day-to-day decision-making locally in water user groups and other local institutions. It also applies in emergencies, requiring states and donors to involve local water users in decisions regarding drilling of boreholes and maintenance systems.

From a human rights perspective, participation has to be 'active, free and meaningful.'¹¹⁴ Meaningful participation requires knowledge about decision-making processes, as well as the laws and policies to be made. Clearly, education and information are important measures for ensuring that the right to participation results in actual empowerment.

The Sub-Commission guidelines link the right to participation with the right to information: 'Everyone should be given equal access to full and transparent information concerning water, sanitation and the envi-

112 The Sub-Commission Guidelines, para. 8.1.

113 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2013), A/HRC/24/44, para. 49.

114 UN General Assembly Resolution 41/128, Declaration on the Right to Development (4 December 1986), A/RES/41/128, art. 2(3).

ronment.¹¹⁵ This adds an explicit equality dimension to the CESCR's emphasis on information accessibility, 'the right to seek, receive and impart information concerning water issues,' as a dimension of adequacy.¹¹⁶

The HRC Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation has further detailed the relationship between participation and transparency:

*True participation requires meaningful opportunities to freely and actively influence decisions, not mere superficial consultation or information sharing [...]. Such a process entails providing information through multiple channels, enabling participation in transparent and inclusive processes, ensuring that funds are appropriately spent on interventions that are needed and strengthening the capacities of individuals and civil society to engage.*¹¹⁷

To ensure that women's participation is active, free, and meaningful, merely counting the number of women present at meetings will, as shown by the research presented in this book, not suffice (Chapters 8, 9 and 12). In practice, customary norms that have developed outside the realm of the national laws, policies, and institutions are often based on a gender hierarchy that reflects the gendered division of labour, resources and power within the community. These norms often assign women an inferior position in the community's governance of water, and have a spillover effect on women's participation in local institutions that are part of the national water governance system. Thus, without an 'empowerment' component addressing water-related gender stereotypes as well as women's agency to assert their social, economic, civil and political rights and their capacity to hold water service providers accountable, there is a danger that the concerns of women will continue to be neglected in both local and national water governance.

9. THE OBLIGATIONS OF INTERNATIONAL DEVELOPMENT ACTORS

The case studies in this book demonstrate the wide range of actors, local, national and international, who are involved in water governance. As noted already, the state in which actions take place ('the home state') has a human rights obligation to *protect* people's enjoyment of the human right to water and sanitation against third parties. However, to some extent,

115 The Sub-Commission Guidelines, para. 8.3.

116 CESCR GC 15, para. 12(c)(iv).

117 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2013), A/HRC/24/44, para. 76.

international actors may also themselves be duty-bearers.

9.1 International actors as duty-bearers

International actors include the international finance institutions (the World Bank and the African Development Bank), international organizations such as the UN agencies (UNICEF, UNDP), international NGOs, and states involved in bi- and multilateral development co-operation. Their involvement takes different forms, ranging from funding state activities to hands-on activities run by the donors themselves. Donors may take part in reform and policy design initiatives at the national level, or be involved in local-level drilling of boreholes, setting up local water user groups, or other types of support to local level activities.

While most of these actors have subscribed to a human rights-based approach to development as a principle guiding their activities, the basis for establishing the *legal* obligations of actors other than the 'home state' differs. NGOs are rarely understood as capable of holding international legal obligations. Although the international financial institutions frequently mention the instrumental role of human rights for their efforts to promote development, they have been reluctant to see themselves as *bound* by human rights, but rather see themselves as facilitating their members' work to realize rights. However, some authors have emphasized that at least some obligations may also be held by these institutions (Skogly, 2003). The UN's purpose of promoting human rights, as embodied, for instance, in the UN Charter Article 55, provides a stronger basis for endowing the UN specialized agencies with obligations. Furthermore, UNICEF is explicitly mandated by the United Nations General Assembly to advocate for the protection of children's rights, which include the rights to water and sanitation.

Recognizing the limits of focusing solely on the nation-state, the CESCR frequently outlines the obligations of international development actors in its general comments. Concerning the right to water in particular, the Committee recommends that UN agencies and other international organizations concerned with water should co-operate effectively with States Parties in relation to the implementation of the right to water. The Committee also recommends that the international financial institutions (IFIs), notably the International Monetary Fund, the World Bank and the African Development Bank, should take into account the right to water in their lending policies, credit agreements, structural adjustment

programmes, and other development projects.¹¹⁸

In a similar vein, the UN General Assembly has stressed the important role of international co-operation and technical assistance in the field of drinking water and sanitation, and ‘urges development partners to adopt a human rights-based approach when designing and implementing development programmes in support of national initiatives and plans of action related to the right to safe drinking water and sanitation.’¹¹⁹ The HRC Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation has argued that donor policies must integrate the human rights to water and to sanitation, and support national priorities in this field as well as targets to reduce disparities in access.¹²⁰

However, the clearest basis for legal obligations is found with donor states that have themselves ratified the human rights conventions. The International Law Commission Draft Articles on State Responsibility of States for Internationally Wrongful Acts specify when a conduct, consisting of an action or omission, is attributable to the State – even outside its territory.¹²¹ The ‘extra-territorial’ obligations of states concerning social and economic rights have received considerable interest over the last decade. This is visible in the analyses from various UN bodies and mechanisms,¹²² as well as in the rapidly growing body of academic literature on the topic (Coomans and Kamminga, 2004; Skogly, 2006; Salomon et al.,

118 CESCR GC 15, para. 60.

119 UN General Assembly Resolution 68/157 on The Human Right to Water and Sanitation (18 December 2013), A/RES/68/157 para. 10. See, similarly, Human Rights Council Resolution 24/18 on The Human Right to Safe Drinking Water and Sanitation (27 September 2013), A/HRC/RES/24/18, para. 15, which make reference to states, specialized agencies of the UN system and international and development partners, and donor agencies.

120 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2011b), A/HRC/18/33, para. 62.

121 International Law Commission (ILC) Articles on the Responsibility of States for Internationally Wrongful Acts, Report of the International Law Commission on the Work of its Fifty-Third Session (2001), A/56/10.

122 This includes many of the documents referred to earlier in this chapter, stemming from treaty bodies such as the CEDAW Committee, the Committee on the Rights of the Child and the CESCR, the resolutions from the General Assembly and the Human Rights Council (HRC), and reports from special rapporteurs, including the HRC Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation. See also The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights, adopted by a gathering of experts in international law and human rights (final version 29 February 2012).

2007; Gibney and Skogly, 2010; Coomans and Künneman, 2012; and Langford, et al., 2013).

The CEDAW Committee has pointed out that State Parties are responsible for all their actions affecting human rights, ‘regardless of whether the affected persons are in their territory.’¹²³ The CESCR has emphasized that ‘International assistance should be provided in a manner that is consistent with the Covenant and other human rights standards, and sustainable and culturally appropriate.’¹²⁴ In its General Comment No. 15 on the right to water, this Committee devotes several paragraphs to the State’s obligations to respect the enjoyment of the right in other countries,¹²⁵ to prevent its own citizens and companies from violating the right in other countries,¹²⁶ and to facilitate realization of the right to water in other countries.¹²⁷ It emphasizes that in emergency assistance and disaster relief, priority should be given to Covenant rights, including the provision of adequate water.¹²⁸

National donors operating in Kenya, Malawi and Zimbabwe, notably GIZ, DFID, SIDA, DANIDA, AusAid and NORAD,¹²⁹ have adopted human rights-based approaches to the water sector. Yet, in many donor-funded interventions, such as consultancy reports or service provision programmes, cost recovery overrides the concerns of poor water users. In Zimbabwe, for example, the Multi Donor Analytical Trust Fund co-ordinated by the World Bank has, in its assistance to the formation of a new national water policy, failed to look into what the state obligation to provide affordable water requires (Chapter 10). In Malawi, where the water sector relies heavily on donor support, most NGOs that are involved in water sector provision through contracts with government are unaware of, or disregard, poor users’ right to affordable water (Chapter 7). While donors supported Malawi’s draft Water and Sanitation Bill in 1999, most of them advocated an economic approach to water provision, with loan conditionalities from the international finance institutions de-

123 CEDAW GR 28, para. 12.

124 CESCR GC 15, para. 34.

125 *Ibid.*, para. 31.

126 *Ibid.*, para. 33.

127 *Ibid.*, para. 34.

128 *Ibid.*, para. 34.

129 German Society for International Co-operation, Dept. of International Development (UK), Swedish International Development Co-operation Agency, Danish International Development Agency, Australian Aid, Norwegian Agency for Development Co-operation.

manding that subsidies be removed and pricing mechanisms be put in place, with the aim of channelling water use to ‘the most productive economic sectors.’ However, in Kenya, donors have in recent years played a more positive role in promoting a human rights based approach, with a pro-poor focus, in the draft water policy (Chapter 3, see also Munguti et al., 2007).

The starting point is that the donor state remains responsible for its conduct, even when it takes place outside its territory. Even though activities must follow the laws and regulations of the home state, and may also require this state’s recognition or acceptance, project design and implementation often resides primarily with a donor. The donor state must thus ensure that it refrains from conduct that nullifies or impairs the enjoyment of rights.¹³⁰ Donor states must also ensure that they observe the right to participate in decision-making, as well as principles of transparency and accountability.¹³¹ In practice, donors frequently co-operate closely with NGOs or consultants. Projects may be implemented through contracting with private (profit- or non-profit) parties. It is important to note that the responsibility remains with the donor state as long as such third parties act under its direction or control.¹³²

9.2 Accessibility without discrimination: Responsibilities of donors when selecting target groups and areas

In practice, the Millennium Development Goals (MDGs) provide an important framework for the prioritization of development assistance. Concrete targets and indicators are intended to ensure that efforts are directed to specific areas deemed to be of great concern. Water and sanitation are included as Target 7.c: ‘To halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation.’¹³³ It seems likely that this has aided in maintaining the attention of both states and donors to this field, and the water element of this target was reportedly met five years ahead of schedule. However, the structure of the targets and the use of indicators have also met with criticism for lack of comprehensiveness, for not providing incentives to move further when the target is reached, and for their blind spots regarding

130 The Maastricht Principles, principle 20.

131 Ibid., principle 32(c).

132 Ibid., principles 11 and 12(a). For further details, see De Schutter et al. (2012) pp. 1110-111.

133 See <http://www.un.org/millenniumgoals/envIRON.shtml> for updated information about the progress towards this target.

the most vulnerable, inequality and discrimination.¹³⁴ The latter point is a key concern when it comes to the realization of women's human right to water and sanitation. It is expected that the proposed Sustainable Development Goals (SDGs), which are to replace the MDGs post-2015, will address these shortcomings.

In contrast to the MDGs, the human right to water and sanitation demands that actors focus on the most vulnerable groups. In its statements on the role of non-state actors, including international organizations, in the realization of the right to water, the CESCR found that 'Priority in the provision of aid, distribution and management of water and water facilities should be given to the most vulnerable or marginalized groups of the population.'¹³⁵ The HRC Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation has stated that donor policies should support national priorities with specific strategies to address discrimination and reach the most disadvantaged.¹³⁶ This must form the foundation for later moves to higher levels of service.¹³⁷

Even if the minimum level of water access has been achieved, neither women nor vulnerable groups should experience discrimination in access to water and facilities.¹³⁸ The CESCR Committee has made the general statement that: 'States Parties should also ensure that they refrain from discriminatory practices in international co-operation and assistance and take steps to ensure that all actors under their jurisdiction do likewise.'¹³⁹ Multiple and intersectional discrimination 'merits particular consideration and remedying,'¹⁴⁰ which would to the protection of women who experience discrimination that is also linked to factors such as ethnic origin, property, political and other opinions, disability, age, marital status,

134 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2012b), A/67/270, see e.g. paras 17-23 and 31-38. See also Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque (2010b), A/65/254.

135 CESCR GC, 15 para. 60. See also GC 14 on the right to health, paras 40 and 64-65.

136 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2011b), A/HRC/18/33, para. 80(f).

137 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2011a), A/66/255, para. 41.

138 CESCR GC 15, para. 37(b), the Sub-Commission Guidelines paras. 3.1-3.3, and generally the Maastricht Principles, principle 32(c).

139 CESCR GC 20, para.14

140 *Ibid.*, para.17.

sexual orientation and gender identity, health status, and economic and social situation.¹⁴¹

The Special Rapporteur has specified that ‘states *and donors* must vigorously promote non-discrimination in their water and sanitation programmes and policies, looking to eliminate disparities in access based on, *inter alia*, race, colour, ethnic origin, religion, gender, economic status or citizenship.’¹⁴² She has further specified that ‘the consideration of equality needs to guide decision-making processes’ for maintenance and rehabilitation, as well as for the expansion of services.¹⁴³

The case studies in this volume draw attention to groups of women who are particularly disadvantaged in enjoying the right to water and sanitation, such as women in informal settlements, displaced women, women farm workers and women engaged in subsistence agriculture.¹⁴⁴ As donor involvement is inherently limited, donors will in practice have to make decisions as to which areas and groups to target. However, the immediate obligation of non-discrimination and the obligation to focus on the most vulnerable and marginalized groups imply that this selection cannot be done randomly. Donors must systematically identify differences in needs, as illustrated when the CRC Committee argues that CRC Article 24.4 *requires* donor states to ‘identify the major health problems affecting children, pregnant women and mothers in recipient countries and to address them in accordance with the priorities and principles established by article 24.’¹⁴⁵ Donors must seek to identify the situations of different groups

141 CESCR GC 15, paras 13–16. See also CESCR GC 20, paras 18–35 for a discussion of a range of prohibited grounds of discrimination in the context of economic, social and cultural rights.

142 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2011a), A/66/255, para. 41 (my italization).

143 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2013), A/HRC/24/44, para. 67.

144 See CESCR GC 15, para. 16 and the Sub-Commission Guidelines paras 3.2–3.3 for examples of individuals and groups that should receive particular attention and active support from states. The Sub-Commission Guidelines further emphasize that farmers and other vulnerable groups should be given priority in access to water resources in order to realize the right to adequate nutrition and the right to earn a living through work, Sub-Commission Guidelines para. 4.3.

145 CRC General Comment No. 15 on the Right of the Child to the Enjoyment of the Highest Attainable Standard of Health (2013), CRC/C/GC/15, para.87.

of women and whether their current water access is adequate. Decisions and priorities on which areas and groups to target must be justifiable given the foundational principles, including the emphasis on basic access, attention to vulnerable and marginalized groups, and non-discrimination. Other considerations, such as links to politics, do not exempt the donor from these principles.

The political, economic and humanitarian crisis in Zimbabwe, which culminated in outbreaks of cholera and typhoid in 2008, illustrates the complex considerations that donors need to take into account when they provide humanitarian assistance in the context of diplomatic isolation (Chapter 10). The study of A1 resettlement farms in Mazowe Catchment in Zimbabwe (Chapter 13) shows how displaced farmworker women's urgent need for clean water and sanitation was neglected by both the national government and international humanitarian actors in a situation where 200,000 farm workers and their families who had been evicted from commercial farms had lost access to housing, food, water and sanitation. International donors were unwilling to provide humanitarian assistance to those living on former commercial farms because the farms were taken illegally and without compensation for their former owners. From a human rights perspective the donors were, regardless of the political situation, under an obligation to consider the basic needs of the most vulnerable and marginalized groups living on the former commercial farms such as the displaced farm worker families and their children.

The limited nature of donor involvement in water and sanitation service delivery concerns also the dimension of time. The HRC Special Rapporteur has pointed out that this can create challenges to sustainability and accountability: 'While providing immediate access is important, it is equally central to guarantee long-term operation and maintenance and to plan with government and communities for phased exits and local ownerships.'¹⁴⁶ Thus, donors should plan for the continuation of non-discrimination after their exit. Efforts to include women as beneficiaries and participants should not be limited to special measures during the start-up of local processes; they should be designed to facilitate enduring equality when government or community take over. Again, the need to address structural discrimination and gender stereotypes (as addressed in Section 6) will be central to this end.

146 Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2013), A/HRC/24/44, para. 42.

9.3 Attention, affordability and accountability: Responsibilities of donors in policy processes

In addition to supporting and implementing concrete projects at the local level, donors may influence national law and policy-making through funding of various forms of expertise. These may include a range of activities, such as budget support (with or without conditionality), funding of and participation in processes of preparing policy and legislative reform, and provision of consultants and technical advice. Such support for reform will facilitate the realization of the human right to water and sanitation – with ensuing obligations for the donor. Donors in the water sector in Kenya have, for instance, invested in the policy and legal reforms required to implement the 2010 Kenyan Constitution, which provides for the right to water and sanitation and thus complements the State's initiatives.

The human rights literature on the right to water has drawn attention to how different policy choices may have negative effects on the realization of the right unless mitigating measures are in place. As noted in Section 4.3 of this chapter, the introduction of user fees, water meters or privatization may jeopardize the right to water, unless adequate safeguards are put in place. As shown in the national case studies compiled in this book (Chapters 3, 7, and 10), donors are frequently found to promote cost-recovery and emphasize economic efficiency. However, this carries the risk of violating the right to affordable water for disadvantaged groups.¹⁴⁷ To avoid violations of the right to water, policies based on the 'user pays' principles must include measures to mitigate such effects.

The actual negative *effects* on individuals' enjoyment of the human right to water may be difficult to attribute to the donor state, as decisions regarding the home state policies, laws and regulations ultimately fall under the home state's jurisdiction.¹⁴⁸ Questions such as how to establish cau-

147 CESCR GC 15, para. 27.

148 Furthermore, national planning processes that are entirely externally-driven are problematic. The Special Rapporteur has pointed out that such reforms can circumvent democratic procedures and result in merely cosmetic strategies and plans. However, she emphasizes, donors and development partners may play a significant role, for example to 'facilitate coordination and support capacity-building and institutional strengthening, including at the local level,' see Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2011b), A/HRC/18/33, paras 43, 51 and 83(e). The recent water reform in Kenya is mentioned as an example of clear designation of responsibilities when donors are involved, para. 44.

sality between a state's actions and the human rights violation, and how to divide responsibilities between the domestic state and other states, have been subject to legal debate (Langford et al., 2013).

However, the donor holds not only obligations of *result*, but also obligations of *conduct*. Donors may, as demonstrated by the national case studies from Kenya, Malawi, and Zimbabwe in this book (Chapters 3, 7 and 10), exercise considerable influence on policy processes by promoting particular policy options, by providing technical advice and staff, or simply by participating in decisions regarding which themes to pursue in analyses, what type of competence to draw on, and what type of information to be collected. Thus, donors are in a position to affect whether processes consider the potential human rights effects of different policy choices. Donors' participation in reform processes must be understood as constituting a human rights-relevant activity in itself, capable of strengthening or weakening the realization of rights. The deeper the donor state's involvement is, the stronger is the responsibility to ensure that such involvement is consistent with human rights.

A donor state's support to and participation in policy processes may place it in a position where it has obligations to fulfil the right to water. Correspondingly, when donors are aware that their influence on reform processes may impinge on the right to water, they are at risk of violating their obligations. While the balancing of considerations is primarily a home state responsibility, donors may 'aid or assist' violations if they promote particular policies/options without taking steps to ensure that corresponding human rights concerns are addressed. Donors must ensure that they do not promote policies that jeopardize the realization of the human right to water, including women's equal enjoyment of this right. If they have knowledge of such risks, as they have been pointed out, for example, in human rights documents and literature, they must simultaneously promote steps to safeguard against such effects.

For water policies and plans of action to promote the human right to water, it is crucial that human rights and gender dimensions be made visible and subject to analysis. Donors involved in such processes should seek to ensure that all aspects of the right to water and sanitation: adequacy, availability, safety, physical and economic accessibility, and non-discrimination are included. The specific requirements will depend upon the mode and degree of involvement. However, when the general human rights norms are juxtaposed with the specific concerns raised in the case studies of this book, the following elements emerge as crucial to consider

when donors influence water policy processes:

- Which themes are analysed? To ensure that the right to water is considered in sufficient depth, themes such as non-discrimination and the situation of vulnerable groups must be considered alongside economics and engineering. Furthermore, the role of water in the realization of other rights such as those to health and livelihood implies that the full range of water uses, both domestic and productive, in urban and rural areas, should be considered. Consequently, donors who play a role in the selection of topics for further analysis, background papers, consultancies, etc, should strive to include these themes.¹⁴⁹
- Which data are collected? If data collection does not include factors such as gender and socio-economic status as variables, the impact on the situation of different groups will be difficult to assess. Donors should seek to ensure that data collection is tailored to enable human rights analyses, so to avoid decisions that end up benefitting already privileged groups. Furthermore, such data are also important to monitor the implementation of the right.¹⁵⁰ In order to monitor non-discrimination adequately, it is not sufficient to simply count the numbers of women present at meetings or sitting in water user groups.
- What kinds of competence are available in the process? Different types of competence may shed light on different questions. An economist may suggest a tariff model without considering the question of economic accessibility, while an engineer may suggest a location for boreholes without

149 Germany presents their involvement in the Kenyan water sector reform as an example of how the donor's human rights based approach successfully contributed to shifting attention towards access for the poor in informal settlements (GTZ, 2009: 7).

150 The Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2013), A/HRC/24/44, commends the use of 'ex ante and ex post human rights assessments' when policies that might have a detrimental effect on the human rights to water and sanitation are adopted, as tools to discharge the obligation to monitor the implementation of the right to water and sanitation, para. 81. The same report further commends donors advocating monitoring the sustainability of water and sanitation interventions, and points out that they must be complemented with equality criteria to ensure that all in society benefit, para. 80.

considering availability for the varying water uses and needs of different groups. Where donors support reform processes through providing staff or consultants, they should consider whether competence on rights and gender needs to be included alongside other types of competence.

Finally, donors involved in water reform processes may exercise both positive and negative influence on whether the decision-making at national level satisfies requirements as to participation, transparency and accountability.¹⁵¹ Donors may, as demonstrated by the national case study from Zimbabwe (Chapter 10), contribute to the violation of this set of rights by actively requesting secrecy about the processes, or by passively neglecting to share information and facilitate participation. To fulfil their human rights obligations, donors should promote transparency. Even if ongoing discussions may require some parts of information to be withheld, there should be sufficient information available about the process, its themes, options and available budgets¹⁵² to allow individuals as well as organisations to voice their views and seek to influence the process. Transparency and information-sharing will help making it visible whether concerns about human rights and gender inequality are included in the processes, and can also assist the rights-holders in holding decision-makers accountable for the results.

10. CONCLUSION

The indivisibility of socio-economic rights, particularly the right to an adequate living standard in terms of land, water, health and food, is especially important for poor African women's livelihoods. Taking a contextual, integrated and engendered approach to human rights, this chapter has developed a framework for analysing both what it takes for the right to water and sanitation to be considered realized and the duties of the home state and other development actors in moving towards this objective.

Most importantly, international and national water laws and policies should, in line with local practices, norms and values, recognize water as a part of the right to livelihood in terms of food and health. This proposed broader notion of a right to water for livelihood is important in that it overcomes the disjunction between customary and statutory

151 See Section 8 of this chapter.

152 The Special Rapporteur has highlighted that transparent budgeting 'fosters accountability and public participation,' Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (2013), A/HRC/24/44, para. 69.

law and provides an opportunity to include food security and poverty prevention in the development of gender-sensitive water laws and policies. Equally important is the need for an ‘empowerment’ component addressing water-related gender stereotypes as well as women’s agency to assert their social, economic, civil and political rights, and their power and capacity to hold water service providers and duty bearers accountable.

As southern and eastern African countries seek to frame and implement the right to water and sanitation, they will have to balance it with the right to gender equality, the right to a healthy environment, the right to health and the right to food embedded in both regional treaties and national constitutions. This broader contextualization of the right to water may be the pathway for looking beyond water for drinking purposes and including water for livelihood – life, food and health.

Part II

Kenya

Chapter 3

Human Rights, Gender and Water in Kenya: Law, Prospects and Challenges

Patricia Kameri-Mbote and Francis Kariuki

1. INTRODUCTION

Water and sanitation are essential for development and preconditions for poverty reduction, health and security (GoK, 2012). However, access to water and sanitation amongst the rural and urban poor in Kenya remains very low, (UNDP, 2007) making significant the fact that approximately 80% of all communicable diseases are water-borne (UNDP, 2007). The situation might, indeed, be worse: reports indicate that 65.9% of the Kenyan population will be living below the poverty line by 2015 (GoK, 2005). According to the Joint Monitoring Programme,¹ access to safe water supplies throughout Kenya is 59%. Out of the Kenyan population of 45 million, 17.5 million lack safe water (Water.org, 2014).

In Kenya, as elsewhere in Africa, the burden of fetching drinking water from outdoor sources falls disproportionately on women and girls

1 See Joint Monitoring Programme for Water Supply and Sanitation of WHO Report 2012. See also the 2008 report which revealed that 59% of Kenyans (83% in urban areas and 52% in rural areas) had access to improved water sources. 19% of Kenyans (44% in urban areas and 12% in rural areas) were reported as having access to piped water through a house or a yard connection.

(UNICEF, 2012). In Sub-Saharan Africa, people spend 40 billion hours every year just walking to collect water, with women bearing two-thirds of the burden of drinking water collection. This leaves less time for other socio-economic activities (UNICEF, 2012). In Kenya, collecting water takes longer than 30 minutes per trip for more than a quarter of the population (UNICEF, 2012; Maoulidi and Salim, 2011).²

The average distance people travel to reach water sources in rural Kenya ranges from two to 12 kilometers which is further than the 1,000 metres recommended by WHO. Apart from the distance, concerns about the quality of the water arise since the consumers share water points with animals, which can result in contamination.

In urban areas like Nairobi, the time spent collecting water is much less than that spent in rural areas, especially where there is piped water. (Uwazi, 2010). The cost of water in urban areas is, however, not affordable for the poor who are likely to pay much more than the middle-class in urban areas of Kenya (Uwazi, 2010), as explained below, thus inhibiting their enjoyment of the right to water.

The inadequacy in quantity and quality of water is also a problem that calls for action on the part of the government in order to achieve the Millennium Development Goal (MDG) by 2015 and the post-2015 development agenda. It is notable that water laws and policies have not promoted access to water services and sanitation provision for the rural and urban poor. Informal settlements have not been recognized in urban plans and, as such, lack water and sanitation supply infrastructure. Local authorities are not involved in water and sanitation services' supply arrangements and this has created room for other actors to bridge this gap (GoK, 2005). Worse still, water and sanitation service provision has been linked to land tenure, thus denying millions of landless people access to water. Consequently, the poor have to access water from unregulated water providers where water tariffs are 5-20 times more than tariffs applying to metered facilities.

2 This considerably reduces the time that women and girls have for other activities such as childcare, income generation and school attendance. See also Maoulidi and Salim (2011), who note that women in Kisumu spend a disproportionate amount of time on household tasks, which leaves them with less time to engage in income-generating activities. The average distance to the nearest water point in Kisumu is one kilometre. They further add that in poor urban areas, establishing water points near homes is very beneficial because it not only provides safe water for the whole community, but also alleviates girls' and women's workloads.

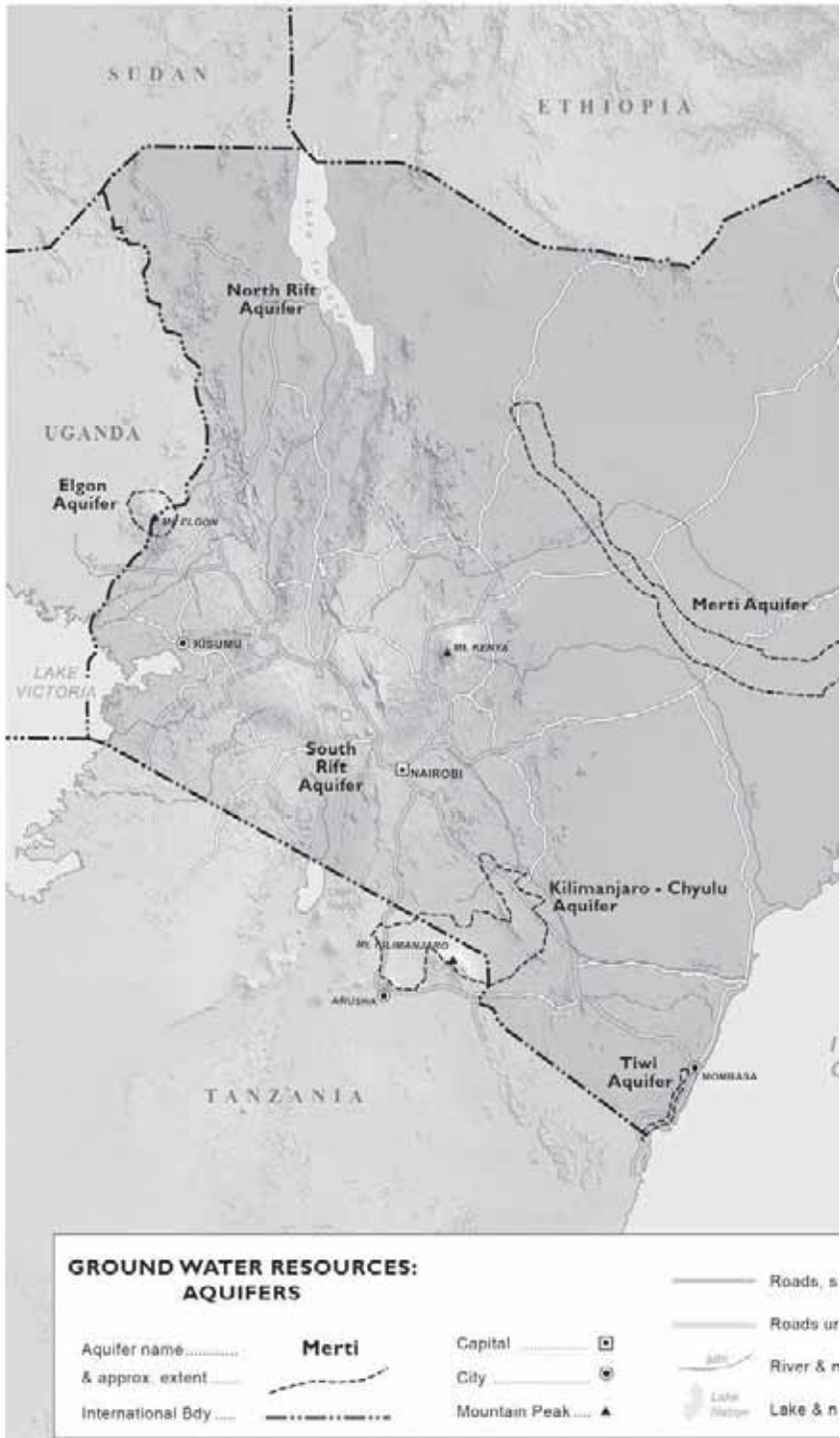
Against this background, this chapter will examine water laws and policy in Kenya against the backdrop of the human rights framework set out in Chapter 2, which addresses the rights of individuals and groups and the corresponding obligations of the actual duty bearers, paying specific attention to three interrelated rights: the rights to water and sanitation, the right to participation, and the right to equality and non-discrimination. It examines the pre-colonial, colonial and post-colonial laws and policies, as well as developments under the 2010 Constitution of Kenya. Our aim is to highlight the continuities and discontinuities in water law and policy and identify the key drivers and the internal and external processes. We argue that in spite of water sector reforms, and the laws and policies emanating from those reforms, the rights to water and sanitation, to participation in water governance, and to gender equality for the rural and urban poor remain a mirage. Moreover, the implementation of the right to water has been limited to water for domestic purposes and has not included water for broader livelihood purposes. It concludes, however, that the implementation of the 2010 Constitution of Kenya – which provides for the right to water and devolution where the national and county governments share governance responsibilities (including that of the water sector) – allows opportunities for realizing the right to water for the rural and urban poor.

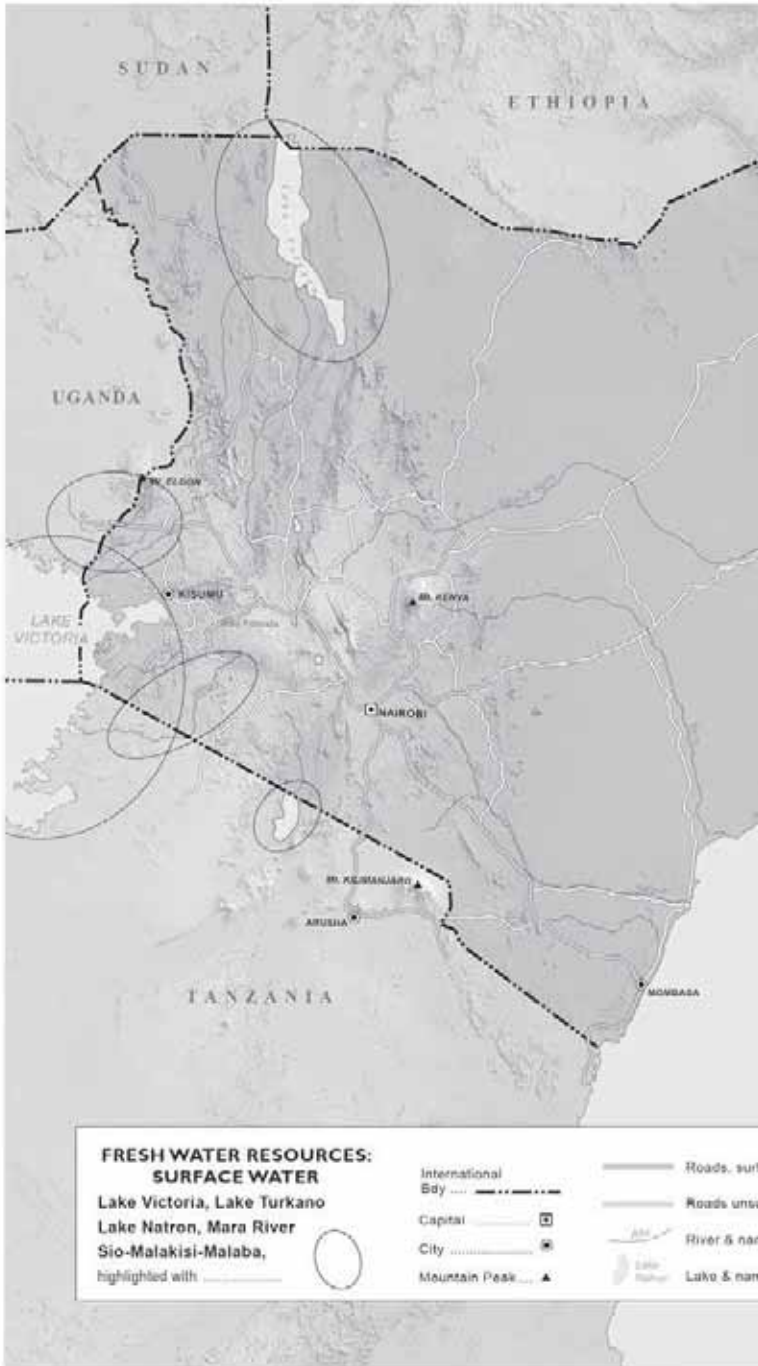
This chapter is divided into seven sections. Section 2 deals with the interface between water resources, land, and human rights, while Section 3 outlines the pre-colonial and colonial water law and policy. Section 4 addresses water law and policy in post-colonial Kenya while Section 5 canvasses the legal and policy initiatives domesticating the right to water in Kenya. Section 6 looks at the emerging jurisprudence relating to the implementation of the right to water and related rights, and Section 7 provides our conclusion.

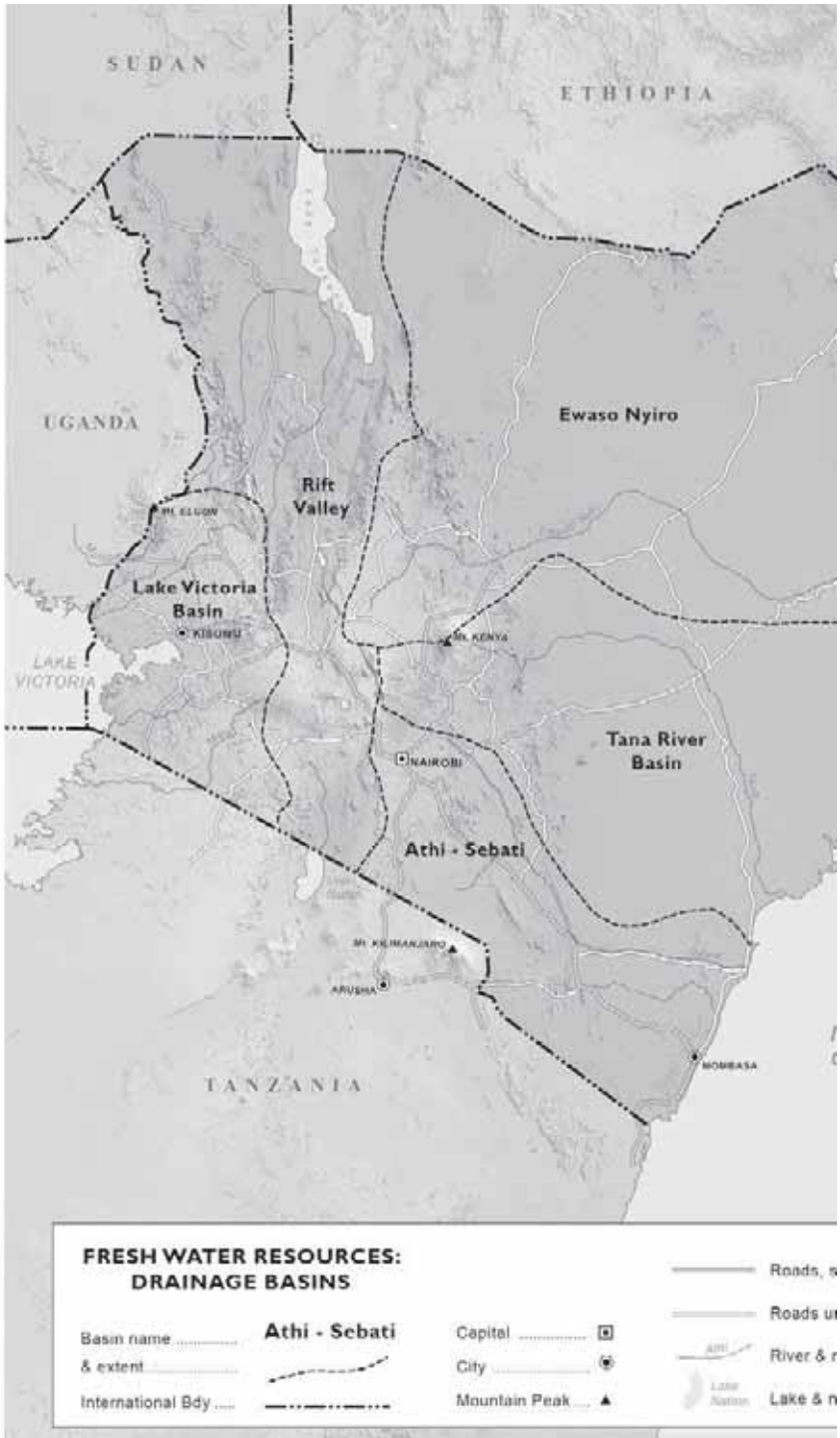
2. WATER RESOURCES, LAND AND HUMAN RIGHTS

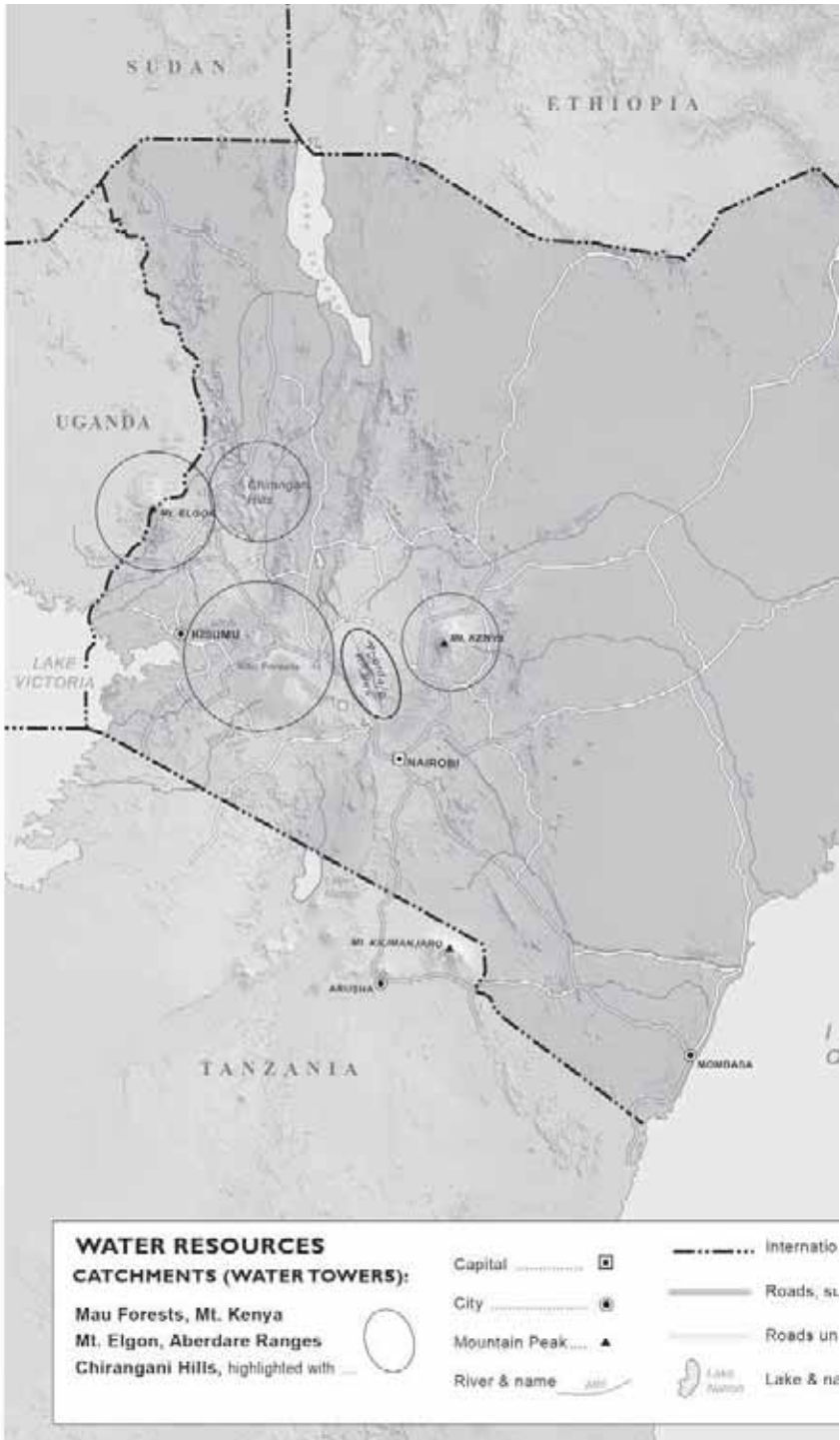
2.1 Water resources in Kenya

Kenya has enormous water resources including five catchment areas or ‘water towers’ – the Mau forest, Mount Kenya, Aberdare ranges, Mt Elgon and Cherangani Hills. Freshwater resources include rivers, lakes, wetlands and reservoirs distributed within five drainage basins – the Tana, Athi, Ewaso Nyiro, Rift Valley and Lake Basin. Besides, Kenya shares about 50% of her surface water resources with her immediate neighbors. It shares









Lake Victoria with Uganda, Tanzania, Rwanda and Burundi; Lake Turkana Basin with Ethiopia; River Mara and Lake Natron with Tanzania; and the Sio-Malakisi-Malaba system with Uganda (GoK, 2005).

There are groundwater resources extending across the borders. Some of the aquifers are the North Rift aquifer, shared with Ethiopia, South Rift Aquifer, Kilimanjaro-Chyulu and Tiwi, shared with Tanzania, the Merti Aquifer, shared with Somalia and the Elgon Aquifer, shared with Uganda (GoK, 2005). Groundwater is mainly accessed through the drilling of boreholes. With increasing demands for water, domestic and commercial users are increasingly drilling private boreholes, with uncertain implications for groundwater resources (AMCOW, 2010). The other source of water is rainwater that is harvested for domestic uses, grazing and irrigation. Rainwater is not a year-round source of water due to the intermittent nature of rainfall in Kenya, and the variability from year to year and region to region. At the coast region, the Indian Ocean is another main water resource as is Lake Victoria to residents of Kisumu.

Despite the abundance of water resources, Kenya is classified as a chronically water-scarce country, with an annual renewable fresh water supply of only 647m³ per capita (GoK, 2005). Most of the catchment areas are threatened by human settlements, logging, charcoal burning, cultivation and grazing. For example, despite gazettement as a water tower, the Mau watershed has lost about 200,000 hectares over a span of about 40 years from 1970 to 2010 as a result of exploitation of forest resources. Development of water resources is also very low, with only 15% of the safe yield of renewable fresh water resources being developed. There remains an opportunity to exploit the balance of 85%. This would require investments in water storage infrastructure, which has been so low that the country has been unable to deal with extreme hydrological events. Indeed, water storage per capita has declined dramatically, from 11.4 m³ in 1969, 4.7 m³ in 1999, to currently about 4m³. In addition, the low water storage capacity is a result of a failure to protect the natural buffering capacity of water catchments and wetlands, and a lack of water storage infrastructure to deal with the shock from extreme hydrological events (GoK, 2005). Further, an imbalance in water abstraction rates across the five drainage systems creates a threat to future water availability. Water reforms in Kenya have focused on water service provision, with water resources management receiving little attention. Water service provision cannot be sustainable if water resources are not well managed.

2.2 Water availability, distribution and demand

Water is unevenly distributed in time and space, and millions of Kenyans do not have sustainable access to safe water. Development of water resources is low and no new resources are being developed. This has created a high demand for water, ultimately resulting in a rise in water prices. Increase in water demand has also led to conflicts over scarce resources between diverse users (UNDP-Kenya, 2010). The trend is projected to continue with an expected 10% annual growth in economy which will require an increase in the fresh water per capita by at least three times (Sida, 2009).

The main water uses are irrigation at 70%, domestic uses at 20%, livestock at 4%, and industrial use at 3% while others, including fisheries and wildlife, are about 3%. Although irrigation is the major water user, only 20% of the potential area of 540,000 hectares is under irrigation (Osinde, 2007). The projected increase in the area under irrigation to 1.3 million hectares by the year 2030 and the anticipated growth of industries will translate into an exponential rise in demand for water. Such intensive growth must be balanced against the demand for water for domestic and personal use and for livelihoods, particularly by women in rural areas. This is because small-scale agriculture, driven by women and the rural poor, may be neglected as government pursues large-scale, water intensive irrigation.

With a projected rise in water demand, a need arises for improving and increasing water abstraction levels in the country. The current water abstraction rate is 5.5%, which is far below the country's potential, of which 84.7% is surface water and the rest underground (GoK, 2007). Estimated average annual water availability is thus 20.2 billion cubic meters (Sida, 2009). Water availability also varies between rural and urban areas, and in most cases is dependent on income levels. Different reports give differing estimates of water and sanitation coverage in the country, but all acknowledge that water access is low. Some reports estimate that access to safe water³ in urban areas stands at 89.7% and in rural areas at 43.5% translating to a national coverage of about 57%. Access to safe sanitation

3 Access to safe water is described as the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring or rainwater collection. Reasonable access is defined as the availability of at least 20 litres per person per day from a source within one kilometre of the dwelling.

services is about 81% of the population, with 94.8% in urban areas and 76.6% in the rural areas. It is also instructive to note that variations exist from region to region and within regions in terms of access to water supply and sanitation. A UNDP report indicates that Kenya's urban poor are among those with lowest access to improved sanitation facilities worldwide (UNDP-Kenya, 2010).

2.3. The interface between water, land and human rights

Water is essential for development. Without access to water, other human rights cannot be realized, particularly by women belonging to marginalized groups and the poor. In Kenya, the mortality and morbidity due to water-borne and sanitation-related diseases accounts for about 70% of all diseases. (UNDP-Kenya, 2010). The government, as the main duty bearer, needs to improve access to water for personal use, domestic use and for livelihood purposes.

The water and sanitation needs of the powerless, mostly the poor and women, are not adequately catered for.⁴ Gender equality and women's empowerment are pivotal in achieving the MDGs, and are necessary pre-conditions for overcoming poverty, hunger and disease (UNDP-Kenya, 2010). In Kenya there are glaring gender gaps in access to and control over resources such as land and water; this impedes women's participation in water and land governance and their capacity to initiate water infra-structural projects. For instance, less than 5% of women have title deeds in Kenya.⁵ In addition, land laws tend to privilege economic and private use and thus limit women's and communities' access to key water sources located on private land.

Water rights and land ownership are interrelated. The notion of individual ownership of land confers exclusive rights including over water resources. One cannot get a water connection or a water permit if one is not the owner of the land. Land ownership has therefore contributed to the exclusion of and discrimination against the landless, especially women, in accessing water. According to Onyango, land ownership and settlement patterns continue to influence community management of water sources (Onyango, 2007), which further contributes to gross under-representation of women in decision-making processes (UNDP-Kenya, 2010). Water law has also developed on the premise that power derives only from formal norms and institutions (UNDP-Ken-

4 See Chapter 4 and Chapter 6 in this book.

5 GoK (2009).

ya, 2010). Consequently, customary water governance institutions and other informal governance authorities operating outside formal law are not recognized. As such, access to water for the rural and urban poor, where traditional and informal water governance is still predominant, is yet to be realized.⁶ Within informal settlements, the effect has been the existence of unregulated informal water service providers who charge exorbitant fees for water and sanitation services.

3. WATER LAW AND POLICY IN PRE-COLONIAL AND COLONIAL KENYA

In pre-colonial Kenya, water governance was the remit of traditional authorities and institutions guided by norms, rules, customs and traditions (Juuti et al., 2007). Each of the communities inhabiting Kenya had its own water governance norms and institutions. Unwritten norms, which varied with time and place, governed how water resources were controlled, managed, and conserved. There were no statutes or written rules governing water resources. Further, these were held communally and each community member had rights of access to the resources. Access to and use of water resources was based on one's membership in the community controlling a particular territory and not premised upon ownership of the underlying land (Juuti et al., 2007: 20). Indeed, individual ownership of land and water resources, as understood in English property law, was unknown among African societies. Nonetheless, local norms oftentimes discriminated against and excluded women from decision-making processes, since most governance institutions were comprised of men.

Major reforms in the land and water sector occurred when the traditional, indigenous and communal land and water governance systems were replaced by the colonial powers with new norms emphasizing individual (male) ownership of land and linking these to water rights. This led to the disorganization and suppression of local, indigenous and communal water governance systems (Juuti et al., 2007). Nonetheless, local norms and governance institutions still continue to operate and guarantee access to water for many in Kenya, particularly in rural areas.⁷

3.1 Water law and policy in the political economy of colonial Kenya

Water law and policy in the colonial era focused on the acquisition of control over water resources, and its supply to white settlers to drive the

6 See Chapter 6 and Chapter 5 in this book.

7 See Chapter 6.

European agricultural economy. Initially, there were no comprehensive water laws, and when they emerged, they were developed piecemeal in response to emergent needs. As will be seen shortly, there was under-development of water resources and water pollution policy and law, and no attention was given to the natives' water rights for consumption, livelihood and livestock rearing. The introduction and imposition of the British legal system in Kenya marked the beginning of a systematic (albeit unsuccessful) attempt at the disintegration and destruction of traditional and indigenous land and water governance institutions that operated amongst most Kenyan communities. To achieve their objectives in the protectorate, the colonialists had to acquire control over land (Okoth-Ogendo, 1991) and resources on the land including water. In 1897, the Indian Land Acquisition Act of 1894 was applied to Kenya to enable settlers to gain control and acquire rights to land in the territory. Further, under the East African (Lands) Order-in-Council of 1901, all land that was not physically occupied by the natives was converted to Crown land, which the Commissioner had powers to dispose of (Okoth-Ogendo, 1991). The assertion of original title to land gave the protectorate authorities power to exploit natural resources, including water (Okoth-Ogendo, 1991). Further alienation was achieved through the Crown Lands Ordinances of 1902 and 1915. More specifically, the effect of the 1915 Crown Lands Ordinance was the total disinheritance of Africans and conversion of land that they occupied to Crown land thus rendering them, in Okoth-Ogendo's words, 'tenants at the will of the Crown' (Okoth-Ogendo, 1991; Ghai and McAuslan, 1970).

The Crown Lands Ordinance of 1902 had provisions dealing with the issuance of water permits, and under the 1915 Crown Lands Ordinance the Water Permit Rules of 1919 were enacted. These rules gave the Director of Public Works Department the power to consent to or refuse to permit the abstraction of water from a spring, river, lake or stream. The effect of the rules was to privilege the colonialists' water rights, resulting in inequitable distribution of water resources (Juuti et al., 2007). In essence, there was the prioritization of commercial water uses by settlers over the domestic and livelihood needs of natives. This trend continues even today, when large-scale farmers are prioritized among water users.⁸

The colonial government used the law effectively as an instrument for prioritizing access to water resources by and water uses for the settlers

8 See generally Chapter 4 by P. K. Mbote and E. Odhiambo, on the Lake Naivasha Basin.

over those of the natives (Juuti et al., 2007). This resulted in the dispossession of the natives' land and water rights. They based their acquisition of ownership of water resources on the notion that the resources, including land, were ownerless. Theorists have questioned this view, which was based on the difference of expression of rights of native Africans from Western conceptions (Okoth-Ogendo, 2003), and thus undermined any rights that Africans held under native customs. In addition, under the common law conception of land, a landowner held everything on that land including water resources. Having effectively acquired control over water resources, protectorate authorities then developed infrastructure for water supply for the settlers. The Uganda Railway was the main supplier of water in the interior of the country between 1900 and 1920 (Nilsson and Nyangeri, 2008). Water supply did not factor in issues of sustainability. The 1913/14 Colonial Report shows that all rivers were polluted and that people used the single-bucket system, whereby the contents of the buckets were disposed of in the sea in Mombasa, and buried in trenches in Kisumu and Nairobi, as sewage schemes had not yet been installed (Great Britain, 1915). Further, between 1913 and 1914, the Protectorate had to get a loan of £250,000 from the Imperial Treasury for the purposes of, *inter alia*, improving the provision of a pipe-borne water supply for Mombasa (Great Britain, 1915). Again, the 1929 Annual General Report for the colony stated that water boring was successfully carried out by the water boring organization of the Public Works Department. Most drilling was carried out to drive settler farming and for local Native Councils in Native Reserves. The local Native Councils had the mandate of providing, maintaining and regulating water supplies for natives in the areas where they had been established (Great Britain, 1934). Water abstraction from public streams was done to further the European economy, leading to an increase in farming (Great Britain, 1930). Overall, land in actual native occupation was neglected in law and policy leading to what has been referred to as the duality of land relations, in which the settler sector was developed and supported while the native-occupied areas were relegated to informal customary norms and institutions.⁹

Between 1920 and 1940, the State sought to assume a prominent role in water provision to meet the objectives of public health, efficiency and vital strategic interests (Nilsson and Nyangeri, 2008). In 1929, the Water Ordinance No. 35 was enacted. It made provision for the conservation of water and for the regulation of water supply, irrigation, and drainage. It

9 GoK (2002).

vested all natural bodies of water in the Crown, vested the right of control in the Governor in Council, and establishing a Water Board. The work of the Water Board was to grant water rights according to the Ordinance. The Ordinance also defined the relationship between the government, as the grantor of water rights, and the licensees as recipients and holders of the water rights. It also provided for offences and penalties for infractions against its provisions. This law was the first comprehensive water law under colonial rule and took effect in 1935, thus fully establishing the role and powers of the State in relation to water (Nilsson and Nyangeri, 2008). By this law, the State took over from the Uganda Railways as the main provider of water in urban areas. For example, in Nairobi and Nakuru, local authorities were put directly in charge of water supply, while in other areas water supply was taken over by the Public Works Department (Nilsson and Nyangeri, 2008). The Ordinance also sought to extend water development to areas occupied by Africans.

Within the colonial set up, vesting water resources in the State was necessary for the promotion of European interests. In this regard, the colonial authorities launched the Development and Reconstruction Authority (DARA) in 1946 as an investment programme to spur rapid development of urban water supplies. According to the architects of the programme, small towns' water supplies were seen as 'vital for the development of the country, and as the expenditure involved is normally recoverable through the rates charged, is in every way a suitable object for the allocation of Development Funds' (Nilsson and Nyangeri, 2008). Water pricing during the colonial period was therefore based on the principle of full cost recovery from users. Cost recovery required water schemes to be economically viable to the government including being financially and technically sound. Essentially, this meant that those who could not afford to pay could not access water services. As will be seen later, cost recovery in water supply continues to inform water laws in Kenya to date. To improve local water supply within the framework of DARA, water users' associations were established by the colonial authorities (Nilsson and Nyangeri, 2008; Juuti et al., 2007).

Land reforms and the expansion of agriculture in the 1940s led to overcrowding, soil erosion and water pollution in European and native reserves. The government reacted to this by enacting the Land and Water Preservation Ordinance (No.4) to prevent deterioration in land quality in the European areas. Under the Land and Water Preservation General Rules 1940, the Governor had powers of, *inter alia*, regulating the watering of

livestock, the burning or clearing of vegetation where necessary to preserve the soil and its fertility, the prevention of the formation of gullies, and the maintenance of bodies of water (Okoth-Ogendo, 1991).

Gender inequality in land ownership, which continues to impede women's participation in water governance, partly has roots in the land reforms carried out in the 1950s. During the land consolidation, adjudication and registration processes, which characterized land reforms in the native reserves, land was mainly registered in the names of male household heads; customary rights of use, which most women had, were not noted on the register. This led to their extinction (Okoth-Ogendo, 1991). Land reforms thus contributed to the disenfranchisement of women in land matters, a factor that still persists today. Additionally, the settlement and land tenure from the colonial times resulted in the duality of land and water property rights especially in informal settlements. The duality was manifest in the existence of well-defined and protected rights in settler areas and largely neglected and ill-defined land and water rights of natives. This duality continues to hinder access to basic services, including water and sanitation, by the poor (Okoth-Ogendo, 1991). Additionally, government policies and plans do not recognize informal settlements in urban areas and have sought to restrict their growth, yet their number and population continues to grow.¹⁰ The exclusion of these areas from plans relegating them to the shadow of the law and they are not supplied with basic services (Osinde, 2007).

The 1929 Water Ordinance was revised in 1951, and in 1972, when it was renamed Chapter 372 of the Laws of Kenya. It is evident that the emphasis on recovering infrastructure costs, together with a water provision cost-recovery policy introduced in this era, was not effective in ensuring universal access to water services, especially for natives. Only those who could afford it were served by the water supply infrastructure. Thus, firstly, water supply systems in urban areas were better than those in the rural areas partly because the returns from investment in water supply were better. Economic viability provided incentives for investment in water supply infrastructure in urban areas. Secondly, urban supplies permit investors to reach a larger catchment because of higher population densities. In consequence, a relatively low investment will yield greater returns due to economies of scale; a piped supply to a remote dwelling on the top of a mountain would cost a great deal more.

10 See also Chapters 6 and 4.

4. WATER LAW AND POLICY IN POST-COLONIAL KENYA

Colonial laws and policies continue to influence water governance and performance of water sector institutions today. The first few years of independence depict a carry over from the colonial era. There was a general focus on economic growth exemplified by the formulation of Sessional Paper No. 10 of 1965, under which the infrastructure for economic and social development (including the water sector) was to be placed under State control (GoK, 1965). Under this policy, the government was to be involved in virtually all productive activities, including provision of water services (UNDP, 2007). Water supply was not regarded as a social service but as a public service, alongside transport, telecommunications and electricity. To spur economic growth, water supply was to be handled by financially self-sustaining schemes, such as water services for the municipalities. There was no consideration of human rights to water and sanitation or the right to equal participation in water governance. The main focus was on full cost-recovery from water users. Reports indicate that in the 1960s virtually all urban areas had access to piped water from public systems (Nilsson and Nyangeri, 2008).

As the economy and the population grew in the early years of independence, inequalities continued to widen between the rich and the poor. A patron-client relationship developed between the central government and local authorities, in which the latter sought public resource allocations from the former. Local authorities became entangled in corruption and misuse of resources. There was favouritism in water supply, and the poor were often excluded from public water supply systems (Nilsson and Nyangeri, 2008). Local authorities were criticized for lack of capacity, absence of guidelines on access, and failure to bridge gaps in law and policy affecting water supply. In later years, some opined that local authorities did not understand the water reform processes and changes and how these influenced decision-making at their level (UNDP, 2007). Concerns about human rights and participation of the citizenry in decision-making did not feature at this time.

In the 1970s, the government began to change national policies and the water sector became a prioritized area for intervention. The Development Plan of 1970-74 sought to expand water development by supplying water to the whole rural population, which was relatively underserved, before 2000. However, the plan did not deal with cost recovery. It increased municipal water tariffs and all users had to pay regardless of their

economic situation. The plan was developed with donor assistance from Sweden (Juuti et al., 2007). The Water Act Cap 372¹¹ provided the legal framework for implementing the policy. Under the Act, the minister in charge of water resources was required to appoint a 'Water Undertaker' for each town. The Water Undertaker could be the local authority, the government through its ministry responsible for water, or any other person or organization. The Undertaker developed regulations, to be approved by the minister, defining the operations and tariffs in the service area. The minister would also have a monitoring role to ensure the quality of service (Nilsson and Nyangeri, 2008).

Focus was on water supply to boost other sectors of the economy with little attention given to water resources management and access to water for domestic and livelihood purposes. No attention was given to conservation of water resources to ensure their availability for future generations. The relevant institutions for water governance were: the Minister; the Water Resources Authority, Catchment Boards, Regional Water Committees, the Water Apportionment Board, Local Water Authorities,¹² and Water Undertakers. The institutional framework under the Act concentrated much power in the minister in charge of water; unduly separated institutional roles; created uncertainty in decision-making among institutions; gave water users little room for participation, and was State-centric with no room for private sector participation (Akech, 2008: 315). This Water Act (Chapter 372, which has since been repealed) made no provision for stakeholder engagement or public participation in water governance and had no special mechanisms targeting the poor and women.

The cost recovery policy in water supply was revisited in the Development Plan of 1974-78. However, the popularization of the basic needs approach in water policy at the international level in the late 1970s, led the government to change its national water policy. Water supply was now viewed as a social service and cost-recovery was not over-emphasized. Donors became increasingly interested in water supply so as to increase access to water and sanitation globally. However, the basic needs approach in water supply did not last long and was reversed by Sessional Paper No.1 of 1986, under which water supply was seen as a pay-for-service and not as a social good or service for the benefit of the largest number of people in the largest possible way. To implement the pay-for-service approach, the National Water Conservation and Pipeline Cor-

11 Chapter 372, Laws of Kenya (Repealed).

12 Local authorities had the main responsibility for water provision.

poration was established in 1988 to operate a number of urban water supplies on a commercial basis (Nilsson and Nyangeri, 2008).

During the 1990s, the performance of the water sector deteriorated, particularly in urban areas, because of low government funding, poor management of utilities, mismanagement of funds, and rising water demand. This partly created the need for reforms, buttressed by several public health crises directly related to poor water services. In addition, there were macroeconomic reform initiatives promoted by bilateral agencies and international finance institutions, which also played a part in catalyzing reform in the water sector (AMCOW, 2010).

A second National Water Master Plan was developed in 1992 by the government in collaboration with Japan International Co-operation Agency (JICA). Reforms were geared towards principles and targets of economic sustainability and good governance ensuring greater access to water. One of the main aims was poverty reduction, particularly in urban poor and rural areas, by ensuring sustainable access to safe water (Osinde, 2007). Water provision in rural areas was based on a supply-driven approach, placing much emphasis on infrastructural development. No measures were put in place for participation in decision-making and overall governance in the water sector. In the late 1990s, the government realized that it did not have sufficient resources to meet rising water demand in the country. Moreover, water demand was exceeding available water resources. Sessional Paper No.1 of 1999¹³ was therefore formulated, with the overall goal of facilitating the provision of water in sufficient quantity and quality and within a reasonable distance to meet all competing uses in a sustainable, rational and economical way. The policy separated policy formulation, regulation, and service provision, and defined the roles of sector actors clearly within a decentralized institutional framework. It also allowed for private sector participation and increased community development (GoK, 1999).

With this policy, there was a shift from the supply-driven approach to a demand-driven approach raising the need for resources to meet rising water demand (GoK, 2012). This shift was also informed by the Integrated Water Resources Management (IWRM) policy that was based on the Dublin Principles, which sought to balance the prevailing neo-liberal economic discourses, advocated by actors such as the International Monetary Fund and the World Bank, with the growing movement for par-

13 GoK (1999).

ticipatory natural resource management and sustainable development.¹⁴ Gender concerns were raised as part of the shift towards IWRM.

This shift paved the way for the participation of private sector and non-governmental organizations (NGOs) in water supply with a number of NGOs partnering with government and donor agencies to develop community water projects in rural and urban areas (Juuti et al., 2007; UNDP, 2007). The main donor agencies were the Swedish International Development Agency (Sida), the Japan International Co-operation Agency (JICA), the Norwegian Agency for Development Co-operation, the Finnish Development Agency and the German Development Agency. Human rights dimensions lay at the core of this shift, and were understood as crucial for meaningful community and individual participation in democratization, decentralization and sustainable water management. Gender concerns were, however, largely ignored. In essence, water governance during the post-colonial period was largely a continuation of colonial water law and policy, did not adopt a pro-poor focus, and allowed for minimal community engagement as recipients of services. Access for the poor was purely tokenism. Water was chiefly perceived as important for economic growth and was supplied on market principles. Little attention was paid to human rights issues and the participation of different water users, such as women, in water governance; domestic and livelihood water uses and needs were ignored; women's concerns were relegated to the back burner.

5. THE RIGHT TO WATER IN KENYA: THE PRESENT LEGAL CONTEXT

Despite the gloomy picture painted above, developments at the international level on the right to water have had an impact on water law in Kenya. There has been an emphasis on providing all people with access to sufficient quantities of safe water and proper sanitation. The climax of these efforts was General Comment No. 15,¹⁵ a general recognition of the human right to water through a resolution of the United Nations General Assembly that outlines the components of the right to water. It is important to note that not all states accepted the right to water as embedded in Article 11 of the International Covenant on Economic, Social and Cultural Rights. Further, as outlined in Chapter 2 of this book, the focus of the right has been more on domestic water uses than on broader liveli-

14 See Introduction.

15 CESCR (2013).

hood uses, which would include food security.¹⁶ The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. Water must be available, of good quality and accessible.¹⁷ Accessibility means that all must have access without discrimination including women, minorities, disabled, displaced, and other vulnerable groups. Obligations are also imposed on State Parties to respect, protect and fulfill the right to safe drinking water.¹⁸ These need, however, to go beyond drinking, cooking and washing to include other water-related activities at the household level, such as food production and processing. (Chenoweth, 2008)

In Kenya, a number of measures have been undertaken leading towards the recognition of the right to water. Such measures include Sessional Paper No. 1 of 1999, the Water Act 2002 and the 2010 Constitution of Kenya. Both the Water Act and Sessional Paper, at least in theory, recognize a right to water. For example, Sessional Paper No. 1 of 1999 enabled the country to include elements of Integrated Water Resources Management. The Water Act 2002 provided that water resources are to be managed in the public interest, as stipulated in the National Water Resources Management Strategy (2007-09), while water supply and sanitation, were guided by the National Water Services Strategy (2007-15), which recognizes a human right to water. However, in practice, the right to water is yet to be realized since all – including the poor – must pay to access water. The attempts made by the Water Services Trust Fund, established under the Water Act 2002, with the mandate ‘to assist in financing the provision of water services to areas of Kenya which are without adequate water services’ (Section 83) are yet to ensure access to adequate, affordable water for the poor in Kenya. One of its major limitations has been its concentration on rural areas.

5.1 Water Act 2002

Reforms introduced by this Act included the separation of water resources’ management from water services’ provision; separation of policy-making from the day-to-day administration and regulation; decentralization of functions to lower-level State organs; and the involvement of the private sector in water resources management and water services provision. The long-term objective of these reforms was poverty reduction in the

16 It is worth noting that the 20 litres provided as the benchmark level of need is insufficient to cater for livelihood uses, including food security.

17 See Paragraphs 10-12.

18 See Paragraph 20.

rural and urban areas, through the establishment and development of a well managed and sustainable water sector (KWAHO, 2009). Moreover, under the Water Act, water supply and sanitation were to be guided by the National Water Services Strategy (2007-15). Section 49(3)(a) of the Water Act 2002, requires the National Water Services' Strategy to frame plans and programmes for the progressive realization of the right to water. The Act does not address gender-equal participation in water governance but the 2006 Presidential Directive on affirmative action for women in all appointments has resulted in greater women's visibility in the water sector institutions.¹⁹

The Act treats water mainly as an economic good and, in efforts to increase access to water, it brings the private sector on board. Water supply is only to be provided by a water service provider,²⁰ defined as a company, NGO, or other body or person providing water services under and in accordance with an agreement with the licensee within whose limits of supply the services are provided.²¹ All municipalities are obliged to manage and operate water services along business and corporate lines and to embrace the full cost of recovery in the provision of water services.²² Water Service Providers (WSPs) acquire water in bulk from Water Service Boards (WSBs). Water supply is based on the principle of cost recovery, which requires users to pay for water and sanitation services. The issue of affordability is not addressed and the poor and vulnerable groups, including women, cannot access water without paying. This has resulted in the proliferation of self-help groups, NGOs and faith-based organizations in water and sewerage services' provision (GoK, 2012).

Regulation of water rights under the Act is based on a permit system.²³ A permit is predicated principally on land rights. It is an offence to construct or employ any works without a permit for a purpose for which a permit is required.²⁴ Section 34 stipulates that a permit runs with the land or undertaking. It is important to note that permits operate principally where land is under formal tenure; therefore, land under customary tenure is excluded. As long as it remains in force, a permit is appurtenant to that portion of land or that undertaking and passes with any

19 For instance WASREB has been chaired by a woman since 2012.

20 Section 53(2), Water Act 2002.

21 See Section 2, Water Act 2002.

22 See Section 57(5) (d), Water Act 2002.

23 Section 8 (1) (c) and (d) of the Water Act 2002.

24 Section 27 (1) (a).

demise, devise, alienation, transfer, or other disposition thereof, whether by operation of law or otherwise.²⁵ In addition, where land to which a permit is appurtenant has been, or is about to be, subdivided, the Water Resources Management Authority may grant a new permit, subject to the permit holder acquiring the necessary easements.²⁶ With few women having titles to land compared to men, women as a gender and as part of a socio-economic class are unable to get permits and are therefore affected negatively. This is also the case where women need water connections. Application of the permit system also means that women cannot utilize water resources in economically productive activities such as irrigation and commercial livestock rearing because they lack water rights to water resources.²⁷ The permit system implies that small-scale water users without ownership rights lose out to large-scale users who hold a permit.

Linking water rights to land may be inappropriate in informal settlements where residents are not the owners of underlying land. Government has failed to develop infrastructure for water supply in informal settlements because the residents are not the real owners of the underlying land. Water services provision is thus left to cartels, who charge exorbitant prices for water. Those without land rights also pay exorbitant prices for water for consumption from informal service providers, as they are not served by the formal providers. This implies that those without ownership rights cannot effectively engage in economically productive activities that require water, such as irrigation and commercial livestock farming (Njuguna, 2012). It is, therefore, evident that the permit system does not sit well with the State's obligation to respect and protect the right to an adequate living standard, the right to food and the right to health.

5.2 Who were the drivers of reforms?

Water reforms in Kenya have been driven by different internal and external actors. The internal actors include the Ministry of Water and Irrigation and its agencies such as the Water Resources Management Authority; Water Services Providers (WSPs); the Ministry of Environment and Mineral Resources through the National Environment Management Authority (NEMA); the Ministry of Public Health; and the Municipal Council and local civil society organizations. The external actors include development partners and donors such as German Technical Co-oper-

25 Section 34 (1).

26 Section 34 (3).

27 Njuguna (2012)

ation, German Development Bank, Water and Sanitation for the Urban Poor (WSUP), United Nations Human Settlements Programme (UN-Habitat), Japan International Cooperation Agency (JICA) and United Nations Children's Fund (UNICEF). Other actors include community-based networks and NGOs.

Donors have played a major role in capacity building, and in responding to emergencies by providing funding and access to poor communities in remote areas and in managing community supplies. For instance, in the 1990s, donors funded about 62% of the development budget for the water sector while the government only financed about 38% from general revenues (GoK, 2005). The funding to the Ministry of Water and Irrigation (MoWI) increased in absolute terms from USD64 million in 2003/04 to USD379 million in 2009/10. In relation to the GDP, donor funding has kept pace with inflation. There was an increase of 0.4% in 2003/04 to 0.9% in 2008/09 (AMCOW, 2010). However, a huge portion of the capital budget, over 80% of the ministry's allocations, has gone to water supply and sanitation rather than irrigation. Nonetheless, it is not clear what proportion was allocated to urban versus rural, and water supply versus sanitation allocations. This lack of clarity is due to the preference that is given to urban water supply compared to rural water supply. Urban water supply continues to receive most of the funding compared to rural areas, necessitating the intervention of NGOs and other informal water providers (AMCOW, 2010). In addition, donor funding was channeled through the Water Services Trust Fund (WSTF) to promote water provision in rural areas and informal settlements, but WSTF funding is still low.

Through the Kenya Water and Sanitation Project and the Water Sector Reform Project, development partners have been involved in setting up water sector institutions since 2005 (Sida, 2009). There have, however, been challenges such as ensuring transition from old institutions to new ones and ensuring complementarities and synergy among institutions. This, coupled with inadequate funding, explains in part the failure to meet the targets set by water and sanitation supply systems (Sida, 2009). More specifically, overlaps between the new water sector institutions, pre-reform institutions and the ministry persist nearly ten years after the institutions were established. This problem has been compounded by the emergence of new institutions established under the 2010 Constitution such as the counties and the amalgamation of ministries dictated by the reduction of ministries from 42 to about 20. In this milieu of an evolving institutional framework, focus on the poor, gender, good governance, stakeholder

participation, viability, sustainability, and objectives towards MDG goals continue to be a moving target and are unlikely to be fully achieved in the short term (Sida, 2009). It is worth noting that the incomplete transfer of staff and water supply and sewerage assets from the MoWI, local authorities, the National Water Conservation and Pipeline Corporation, and other public bodies to the WSBs and WSPs has continued to directly impact on the financial viability of WSPs (AMCOW, 2010). This is now compounded by the constitutional provision that separates water resource management functions (placed under the national government) from water service provision (placed under the county government).²⁸ A major concern is how to secure the gains made in the reform process and ensure that the right to water provided for in the Constitution is realized (World Bank, 2013). A number of cases have already come before the courts in which county governments have been challenged for appointing the members of the boards of Water Service Providers in contravention of processes established under the reforms.²⁹

Notwithstanding the support that Water Service Institutions (WSIs) have received from the government, donors and development partners, access to water services and sanitation remains low at 53% and 69% respectively (Water Services Regulatory Board, 2014) and it is likely that the sector MDG targets of 80% urban water and 77.5% urban sanitation coverage by 2015 will not be attained (World Bank, 2013). This is likely to greatly affect access for the poor. Not surprisingly, civil society actors have become increasingly involved in water supply and sanitation in rural and informal settlements, filling in the provision gaps.³⁰ This is likely to positively affect the incorporation of the rights-based approach to water provision and a shift from the focus on the economic good of water (Moyo, 2011). This is important in ensuring the realization of the right to water, since without the participation of grassroots organizations and civil society, planning, formulation and implementation of water reforms may not capture the needs and priorities of the poor. There is, however, need for synergies, legitimization and institutionalization of the role of

28 See generally the Fourth Schedule to the Constitution of Kenya, 2010.

29 See e.g. *Okiya Omtatah Okioti and 3 others v Nairobi City County and 5 others*, High Court Petition No. 143 of 2014.

30 These organizations include the Kenya Alliance of Residents Association (KARA), Nairobi City Consortium, Kenya Water and Sanitation CSO's Network (KEWASNET), UMANDE Trust, Majina Ufanisi, Kenya Water for Health Organisation (KWAHO), Transparency International-TI, Muungano wa Wanavijiji, PAMOJA Trust and Hakijamii.

CSOs in water supply (Osinde, 2007). The laws and policies aligning the water sector with the Constitution which are currently before Parliament provide an opportunity to institutionalize this participation as part of the constitutional requirement of stakeholder engagement and public participation. (Article 10(2)) There is, however, a dearth of NGOs, CBOs and other civil society groups with adequate capacity working in the actual advancement of water governance in the reform process (Osinde, 2007).

5.3 Constitution of Kenya 2010 and water provision

The Constitution places a high premium on the core themes in this book – the right to water and sanitation, the right to gender equality and the right to gender-equal participation in governance – including them in the National Values and Principles of Governance (Article 10) and in the Bill of Rights (Chapter 4). Indeed, the implementation of the Constitution has far-reaching implications for water governance and the realization of the right to water for all Kenyans. The Constitution provides for gender equality unequivocally and unambiguously (Article 27) and requires that legislative and other measures including affirmative action programmes and policies be taken to ensure that the rights it provides for are realized. (Article 27(6)).

The Constitution expressly recognizes the right of every person to clean and safe water in adequate quantities (Article 43(1)(d)) thus providing individuals and civil society groups with a basis for engaging and exhorting the government at the national and county levels to respect, protect, promote and fulfill the right. In addition, the Constitution recognizes the right to reasonable standards of sanitation.(Article 43(1)(b)) Recognition of the rights to water and sanitation as distinct human rights in the Bill of Rights is important because of the priority usually given to the right to water when the two rights are lumped together. The government at the national and county levels is therefore under a duty to ensure that conditions exist for the realization of the right to water and enjoyment of the right to reasonable standards of sanitation. Further, the right to water is grouped together with other economic and social rights such as the rights to food (Article 43(1)(c)), a healthy environment (Article 42), housing (Article 43(1)(b)), education (Article 43(1)(f)), health (Article 43(1)(a)), and social security (Article 43(1)(e)), underscoring the fact that these rights are interrelated since in most cases those without access to water and sanitation also do not enjoy the related rights. The grouping of the right to water together with other social and economic

rights, may suggest that the right to water in Kenya is wide and includes the right to water for livelihood and not only for personal and domestic uses. This is so, because without access to water, it becomes difficult to realize other rights such as the rights to life, to food, to health and to an adequate standard of living. It will be interesting to see whether courts adopt this broad definition.

The State is also under a duty to observe, respect, protect, promote and fulfill the right to water in international law. Article 2(6) of the Constitution provides that 'any treaty or convention ratified by Kenya shall form part of the law of Kenya'. This implies that there is no need for the legislative process of domesticating international treaties, which can be a barrier to the realization of rights provided for in international treaties. There is, however, a conflicting provision in Article 94(5) which reserves the power of making law to Parliament: 'No person or body, other than Parliament, has the power to make provision having the force of law in Kenya except under authority conferred by this Constitution or by legislation.' State representatives in international treaty negotiations are not MPs, and hence the need for clarity on the application of treaties in national courts. With regard to the rights to water and sanitation and participation in water sector governance, there is a bill before Parliament that contains the provisions beyond the Constitution and UN and regional commitments. This is fortified by the equality and anti-discrimination provision (Article 27) with regard to gender.

The Constitution, like UN agreements, requires that legislative, policy and other measures, including the setting of standards be taken to achieve the progressive realization of the right to water under Article 43 of the Constitution.³¹ This is in appreciation of the fact that recognition of the right to water in the Constitution is not enough, and that much must be done towards its realization especially in rural and informal urban settlements. Consequently, where the right to water is denied, violated, infringed or are threatened, one has a right to seek redress in court.³² A court may grant a number of reliefs including a declaration of rights, an injunction, a conservatory order, a declaration of invalidity of any law, which denies, violates, infringes, or threatens a right or fundamental freedom in the Bill of Rights and is not justified under Article 24; or an order for compensation and an order of judicial review.³³

31 See Article 21(1) and (2), Constitution of Kenya, 2010.

32 See Article 22, Constitution of Kenya, 2010.

33 See Article 23(3), Constitution of Kenya, 2010.

Essentially, the right to water entitles every person to a continuous supply of water for livelihood purposes and basic sanitation. This issue continues to dog the water sector in Kenya, which has not met the international benchmarks that provide that, in order to have a basic access to 20 litres per day, the water source has to be within 1,000 metres of the home and collection time should not exceed 30 minutes in urban areas, or, alternatively, two kilometres in rural areas. This addresses the concern that women and children travel long distances per day to fetch water in Kenya. Further, the cost of access to water should not exceed 5% of the household income (UN OHCHR, 2010; KWAHO, 2009).³⁴ Indeed, as noted above, the poor pay much more for water than the rich who get metered water (UNDP, 2006).

With regard to sanitation, the sanitation infrastructure must be in a private, safe and dignified environment (KWAHO, 2009; UN OHCHR, 2010). Toilets must be within, or in immediate vicinity of, each household, educational institution or workplace and available for use day or night with appropriate facilities for use by children, the disabled and the elderly (KWAHO, 2009). The basic infrastructure for sanitation and sewerage system for households and public use must be functional and culturally acceptable, providing privacy for both men and women. A shared toilet facility should not be shared by more than four households. In the chapters on Naivasha and Mathare,³⁵ it is clear that these conditions are far from being met. Indeed, while the cost of sanitation and water should not exceed 5% of the household income, residents in these areas pay more and some do not have access to sanitation facilities at all times owing to insecurity (KWAHO, 2009).

To realize the right to water amongst minorities and other marginalized groups, Article 56(e) of the Constitution obliges the State to put in place affirmative action programmes designed to ensure that minorities and marginalized groups have reasonable access to water, among other social services. Article 27(2) on equality and non-discrimination provides that women and men should be treated equally, including the right to equal opportunities in political, economic, cultural and social spheres. This extends to productive water uses, such that women's water uses should be given equal treatment to men's water uses such as irrigation.³⁶

34 UNDP suggests 3% of household income as a benchmark.

35 See chapters 4 and 6.

36 See Chapter 2.

The Constitution also establishes an Equalization Fund³⁷ to be used by the national government in providing basic services, including water, to marginalized areas to the extent necessary to bring those areas to the level generally enjoyed by the rest of the nation.³⁸ Whether these provisions benefit women and the poor and facilitate their realization of the right to water remains to be seen.

5.4 Devolution and water governance

The Constitution creates two levels of government: national and county governments. Functions have been apportioned between the two levels generally and in relation to water services particularly. On the one hand, water services' provision is under county governments, making them responsible for meeting the water needs of people in their respective counties (World Bank, 2013).³⁹ On the other hand, water resource management and trans-county issues such as protection of water resources and prevention of pollution are the responsibility of the national government.⁴⁰ This is justifiable on a number of counts:

- i. water resources are very unevenly distributed among counties in Kenya and counties are dependent, sometimes wholly, on water resources from other counties;⁴¹
- ii. counties do not have the capital necessary to develop infrastructure such as multipurpose dams;
- iii. infrastructure, developed so far, has been through financing arrangements with the national government which has necessitated transitional handing over arrangements;
- iv. the national government is better placed to deal with pollution issues which may affect water resources in different counties;
- v. there is need to set national standards for service provision that apply across counties to ensure that water supplied is accessible, acceptable, affordable, and of a standard quality;

37 Article 204(1), Constitution of Kenya 2010.

38 See Article 204(2), Constitution of Kenya, 2010.

39 World Bank (2013), p.6.

40 See Section 22 of the Fourth Schedule, Constitution of Kenya, 2010.

41 For example, counties such as Nairobi, Mombasa, Eldoret and Kakamega are dependent on water from other counties.

- vi. the national government needs to develop water and sanitation policies, and oversee and support the counties in the performance of their water service provision roles, to ensure that all citizens have access to water and sanitation, as provided for in the Constitution.

A major support function of the national government is ensuring that funds allocated for county governments are released and facilitating the development of counties' capacities to provide water and sanitation services to citizens (World Bank, 2013). Indeed, the national State organs are required to ensure reasonable access to their services in all parts of the country,⁴² including access to water and sanitation services. It is important to note that gender-equal participation is required for both levels of government and the expectation is that this will apply to institutions set up to manage water.

The promulgation of the Constitution and the establishment of counties have posed a challenge for the momentum in water sector reforms, as efforts are made to improve service delivery with discussions on how to build on ongoing reforms rather than rapidly overhauling the system before it coalesces (World Bank, 2013). This discussion is likely to continue; the critical issue is to ensure that water provision and sanitation coverage, especially in rural and informal settlements in urban areas, is improved and that the poor and marginalized are not left out. There is also a window of opportunity for gender-equal participation and the consideration of water uses for women for domestic and livelihood purposes. Devolution of water services' provision to counties must be linked to funding, implying that existing and new money flows for water investments is evaluated and agreements reached between the national and county governments about how these investments are re-organized and applied (World Bank, 2013). This process provides an entry point for gender.

5.5 Draft Water Policy, 2012⁴³

In a bid to align the water sector policies to the Constitution of Kenya 2010, the government prepared a Water Policy in 2012. This policy adopts a human rights based approach to water governance with a pro-poor focus. It provides for the creation of and anchors water sector institutions (WSIs). The Policy expresses the need to move towards gender

42 Article 6(3), 2010 Constitution of Kenya.

43 GoK, 2012.

equality in the WSIs (GoK, 2012), with the government committing to enforce the constitutionally enshrined rule that not more than two-thirds of elective or appointive posts should be held by members of one gender. This rule facilitates the participation of women in water sector institutions including representation on boards of the institutions in the sector. It also states that women shall be encouraged to invest in, and have access to, employment opportunities in the water sector (GoK, 2012). This is in recognition of the fact that women, children and persons with disability are among the poorest in society and are the most affected where water supply and sanitation services are inadequate, often with life-threatening consequences. Water association groups (WAGs) and Water Resource Users Associations (WRUAs) empower women to participate in decision-making. The policy requires that WAGs and WRUAs must have among their members 30% women and that at least 50% of water kiosks be operated by women (Republic of Kenya, 2012). Water for livelihood is dealt with under the policy as it seeks to enhance access to water for economic and social growth to increase, *inter alia*, livestock production, gradually increase irrigated land for crop agriculture, and to increase industrial production.

5.6 Draft National Environment Policy, 2013⁴⁴

This draft policy will be the overarching policy on environmental matters in Kenya. It recognizes the important role that gender plays in the management of the environment (GoK, 2013). It also recognizes that different social groups and demographic sectors are impacted differently by environmental challenges. In addition, it appreciates that different actors play unique roles in managing the environment given their unique capabilities, experiences and knowledge relating to the environment (GoK, 2013). The policy therefore requires that access to and ownership of natural resources should be enhanced for both genders, people living with disabilities, and marginalized and minority groups. This is to be attained through the provision of incentives to attract the under-represented gender and other vulnerable groups into environmental management careers, occupations and programmes (GoK, 2013). It will also be achieved through gender mainstreaming and equity in all sustainable development policies.

44 GoK (2013).

5.7 Draft Water Bill 2014⁴⁵

This bill, currently before Parliament, seeks to align the Water Act with the Constitution. The fact that it replicates many of the provisions of the Water Act 2002 may limit its capacity to deliver the human rights promise. Ownership of water resources is vested in the national government and held in trust for the people.⁴⁶ The bill recognizes the right to water and creates institutions tasked to ensure that this right is fulfilled.⁴⁷ Interestingly, water rights under the bill are still premised on the permit system.⁴⁸ A 'water right' under the bill is described as the right to have access to water through a water permit. The bill seems to recognize local custom-based water rights, as it defines a 'landholder' in relation to land for purposes of getting a permit as any person who by any established right, custom or estate is entitled to be the holder or possessor of land.⁴⁹ The bill is, however, not clear on the right to water for livelihood and replicates the constitutional provisions on the right to water without amplifying the issues of access, affordability and quality. These issues have been raised with the Parliamentary committee discussing the bill, which is yet to become law.

Water service provision under the bill will be done with a view to fulfilling the right to clean and safe water and reasonable standards of sanitation.⁵⁰ To ensure the realization of the right to water, the bill requires the Cabinet Secretary to formulate a Water Strategy providing government's plans and programmes for the progressive realization of the right to water.⁵¹ The Water Strategy is to contain details on existing water services, number and location of persons not provided with a basic water supply and basic sewerage services, standards for the progressive realization of the right to water, and a reasonable mobilization strategy for the implementation of the plans.⁵² This provides a good point for bringing on board gender concerns and water needs for livelihood. Water Works Development Boards are established as agents of the national government to develop national public water works for water services. These will be

45 Draft Water Bill 2014.

46 See Clause 5 of the Draft Water Bill 2014.

47 See Clause 4 of the Draft Water Bill 2014.

48 See Clauses 34-54.

49 See Clause 2.

50 See Clause 62 of the Draft Water Bill 2014.

51 See Clause 63(1) of the Draft Water Bill 2014.

52 See Clause 63(3) of the Draft Water Bill 2014.

critical in the realization of the right to water. Their role is to formulate development and investment plans for rural and urban areas; provide input to the national development and financing plan; provide technical assistance to the WSPs, as county government agents for county asset development in consultation with the respective county governments; hand over developed public assets to the licensed county water services providers, cross-county water services providers or to the county water department according to the rules of the Cabinet Secretary; and facilitate the establishment of cross-county water service providers.⁵³ The proposed Water Services Regulatory Authority will protect the interests and rights of consumers in the provision of water services.⁵⁴ It is therefore a critical actor in delivering the rights to water and sanitation and gender-equal participation in the water sector. The Authority will, among other things, determine and prescribe national standards for the provision of water services and asset development for water services; evaluate and recommend water and sewerage tariffs to the county WSPs and approve their imposition in line with consumer protection standards; set license conditions and accredit WSPs. Accreditation of WSPs will ensure that the companies have the capacity to provide water in the counties. In addition, setting of tariffs by the Authority underscores the impact of the authority's activities on people's livelihoods. Further, the setting of national standards by the Authority will ensure that water standards are uniform across the country and that no county will allow unsafe and unclean water to be sold to the people. This will contribute to the attainment of the right to water in so far as safety and quality is concerned.

WSPs, established in clause 76 of the bill as agents of the county governments, are also critical to the realization of the right to water. They are to provide water services within the area specified in the license and develop county assets for water service provision.⁵⁵ Water service providers are responsible for the efficient and economical provision of water services so as to fulfill the right to water.⁵⁶ While commercial viability is a major concern in the bill, reflecting the over-emphasis on economic considerations in water service provision, the bill provides that no person or community shall be denied water services principally on the grounds

53 See Clause 67 of the Draft Water Bill 2014.

54 See Clause 69(1) of the Draft Water Bill 2014.

55 See Clause 77(1) of the Draft Water Bill 2014.

56 See Clause 90(1) of the Draft Water Bill 2014.

that provision is not commercially viable.⁵⁷ County governments are also enjoined to put in place measures for the provision of water services to rural areas considered not to be commercially viable for water services' provision.⁵⁸ Such measures include developing point sources, small-scale piped systems and stand pipes which meet the standards set by the Water Services Regulatory Authority and which may be managed by the community associations, by NGOs or by a private person under a contract with the county government.⁵⁹ This brings the access issue of the human right to water to the fore.

The provisions of the bill are a departure from the Water Act 2002, which did not explicitly recognize the right to water, gender-equal participation, and community-based water projects. The bill, unlike the 2002 Act, provides for water supply provision in rural and peri-urban areas which will enhance access to water and sewerage services.

Devolution of water resources management and services provision should contribute to greater realization and fulfillment of the right to water. However, devolution should be implemented in a way that builds on the gains achieved through water sector reforms and weaknesses worked on to realize the right to water. Mechanisms of fitting the institutions under the 2002 Act into the devolution set up should thus be devised and evaluation carried out to determine whether these institutions have served their purpose, and whether there is any justification for retaining them as they are in the bill. There will also be a need to investigate whether existing water sector institutions have increased water service provision, and the impact they have had on the poor and women. It is important to ensure that the right to water for these categories of people is not hindered by the privatization of water service providers, licensing requirements for water providers, permit requirements, and tariffs which impede access to water services by the poor, including women. Regulation of water rights based on the permit system may deny women access to water for livelihood. It is to be noted that, whereas the bill recognizes the right to water, it fails to provide for a right to water for livelihood, especially where women need water for growing food crops. Although domestic water uses take precedence over water use for any other purpose,⁶⁰ water for broader livelihood purposes is not mentioned and this can be considered as devolution is rolled out.

57 See Clause 92(1) of the Draft Water Bill 2014.

58 See Clause 92(2) of the Draft Water Bill 2014.

59 See Clause 92(3) of the Draft Water Bill 2014.

60 See Clause 41(2). The Bill does not define what 'domestic water uses' are.

6. JUDICIALIZING THE RIGHT TO WATER AND THE REALITIES OF POWERLESSNESS

It is important to note that the Constitution of Kenya has been lauded for having very transformative provisions. These provisions, however, need to be brought alive, and one of the ways in which this happens is through court actions. Judicial pronouncements are useful as they give meaning to rights by espousing the normative content of those rights. Judicial interpretation of rights makes them meaningful to right-bearers, especially the poor and women. Recent court decisions have sought to give meaning to the right to water as enshrined in the 2010 Constitution.

The transitional provisions of the Constitution state that ‘all law in force... shall be construed with the alterations, adaptations, qualifications and exceptions necessary to bring it into conformity with this Constitution’ (Sixth Schedule Part 2 Section 7(1)). In one decision, the high court has held that the rights under Article 43 are interconnected.⁶¹ Violation or denial of one right may mean denial of the other rights. Further, in *Satrose Ayuma and 11 others v Registered Trustees of the Kenya Railways Staff Retirement Benefits Scheme and 3 others*,⁶² the court underscored the challenges which treating water as an economic good and managing it on market principles occasions for the poor, who have a constitutionally guaranteed right to water. The Judge in the case noted, referring to General Comments No. 4 and 7 on the UN Committee on Economic, Social and Cultural Rights, that ‘an adequate house must contain facilities for health, security, comfort and nutrition; all beneficiaries should have sustainable access to natural and common resources, safe drinking water, energy for cooking, heating and lighting, sanitation and washing facilities, means of food storage, refuse disposal, site drainage and emergency services’. Referring to the requirement to pay for water services, the judge stated that under the Water Act 2002, the water supply system requires payment of a fee to access water, and if an individual does not pay, they cannot claim a denial of their right to water. He, however, pointed out that the Water Act needed to be aligned to the Constitution, specifically with regard to the right to water (Para. 100). According to the court, there is a need for water suppliers and the State to adopt a rights-based approach to the provision of water services, so that a person is not denied

61 *June Seventeenth Enterprises Ltd (Suing on its own behalf and on behalf of and in the interest of 223 other persons being former inhabitants of KPA Maasai Village Embakasi within Nairobi) v Kenya Airports Authority and 4 others* [2014] eKLR.

62 [2011] eKLR.

access to water for non-payment, especially where one proves that one is unable to pay. Further, the court observed that recognition of a human right in the Constitution was not enough to ameliorate the plight of those without access. It stated that:

... This Court has a special responsibility to develop, and comprehensively so, the meaning of all the rights in the Bill of Rights, especially social-economic rights such as the right of access to clean and safe water. It is important therefore to elaborate on the normative content of the right to water so as to help the State realize its constitutional obligations.

Defining the normative content of the right to water with certainty and clarity will give the right meaning in the lives of the poor people of Kenya (Moyo, 2011).

In *Joseph Letuya and 21 others v Attorney General and 5 others*,⁶³ the court was of the view that the purpose of the rights in Article 43(1) of the Constitution is to ensure that persons to whom they apply attain a reasonable livelihood. While considering the nature of rights to dignity, life and a livelihood, the court observed as follows:

...that the right to livelihood neither has an established definition nor recognition as a human right at the national or international level. However, the right to a livelihood is a concept that is increasingly being discussed in the context of human rights. This concept has mention in various international human rights treaties which are now part of Kenyan law by virtue of Article 2(6) of the Kenyan Constitution.

As argued elsewhere in this chapter, the right to water in the Constitution should be understood in a wider context and in relation to the other socio-economic rights, as they are all connected and indivisible, and it cannot be said that one set of rights is more important than another. All the rights in the Bill of Rights need to be observed for a person to attain a reasonable livelihood. Regarding Article 56(e), the court in the *Joseph Letuya* case noted that the

need for affirmative action for, and special consideration of minority and indigenous groups arises from the fact that indirect indiscrimination of these groups may result from certain actions or policies which on their face look neutral and fair, but which will have a differential effect on these groups because of their special characteristics.

The high court has also had occasion to discuss the issue of participation, affordability and quality in *Kiriinya M. Mwendia v Runda Wa-*

63 [2014] eKLR.

*ter Limited and another.*⁶⁴ The petitioner argued that the Runda Water, a water supplier, sold water of low quality and at higher price compared to Nairobi City Water and Sewerage Company (NCWSC). He also argued that he was entitled to be supplied with water from a company of his choice as per Article 46 of the Constitution. The court, in finding that each WSP has its exclusive area of jurisdiction, stated that:

...the petitioner has no right to receive water from NCWSC or any other water company of his choice and this Court cannot vary the term of Runda Water Service Agreement for his benefit. As the petitioner's property falls within LR No. 7785, he is entitled to apply to Runda Water for the connection... Runda Water will be happy to supply water to him.

Each water service provider having exclusive jurisdiction can thus be a basis for denial or violation of the right to water. A water user is obliged to buy water from the WSP even when the tariffs are high. This does not augur well for a rights-based approach to water. Other actors should be free to supply water, even where there is a licensed water service provider.

7. CONCLUDING REMARKS

This chapter has given a comprehensive overview of water laws and policy in Kenya. It demonstrates the arduous process of bringing the right to water and sanitation, the right to gender-equal participation, and the right to gender equality to the national plane. It outlines the development of water law and policy in Kenya, depicting a history of continuities and discontinuities of themes from one era to the other. The human rights based approach has in most stages been relegated to the back as economic considerations have *always* taken centre stage. For instance, cost-recovery is one theme that has run through the development of water law and policy in Kenya. Water supply has been on the basis of the water user's ability to pay. Colonial policies and post-colonial policies were based on cost-recovery in water supply. Currently, water supply is governed by the Water Act 2002, which is based on cost-recovery. The draft Water Bill 2014 currently before Parliament heralds a shift, as it seeks to align the water sector laws with the Constitution which provides for a right to water. While the bill provides for the right to water, it falls short of providing for accessibility, availability and affordability of water for livelihood purposes, even though the grouping of this right together with other social and economic rights in the Constitution implies a right to water for livelihood. The bill seems to be informed by cost-recovery and

64 [2014] eKLR.

does not address the challenge of high water tariffs, which are a barrier to the realization of the right to water by the poor and women. This makes it harder for the poor and women to access water for personal and domestic uses and for livelihood. An emphasis on cost-recovery also seems to ignore small-scale water users such as small-scale farmers or women with kitchen gardens.

Although, some policies have recognized a rights-based approach in water supply, it has not been implemented in practice. A human rights based approach to water governance would require a change in water supply policy. WSPs should not discontinue or deny the poor access to water for non-payment. In urban areas, some households use more than 30% of their income on water. The government should assure citizens of a minimum amount of water entitlement irrespective of payment especially for the poor and create an enabling environment for the participation of CBOs and NGOs in water supply. The enlistment of participation of other actors is important, since the rights-based approach does not envisage that the State will be the sole provider of basic services. The swift passage of the Draft Bill is necessary if the right to water is to be firmly anchored in law. Another aspect of water governance that has continued over the years is support from donors and development partners. Donor funding has been instrumental in driving reforms in Kenya. Although their role has been critiqued, this chapter concludes that donor and development partners' support has been instrumental in promoting a pro-poor focus in water supply, especially in rural areas and within informal settlements.

In conclusion, we find that, in spite of water sector reforms and laws and policies implementing those reforms, the right to water for the rural and urban poor is far from realization. As a result, poor households continue to spend more time, and pay more money, in accessing water and sanitation services compared to the rich. The participation of women in water governance also needs to be scaled up and their interests taken into account in framing access, availability and affordability tenets of the right to water. However, as discussed above, the process of implementing the 2010 Constitution, particularly the provisions on devolution and the human rights based approach to water, present opportunities for improving access to water services and sanitation for the poor and women in Kenya. There is also an opportunity to promote gender-equal participation and gender equality generally, and specifically within the water sector.

Chapter 4

Not so Rosy: Farm Workers' Human Right to Water in the Lake Naivasha Basin

Patricia Kameri-Mbote and Edna Odhiambo

I. INTRODUCTION

In 2010, the United Nations General Assembly (UNGA) explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the full enjoyment of life and realization of all other human rights.¹ In the same year, the right to clean, safe and adequate water found its pride of place in the Kenyan Constitution.² The Constitution of Kenya, promulgated in 2010, includes the rights to water and sanitation in the Bill of Rights.³ There is a 2014 draft Water Bill seeking, among other things, to implement the right to water, which is before parliament. This underscores the fact that the realization of these rights requires concerted efforts by all players considering that urban sanitation access level was stated to be 69% in 2011/12. This, however, is not very far below the sector target of 77.5% urban sanitation coverage by 2015.⁴ With regard to water, the current access rate is 53% and it is likely that the sector target of 80% urban water coverage in 2015 will not be attained.⁵ The improvement in coverage in 2014 has been a meagre 1%.⁶

Meeting water and sanitation needs must be considered within the

1 UN General Assembly (2010).

2 Constitution of Kenya (2010) Article 43 (1)(d)

3 Ibid.

4 The challenge however is the verification of the reliability of on-site sanitation data. See Water Services Regulatory Board (2013).

5 Ibid. p. 12

6 Water Services Regulatory Board (2014).

context of a rapidly growing urban population and the proliferation of informal settlements as people migrate to urban areas in search of employment. In Kenya, devolution entailing the establishment of 47 counties under the Constitution with their own headquarters and staff will fuel the urban bulge and put stress on the water and sanitation facilities available unless the infrastructure is expanded. This chapter focuses on the right to water and sanitation in four villages hosting farm workers in the Lake Naivasha Basin. Since our concern is with the right to water⁷ as defined by UNGA in the Resolution adopted on 28 July, in General Comment No. 15 on the Human Rights to Water adopted by the Committee on Economic, Social and Cultural Rights (CESCR)⁸ and in the Kenyan Constitution, we focus on water use for domestic purposes. This is the predominant use in the target villages where the workers (with the exception of one village) are migrants from other parts of the country coming into the basin in search of livelihood opportunities linked to the flower and horticulture industry. It is, however, noteworthy that the broader livelihood uses of water (kitchen gardening and watering livestock) which are the concern of many poor, and especially women, in Kenya are only observed in one of the target informal settlements discussed below. The absence of use for broader livelihood purposes in the other villages is probably attributable to the fact that most of the workers in the basin are labourers with no land rights in the basin area. The increase of the basin population will increase the inhabitants in informal settlements and hence exacerbate the competition over available resources including water.⁹ Whereas the right to water and sanitation applies to everyone, the CESCR committee has in General Comment No. 15 on the human right to water called upon states parties to: 'give special attention to those individuals and groups who have traditionally faced difficulties in exercising this right, including women, children, minority groups, indigenous peoples, refugees, asylum seekers, internally displaced people, migrant workers, prisoners and detainees'.¹⁰

Further, the right to water under international law, as discussed in Chapter 2 of this book imputes duties on State Parties to ensure that water is accessible by availing infrastructure to provide sufficient quantities

7 As defined by the United Nations General Assembly (2010) Resolution A/RES/64/292, and the Constitution of Kenya (2010) Article 4(1)(d).

8 CESCR (2002).

9 WWF & Pegasys Strategy and Development (2012) p. 31.

10 CESCR (2003) para 18.

of water in households, schools, hospitals, work and public places.¹¹ Water must also be of such a quality that it does not pose a threat to human health.¹² On affordability, the CESCR committee has in General Comment No. 15 required that ‘Water, and water facilities and services must be affordable for all. The direct and indirect costs must not compromise or threaten the realization of other Covenant rights’¹³ and ‘appropriate pricing policies – free or low-cost water’¹⁴ should be put in place to ensure that ‘poorer households should not be disproportionately burdened with water expenses compared to richer households’.¹⁵

The International Covenant on Economic Social and Cultural Rights is part of Kenyan law as discussed in Chapter 3, by virtue of the Constitution.¹⁶ Further, the State has been charged with the duty of ensuring that the needs of vulnerable groups are addressed.¹⁷ Article 56(e) of the Constitution specifically obliges the State to put in place affirmative action programmes designed to ensure that minorities and marginalized groups have reasonable access to water, among other social services. It is within this context that this chapter looks at the intersectional discrimination of a vulnerable group – farm workers who are mainly women – and evaluates the extent to which their rights to water and sanitation have been realized.

In this chapter, the competition for water resources is demonstrated through an exploration of the disparate users and uses of water in the basin and the amounts of water they take up. We look at this within the context of several factors, which include land rights and their effect on the right to water; environmental degradation; and the poor working and living conditions of flower farm workers in the basin. The chapter highlights the status of the realization of the constitutional rights to water and sanitation for the farm workers living in informal settlements in the basin by assessing critical issues affecting their right to water for domestic use (washing, cooking, drinking and bathing) and their right to sanitation. Drawing on field studies carried out in four villages in the basin and augmented by cited literature, the chapter underscores the competition for

11 Ibid. para 12 (c).

12 Ibid. para 12 (b).

13 Ibid. para. 12 (c).

14 Ibid. para. 27 (b).

15 Ibid. para. 26.

16 Constitution of Kenya (2010) Article 2 (6).

17 Ibid. Article 21 (3).

water resources between the disparate uses and users of water in the basin and analyses the relation between land rights, water use and the right to water. The large water users who are mainly flower and horticulture farms and also the land owners get the bulk of the water. In securing their land rights, these owners have curtailed access to the lake by other users specifically those needing water for domestic use such as the farm workers living in informal settlements. The chapter also assesses the living and working conditions of farm workers and how they impact on their right to water particularly with regard to affordability, quality and accessibility.

The main questions the chapter seeks to answer are whether the rights to water and sanitation for farm workers in the Lake Naivasha basin have been realized and whether services are affordable, accessible, sustainable, safe, sufficient and acceptable to the farm worker community. These questions are addressed through an exploration of the workers' knowledge of the existence of the rights; their perceptions on the extent to which the rights have been respected and protected; their participation in water governance; and the status of water and sanitation services' provision. It is worth noting that by looking at the different water uses in the basin and the allocation of water for these uses, the chapter demonstrates the low hierarchical level accorded to domestic water needs of residents of informal settlements around the lake, who are mainly farm workers and women.

2. THE LAKE NAIVASHA BASIN

2.1 The Basin

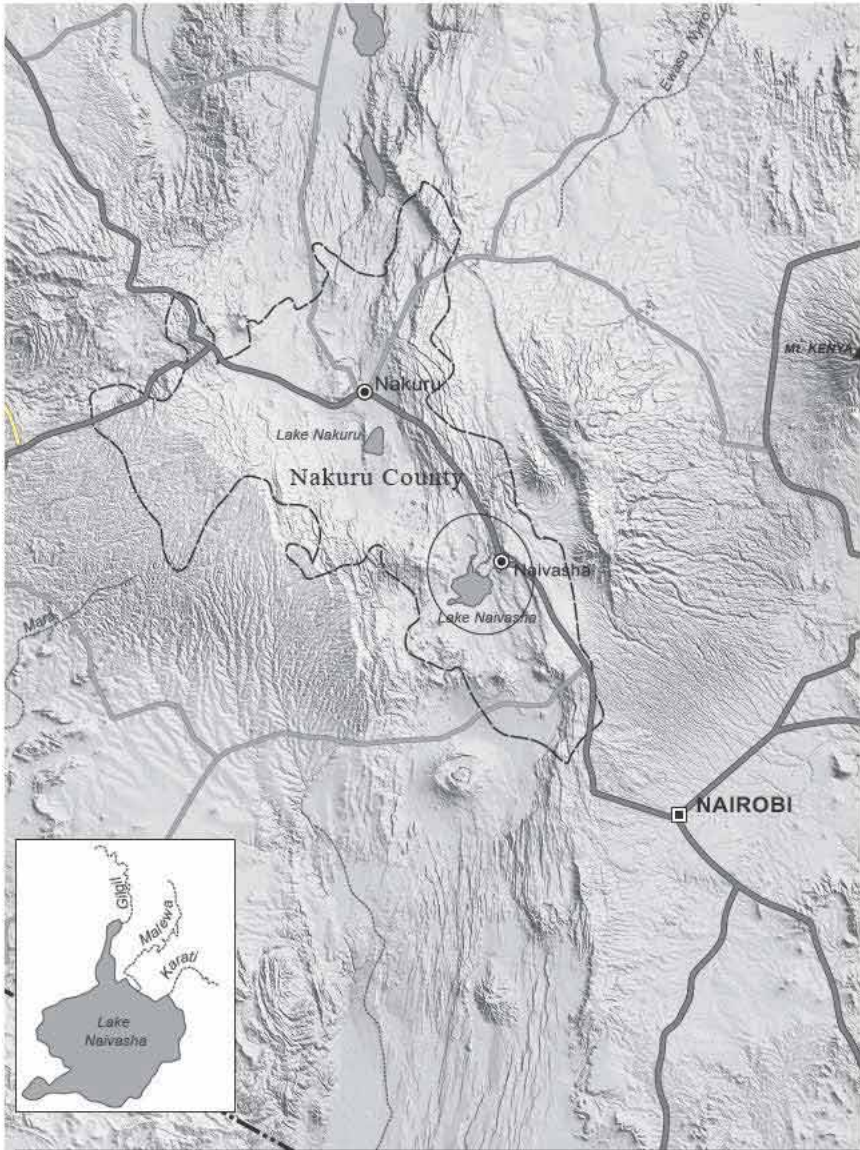
Lake Naivasha is an international conservation area and was declared a Ramsar site (wetland of international importance) in 1995.¹⁸ It is the only freshwater lake in the Kenyan Rift Valley with a catchment area of approximately 3,400 km².¹⁹ It is Kenya's second largest freshwater lake and is located about 80 kilometres northwest of Nairobi, within the Nakuru County. It is surrounded by swamps and while its inflow comes mainly from the Aberdare Mountains, the lake has no outflow (Isyaku et al., 2011). It is fed by two perennial rivers, the Malewa and the Gilgil that contribute 80% and 20% of the total inflow of the lake respectively.²⁰ There are a range of other ephemeral rivers carrying storm water run-off to the lake. The largest of these is the Karati, which flows for two months

18 Second Ramsar site in Kenya designated on 10 April, 1995.

19 WWF & Pegasys Strategy and Development (2012) p. 6.

20 Ibid.

LAKE NAIVASHA



**FRESH WATER RESOURCES:
SURFACE WATER**

Lake Naivasha
highlighted with
also see inset above

International Bdy
County Bdy
Capital
City
Mountain Peak

Roads, surfaced..
Roads unsurfaced
Athi
River & name
Lake Naivasha
Lake & name

of the year and drains the area east of the lake. It only reaches the lake in the high rains. The drainage from the west infiltrates before reaching the lake and there is not much runoff reaching the lake from the south.²¹ It estimated that the lake holds approximately 680 Mm³ of water but this level has fluctuated considerably over time (Otiang'a-Owiti and Oswe, 2007).

The lake supports a wide range of biodiversity and 'a rich ecosystem, with hundreds of bird species, papyrus fringes filled with hippos, riparian grass lands where waterbuck, giraffe, zebra and various antelopes graze, dense patches of riparian acacia forest with buffaloes, bushbuck and other creatures, [and] beautiful swampy areas where waterfowl breed and feed' (Becht et al., 2005). It is also a major source of water supply for both domestic and agricultural activities. Other economic activities sustained by the lake basin are small-scale agriculture, fishing, cattle ranching and grazing, tourism, and generation of geothermal electricity.

The 2009 census estimated the population of the basin to be 650,000 people of which approximately 160,000 lived around the lake itself.²² Of these, about 50,000 are estimated to be workers on flower and horticultural farms. (Leipold and Morgante, 2013) These people depend on the basin's water resources for their water supply and waste water disposal. These activities have led to various impacts: depletion of basin flows, depletion of groundwater and lake levels due to over-abstraction, deforestation in the upper basin, deterioration of water quality through high nutrient and sediment runoff and pollution from agricultural chemicals and untreated waste, habitat degradation and riparian encroachment, eutrophication, over-fishing, introduction of invasive and alien species, access conflicts, and reduction in biodiversity (Hepworth et al., 2011: 8).

With regard to sanitation, the existing sewerage system, designed between 1974 and 1977 by Sweco Viak of Sweden, was for a population of 17,000 people by 1985 and was expected to be expanded to serve about 43,000 people by 2000. The expansion has not been implemented.²³ The available sanitation services are not equally distributed and the sewerage network is very limited (20% coverage) and is currently overloaded and unable to cope with demand. It does not serve the informal settlements where majority of the flower farm worker population resides. As the population in the Naivasha area increases, immense pressure will be put on

21 Ibid.

22 Ibid. p. 7.

23 JICA and Ministry of Local Government (2003).

this already inadequate infrastructure. The basin has many large flower and horticulture farms which have attracted many people to the area in search of jobs as will be shown below.

2.2 Disparate uses and users of water in the Lake Naivasha Basin

Lake Naivasha Basin has wetland ecosystems which co-exist with industrial scale intensive farming of cut-flowers and high value vegetables (Hepworth et al., 2011: 23). A rapidly growing population and economy also depend on the basin's water resources for their water supply and wastewater disposal, with other significant water uses including small scale agriculture, tourism and wildlife sectors, cattle ranching and grazing, fisheries and power generation.²⁴

2.2.1 Export floriculture and horticulture

Kenya sends more than 450,000 tons of fruit, vegetables and cut flowers to the European Union and United Kingdom each year and the sector remains one of Kenya's top foreign exchange earners. In Lake Naivasha, they occupy a total of 1,900 hectares and 1,200 hectares are grown in greenhouses. Due to its fertile conditions, Lake Naivasha is the heart of the flower industry and is home to at least 44 (60%) horticulture producers that hire approximately 70,000 people (Hepworth et al., 2011: 32).

Cut flowers take a large share of the water footprint²⁵ related to crop production around Lake Naivasha, contributing about 98% and 41% to the blue water (abstracted water) and total water volume respectively. Cut flowers consume about 16.8 Mm³/yr of water during production.²⁶ Flowers grown in greenhouses are assumed to be fully supplied with irrigation water, while flowers cultivated in the open field get both rainwater and irrigation water. For flowers grown in the open field the blue water component is only 24% of the total water footprint, while for flowers grown in greenhouses the evaporative water consumption is met fully from irrigation water (Mekonnen et al., 2012).

The average water footprint of cut flowers grown around Lake Naivasha is 367m³/ton. About 45% (165m³/ton) of this water footprint refers to blue water, 22% (79 m³/ton) to green water (water evapo-transpired from soil moisture) and 33% (123 m³/ton) to grey water, the volume of

24 Ibid.

25 The water footprint of a product is the estimated volume of water indirectly or directly used to produce it, along its supply chain. See WWF & Pegasys Strategy and Development (2012) p. 22.

26 Mekonnen et al. (2012)

water needed to assimilate the nitrogen fertilizers that enter the water systems due to leaching or run-off.²⁷ The six big farms; Longonot Horticulture, Delamere, Oserian, Gordon-Miller, Marula Estate and Sher Agencies account for about 56% of the total operational water footprint around Lake Naivasha (lower part of the catchment) and 60% of the blue water footprint related to crop production in the whole basin.²⁸

2.2.2 Domestic water use

Farm workers live mainly in informal settlements around the lake and their need for water is mainly for drinking, food preparation, personal sanitation, and domestic hygiene (washing and cleaning) (Heemink, 2005). Though the Constitution of Kenya provides for the right to water and sanitation, according to an annual report by the Water Service Regulatory Board,²⁹ water connections in Naivasha serve an estimated 13% of the population. The Naivasha basin illustrates the challenge of informality where failure of water sector reforms to deliver water to all residents leads those not covered to look for alternatives through production (boreholes), distribution (reselling, home delivery and vendors) and free water sources (rivers, lakes and wells) (Jaglin, 2002). Flower farm workers living in the informal settlements are not served by the Naivasha Water, Sewerage and Sanitation Company (NAIVAWASSCO), the company responsible for water and sanitation provision in Naivasha. They rely on private, community or shared water supplies including groundwater and gravity fed schemes, with untreated lake water and surface water commonly used as a source for washing and bathing. Outside of urban areas in the basin, domestic water is obtained from untreated surface or shallow groundwater sources. Domestic water use in the basin accounts for 25% of the blue water footprint (Jaglin, 2002).

2.2.3 Smallholder agriculture

It is estimated that around 10,000 small farms occupy an area of 40,000 hectares within the basin and grow mainly maize and vegetables.³⁰ These farms occupy areas that receive high rainfall; there are about 18,000 ha of farm land in the upper catchment of which only 2% is irrigated. The average water footprint related to the production of these crops over the period 1996-2005 was about 60 Mm³/yr (90.7% green water, 0.8% blue

27 Ibid.

28 Ibid.

29 Water Services Regulatory Board (2009).

30 Ibid.

water; 8.5% grey water). (Mekonnen et al., 2012) Smallholders equally contribute vegetables to the export market and whilst commercial farmers dominate the trade, out grower schemes allow smallholders to access the higher value export market.³¹ Studies suggest that smallholder production for export markets is growing rapidly.³² Although rates of return are higher for export, the majority of vegetable production by smallholders in the Naivasha basin is destined for the domestic market.

2.2.4 Geothermal power generation

Geothermal power generation wells with capacity of 128 MW are based in Hell's Gate National park about 7 km south of the lake. Beginning in 1982, three geothermal projects now account for 19% of Kenya's power supply. The installations require water supply of 1Mm³ per year which is obtained from the lake (Hepworth et al., 2011: 36). With Kenya striving to become a low carbon resilient economy and the hard-hitting impacts of climate change affecting rainfall patterns, investments in geothermal power and other renewable sources of energy are bound to increase.

2.2.5 Tourism and recreation

Naivasha is a popular destination for national and international tourists. There are approximately 4,000 accommodation beds in the basin catering for a disparate range of visitors with an estimated 5% of Kenya's international tourists passing through the area. It also benefits as a destination for domestic and international conferences and meetings.³³ Water supplies for tourism and recreation are drawn from the lake or private groundwater supplies and although data on sewage treatment is unavailable, it is likely that this is via onsite septic tanks with discharge to the lake or via a soak away. As well as employment opportunities, local communities benefit directly through trade with tourists and provision of tour guides and boat trips on the lake.³⁴

2.2.6 Fishing industry

Commercial fisheries were established in the 1960s based on introduced black bass and tilapia.³⁵ The common carp was introduced in the 1990s. The performance of the fisheries has fluctuated due to overfishing and

31 Ibid.

32 WWF & Pegasys Strategy and Development (2012) p. 13.

33 Ibid p. 36.

34 Ibid.

35 Ibid.

Commercial Farms around the lake		TABLE 1		
		Area in (h)	Green WF (1,000 m ³)	Blue WF (1,000 m ³)
Flowers	1,911	3,640	31,388	35,028
Export vegetables	1,824	7,887		24,531
Fodder	665	3,716	16,644	6,910
Total of commercial farms	4,400	15,243	3,194	66,469
			51,226	
Upper catchment	Area in (h)			
Vegetables	6,500	20,181	7,118	27,299
Domestic market	5,720	16,808	-	16,808
Export market	780	3,373	7,118	10,491
Maize	30,000	87,824	-	
Fodder	4,300	24,028	-	24,028
Total	40,800	132,033	7,118	139,151

Source: WWF & Pegasys Strategy and Development (2012)

water level fluctuations. In addition, the introduction of exotic species has also disrupted the lake ecosystem.³⁶ The lake is also a considerable asset to the fishing community in Naivasha who earn their daily bread by selling the popular tilapia which has been depleting over the years due to interference with its breeding and the emission of toxins into the lake from the flower farms.³⁷

3. IMPACTS OF DISPARATE WATER USES AND USERS ON LAKE NAIVASHA

Having analysed the different users and uses of water in the Naivasha basin, it is apparent that the challenges of meeting the needs and managing the impacts of these multiple uses occur against a difficult physical, socio-economic and institutional backdrop.³⁸ The continued unsustainable utilization of water resources poses hardship to basin stakeholders and if left unchecked these problems threaten the ecological integrity of the basin, the human right to water as well as the reputational and financial impacts for export growers and tourism enterprises.³⁹ Indeed, there have been reports of threats from the European Union to bar imports of flower and horticultural products from Kenya on account of their carbon footprint and the levels of pesticide residue.⁴⁰

3.1 Economic contribution and water footprint analysis

The water footprint approach can be used to estimate the indirect and direct water consumption of a catchment area, by summing up the individual water uses of the products and the services that they consume. This concept can then be applied to identify how water flows through the economy of a basin and a country. Its objective is not to just estimate the volume of water embedded in the products of a particular area but to compare how different water uses contribute to economic activity and job creation.⁴¹ An analysis by WWF revealed that the Lake Naivasha basin accounts for 70% of Kenya's cut flower and 20% of vegetable exports, gen-

36 Ibid. For example, the introduction of Louisiana crayfish in the 1970s for the international market devastated the aquatic vegetation until predation brought some better balance in the 1980s. Also in the 1980s water hyacinth reached the lake forming characteristic dense littoral and floating mats and has since been the focus of control efforts using the hyacinth weevil.

37 KHRC et al. (2008) p. 37.

38 Ibid. p. 28.

39 Ibid.

40 *Business Daily* (n.d.).

41 KHRC et al. (2008) p. 22.

erates at least 10.7% of Kenya's export earnings, and accounts for around 2.1% of national GDP.

The analysis found that flowers generate the greatest income and jobs per volume of water than other activities, though interestingly vegetables grown for domestic markets in the upper catchment brought higher incomes per water used than those for export markets. Relative figures for job creation per water used were not available for vegetable production in the upper catchment though it is likely that significant livelihood benefits and resilience accrue from smallholder farming.

Table 1 illustrates the high level water footprint for the Lake Naivasha basin⁴²

3.2 Ecological impacts

The competing uses and users of water in the Naivasha basin have significant adverse effects on the ecology. There are several resulting water related impacts which include: depletion of basin flows, groundwater and lake levels due to over-abstraction and drought; water quality deterioration through high nutrient and sediment run-off and pollution from agricultural chemicals and untreated waste, habitat degradation and riparian encroachment, access conflicts, invasive species and reduction in biodiversity and fishery production.⁴³

3.3 Impacts on the right to water

As earlier mentioned, water levels in Lake Naivasha have gone down significantly. The massive use of water for irrigating greenhouses owned by commercial flower farms plays a leading role in depriving a section of local communities one of the few sources of water in a very arid region. In addition, residents face the challenge of lack of clean and safe water as water quality in the region continues to deteriorate through high nutrient and sediment run-off and pollution from agricultural chemicals and untreated waste finding its way to the lake. The right to water as will be seen in the next section is further compounded by land rights that affect water use around the lake. Similarly, the case of flower farm workers in the villages around the lake provides greater insight on the extent to which this basic right is being denied.

3.4 Land rights and water use in the Lake Naivasha Basin

In Kenya, land continues to have an immense social, economic, cultur-

42 WWF & Pegasys Strategy and Development (2012) p. 23.

43 Ibid.

al and political value. Over the years, dynamic changes in land ownership and use surrounding the lake, and enhanced water resource conflicts between stakeholders have been observed (Everard and Harper, 2002). There appears to be a direct correlation between surface water use, the land tenure system and water resource legislative framework (Heemink, 2005: 4). Water rights are linked to land tenure such that property rights determine access to water resources. In Kenya, one of the requirements for the provision of a water permit is that the applicant must demonstrate ownership of land.⁴⁴ Currently, there do not appear to be laws enabling the government to intervene on freehold land or leased freehold land for the purposes of allocating surface water access or use (Onyango et al., 2005).

Flower farm workers who predominantly reside in informal settlements in the basin have no land rights as pointed out above. Their access to water is therefore limited compared to land owners around the lake and in the upper catchment areas who own land. Related to this is the fact that the cost of water in informal settlements⁴⁵ around the lake is much higher than for the land owners. Some of the characteristics of informal settlements are prevalent poverty of the inhabitants; and lack of basic municipal services, inclusive of water supply, sanitary sewage, transportation infrastructure, and electricity. Indeed informal settlements are not recognized as inhabited areas in law and policy. Lacking recognition renders them invisible to government entities responsible for planning and service provision, including those providing domestic water supply services (Weru, 2000).

A study conducted in the informal settlements of Naivasha in 2005 revealed that access to surface water is limited because almost all the land along the riparian boundary is privately owned (Heemink, 2005: 87). Access to surface water for residents of informal settlements was limited to five access routes that ranged in distance between 1.25 and 12 km (Heemink, 2005: 88). Similarly, another study conducted by the Kenya Human Rights Commission in relation to sealing off of the corridors that facilitate access to the lake revealed that there is massive encroachment by commercial companies on the riparian land.⁴⁶ Sher Agencies (the largest flower farm) is one of the companies that have not only encroached on

44 Water Act, 2002; Mumma (2005).

45 Nabutola (2004) described informal settlements as human habitats without formal license or lease, and the tenants pay rent to unofficial landlords.

46 KHRC et al. (2008) p. 37.

such land, but have also erected permanent buildings on it. This concern was also raised by the Presidential Commission on Illegal and Irregular Allocation of Public Land.⁴⁷ Consequently, there were complaints within the local community about the lack of access by locals to the lake (though there are few public corridors to the lake that are still open). The residents claimed that people who accessed the lake using the grabbed corridors were charged with trespassing and farm owners had erected 'No Trespassing' signs on riparian land claiming that they had negotiated with the colonial government to move their fences towards the lake when the waters rescind.⁴⁸

It is apparent that the informal settlements' residents' right to water is being limited not only through the restriction of access routes to the lake meaning, less amounts of water for them, but also through the physical accessibility of water as they have to travel more than a kilometre to obtain it. The basin users of water for agricultural and commercial purposes (Gitahi, 2005) have grievances relating to their enjoyment of their rights. Those who are private landowners have to ward off trespassers; local communities and others dependent on the lake water for domestic purposes resent private land owners who they consider as having privatized public resources and are unhappy with the favouritism which, they argue, is exercised for the agriculturalists in the basin. Behind these complaints lies the fact that only five out of 16 access roads to the lake remain open;⁴⁹ many hotels are also being built which will significantly affect access to water; and corridors previously used by game and cattle to access the lake continue to decrease as land around the lake is privatized. Fishing communities' access to landing sites has also been affected.

There is concern with regard to over-exploitation of the lake's surface water by commercial growers and the continued issuance of water permits to such growers despite acknowledged and growing concern for the sustainability of Lake Naivasha as a water resource. The situation is aggravated by ineffective monitoring of existing water permits concerning the actual versus permitted surface water extraction amounts (Heemink, 2005: 14). The growth of the horticulture and flower industry and associated population increase has also led to concerns about potential water resource conflicts by different water users linked to inequitable land ownership and use based on the current land tenure system, the absence

47 Commonly known as the 'Ndungu Report'.

48 KHRC et al. (2008) p. 37.

49 Ibid.

of effective enforcement of the water resource legislative framework, and the potential socio-economic divergences between stakeholders relying on the same water resource.⁵⁰

These factors may promote inequitable surface water use, surface water access, distance, and retrieval and transportation methods, and sources of alternative domestic water supplies. This contributes to discrepancies in domestic water consumption such that the basic human water consumption (BWR) needs of residents of informal settlements around the lake at the rate of 50 litres per person per day are not met, whereas commercial farms are consuming domestic water in excess of the BWR.⁵¹

4. FLOWER FARM WORKERS IN THE LAKE NAIVASHA BASIN

4.1 The research issue

The flower and horticulture farms around Lake Naivasha employ 70,000-100,000 people. Like other people around the lake, they depend on the basin's water resources for their water supply and waste-water disposal. Our concern here, however, is with of the villages around the lake, which have sprung up to host the labourers as the farming, hospitality and other commercial activities have intensified. The population of these villages is estimated to be 40,000-50,000 with women comprising 65-75%.⁵²

To understand the different users and uses in a smaller area in the basin, the Gender, Human Right and Water Governance research team collected empirical data between 3 and 21 July 2012 covering four villages namely, Karagita; Mirera; Kamere; and Kasarani. Survey questionnaires were administered at household level in all the villages. A total of 242 were completed: 57.9% of the respondents were female, mainly farm workers who are rights' holders. For the duty bearers, a total of ten key informants were interviewed using a key informant guide. These included the local administrators such as the chief, the local community elders, government officers and NGO officials water service providers and flower farms.

The broad aim of the study was to map the different uses of water in the Lake Naivasha Basin with a view to excavating the context within which the human right to water provided for in the Constitution is being implemented in the target villages. The main concerns were gender-equal participation and the realization of the right to water taking into account

50 Ibid. p. 98.

51 Ibid. p. 100.

52 Opondo (2005).

gender roles and vulnerabilities. Key informants drawn from local and national institutions were interviewed and focus group discussions held with women groups, water vendors, water users' associations (WUAs), Water Resource Users' Associations (WRUAs) and youth groups to clarify issues raised in the survey.

The decision to focus on farm workers was made in February 2014 when the interviews revealed that the workers' access to water and sanitation was a burning issue. Additional data was consequently sought through review of available literature and interviews to supplement the information available from the 2012 research.⁵³ There is a growing population of migrant workers on flower and horticulture farms living in the informal settlements around the lake. They consider Naivasha a place to settle as the area offers work but their homes are in other parts of the country. These migrants do not generally own land in Naivasha and live in rented accommodation in informal settlements. They have very basic water needs for domestic and minimal livelihood use for kitchen gardens and livestock.

Despite being a top foreign exchange earner, the flower and horticulture industry in Kenya has come under massive criticism regarding its impact on workers' livelihoods, environmental sustainability and on the Kenyan economy. Flower farm owners have been accused of human and worker rights' abuses (particularly through low wages that are below the living wage), diminishing Kenya's already scarce water resources (particularly in Lake Naivasha), and water pollution by poisoning water supplies through the dumping and leaking of pesticides and chemicals (Leipold and Morgante, 2013) and this has direct implications on the flower farm workers' right to water.

The flower industry has a much higher proportion of women than other sectors, making women's issues particularly pressing.⁵⁴ According to studies conducted in 2012 and 2013,⁵⁵ an improvement in flower farm workers' working conditions has been marked since the enactment of the new labour laws,⁵⁶ the new Constitution and the influence of accredita-

53 This latter research focuses generally on the working conditions of flower farm workers, many of whom are women. One limitation of the research is that it did not initially focus directly on flower farm workers.

54 Working Women Worldwide (2008).

55 Kenya Human Rights Commission (2012).

56 Ibid. p. 9.

tion bodies such as EureGAP.⁵⁷ Challenges that persist include sexual abuse; limited freedom of association; childcare services; and unfair termination and dismissal. Sexual harassment in the industry is also a major challenge that disproportionately affects women in comparison to their male counterparts. Further, according to a study by the Kenya Human Rights Commission,⁵⁸ there is an increase in women-headed households in the cut-flower sector with over 55% of women workers being single mothers with an average of three children. Although some companies have on-site clinics providing limited family planning services based on hormonal methods, the study found work demands to be incompatible with access to reproductive and other promotional healthcare services for majority of the women workers.⁵⁹

Childcare facilities are not available and women have to resort to informal day care facilities based in cramped rooms, which tend to spread of communicable diseases. Moreover, because of the hours of work, women have limited time to care for their children and men do not generally assist.⁶⁰ Lastly, whereas companies have adopted the equal pay for equal work principle, practice differs. The study by the Kenya Human Rights Commission revealed that women and men do not earn equally as more men are concentrated in managerial positions; women in management are mainly relegated to lower level supervisory jobs with salaries similar to those of manual labourers.⁶¹ This is compounded by the fact that women are 'time poor' because of their dual roles in the household economy and the labour market. On average women work longer hours (12.9 hours per day) compared with those of men (8.2 hours per day), yet women earn less because these additional hours are not remunerated. Working hours in the cut-flower sector are much higher than the national average with 16-hour days being common during peak seasons.⁶²

Within this context, we were concerned with two questions:

- i. Has the right to water and sanitation for domestic use for farm workers in the Lake Naivasha basin been realized?

57 EurepGAP is a common standard for farm management practice created in the late 1990s by several European supermarket chains and their major suppliers. GAP is an acronym for Good Agricultural Practices.

58 KHRC (2012) p. 10.

59 Ibid. p. 60.

60 Ibid. p. 61.

61 Ibid. p. 11.

62 Ibid. p. 17.

- ii. Is water and sanitation affordable, accessible, sustainable, safe, sufficient and acceptable to the farm worker community?

We sought to answer these questions by focusing on the following themes:

1. Extent of awareness of the constitutional right to water and sanitation
2. Responsibility for ensuring that people enjoy the right to water and sanitation
3. Main uses of water in the community and what should be accorded highest priority
4. Participation in water and sanitation governance
5. Water and sanitation services' provision

4.2 Awareness of the constitutional right to water

The majority of the rights' holders and duty bearers were aware of the constitutional right to water and sanitation; indeed, local leaders' levels of awareness were remarkably high. At various institutional levels for duty bearers and groups of rights' holders (such as women's groups), there were not only high levels of awareness but clarity on specific provisions of the Constitution – some even quoting the relevant provisions. The high level of awareness of the constitutional provisions on the right to water is attributable to civic education around the referendum leading to the adoption of the Constitution.

4.3 Obligation to fulfill the right to water and sanitation: perceptions

The rights' holders and duty bearers differed in their perception about who should be responsible for ensuring that people enjoyed their right to water and sanitation. The majority of government officers and NGOs felt that the government, through the ministry responsible for water and irrigation, has the core obligation through institutions mandated to provide these services. These include Water Service Boards (WSBs) and Water Service Providers (WSPs). Residents in the informal settlements, however, did not have high expectations of the government and seemed not to be aware that the government was the main duty bearer. They talked about the role of other players such as NGOs. Further, they were of the view that citizens have a role to play in ensuring that the right to water is realized. These perceptions reflect the reality that community based

organizations (CBOs) and NGOs are the key players in water provision. Respondents perceived government actors, such as the Ministry of Public Health, as playing a significant role through enforcement of the set standards in the provision of water and sanitation. The rights' holders perceived the responsibility of the Water Resources' Management Authority to be that of protecting the water resources against degradation, pollution, and regulating abstraction in order to ensure a continuous flow of water. The majority of farm workers living in the informal settlements blamed the municipal council for their water and sanitation woes, although they felt strongly that individual users have a responsibility for ensuring that their rights were not abused.

WSPs perceived the government's role as that of facilitator. The managing director of NAIVAWASSCO, the main WSP, told us the government should focus on providing the infrastructure and financial support, while the main responsibility for ensuring water a continuous water supply should be left to the WSPs. This feeling was reinforced by a small-scale WSP in the Karagita informal settlement who observed:

*Before, I felt that the government should ensure that people enjoy their right to water and sanitation, but not anymore. The government may not reach the communities at the lowest level and so the private sector (WSPs) should take a more active role at that level. The government should only provide infrastructure and private sector should ensure distribution.*⁶³

4.4 Affordability of water for flower farm workers

The average wages in the flower farm and worker data were negligibly different at KSh5,485 and KSh5,257 respectively. This is below the legal basic minimum wage.⁶⁴ The table below, based on worker testimony and data on Kenya living expenses, illustrates the insufficiency of the wages. It shows the monthly breakdown of living expenses for an average worker with two children, one in primary school and one in secondary school. This breakdown clearly illustrates that the amount of money spent on water is well above the recommended 3% of one's household income,⁶⁵ and therefore means that water is not affordable for these residents. Monthly expenditure amounts to KSh9,260. Even with the additional KSh1,500 provided as housing allowance, this amount is well above the average

63 Geoffrey Macharia, Water Service Provider.

64 Leipold and Morgante (2013) p.1.

65 Scanlon et al. (2004).

wage earned by flower farm workers. Workers cover the shortfall through loans (usually through workplace co-operatives), their spouse's income, occasional bonuses and second jobs. This leaves a very low savings rate with workers reporting saving on average between KSh200 and KSh500 a month.⁶⁶ The clear message is that their wages are low, and do not provide a decent standard of living. As noted above, the direct and indirect costs of water must not compromise or threaten the realization of other Covenant rights⁶⁷ and 'appropriate pricing policies – free or low-cost water'⁶⁸ should be put in place to ensure that 'poorer households should not be disproportionately burdened with water expenses compared to richer households'.⁶⁹

Water vendors charge high prices for water and delivery services making it difficult for poor urban residents in general to afford water for their daily needs. Cost of water can thus threaten farm workers' enjoyment of the right to livelihood, housing, an adequate standard of living, health and education. There are no pricing policies in the informal water provision networks and the net effect is that the poor pay a lot more for water than rich large water users. On a positive note, however, the entry of the Water and Sanitation for the Urban Poor (WSUP) into the villages has brought down water costs and while residents in Karagita paid KSh5-10 previously, they currently pay between KSh2-3 per 20-litre jerrican. Piped schemes' water would be the most affordable and convenient for the poor but the service is very limited.

There are currently no water strategies in place which focus on water provision for the most vulnerable members of society: this despite both national and international law charging the State with the duty of ensuring that their rights are addressed.⁷⁰ The only option the poor have if they cannot pay for water is to collect it from the lake. However, access to the lake is not guaranteed and the water is not safe, as pointed out above. Article 56(e) of the Constitution, which obliges the State to put in place affirmative action programmes to ensure that minorities and marginalized groups have reasonable access to water (among other social services)

66 Ibid.

67 CESCR (2003), para. 12 (c).

68 Ibid. para. 27 (b).

69 Ibid. para. 26.

70 See General Comment No. 15, para. 18. (Twenty-ninth session, 2002), U.N. Doc. E/C.12/2002/11 (2003), Constitution of Kenya (2010) Article 2 (6) and Article 21 (3)

could provide an entry point for designing such strategies. Further, the Water Bill 2014 has included urban water access as a function of the Water Services' Trust Fund; this will also contribute to availing water for the poor. Tariffs for water services need to be adapted to peoples' economic capacities to ensure that the right to water is guaranteed for poor people living in informal settlements.

MONTHLY WORKER INCOME AND EXPENSES⁷¹

EXPENDITURE	KENYA SHILLINGS
Food	4,000
Primary school expenses	500
Secondary school expenses	2,200
Rent	1,350
Water and electricity	700
Social security	360
KEPAWU membership	150
Total	9,260
Income	5,000
Housing allowance	1,500
Total	6,500

4.5 Access to water and sanitation in flower farm workers' settlements

The right to water encompasses water for personal and domestic uses.⁷² However, our argument in this book is that the right should cover water for livelihood purposes as well.

The main uses of water according to respondents in the target villages confirm available findings: it includes domestic, environmental services, irrigation by large scale farmers mostly for horticulture and floriculture purposes, industry (hotels and factories such as Keroche, hydropower production) and pastoralism. In the villages studied, water is mainly used for domestic purposes (washing, cooking, drinking and bathing). Usage is a critical issue considering the water footprint data above. It also underscores an unstated fact that water use is gendered because of the gender division of labour that ascribes the main uses of water to roles performed by women. The plight of the villages' residents confirms that access, allocation and cost of water hinges on security of tenure to land in Naivasha, with the owners of flower farms around the lake and in the upper catchment having secure tenure and a greater voice in water related

71 Leipold and Morgante (2013).

72 See discussions in chapters 2 and 3.

issues. The information below illustrates that the human right to water for farm workers living in the informal settlements is at the bottom of the water use hierarchy and should be given priority from a human rights perspective. It is noteworthy that water use in three of the four villages researched is for personal and domestic purposes only. Use of water for livelihood (kitchen gardening and watering livestock), which is a concern for many poor and especially women in Kenya, are only observed in one of the target informal settlements.

In Mirera, kitchen gardening, poultry and livestock keeping (zero grazing) are common practices while in Karagita, Kasarani and Kamere, water is primarily used for domestic purposes. This is related to the fact that in Mirera, unlike the other three villages, the residents own their plots and occupy spaces of up to half an acre. A small number of those interviewed across the villages also indicated that they use water as a source of livelihood as water vendors. The absence of use for broader livelihood purposes in the other villages is probably attributable to the fact that most workers in the basin are migrants coming into the area in search of job opportunities linked to the flower and horticulture industry.

4.5.1 Water supply

The residents in the villages are workers on the farms and other establishments around the lake. The residents in Mirera recorded a higher incidence of plot ownership. Not surprisingly, access to water from individually or communally owned boreholes is better in Mirera than where residents are tenants in Karagita, Kamere and Kasarani. Out of the six boreholes that were identified in Mirera, three are community owned and managed.⁷³ Some residents own donkey carts that help them obtain water from the water points; others use water transported by vendors. The residents have access to piped water supplied into the yard but the water supply is unreliable due to regular power cuts or blackouts. The water also has high fluoride levels. Many of these residents practice small-scale farming and have dug water pans to collect rain-water for farming and livestock.

In Karagita, most residents are tenants working as casual labourers on the flower farms and in the hospitality industry. Their main sources of water are communal water kiosks installed by the Water and Sanitation for the Urban Poor (WSUP) or private individuals. The water kiosks supply

⁷³ Munyu Station Borehole, Mirera Water Project Borehole and a new borehole near the AIPCA Rubiri church built by the East African Breweries Limited (EABL) Foundation.

two types of water: defluoridated and non-defluoridated water. Defluoridated water costs KSh3 and non-defluoridated KSh2 per 20 litres. There are still people who get water from water vendors (donkey transported) at KSh5 for 20 litres while a few others collect water directly from the lake.

In Kamere, like in Karagita, most of the residents work in the flower farms. Residents share water and sanitation facilities. The main water supply is from water vendors who transport water from the lake on bicycles. Water vendors take advantage of the fact that there is a shortage of water in the area and charge exorbitantly – up to KSh10 per 20 litres. Some residents have installed large storage tanks and practice rain-water harvesting. Most residents of Kasarani are also casual workers on the flower farms. Their main sources of water are water kiosks supplied by boreholes and direct use of the lake. The boreholes are privately or communally owned and managed.

In some cases, the flower farms have installed and equipped boreholes or taps for use by the community as part of their corporate social responsibility programmes. The Constituency Development Fund (CDF) has also supported the installation of boreholes or storage tanks in some communities. In Kamere for instance, CDF supported the installation of a tank but it was not working at the time the research was carried out. Residents claimed that it had never worked and that even when full of water, it seemed to leak, as the water disappeared.

4.5.2 Sanitation

Unlike the other three villages, most Mirera residents have good sanitation facilities that are individually owned and used by individual households. This is attributable to the fact that they own the homes they live in and that their plots are large enough to allow for the construction of sanitation facilities for the family. Solid waste disposal however remains a challenge. Residents disposed of solid waste into compost pits where it is regularly burnt. It is never separated and even plastic is burnt posing a health hazard of which the residents are unfortunately unaware.

Toilets and bathrooms in Karagita are shared by an average of ten households which can translate to 30 people per bathroom. In many cases, there are no separate bathrooms and toilets for women and men. Toilets are generally in very poor condition due to lack of routine repairs and maintenance by landlords. There is a public facility in the area that was constructed by the Institute of Environment and Water Management that is available for use at KSh5 per entry. The facility is managed by a

private vendor. Waste is disposed of in pits dug at the corner of the plots where both solid and liquid waste is dumped. These pits are both health hazards and a safety risk to the children who play outside every day.

Toilets and bathrooms in Kamere are in dire need of improvement. The existing toilets are poorly constructed mud slabs with a superstructure made of plastic. Most toilets are rarely emptied. There are some public toilets that are no longer in usable condition. Due to the instability of the soil structure in the area, toilet pits are shallow and fill up quite fast. Many residents use their houses as bathrooms because such facilities were not catered for during building or because they are not in usable condition. Solid waste disposal and drainage systems are also major challenges. Heaps of garbage are strewn all over in open spaces and on roadsides. When it rains, the floods become violent. On some occasions, houses have been swept away. This is because the terrain in Kamere is bare, parched and hilly, and there are no drainage systems.

As in Karagita and Kamere, residents in Kasarani live in plots as tenants and therefore share toilet and bathroom facilities. Most are poorly constructed and maintained. The public facilities are in such a terrible state that they are inaccessible. Heaps of garbage are strewn all over the streets and passages.

4.6 Conclusions regarding water and sanitation services' provision in the Target Villages

The right to water and sanitation for flower farm workers is less than optimal. Service provision in Mirera, Karagita, Kamere and Kasarani villages has been facilitated with interventions by the communities, NGOs and private sector groups. WSUP's interventions, for instance, have sought to increase coverage for water supply and sanitation services in the study area. Residents have appreciated increased reliability and quality in water service provision.

It is surprising that sanitation still lags behind water supply as the former is estimated at over 70% compared to water at 54% in Kenya. Installation of sanitation facilities in public places, households and schools has increased access. But, as mentioned earlier, these interventions are not evenly distributed. Karagita has greatly benefited from the donor interventions. Other villages are still hoping that some good samaritans will provide support. Other success stories include intervention by the public health officers through enforcement of compliance with the building code. In Kamere, some plots had been closed by the Public Health Office

for lack of sanitation facilities. At the time of the visit, two plots were still without tenants. Residents felt that this was a welcome action since hygiene thereon had been compromised by open defecation.

There are many reasons which have contributed to the noted successes. These include co-operation between players on the water and sanitation challenge and entry of private and individual players into the sector; and the shift from communal water management to private-sector-based management has yielded greater results. Two community water management schemes stalled due to poor governance, lack of skills and endemic conflicts over financial management, disagreements, poor operations and maintenance. Further, interventions by public health officers and community health workers in enforcement have also helped. For example, the closure of those residential plots that lacked sanitation facilities has triggered some behaviour change. Increasingly new plots are providing for sanitation facilities. Co-operation between the private sector, NGOs, government departments, and NAIVAWASSCO has also contributed to the realization of the right to water and sanitation. For example, Water and Sanitation for the Urban Poor (WSUP) and the Institute of Environment and Water have contributed greatly to the water and sanitation sector in Naivasha as elaborated above.

5. Realization of the rights to water and sanitation for farm workers

The realization of the rights to water and sanitation for residents in informal settlements in Naivasha is a long way off. As far as water is concerned, availability, quality, governance, affordability, equity, justice and participation are still issues of concern. With regard to water availability, the demand for water in the area is estimated at 60,000 cubic metres per day by NAIVAWASSCO but only 5,000 cubic metres are produced, yet population growth is very rapid. Regarding quality, high levels of fluoride and the mode of water transportation by vendors remain of key concern to the residents as they affect the quality of the water delivered.

Regarding governance, areas of concern include conflicts over use at different levels as outlined above; vandalism of water supply systems associated with water vendors and community water projects; corruption in governance organs; misappropriation of finances, poor operations and maintenance. Most water and sanitation systems are in disrepair. For example, in Kamere, the cement water tank has been leaking for over three years and no action has been taken to solve this problem.

Unreliable water supply attributable to high costs of power affecting NAIWAWASSCO and other WSPs is also a problem. Additionally, there is inefficient water use and wastage amounting to over 50% unaccounted for water in Naivasha. This is also evidenced by the leaking water storage tank in Kamere.

Regarding affordability, residents in the target informal settlements pay from KSh2-10 for 20 litres of water depending on how they access the water while large scale water users only pay 50cts for 1m³. This raises concern among the domestic water users who feel that they are discriminated against and their water needs are not prioritized. The Karagita Water Users Association (KWUA) also stated that the government had done little for them in terms of water provision. They were of the view that the Naivasha water service provider does not do anything to improve water and sanitation access in their area and yet they pay for water. In their words

NAIWAWASSCO collects money it does not deserve. WSUP laid the pipes, owns the infrastructure and we manage the project. NAIWAWASSCO does not co-operate in the local water development and management activities, but they get the money.

Access to the lake resources and its management was said to be inequitable on account of the rights to land around the lake as elaborated above. In the words of one respondent,

It is a show of the mighty. It is like a club, the locals cannot penetrate the lake Naivasha management 'club'. Access to water and the lake resources by the locals is also a challenge. There are many barriers of access, with some corridors for fishermen and pastoralists completely sealed with either a perimeter fence or privatizing of public corridors to the lake.

Regarding participation, mechanisms for ensuring participation of women and men in sanitation, water supply and resources management at various levels have been put in place through national initiatives such as the Presidential Directive on Affirmative Action discussed in Chapter 3 which has informed the formation of Water Users Associations (WUAs) and Water Resources Users Association (WRUAs).

With regard to Sanitation, the government has established an Inter-agency Co-ordination Committee with sub-thematic committees to address a wide range of issues to do with water and sanitation. In Naivasha, however, meetings about water and sanitation were uncommon

according to respondents, and where there were reports of such, local administration, elders, civil leaders and committee members would be the main attendees. Of the participants, 77.3% and 81.4% stated that they had not participated in water and sanitation meetings in their neighbourhoods. Those who participated stated that they did not contribute to the deliberations for a variety of reasons such as time available for participant contributions; that they were not given an opportunity; that what they would have wanted to say had already been said; or they agreed with what had been discussed and did not see the need to intervene. However, many of the respondents to the survey questionnaire wrote 'Not Applicable' as they had never been invited to the meetings.

The local community plays a key role in water supply management, but less so in sanitation management. In Mirera, a private WSP and water vendors supply water. Karagita WUA is also taking great responsibility in managing the water supply project. They ensure that water is available to the community at all times and that the operations work smoothly. 'We are the eyes of the government and of the people', KWUA members told us. In addition to the WUAs and WRUAs, there are also a number of formal and informal CBOs operating in the area. Most of them are self-help groups that women and their communities form to raise their standards of living. It is noteworthy that women form a substantial membership of the self-help groups. In many cases, these groups have the potential to enhance participation of their members into different development activities including water and sanitation. However, although membership in such organizations is open to everyone, some interested members are constrained by the requirement of a financial contribution. As such, it is not everyone in the community that is able to become a member of a CBO even if they wish to. On a positive note, women participate in and are involved in leadership positions in these groups.

The mode of communication between organizations and local institutions is both formal and informal. Information dissemination on water, sanitation and hygiene is diverse. It is done through posters and flyers, chiefs' *barazas*, word of mouth and seminars. Groups are also key channels of information to the members. Telephones are used but mostly for communicating short message texts like meeting notifications and invitation.

Inadequate and poor quality /types of sanitation facilities are prevalent in the area. Toilets are inadequate and in many cases are also used as bathrooms. Overall there are still many residential plots without usable sani-

tation facilities because they are unhygienic owing to poor maintenance, and because they are rarely emptied. Many people opt for flying toilets⁷⁴ when the toilets are not in usable condition. Poor solid waste management is also a common factor in all the villages. Indiscriminate disposal of waste is practiced everywhere. The sewerage network is very limited with about 20% coverage (compare to the estimated national coverage of 77%) and is unable to cope with current demand.

There are no formal methods of solid waste collection and disposal although there was an attempt by a community group to initiate an organized garbage collection system. In Karagita, the disabled group has organized itself in a CBO that deals with household solid waste collect at a cost of KSh300 per household per month. This has only worked in a very limited area because of the unwillingness of many residents to pay for such services and inadequate support from the municipal council. As mentioned earlier, refuse disposal is done in compost pits and or burning.

Drainage is also key challenge: waste water is not addressed in any way. When it rains flooding becomes a major hazard due to the poor drainage. There is also no system for sludge management in all the villages visited. As such, many toilet facilities were found to be full but not evacuated.

6. CONCLUSION

As we have seen water use is gendered because of the gender division of labour that ascribes the main uses of water to roles performed by women. It is apparent that women suffer disproportionately in the struggle to realize their right to water as they have to contend with longer work hours, poorer pay and poor work conditions. In addition, while access to sanitation is deplorable for all residents in the target villages, women are more affected by lack of access to adequate sanitation services because of menstrual hygiene management⁷⁵.

Farm workers still earn wages that are below the legal basic minimum wage. They can barely sustain a decent life let alone afford water for domestic use. Their situation is aggravated because domestic use of water is lowest ranked amid the competing uses of water in the Naivasha basin, a remarkable fact given the high usage of water for agriculture. Accessibility of water for the workers is also a challenge and is affected by land tenure issues, corruption and poor governance. The sustainability of water in Lake Naivasha whose ecology has been adversely affected due

74 Waste put in plastic bags and thrown out.

75 See Chapter 2

to competing uses and users of water as well as mismanagement. This compounds the right to water for the farm workers as they have to pay higher prices, walk further distances, and contend with conflicts in order to access this precious commodity.

In addition, the water safety is compromised by high levels of fluoride, nutrient and sediment run-off, pollution from agricultural chemicals, and untreated waste, among other factors. Thus residents in the informal settlements are exposed to health hazards. The study concluded that the water needs of those living in the informal settlements around the lake, the majority of whom are women, are not met; whereas commercial farms consume water that should be availed for domestic use, thus raising serious concerns as to equity and justice.

The sanitation facilities in the informal settlements are in a deplorable state. Access to sanitation is affected by land tenure, cost and availability. The right to water and sanitation is essential to human life and dignity. Failing to realize this right relegates people to inadequate living standards: water deprivation is often intrinsic to poverty.⁷⁶ Considering the interrelatedness of the rights to water and sanitation with other economic and social rights such as the rights to food, a healthy environment, housing, education, health and social security, their negation has far-reaching implications. Indeed, the realization of this right would have multiple benefits not only for the farm workers but the community as a whole. In realizing the right to water in the Naivasha basin, low wages of the farm workers, environmental concerns, corruption in governance structures, gender disparities, issues of public participation in decision-making as well as access to information will be effectively addressed promoting an equitable and just society. It is our expectation that the Water Bill 2014 which unpacks the constitutional right to water will result in the meaningful realization of the right to water for all Kenyans including flower farm workers in Naivasha.

76 IWMI (2004)

Chapter 5

Watered Down: Gender and the Human Right to Water and Reasonable Sanitation in Mathare, Nairobi

Celestine Nyamu Musembi¹

1. INTRODUCTION

The realization of any human right hinges substantially on the State's assumption of the corresponding obligation. The very existence and continued growth of informal settlements bears witness to the failure of a State to assume its obligations. Gordon White describes the democratic developmental State as one that effectively plays three types of roles: infrastructural, regulatory and distributive (White, 1998). In Mathare, as in other informal settlements, the State's absence with respect to the first role is the hallmark of slum life. The second is deployed selectively: present and overbearing when it need not be there, and absent when it is needed most. The gap in service provision between informal settlements and planned urban areas reverses the third, distributive role of the State from alleviating radical inequalities to reinforcing them. In Mathare no single issue demonstrates these multiple failures more than that of water and sanitation.

This chapter is based on field research conducted in Mathare between April and July 2012, organized around four research questions:

- What is the status of water and sanitation services in Mathare (assessed in terms of availability, accessibility and quality)?
- How does Mathare reflect the gender implications of the

1 The author acknowledges with gratitude all Mathare residents, officials and service providers who agreed to take part in the study, as well as research assistance provided by Rose Nyawira, Ann Wanjiru, Jason Waweru, Clarice Akinyi, Stephen Irungu and Mary Nyambura.

skewed prioritization of water supply over sanitation in the sector?

- What structures exist for water governance in Mathare? A subsidiary question here was whether the mechanisms for citizens to participate in water governance that were laid down in the Water Act (2002) feature at all.
- What is the degree of Mathare residents' participation and, in particular, women's participation in water governance?

This chapter is divided into five sections. Following this introduction, the second section gives background information on Mathare. The third section outlines the study methodology and the rationale for site selection. The fourth section presents and discusses the research findings, organized in accordance with the research questions, followed by a concluding section.

2. BACKGROUND: DESCRIBING THE RESEARCH SITE

Mathare is one of Nairobi's informal settlements. It lies in the south-eastern part of the city, within Mathare Division. The population of Mathare is estimated to range between 87,000 and 100,000 (KNBS, 2010; Corburn et al., 2012). The informal settlement grew gradually on account of successive waves of rural–urban migration but also on account of intermittent influxes of people fleeing eviction from other areas. Unlike most other informal settlements in Nairobi, which originated in encroachment on government-owned land, most of Mathare (seven out of twelve villages) sits on privately-owned land (Corburn et al., 2012). The owners invariably do not reside in the area, and in many instances the land-owners are different from the 'structure owners.' In many instances, ownership and occupation are fraught with disputes due to a long history of squatting. According to a key informant who is a local administrator, most of the land had been purchased by land-buying companies and cooperatives in the 1970s. Roughly a decade later, the land-buying companies and cooperatives began to partition the land and share it among their members. Many members lived outside Nairobi and did not take physical possession of the land, leaving it prone to squatting. The local administration is still processing disputes dating back decades.²

There are some patches of public land. For instance, one of the villages covered in this study, Mashimoni, sits on land belonging to the Air Force.

2 Interview with District Officer, Mathare, 15 June 2012.

Another village covered in the study, Kosovo, also sits on public land: land that was formerly a police depot as well as land belonging to the government-owned Mathari mental hospital. This explains the choice of Kosovo as the site of a pilot project on formalizing water supply to informal settlements and the choice of Mashimoni to pilot a sewer system (WSTF, 2010).³ In addition to being public land, Kosovo also has the advantage of being partly planned.

The land tenure situation in Mathare largely accounts for the relative difficulty in initiating public investment to improve amenities, including in the water and sanitation infrastructure.

3. METHODOLOGY

3.1 Rationale for site selection

Our initial interest in Mathare was triggered by a detailed report on a pilot project to formalize water service provision in one village, Kosovo, in this informal settlement (WSTF, 2010). The project was widely cited as a success story both for improving poor communities' water access and affordability, and for innovation in community-based water governance. The initiative was undertaken jointly by community-based groups, Pamoja Trust (an NGO), the Nairobi City Water and Sewerage Company's Urban Informal Settlements Department (the water service provider) and the Water Services Trust Fund. The project worked through well-established community groups during the mapping and enumeration exercise that preceded the main exercise of identifying and removing illegal water connections, getting community consensus on situating shared water points, and installing household metres for those able to pay for the connection. At the completion of the pilot project, an elaborate network of community structures for monitoring was put in place. The smallest unit was that of 'lane representatives' – one man and one woman elected from each lane or street (*kichocho*). Several lanes were then clustered together and their lane representatives formed the 'cluster committee.' Each cluster committee nominated two representatives for the oversight committee, which served as the overall supervisory organ and also enabled liaison among the community, the water service provider, and other key actors.

We therefore considered Mathare an ideal study site to address the

3 Interview, Pamoja Trust, Nairobi, 3 April 2013; remarks by representative of Nairobi Water Urban Informal Settlements Department at Research Validation Workshop, Mathare, 1 August 2013.

study's research questions, given the varying degrees of access to formal water services and to institutional spaces for decision-making in the various neighbourhoods within the informal settlement.

3.2 Sample design and sampling procedure

Mathare has a total of twelve villages (Corburn et al., 2012). The survey carried out for this study targeted 150 respondents, covering six of those villages, namely Kosovo, Kyamutisya, Village 3C, Village 4A, Mashimoni and Mabatini. For sampling purposes, Kosovo and Kyamutisya were collapsed into one village on account of their small size. Each village unit then contributed 30 respondents.

Kosovo, Kyamutisya and Village 3C were chosen to represent areas in which there have been some public interventions with regard to water and sanitation. In addition to the pilot project referred to earlier, these areas also have the highest number of public toilets. Some of these were constructed under the Constituency Development Fund, while others had previously been Nairobi City Council public toilets that had fallen into disuse, were rehabilitated, and are now operated by self-help community-based groups.

Village 4A has been the site of a public-private initiative to upgrade slums since 2000, with a few lapses in between due to hostility from competing interests within the community (Reback, 2007). Mashimoni and Mabatini have had little experience of public or private interventions with regard to water and sanitation.⁴

The survey was household-based, so no two respondents are from the same household. The households were randomly selected, with an effort to ensure gender balance: 56% of respondents were female and 44% were male.

3.3 Data sources and collection methods

The study combined primary and secondary data collection methods. Primary methods comprised the survey of 150 respondents, semi-structured interviews with various categories of key informants, and focus group discussions. The key informant interview respondents included water suppliers (formal and informal), men and women active in local groups carrying out activities related to water and sanitation, NGO officials, local

4 At the time of the study, the only intervention was a biodigester in Mashimoni by Umande Trust, which was a new initiative. Subsequent to the study, Mashimoni has also been made the site of a pilot project on a condominium sewer, which is in its early stages.

administrators, and an official from Nairobi City Water Company's Urban Informal Settlements Department. Two focus group discussions were convened. The first focused on men and women in the Kosovo/Kyamutiya area serving on the water oversight committees established under the pilot project. The second focused on women drawn from the remaining villages, in order to allow in-depth discussion of the issue of women's participation in groups working on water and sanitation.

Secondary sources consulted included official statistics such as Majidata (www.majidata.go.ke), data compiled by Map Mathare (an NGO initiative), and also relevant academic and policy-oriented literature.

The field research was carried out with the assistance of six research assistants recruited from Mathare and the adjacent Huruma.⁵ Their local connection to the study site both facilitated the research process and enriched the study.

3.4 Data processing, analysis and presentation

The quantitative survey data were processed and analysed using Statistical Package for the Social Sciences (SPSS) software. The qualitative data from the key informant interviews and focus group discussions were coded manually by theme. The findings were presented for validation to selected community members, local leaders and the water service provider.⁶

4. RESEARCH FINDINGS

The presentation of the research findings is organized around the four research questions:

- Assessing the right to water and sanitation in Mathare (availability, accessibility and quality);
- Gendered implications of skewed prioritization in water and sanitation;
- Lack of awareness and relevance of statutory mechanisms for citizen participation in water governance;
- Women's participation in water governance.

While Kenya was celebrating the ratification of its new Constitution in a national referendum in 2010, most assessments had concluded that

5 Of the six, three were current residents of Mathare and three were Huruma residents, one of whom grew up in Mathare, and another of whom grew up in nearby Korogocho, which is also an informal settlement.

6 The Research Validation Workshop was held on 1 August 2013 at Mathare Youth Polytechnic.

the country was unlikely to meet the Millennium Development Goals for water supply and sanitation (Nycander et al., 2011: 1).

Article 43(1)(d) of the 2010 Constitution of Kenya states that every person has the right to 'clean and safe water in adequate quantities.' The right to 'reasonable standards of sanitation' is also guaranteed as a corollary of the right to housing, under article 43(1)(b).

Predating these historic constitutional provisions was General Comment No. 15 issued by the United Nations Committee on Economic, Social and Cultural Rights (CESCR, 2003). In this General Comment, the committee interprets article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) (the right to an adequate standard of living) as incorporating the right to water. The committee identifies the elements of the right to water as availability, accessibility and quality. Availability relates to whether there are sufficient quantities of water and a regular and sustained supply. Accessibility refers to four dimensions: physical access, economic access (affordability), non-discrimination (paying particular attention to vulnerable and marginalized populations) and accessibility of relevant information concerning water issues. Quality refers to safety and acceptability or suitability for purpose.

The CESCR also issued a General Comment expounding on the legal content of the right to adequate housing under article 11 of the International Covenant on Economic, Social and Cultural Rights (CESCR, 1991). This cites sanitation as one of the services that must be present in order for housing to be habitable.

Drawing from this study's empirical findings as well as from secondary sources, the next section analyses the status of the realization of the right to water and sanitation in Mathare.

4.1 The state of the right to water in Mathare: availability, accessibility and quality

By all accounts Mathare, like all informal settlements, is underserved in the formal provision of water services. The formal water service provider, Nairobi City Water and Sewerage Company (NCWSC), admits that not much effort has been made to extend water services to urban informal settlements (WSTF, 2010). Most residents of urban informal settlements are therefore at the mercy of informal water vendors who charge prices far in excess of the tariffs levied by the formal water service providers. This was the case for all of Mathare until 2008 when the Nairobi City Water and Sewerage Company began to extend its services. This was

done through a pilot project initiated by its Urban Informal Settlements Department in partnership with an NGO and supported by the Water Services Trust Fund, which was established under the Water Act of 2002. Through this programme, a number of households currently have their own individual water connection or have access to a shared yard tap (within a residential plot or block), while others buy water from the various water kiosks set up by the company or rely on standpipes installed at various public points within the neighbourhood.

4.1.1 Assessing availability of water

To assess the availability of water in Mathare, we posed a series of questions in the survey. We began by asking respondents where they got their water from. At the time of the research, Mathare had a fairly good distribution of water points supplied by the Nairobi City Water and Sewerage Company. The survey revealed that 58% of households had access to a standpipe close by where the water is available without charge, 11.3% bought their water from a water kiosk nearby, 6.6% had access to a shared tap (shared metered connection) within the plot on which they lived, 8% could draw on their neighbours' metered connection for a fee, and only 1.3% had a water tap within their own household. This adds up to nearly 85% with some form of access to a formal water supply. Those depending on private water vendors made up 12%, while those admitting they used an illegal water connection accounted for 1.3%. These figures suggest that availability of water is not too big a problem.

However, this is not the case when frequency of water shortages is taken into account – and it emerged that shortages are indeed frequent. We asked respondents whether their water supply was ‘reliable/regular/adequate,’⁷ and 55% reported that it was not reliable, not adequate, or not regular. When asked to give reasons for their response, 64% of respondents cited irregular supply, interruptions, or water rationing as the reasons for their dissatisfaction with the water supply. Our observations confirmed this finding. There was an acute water shortage that was entering its third week at the time of the research, so the sight of water resellers' hand-carts piled high with jerry cans was common.

4.1.2 Assessing accessibility of water

Regarding physical accessibility, the main concern is the low coverage of a household-level metered water supply. Our survey put this at a com-

7 The question was posed in Kiswahili as ‘Je, unaridhika na huduma ya maji?’

bined total of roughly 8% (individual metered connections and shared metered connections within a residential plot). The individual metered connections are probably only in Kosovo, where the pilot project was undertaken. Coverage within Kosovo itself is still relatively low, at 13.19% (WSTF, 2010). Sharing arrangements are therefore the norm for most residents. Over 90% of the respondents in our study reported that they relied on some form of sharing arrangement, the density varying depending on the distribution of water points in each neighbourhood. People's physical access to water therefore depends on how the sharing arrangement is managed.

To assess economic accessibility, we began by asking respondents whether they paid for their water. 29% of the respondents reported that they did not pay for their water. There are two explanations for this. First, some people accessed water at no charge from standpipes on the periphery of the settlement. These standpipes were installed in 2007-08 as a stop-gap measure following a crisis triggered by the water company's decision to undertake mass disconnections as its way of dealing with illegal connections. Following riots in the community, with tragic consequences, the company came under political pressure; in response, they installed the standpipes.⁸ Second, some residents have also benefited from a semi-official arrangement whereby, after paying a fee to a local councillor, they could install pipes to tap water from a pipe laid in the area in 1973.⁹

We then asked each respondent how much they paid for water. The responses are summarized in Table 1. The data showed that 63% of respondents' water charges were within the Nairobi City Water and Sewerage Company's water tariff for the area (see table 2) which ranges from KSh2 per 20 litres in Kosovo to KSh5 per 20 litres in Mathare 3C. However, on this aspect too we must factor in the reality of frequent shortages and therefore fluctuating water costs considering the higher charges levied by private water resellers.

To further assess affordability, we asked the paying residents whether in their opinion the price they paid for water was affordable. Responses showed that more residents considered their water charges affordable (45.7%) than considered them expensive (29.1%).

8 Focus group discussion with members of the water oversight committees, Kosovo and Kiamutisya villages, Community Hall, Kosovo, 28 June 2012.

9 The water company's own survey data on costs of water in Mathare confirms that some residents have free water. See Table 2.

Response	Frequency	Percentage
KSh 1 per 20 litres	2	1.3%
KSh 2 per 20 litres	48	31.8%
KSh 3 per 20 litres	24	15.9%
KSh 5 per 20 litres	21	13.9%
KSh 6 per 20 litres	1	0.7%
KSh 10 per 20 litres	4	2.6%
Included in rent (can't tell how much)	2	1.3%
KSh 20 per person	1	0.7%
N/A (do not pay)	45	29.8%
No response	3	2.0%
Total	151	100%

In spite of the respondents' subjective assessment that their water is affordable, an objective assessment in relation to income shows that residents of Mathare and other informal settlements are clearly paying disproportionately more for their water. Representatives of the Nairobi City Water and Sewerage Company at the Research Validation Workshop confirmed that the company applies a uniform tariff, distinguishing only between domestic and commercial consumption. There is no differentiated tariff for low-income areas. The current tariff is as follows: the first 11 cubic metres are billed at KSh18.71 per cubic metre. Any consumption beyond 11 cubic metres but less than 30 cubic metres is billed at KSh28 per cubic metre. Any consumption above 30 cubic metres is billed at the commercial rate.

For the typical Mathare resident, expenditure on water may account for a minimum of 20–25% of one monthly income.¹⁰ This is disproportionately higher than estimates of average monthly spending on utilities for Nairobi, which indicate 3.58% (combining electricity, water, heating, and garbage collection).¹¹

There is another sense in which residents of Mathare and other informal settlements pay relatively more for water. As our findings on avail-

10 As calculated by a focus group discussion with women drawn from Mashimoni, Mabatini, village 3C and village 4A, based on estimated average monthly income of KSh 4,800.

11 Calculations are based on an average income of KSh35,000. See http://www.numbeo.com/cost-of-living/city_result.jsp?country=Kenya&city=Nairobi, accessed 12 September 2013.

ability indicate, most residents rely on a shared water point. This means that a resale cost is inevitably added to the price of water bought at the kiosk or through a neighbour's metred connection, not to mention illegal

TABLE 2: NAIROBI WATER AND SEWERAGE COMPANY: WATER AVAILABILITY, COST AND QUALITY IN SELECTED MATHARE VILLAGES

Village	Connected to NCWSC?	Type of connection	Residents' rating of water quality	Main water problem (residents' view)	NCWSC tariff	Informal water suppliers active?	Illegal connections
3C	Yes	Abution block (shared)	Fair	Irregular supply	KSh 5 per 20 litres	Only during shortage	
4A	Yes	Abution block (shared)	Ranges from good to poor in various 'zones'	'No major problems' in some zones, 'poor water quality' in others..	0 (no charges)*	In some zones	Yes
Kosovo/ Kiamutitsya	Yes	NCWSC Water kiosk**	Fair	Irregular supply	KSh 2 per 20 litres	During shortages	Yes

Source: *Majidata.go.ke (compiled from data for the respective neighbourhoods)*

* This data helped to corroborate our survey findings, where many respondents from Mathare 4A had reported zero charges for their water.

** Some individual household metred connections installed under the pilot project.

connections.¹² This resale cost is significant: a 20 litre jerry can of water purchased from a water kiosk ranges from KSh2 to KSh5, while the same amount supplied to the water company's domestic consumers works out to KSh0.37.

According to representatives from the water company who attended the Research Validation Workshop, while the company intends to improve coverage, progress is likely to be slow and limited. Semi-planned neighbourhoods, such as Kosovo, may achieve almost universal coverage, but in totally unplanned neighbourhoods with uneven terrain, only those close to the mains will get connected. This inequality in access to water means that there is discrimination against informal settlements with regard to accessibility, contrary to the United Nations General Comment No. 15 cited earlier.

We compared our data on water charges with official statistics available from the government database, Majidata, and found that they were broadly consistent. Table 2 gives official data on the cost of water in selected Mathare neighbourhoods.

4.1.3 Assessing quality of water

Concerning the quality of water, Table 2 shows that the water company had, through its own survey, asked residents to rate the quality of water and water services. As shown, the only village that registered a response rating the quality of water and water services as 'good' was Mathare 4A. In all the other areas it ranged from 'poor' to 'fair'. However, an overwhelming majority of respondents in our survey were satisfied with the quality of the water (78%, compared to 20% dissatisfied). The 20% dissatisfied cited water pipes contaminated by sewage and said that after a shortage the taps produced dirty water for a while. Reading the data on this question in conjunction with government data and the data on irregular supply discussed above leads to the conclusion that residents are, on the whole, satisfied with the quality of the water itself, but they are not satisfied with the quality of the water services. This conclusion was confirmed by responses to a question that required respondents to identify what they considered to be the biggest challenge concerning water supply in Mathare. The responses are summed up in Table 3.

12 Note that the price could rise sharply to KSh10 during a protracted shortage, as the women in the focus group discussion pointed out.

TABLE 3: 'IN YOUR OPINION, WHAT IS THE BIGGEST CHALLENGE CONCERNING WATER SUPPLY IN YOUR AREA?'

Response	Frequency	Percentage
Rationing/interruption/irregular supply	47	31.2%
'Density'/inadequate access (too few water points, too many people)	40	26.5%
Contamination/ dirty water	17	11.2%
Vandalism/illegal connections/water cartels	20	13.2%
Too expensive (especially during shortage)	12	7.9%
Community wastes water	1	0.7%
No challenges	12	7.9%
No response	2	1.3%
Total	151	100%

Finally, quality (both of water and of water services) is compromised by inadequate regulation of the multiple water service providers. This relates most obviously to the private vendors (resellers) who become the only suppliers when there is a shortage. The study established that informal water provision is still prevalent. In interviews with leaders of community groups, none of the groups that listed water provision among their activities indicated that they have official permits for this. However, concerns also arise from inadequate supervision and support for those authorized to operate water kiosks under agreements with the water company. The water company was perceived as unresponsive to reports about leakage or vandalism, exposing residents to the risk of contamination.

4.2 The state of the right to reasonable sanitation in Mathare: availability, accessibility, quality

Even before we embarked on the field component of this study, it had become clear from reviewing secondary literature and policy documents that there had been a greater emphasis on water supply than on sanitation. A UN-Habitat study on Kenya concluded that strategies to serve the urban poor in key areas such as sanitation are not clearly articulated and therefore the work of UN-Habitat's Water and Sanitation Trust Fund should take the form of 'considerable policy and strategy support' in the area of sanitation (Nycander et al., 2011: vi). The bias against sanitation is also reflected in investment in infrastructure for service provision. The experience of the ten-year old Water Services Trust Fund (WSTF) con-

firmly this. The fund invites water service providers to apply for funding for projects that improve low-income communities' access to water services. Most applications relate to water supply infrastructure. As of 2012 only one application had dealt with sanitation.¹³ It was only as recently as 2012 (eight years after the fund was set up) that the fund established a sanitation programme known as Up-scaling Basic Sanitation for the Urban Poor.

This trend is not at all a reflection of community preferences. If anything, there is evidence that residents of informal settlements rank sanitation (toilets and sewerage) as the most pressing need, above water and improvements in housing and education (Reback, 2007). In wrapping up a focus group discussion with members of the water oversight committee in Kosovo and Kyamutisya villages, we asked participants to share one thing that they would term an achievement in the three years of the committee's existence. Many lauded access to clean and safe water, and the fact that their small village had made it to the global map by virtue of the water governance model that was piloted there. However, many could not help adding a negative footnote with respect to sanitation.

Local administrators also agree that sanitation has not received adequate attention. In an interview with the local District Officer, we asked him whether he had observed any positive change in his three-year tenure in Mathare. He replied, 'Yes, on the water issue... but the impact on sanitation overall is regrettably small.'

The under-investment in sanitation in poor urban neighbourhoods is largely due to the relatively high cost of laying down sanitation infrastructure. Besides the financial cost, however, there is another deterrent: the cost of protracted negotiation with multiple players. This is in contrast with water supply, where the formal service providers and regulatory bodies are often the only players. UN-Habitat observed that institutional responsibilities for sanitation were still less than clear eight years after water sector reforms had been instituted and therefore needed to be clarified (Nycander et al., 2011: 3). The situation is probably rendered more complex by the devolved system of government created by the 2010 Constitution. Whereas water resources are vested in the national government (to be managed by the National Land Commission), responsibility for sanitation and water service provision is given to the county governments.

13 The singular exception is Kiandutu Settlement in Thika town. Interview, Muungano Support Trust (MUST), 6 June 2012. MUST works in partnership with the Water Services Trust Fund to assist communities involved.

Role demarcation and definition needs to be given careful attention so that institutional responsibilities are clarified (Mumma, 2013).

The issue of transactional as well as financial cost looms large in Mathare compared to other informal settlements in Nairobi due to the land tenure dynamics discussed earlier. Our interviews established that the Kosovo pilot project had secured a commitment from a significant number of landlords that they would not put up any more structures along the river bank, so as to allow for a future project on sewerage. However, as soon as it became public knowledge that mapping of the run-down sewer network was underway with a view to rehabilitation, there was something of a construction boom along the river banks, in anticipation of compensation. The land tenure dynamics in Mathare act as a deterrent to investment in solving the sanitation challenge.

The solutions that have been attempted so far largely involve constructing public toilet blocks or rehabilitating public toilets that were previously operated by the Nairobi City Council (NCC) but had fallen into disuse. These construction and rehabilitation projects have been financed through the Constituency Development Fund, a fund controlled by the local member of parliament, as well as by support from donors channelled through NGOs. Upon completion, the toilets are then handed over to the council, which in turn invites local groups to bid for a contract to manage the toilets and recover their costs by charging a user fee.¹⁴ These public toilet blocks are far from adequate. Although donors are willing to support further provision, the land tenure dynamics once again make it difficult for expansion of services to take place, as a local administrator confirmed:

More donors are willing to help but there is no space to build new toilets, unless some landowners allow their land to be used for that purpose. Even where community members identify a vacant space and approach me to allow them to have it used as a toilet construction site, I cannot endorse that as I do not want to risk being accused of having facilitated encroachment on private land.¹⁵

In assessing the right to 'reasonable standards of sanitation,' we asked our survey respondents about access to and quality of toilets, bathrooms and garbage collection services. With regard to toilets, we sought first to establish whether respondents had access to a toilet 'at all times,' to which

14 Interview with District Officer, Mathare, 15 June 2012.

15 Ibid.



Source: Map Mathare Initiative

64.9% responded in the affirmative and 34.4% (52 respondents) in the negative. Among these 52 respondents, the reason most cited for lack of access to a toilet was that the toilet is locked at night or simply inaccessible at night due to lack of security (65% or 34 out of the 52 respondents gave this reason). This finding alone has huge implications for gender and a link between sanitation and security that we will take up in the next sub-section.

The data on bathrooms (bathing facilities) registered similar levels, with 64.2% reporting that they had access to a bathroom, while 34.4% said they did not. Those that reported not having access to a bathroom said that they bathed in the house (19.2%) or made a makeshift bathroom outdoors by hanging up fabric (*shuka*) or blankets propped up against a corner of the house.

As was the case with water points, we found that most residents had only shared access: only 6.6% reported having a toilet and 6% said they had a bathroom within their dwelling (either individual household or residential plot). Economic access (affordability) also raises serious concerns. Close to two-thirds of respondents (61.6%) reported having to pay per use or per month to use a toilet, compared to 37.7% who did not.¹⁶ The statistics on payment for bathroom use (31.8% 'yes' and 50.3% 'no') hide the reality of the 'free' but undignified coping mechanisms that people have to employ. With respect to both toilets and bathrooms, the paying arrangements were of two types: paying per use or paying a monthly flat rate for a household. Toilet charges ranged from KSh2-10 per visit, to monthly charges of KSh50-100. The bathroom charges ranged from KSh2-10 per use.

With respect to respondents' own perceptions of cost, 41.7% found their toilet charges too expensive, while 29.1% found them affordable (19.9% and 24.5% respectively for bathroom charges). It should be noted that these percentages are based on the entire study sample; therefore, among those who indicated that their charges were 'affordable' would be people who do not pay at all because they have no access to a bathing facility.

It is also important to note that only a fraction of the toilets are connected to the mains sewer line, which is itself incomplete and severely

16 Analysing the responses to the follow-up question, however, made us realize that about one-third of those who said they do not pay for toilet use meant that it is included in their rent. The overall figure for those whose rent includes toilet charges came to 11.3% of the entire sample.

run down. Over the years, structures have been built over the sewer lines and an audit would need to establish the location of the old disused sewer lines. This would have to be followed by demolishing the structures currently sitting on the sewer lines. While this would appear to be a logical course to pursue, the local administration concedes that it would require bold political decisions at the highest level, as the issue of demolitions in the informal settlements is always laced with political patronage.¹⁷

As a result of this situation, all the solid waste ends up in the river. Some villages, such as Kosovo, have no access to the sewer mains at all (Corburn et al., 2012). The cost of connecting to the sewer line is KSh14,000. Structure owners, who invariably are not the land-owners, have no incentive to incur this cost. If they do take it on, they invariably pass the cost on to tenants, who also find it too costly and opt for dwellings that are not connected to the sewer line.

This sewer situation is not unique to Mathare. UN-Habitat statistics indicate that, overall, only 20% of Kenya's urban population is connected to a sewer line and only 4% of urban waste water is treated, the rest finding its way into ground and surface water in its raw state (Nycander et al., 2011: 8).

Garbage collection presented a similarly bleak picture. Absolutely no formal garbage collection services are provided, which does not distinguish Mathare from other Nairobi neighbourhoods, since the city's garbage collection service collapsed in the late 1980s. The responses to the question 'How do you dispose of your household rubbish?' differed only with respect to the place of dumping. 29.8% confessed to dumping directly in the river, while a further 37% confessed to dumping along roads or in a variety of dump sites, or burying their rubbish in pits. The remaining 29.1% had some arrangement by which youth groups collected the garbage and charged a fee for disposal. However, these groups also simply dumped the rubbish, and it all ended up in the river.

In summary, it must be acknowledged that water and sanitation services are better in Mathare than in other informal settlements, due to the initiative to formalize the water supply. However, there are deficiencies

17 Interview with District Officer, Mathare, 15 June 2012.

with regard to all the components of the right, with sanitation faring much worse than water, leading to gender-differentiated impacts.

Gendered implications of skewed prioritization in water and sanitation

The lack of commitment to investing financially and administratively in sanitation has evidently created a heavy burden for all Mathare residents, but it is particularly heavy for women, since they take charge of sanitation and hygiene at the household level.¹⁸

We asked whether there were separate toilet and bathroom facilities for men and women. With respect to toilets, only 29.8% of respondents reported having access to toilets that had separate facilities for men and women. For bathroom facilities the figure dropped to 14.6%. Only 9.3% (14 respondents) reported that their toilet had a sanitary bin. According to both Majidata, the official database, and Map Mathare, an NGO, only one toilet in Mathare has a sanitary bin (see figure 2). The research team identified this as the toilet in a health clinic in village 4A. Only 3.3% (5 respondents) reported having access to a toilet with modifications to allow disability access.

The sanitation data on urban informal settlements is generally discouraging, but the gender-differentiated accounts are downright depressing. A study by the Water Services Trust Fund in the village of Kosovo corroborates the findings of our field research. The study shows that the number of dwellings with an active connection to the sewer line is zero, with 100% of the dwellings reporting shared toilet facilities. Only 7.69% of dwellings reported having separate toilet facilities for women and men (8.79% for bathrooms).¹⁹

The disproportionate impact of the bleak sanitation situation on women also manifests itself in the issue of security. The fact that most residents do not have toilets attached to their dwellings means that they have no access to toilet facilities at night. The focus group discussion with women from four villages reinforced the significance of the linkage between sanitation and security. Village 3C boasts the highest number of toilet blocks funded by the Community Development Fund, yet it also has a high incidence of open defecation. The reason for this paradox became clear at the focus group discussion: the toilet blocks are locked up at 6pm

18 Focus group discussion with women from Mabatini, Mashimoni, village 3C and village 4A, Mathare, 29 June 2012.

19 See www.Majidata.go.ke



Source: Map Mathare Initiative

and only re-open at 6am due to high levels of insecurity. In addition, even day-time use of the toilets by women had reduced on account of a recent pattern of rapes and sexual assaults occurring in the toilets. These rapes and sexual assaults were allegedly perpetrated by the very youths who were managing the toilets. Only two incidents had been reported to the chief, but the women at the focus group discussion made it clear that they were aware of unreported incidents. Since the perpetrators were known to the victims, they had threatened the victims into silence:

*If you report, where will you walk? You would have to move out as soon as you report. You can't continue to live there.*²⁰

Village 4A, with the benefit of the slum upgrading programme, had better security and women living within a reasonable distance of the toilet block felt safe enough to go out and use the toilet at night:

*We have wider roads and they are lit [under a publicly-funded flood lighting programme] so if someone raises the alarm at night, people are likely to come out and help. In these other places, no one dares come out even when a person under attack raises the alarm.*²¹

What prevents a lighting project around public toilet facilities from being prioritized throughout the settlement? Village 4A achieved this, thanks to the slum-upgrading programme. Village 3C had flood lighting installed, but it was subsequently vandalized and has remained in a state of disrepair since then. Why is the cost of installing and maintaining flood lighting not factored into the overall cost of constructing or rehabilitating public toilet blocks? Failing to do so reflects skewed priorities that fail to acknowledge the link between sanitation and security, and women bear the distinct and disproportionate burden of this failure (Amnesty International, 2010).

This leads to the question of who makes these decisions, including those on allocating funding to the water and sanitation sector and across sectors? This question relates to the issue of participation in water governance, discussed in the last theme.

20 Focus group discussion with women from Mabatini, Mashimoni, 3C and 4A, Mathare, 29 June 2012.

21 Focus group discussion with women from Mabatini, Mashimoni, village 3C and village 4A, Mathare, 29 June 2012.

4.3 Lack of awareness and the relevance of statutory mechanisms for citizen participation in water governance

It became clear quite early in the study that the institutions created under the Water Act (2002) to facilitate citizen participation in water governance had not had an impact at community level. Nonetheless, one aspect of the fourth research question set out to establish empirically just how much people knew about these institutions.

When asked whether respondents knew about Water Resource Users' Associations, only 16% (24 respondents) answered in the affirmative, while 67% said they did not know anything about these associations and 17% did not respond to the question. Of the 24 who knew about the associations, we sought to find out how they had come to know about them. Only four had obtained the information from an official institution connected with water and sanitation. The highest number (nine) had heard about it from a friend or neighbour, while seven had come across the information through local administrators' sensitization campaigns. When probed to establish what exactly they knew about the associations, nine of the 24 respondents indicated that they knew nothing further than the fact of their existence.

These data confirm the low levels of awareness about statutory bodies that are ostensibly there to involve citizens in water governance. Furthermore, they suggest that if official institutions in the water and sanitation sector have done something to promote awareness, these efforts are not reflected at the community level. If people do not know about these institutions, it follows that levels of participation would also be low.

Further evidence lies in the absence of any reference to the Water Resource Users' Associations in the existing structures for water governance at the community level in Mathare, including in the Kosovo pilot project referred to earlier. The water governance structure set up within the pilot project made no reference whatsoever to these associations. The absence of any mention of them in a project involving a State corporation (the Water Services Trust Fund) and an NGO that is well versed in the sector means that these associations were not there in the first place.

4.4 Women's participation in water governance

In addition to being recognized in the 2010 Constitution of Kenya, the right to participate finds legal basis in various international and regional human rights instruments. To start with, the International Covenant on Civil and Political Rights recognizes everyone's right to take part in pub-

lic affairs either directly or through freely chosen representatives (Article 25). The United Nations Declaration on the Right to Development (Article 2.3) captures the most robust expression of the kind of participation that counts: 'active, free and meaningful,' relating participation both to the process of development and to equitable distribution of the benefits resulting from development.

General Comment No. 15 on the right to water, issued by the Committee on Economic, Social and Cultural Rights, stipulates that:

The right of individuals and groups to participate in decision-making processes that may affect their exercise of the right to water must be an integral part of any policy, programme or strategy concerning water. (CESCR, 2002)

Specific to women's participation, article 7 of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) provides for women's rights to 'participate in the formulation of government policy and the implementation thereof' and to participate in NGOs and associations concerned with the public and political life of the country. In addition, Article 9 of the Protocol to the African Charter on Human and People's Rights, which addresses the Rights of Women in Africa, provides for equal participation of women in all decision-making processes.

What, then, is the extent of this participation in Mathare, particularly for women? We sought to establish this through both the quantitative survey and the qualitative data. The survey opened by asking the respondents whether they had ever been invited to attend any meeting in their neighbourhood to discuss water. Only 36% answered in the affirmative. The same question in relation to sanitation registered 31% in the affirmative. To cover the possibility that a respondent might have attended a meeting nonetheless without any invitation being issued, we also asked whether the respondent had ever attended any meeting in their neighbourhood to discuss water (and then sanitation). Here, too, the affirmative responses were low: 30% with respect to water and 25% with respect to sanitation. For respondents giving negative responses, we probed for their reasons for non-attendance. The most frequently cited reason for non-attendance was that the respondents had never heard of such meetings (31%), the second was that they had never been invited to any meeting (15%), and the third was that they had been unable to attend (10%).

For the respondents who had been invited to or who had attended

meetings to discuss water and/or sanitation, we asked who had called the meetings. In 46% of the responses, the meeting had been called by *Muungano wa wanavijiji*, a registered community-based coalition of residents of informal settlements, which is supported by a community organizing NGO known as Muungano Support Trust (MUST). To this figure may be added 2% who cited a meeting called by Pamoja Trust, an NGO similar in structure and mission to MUST. Only 10% of the responses cited the Nairobi Water and Sewerage Company. The chief and village elders (local administration) garnered a combined total of just under 7%, while the local councillor (elected office) registered 5%. Residents' own initiatives and those of local self-help groups were cited in 9% of the responses, while community health workers and public health officials were cited in 0.7% and 1.4% of the responses respectively, with 19% unsure of who had called the meeting.

The quantitative data suggests that at least two out of every three residents in Mathare are not at all engaged in public deliberation over water and sanitation. It further suggests that where any evidence of public engagement can be found, it is mostly attributable to residents' initiatives and either community-based or facilitated by non-governmental organizations. Public engagement at the initiative of official water service providers or government offices that have a mandate over water and sanitation is rare in this informal settlement.

The study also sought to examine participation through community-based associations. We asked respondents whether they were involved in any community group or committee dealing with issues of water and sanitation. With regard to water, 21% indicated involvement, while 78% said they were not involved. With regard to sanitation, the figures were 21% and 77% respectively. The reasons cited for non-involvement were varied: lack of interest (23%), involvement in other community groups not working on water and sanitation (10%), never having been invited to join (20%), lack of awareness of such groups (12%), no groups in the immediate locality (6%) and too busy to attend (5%).²²

Our findings show that, even with respect to participation at the level of community self-organizing, only about one in every five residents is involved in collective action around issues of water and sanitation. This low level of involvement in collective action raises questions, considering

²² 7% chose not to give any reason for their non-participation, simply confirming that they did not involve themselves in such groups; 18% did not give any response to this question.

that the water and sanitation situation is far from adequate and also considering that, by their own account, most residents are not satisfied with the water and sanitation services, as discussed earlier.

The survey results also show that women were less likely than men to participate in public deliberations on issues of water and sanitation. These results are summarized in Table 4.

TABLE 4: GENDER DYNAMICS OF PARTICIPATION IN DECISION MAKING ON WATER AND SANITATION						
	Female		Male		Total	
	n	%	n	%	n	%
Qn: Ever attended meeting to discuss water?						
No	66	64.1%	37	35.9%	103	70%
Yes	19	42.2%	26	57.8%	45	30%
Total	85	57.4%	63	42.6%	148	100%
Qn: Ever attended meeting to discuss sanitation?						
No	70	63.6%	40	36.4%	110	75%
Yes	14	37.8%	23	62.2%	37	25%
Total	84	57.1%	63	42.9%	147	100%
Qn: Did you contribute at the meeting?						
No	6	42.9%	8	57.1%	14	33%
Yes	11	39.3%	17	60.7%	28	67%
Total	17	40.5%	25	59.5%	42	100%
Qn: Did you feel your views were taken seriously?						
No	14	58.8%	49	41.2%	119	79%
Yes	21	48.4%	16	51.6%	31	21%
Total	35	56.7%	65	43.3%	150	100%
Qn: Are you involved in any group/committee dealing with water?						
No	70	58.8%	49	41.2%	119	79%
Yes	15	48.4%	16	51.6%	31	21%
Total	85	56.7%	65	43.3%	150	100%
Qn: Are you involved in any group/committee dealing with sanitation?						
No	72	61%	46	39%	118	79%
Yes	13	40.6%	19	59.4%	32	21%
Total	85	56.7%	65	43.3%	150	100%

It also became apparent in the course of conducting the key informant interviews that women were not visibly active in community organizing initiatives around water and sanitation. For instance, of the 28 key informants who were in leadership positions in community-based groups dealing with water and sanitation, only six were women. We therefore decided to convene a women-only focus group discussion with participants drawn from four of the villages in the study (excluding Kosovo and Kiamutisya, which had more structured avenues of participation created by the pilot project) to discuss why women appeared to be inactive in water and sanitation issues.²³ From a preliminary discussion of the water and sanitation situation in Mathare, it became clear that the women were far from complacent; they were all deeply concerned about the situation. However, they observed that distinct hurdles stood in the way of taking collective measures to deal with it.

First, their various responses took the form of fragmented individual self-help coping measures, rather than collective action. The discussion yielded an illustration from the perennial problem of blockages in the open sewers or ditches that flow through the neighbourhood, into which people empty human waste:

It is a problem of lack of cooperation; people cannot agree among themselves and yet none of us on their own can solve the problem. If I only clean the section of the ditch in front of my house I still get affected when the ditch blocks further downstream because someone else has not bothered to clean their section and keep the stuff moving at least.

The land-ownership dynamics of Mathare discussed in the introductory section compound the collective action problem. The fact that residents have to contend with disparate individual landlords leads to a sense of isolation that clouds the collective nature of the problem.

Second, collective action seems to happen more easily when people have other pre-existing or additional reasons to cooperate besides simply living in the same neighbourhood. This conclusion emerged from a realization that the women at the focus group discussion who had been part of collective initiatives to find solutions to water and sanitation problems had done this in the context of groups that were already organized around some other issue. In Village 4A for instance, a women's savings group had recently managed to construct a toilet block with the help of a donor who matched their accumulated capital of KSh10,000. It had taken them

23 Focus group discussion with women from village 3C, village 4A, Mabatini and Mashimoni, Mathare, 29 June 2012.

nearly two years of saving KSh30 per member per month (the equivalent of one shilling per day). However, this accomplishment was possible largely because the group members had worked together for much longer than that, having come together to mutually guarantee each other's loans from the Kenya Women Finance Trust. The other example involved an initiative that had resulted in the cleaning up of the neighbourhood around the market in the Ngumba area. Women had come together and reclaimed an abandoned public toilet block and unblocked the disused sewer line in the area. However, not all women in the area took part. All the women who got involved had some connection to the market: either they had stalls at the market or they grew and/or supplied vegetables to the market.

Third, the women expressed the view that there is a sense of resignation, which makes it difficult to agree on common rules, let alone enforce them. A kind of impunity prevails. Several women recounted how they had unsuccessfully tried several times to establish a rota for cleaning the shared toilets in their neighbourhood.

The other problem is impunity: we agree the rules, for example, on cleaning, but people just disregard them. So each one of us keeps pushing the stuff away from our doorsteps and lets the person at the end of the ditch figure out what to do. Then we get into constant quarrels and keep taking each other to the chief over assaults and so on. The person who benefits is the chief since we all know that he doesn't just sit there and listen to our quarrels for free!

Only a few retain the determination to continue trying in such circumstances:

... but even if only five of us agree, my attitude is that we simply start there. Never mind the many that are not doing their part. If five of us do our part diligently then the on-lookers will eventually want to join when they see the difference you are making.

Fourth, even though women bear the greatest responsibility for water and sanitation needs at the household level, the face of public collective action on these issues has been largely masculinized. The groups most active in water and sanitation related activities in the area are youth groups, which tend to be composed almost exclusively of young men. Thieme (2010) corroborates our findings on this issue. Contracts for the operation of public toilet facilities on a pay-per-use basis have gone mostly to these youth groups. None of these facilities was being operated by a

women's group at the time of the research. Women under the age of 30 in the focus group discussion conceded that even though 'youth' includes both men and women they never saw themselves as part of that category. So when community mobilization largely identified with 'youth' was undertaken, women invariably registered low turnout.

Key informant interviews with leaders of community-based groups confirmed this trend. When we sought to identify leaders of community groups to interview there were far more men than women. Out of interviews with 28 leaders, only six were with women. We noted that groups describing themselves as 'youth' groups had far more men than women in their membership, or even had exclusively male membership.²⁴

There is a distinct history of the water and sanitation sector in urban informal settlements that explains this masculinization trend. Formal provision of water to this area by the Nairobi Water and Sewerage Company is recent (2008-09) (WSTF, 2010). Prior to that, water provision had come under the control of gangs or cartels, which tapped water illegally from pipes supplying water to neighbouring, higher-income areas. It was common for rival gangs to fight over supply routes. The same problem plagued garbage collection, since the city council does not provide this service to the informal settlements. We encountered at least two instances of women's groups that had successfully operated toilet blocks, only to be subsequently elbowed out by youth gangs that simply occupied the toilet blocks. In one instance, the women's group simply gave up the facility. In another instance, they involved the District Officer and managed to secure their claim.²⁵ Hence, the issue of water and sanitation had become synonymous with violence. It is no wonder, therefore, that women may have kept away from joining groups that identified themselves as working on these issues and that women's groups deliberately chose not to work on these issues.

Another explanatory factor is the absence of a supportive administrative environment. Two women at the focus group discussion narrated how their groups' efforts were frustrated by local administrators. One women's group in Village 3C saved up enough funds and convinced a landlord to sell them a small plot of land on which they intended to construct and

24 Only two groups departed from this trend: Champion Youth Group (village 3C), which had 13 women and 11 men, and Mathare Youth Foundation (Kiamutisya village).

25 Research Validation Workshop, Mathare Youth Polytechnic, 1 August 2013.

operate a pay-per-use toilet block:

But the moment the chief learned of it, of our plans to construct, we began to receive threats. They sabotage the plans until you feel compelled to give them "something." This frustrated us and there ended our plan.

The other group's leader recounted a similar experience:

I do a lot of community work and I am constantly in touch with the chief and elders, so I assumed they would be supportive. The chief sent a veiled demand for a bribe, which we chose to ignore. He then took the hard line and instigated the city council to get involved. The next thing we knew an NCC [Nairobi City Council] lorry showed up at the site, picked up our fundi [contractor] and KYMs [the unskilled labourers], saying that the construction did not have the proper authorization; that the construction was unapproved. Which construction is ever approved in this place? So that scuttled our plans and we have not made another attempt.

While the administrative challenges raised here are not restricted to efforts by women's groups, they certainly offer a partial explanation of the apparent paradox: that women bear the greatest burden of poor water and sanitation services, on account of their household management roles, and yet public action to solve these problems in Mathare bears a male (youth) face.

We also noted that none of the water kiosks was being operated by women's groups. To get to the root of this, we asked how it was decided which community groups would be awarded the contract to operate the water kiosks. The process was facilitated by the NGO (Pamoja Trust) that was in charge of the community organizing angle of the pilot project. Applications were solicited from community-based organizations. Eligible organizations needed to have a bank account, a certificate of registration, a letter of recommendation from the local *Muungano wa wanavijiji*, a letter from the chief and village elder, and a deposit of KSh7,500. It is quite possible that these requirements, including the cost, might have sifted out women's groups and any groups that were not overly structured, well-resourced or connected to the local administration.

Finally it is relevant to reflect on how macro-level dynamics among key actors in the governance of the water sector impede or facilitate genuine community participation and what effect this has on women's participation. The Kosovo model provides an opportunity for this reflection. From the perspective of the water company, interest in the model was

not motivated by an altruistic commitment to participatory community management of water services. Rather, the water company's main interest was in a structure that would ensure that the company could access and read the water meters, collect its revenue and guarantee the safety of its infrastructure in a social setting in which routine access for their officials could not be taken for granted. The 'lanes and clusters' set-up served the purpose of making the slum 'legible' to the company to begin with. It is therefore fair to say that while those serving on the oversight committee viewed themselves primarily as accountable to the community that elected them, the company viewed them primarily as 'agents' of the company. But how did these elected representatives view their role? We posed this question to members of the oversight committees for Kosovo and Kiamutisya in a focus group discussion. The following quote captures the dominant sentiment:

Initially our role was to look out for the interests of community members. We did this by negotiating tariffs, sewer charge exemption; and so on, with the company [since Kosovo has no access to the sewer line]. But we also had a role to ensure that the company did not suffer losses through illegal connections and that problems such as water leaks did not go unaddressed for weeks. We were a bridge between the company and the wananchi [residents]. We were also to oversee the community-based groups awarded contracts to run the water points; to see that they kept to the conditions on pricing, hours of operation, maintaining standards of cleanliness and so on.

However, lack of clear articulation of this multifaceted role for the community representatives, as well as failure to define it in relation to the roles of other key players, had already presented problems. This dampens the celebratory tone in which the Kosovo model is discussed in most secondary literature. The oversight committee had expected the company to offer them support in facilitating their vigilance role and guarding against vandalism and illegal connections. They had also expected that the company would engage them on an ongoing basis, especially in communicating major decisions such as increases in water tariffs. Some accuse the company of selectively engaging with only some hand-picked members of the committee rather than with the entire structure, which better represents the community. This has generated tension and resulted in internal wrangles, eroding the community solidarity that had begun to emerge during the pilot project and inviting a resurgence of the water cartels.

Disillusionment has set in and as a result the committee is no longer effective. Members who took part in the focus group discussion expressed concern that they collectively and individually had lost credibility with the community. This was partly due to the water company not backing them up and in some instances bypassing them altogether, and partly due to persistent delays in responding to reports of leaks or vandalism.

The structure that had been created with careful attention to balanced representation, both in terms of geography and in terms of gender, does not function as intended. As a result, a potential avenue for enhanced participation by women is not as effective as it could be.²⁶

5. CONCLUSION

This study found that the ongoing formalization of the water supply in Mathare has significantly improved one dimension of access, namely availability. However, the other dimension of access, namely affordability, raises questions of inequality, with residents of informal settlements paying roughly five times more, relative to their income, than the average Nairobi resident. Further, while the quality of water itself is on the whole satisfactory, the quality of the water service is poor on account of the irregular supply and a lack of responsiveness from the water service provider.

Even this partial improvement is not matched by improvements in sanitation, thanks to decades of no investment in sanitation infrastructure. Private initiatives, including initiatives by community youth, have gone some way towards plugging the gaps in sanitation services (Thieme, 2010). However, these initiatives are on a limited scale and lack sustainability, so their gains are easily reversed.

The State will have to invest heavily in playing its three interrelated roles: infrastructural, regulatory, and distributive. This will bridge the wide gap in realizing the right to 'clean and safe water in adequate quantities' and the right to 'reasonable standards of sanitation.' At the same time, it will create an environment conducive to women's participation in decision making and mitigate the adverse gender-differentiated impact of poor services, particularly in sanitation.

The failure of the infrastructural role is most evident with regard to the

26 The committee members recognize this problem. They resolved to go through a process of internal reflection with the hope that this would lead to reviving the oversight committee. Focus group discussion with water oversight committees from Kosovo and Kyamutisya, Mathare, 28 June 2012 and the Research Validation Workshop, Mathare, 1 August 2013 .

run-down state of the sewer line and its total absence in some areas, for example in Kosovo village. It is also evident in the absence of delineation of access roads and utilities, a problem that has grown ever more complex with time.

At the same time, lapses in the regulatory role have allowed construction and settlement on sites initially intended for utilities. But perhaps the most glaring evidence of failure in the regulatory role is in the area of sanitation, where landlords and structure owners are allowed to collect rent from residential and business premises (including food establishments) without providing toilet facilities. The State has failed to protect people's rights. Yet this could be accomplished simply by regulating the conduct of private parties to ensure that their actions do not impact negatively on Mathare residents' rights. UN-Habitat reinforces this conclusion:

... the assessment indicates that the dire lack of sanitation facilities could be mitigated through the enactment and enforcement of local authority by-laws, such as compelling landlords in informal settlements to provide adequate sanitation facilities for their tenants. (Nycander et al., 2011: 8)

Do regulations on public health or on tenant and landlord relations not apply in informal settlements? In these matters where the residents of informal settlements really need the State's intervention, it is glaringly absent. Yet State functionaries are quick to cite the building code and public health stipulations to obstruct community self-help initiatives and to find ways of extracting bribes. As the experience of some women's groups illustrates, the State can be present and overbearing when it is not needed and absent when it is needed most.

Land tenure emerged as the most significant bottleneck in investing in infrastructure, particularly for sanitation. The State will have to take the bold step of exercising its power of eminent domain and stipulating a compulsory compensation amount, if negotiating with and offering specific compensation to the disparate land-owners proves unworkable. This would be the appropriate balance between the State's obligation to uphold the right to private property and its obligation to deliver on the social and economic rights guaranteed under Article 43 of the 2010 Constitution.

Concerning the State's distributive role, the water company had no satisfactory answer as to why they could not differentiate their tariffs to

benefit residents of informal settlements.²⁷ Although the Nairobi Water and Sewerage Company set up a department to deal with informal settlements and the people working in it are committed, the overall institutional culture is manifestly reluctant to respond flexibly to the circumstances that define informal settlements. The Water Services Regulatory Board, the State regulatory body, would be acting within its mandate in negotiating with licensed providers and setting minimum conditions for water and sanitation services with respect to informal settlements. Alternatively, the State could find other ways to enable residents of low-income neighbourhoods to meet the cost of water and sanitation services. One recent example is the 'social connection policy' that is being piloted. Rather than requiring standard upfront payment, the water company allows customers from informal settlements to pay their connection fee in instalments spread over 24 months, with the charges being loaded onto their monthly water bill.²⁸

It is bad enough that Kenya will not meet the Millennium Development Goals with respect to water and sanitation. Worse, though, is the inevitable deepening of inequality that will result from continued under-investment in water and sanitation for informal settlements. In charting a post-2015 development agenda, the United Nations Special Rapporteur on the Right to Safe Drinking Water and Sanitation argues strongly that attention must now focus on eliminating inequalities, rather than simply counting the absolute numbers of people receiving services (de Albuquerque, 2013). The distributive role of the State entails correcting 'glaring inequalities of social condition' (White, 1998), and few manifestations of such glaring inequalities would rival the state of water and sanitation in informal settlements such as Mathare.

27 Remarks of Nairobi Water and Sewerage Company staff, Research Validation Workshop, Mathare Youth Polytechnic, 1 August 2013.

28 The residents of Kayole-Soweto are the first beneficiaries of this innovative practice, Research Validation Workshop, Mathare Youth Polytechnic, 1 August 2013.

Chapter 6

Gender Dimensions of Customary Water Resource Governance: Marakwet Case Study

Elizabeth Gachenga

1. INTRODUCTION

The goal of this book, as noted in Chapter 1, is to investigate the inter-relation between gender, human rights, and water governance through the use of local case studies selected from rural and peri-urban areas of eastern and southern Africa. In tandem with this overall aim, the present chapter investigates the relationship between the human right to water; the right to gender equality and freedom from discrimination on the basis of sex; and the right to participate in water governance issues. The investigation is contextualized through a case study of the Marakwet people living in Sambalat village. Sambalat village is located in Kaben location of Marakwet County on the North side of the Rift Valley in Kenya.¹

Access to water and sanitation constitutes a human right, as acknowledged by the Declaration of the Human Right to Water and Sanitation.² Although Kenya abstained from voting on the United Nations General Assembly on the Human Right to Water and Sanitation (Chazournes et al., 2013),³ the right seems to be explicitly recognized in Kenya's national framework. The Constitution includes among the economic and social rights the right of all Kenyans to clean and safe water in adequate

1 See map on page 191.

2 UN General Assembly (2010).

3 An analysis of the interventions of the representatives of countries that abstained from voting in favour of the resolution indicates that the reasons for abstaining pointed to issues of procedure and substance of the Resolution and were not a manifestation of their failing to recognize the right.

quantities.⁴ The Constitution further requires the government to take affirmative action to ensure that minorities and marginalized groups have reasonable access to water.⁵ The Constitution includes women in the definition of marginalized groups.⁶

Women are not merely players in water and sanitation issues but are in many cases the main actors. This is particularly the case in rural communities in eastern and southern Africa where women play a critical role in commercial and subsistence agriculture as well as in the performance of domestic chores requiring water supply and sanitation. The central role that rural women play in the social and economic context is recognized in international and regional human rights instruments. The Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) explicitly recognizes the crucial contribution that women make to 'the economic survival of their families'.⁷ At the regional level, the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (the Maputo Protocol), in recognition of the important role women play in sustainable development, requires State Parties to take appropriate measures to promote their access to credit, training skills development, and extension services at rural levels, in order to provide them with a higher quality of life and reduce the level of poverty among women.⁸ State Parties to these international and regional instruments are expected to implement these provisions in their legal systems for water governance.

Legal systems for water resource governance are often conceived primarily in the context of statutory law: that is, law enacted by State organs. Kenya is obliged to implement the provisions highlighted above, being a signatory to both the CEDAW⁹ and the Maputo Protocol.¹⁰ The Constitution contains various provisions prohibiting discrimination on the basis of gender as well as promoting affirmative action in a bid to improve the participation of women in political, social and economic spheres of society.¹¹

4 Constitution of Kenya, 2010, art. 43(1)(d).

5 Ibid. art. 56(e).

6 Ibid. art. 260.

7 Opened for signature 21 December 1965, 660 UNTS 195 (entry into force 4 April 1969) art. 14.

8 Adopted by the 2nd Ordinary Session of the Assembly of the Union, Maputo, CAB/LEG/66.6 (Sept. 13, 2000); entered into force 25 November 2005, art. 19(d).

9 Ratified on 9 March 1984.

10 Ratified on 8 October 2010.

11 See Chapter 3.

Kenya's statutory framework thus abounds with provisions recognizing the human right to water, gender equality rights, and the right of women to participate in all spheres of decision-making. However, as noted in Chapter 1, in many countries in eastern and southern Africa, certain aspects of water resource development and management, particularly at the local level, are governed by informal norms, practices and institutions developed by the groups and individuals using the resource.¹² This is particularly the case in rural areas, which are often under-serviced due to lack of technical and financial capacity of State institutions. The informal normative and institutional frameworks for water governance are referred to using various terminologies, including 'community-based water law' (Van Koppen et al., 2007) and 'customary law governance system' (Mumma, 2007).

Kenya has a long tradition of customary law governance. The traditions and cultures of many communities living in Kenya are replete with rules relating to ecological stewardship and management of natural resources (Okidi et al., 2008). Water management was an integral part of the customary laws and behavioural norms of the different communities (Huggins, 2002). Given the legal pluralistic scene characteristic of many rural communities in Kenya, there is a need to recognize that the power structures informing gender relations in the family and the local community are often directed not only by State actors but also by non-State actors involved in governance of water resources. While these customary norms and institutions continue to play a primary role in water resource management in rural area, Kenya's legal framework for water resource governance does not recognize them (Mumma, 2007).

In spite of their lack of recognition by the State law, these informal governance frameworks in rural and peri-urban settings, as well as in certain informal settlements within urban areas, have greater force of implementation than the statutory framework of water resource governance.

As women are critical actors in water and sanitation issues in rural Kenya, their rights, including their human right to water, gender equality rights, and the right to participate, are significantly affected by the disconnect between customary and statutory water governance systems. This research thus sought to investigate the gender dimensions of a customary water governance system, that of the Marakwet of Kenya, so as to demonstrate the often unappreciated dilemmas and conflicts that women face in a pluralistic legal context in which there is a disconnect between

12 See Chapter 1.

customary and statutory systems.

The Marakwet case study sought to determine the implications of the plural normative and institutional water governance frameworks for rural women's right to water for personal, domestic and livelihood uses. The main objectives of the research were the following. Firstly, to identify any gendered norms and practices in relation to ownership claims to water resources and participation of women in decision-making, highlighting any dynamics of change. Secondly, to critically analyse the rights of women under the customary law governance system and contrast these with the provisions of the CEDAW, the Maputo Protocol, and the provisions on the right to water, gender equality, and participation included in Kenya's statutory framework for water resources. Finally, to propose legal strategies that could be used to harmonize any apparent tensions and conflicts arising from the lack of harmony between the rights and duties of women under Marakwet's customary law governance system and under the statutory framework for water governance in Kenya.

2. THEORETICAL FRAMEWORK AND METHODOLOGY

Consistent with the theoretical framework presented in Chapter 1, the present research used a grounded and woman-focused approach to explore how Kenyan laws and policies respond to the way in which rural women access water for personal, domestic and livelihood uses and how they participate in water governance.

A fundamental implication of this theoretical approach is the appreciation and recognition that women do not constitute a homogenous group, and consequently that different groups of women experience rights differently in accordance with other aspects of their identity, as opposed to just gender. This research is thus sensitive to the risk of intersectional marginalization on the basis not just of gender but also of age, political exclusion, and socio-economic class. In view of this, the present research sought to capture the nuances in views across women water users from different socio-economic classes, age groups and marital status as a means of determining any differences in the views of the different groups of women.

A further assumption underlying the theoretical approach taken in this book and chapter is that of a holistic approach to the right to water and sanitation that includes not just the right of access to water and sanitation services but also the right to participation. The case study of the Marakwet thus views the right of access to water and sanitation as closely inter-

twined with the right to participate in water governance. The case study thus interrogated the extent to which the Marakwet normative and institutional structures empower or disempower different groups of women to claim and defend their right to water and sanitation. This was contrasted with the national and local water governance structures anticipated in the statutory framework for water governance.

As noted in the introduction to this chapter, this research uses the expression ‘customary water governance systems’. The term ‘customary law’ is used to refer to the myriad of norms and institutions accepted by communities as binding on them: norms and institutions which draw their legitimacy not from the formal State mechanisms but rather from traditional or contemporary culture or customs, religious beliefs, ideas, and practices. This notion of customary law is an adaptation of the definition of non-State legal orders used by the International Council on Human Rights Policy.¹³ This definition signifies a ‘living’ customary law and contrasts sharply with the static definition in which customary law is construed as an ossified notion referring to norms and mores from an ancient past that have little to do with the present.

The present research uses the term “living” customary law’ in analysing community-based water resource governance. This framework is particularly useful with regard to the analysis of the existing mix of customs and practices, some of which are legitimized on the basis of antiquity and immemorial usage, while others reflect the dynamism of evolving societal communities.¹⁴ Consequently, all references to ‘customary’ or ‘customary law’ in this chapter refer to this notion of ‘living’ customary law.

2.1 Area of study – Marakwet

The choice of Marakwet’s customary water resource governance system as a case study for this thesis was deliberate. The reason for its selection is that the irrigation system along the Marakwet Escarpment in the Kerio Valley is the country’s oldest customarily managed irrigation system.¹⁵ This suggests that the system is resilient and thus provides a good example of a normative and institutional framework comprised of a mix of antiquated customs, attested to by its age, and more recent norms that reflect societal evolution and thus explain its sustainability. The irrigation system practiced in the area under study is a form of hill furrow irriga-

13 International Council on Human Rights Policy (2009) p. 43.

14 Shadle (1999).

15 For a discussion on the history and social organization of the irrigation canals, see Ssenyonga (1983).

tion and has been described as slope off-take irrigation system (Vincent, 1995). The furrows provide the main source of fresh water for the community, for both agricultural and domestic use. The community thus provides a good example of a rural customary-based system of water resource governance in Kenya.

The specific area under study is Kaben location, Tot Division of Marakwet East Sub-County, which is in Elgeyo Marakwet County. For administrative purposes, Kaben location is in the Endo Constituency Assembly Ward. Endo is a relatively small ward with an approximate total population of 18,181 according to the 2009 census and an approximate County Ward Assembly Population Quota of 26,628.¹⁶

The irrigation furrows under study are part of the fourteen furrows located at 1°12'N to 1°15'N and 35° 35' E to 35° 40'E that are sourced from the upper and lower parts of the Embobut River, Kenya.¹⁷ The Marakwet community has relied on the water from the furrows for crop irrigation; the potential of these traditional irrigation systems for the achievement of food security is recognized by relief agencies that, to date, fund the maintenance and repair of the furrows.¹⁸ The area under study is under-serviced in terms of State provision of water and sanitation services; as a result, the water from the furrows continues to be used for domestic purposes.

2.2 Methodology

The method of study adopted for gaining an in-depth understanding of the gender dimensions of the Marakwet's customary (law) water governance system was that of a case study. The information for the case study used in this research is based on both primary and secondary data. The secondary data was obtained from a desktop literature review of other studies, including ethnographic studies of the Marakwet.¹⁹ The literature was used to supplement primary data collected by the researcher. The case study was conducted in the months of November 2010 and February 2011.

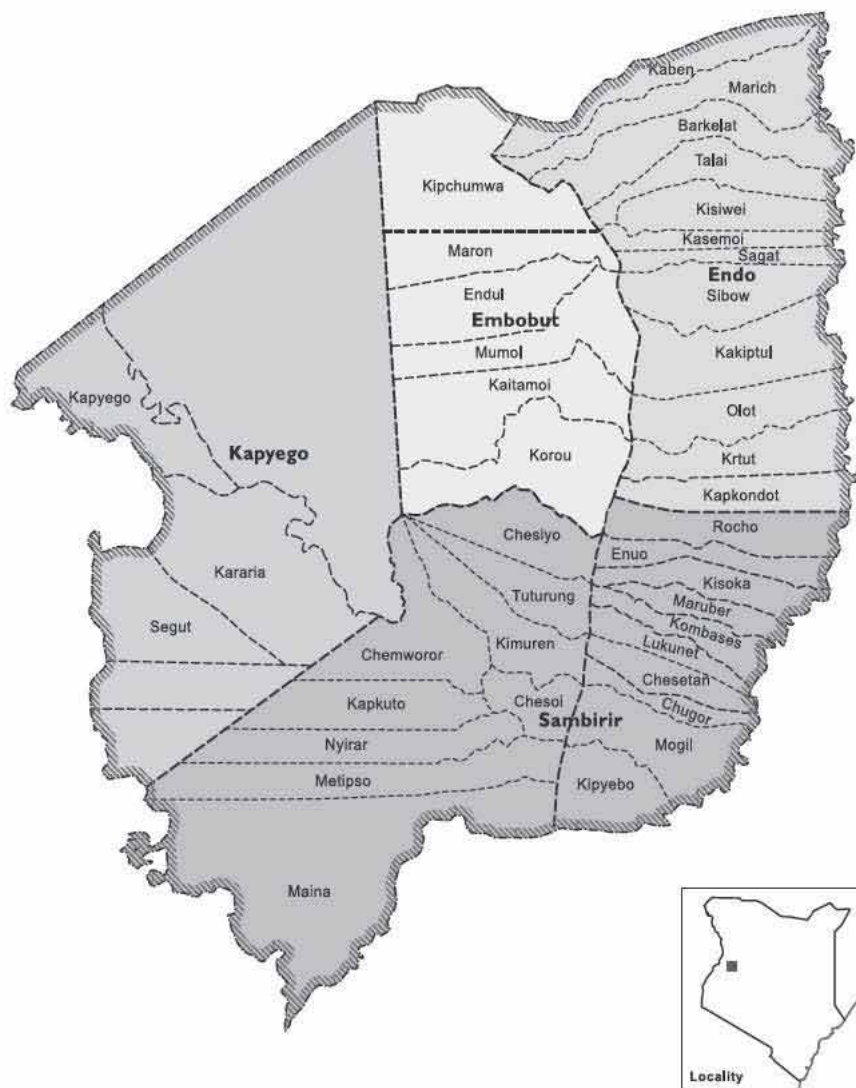
Apart from review of secondary data, multiple data collection methods were used to obtain primary data, including interviews, focus group

16 Independent Electoral and Boundaries Commission (2012).

17 Kipkorir and Kareithi (2012).

18 Kipkorir and Kareithi (2013).

19 Adams et al. (1997); Beech (1921); Cheserek (2005); Gunlycke and Tuomaala (2011); Kipkorir and Welbourn (2008); Kipkorir and Kareithi (2012); Watson et al. (1998).



Source: http://mudavadi2013.com/North_Rift/Elgeyo%20Marakwet/Marakwet_East/Maps/EBC_Marakwet_E_Const_Map.PNG

<p>POLITICAL:</p> <p>MARAKWET EAST with County Assembly Wards (CAW) and Sub-locations</p>		Constituency Boundary
		Sambir County Assembly Ward Boundary with Name
		Maina Sub-location boundary with Name

discussion, and transect walks. The review of ethnographic studies on the Marakwet provided information on their customs and practices. This information formed a basis for corroborating the information gathered from focus group discussions with the council of elders and two groups of women on their customs and practices. Further, the interviews with water users provided a further basis for confirming and enriching information on the actual operation of customs and practices. Finally, the researcher used the transect walks and interaction with community members to observe the practice and operation of some customs. The multiplicity of data sources and collection methods thus provided the opportunity for validation through triangulation.

The primary source of water for irrigation and domestic use is the furrow system, though the community members also rely on wells and other natural water sources, as well as piped water taps, to supplement their water for domestic use. The focus of this study was on the communal gravity-driven furrows. As the subject under study was the customary law system for water governance, the primary informants were determined as male council elders responsible for furrow issues, who are considered the custodians of the customary law governance system. Consequently, a group of male council representatives from different clans composed of both elders and some younger men involved in furrow management issues was purposefully selected for a focus group discussion. The criteria for selection included knowledge and experience of the customary norms and institutions.

In the Marakwet community, women do not have a direct role in the design, construction and repair of the furrow system and thus have no direct say in decision making related to furrow issues. However, given the woman-focused approach adopted as a framework for this research, a focus group discussion was organized with a group of women in the age bracket of the men usually elected in the furrow council so as to provide an insight into their view on governance issues. A further focus group discussion was organized with younger women in the community in appreciation of the view of women not as a homogenous group but as also affected by personal identities and other factors apart from gender. This stratification of age groups was also useful to determine if, over time, women change their view of their perceived roles in water governance.

This research, as already mentioned, adopted an approach that recognizes variation in women's experiences within countries, across socio-economic class, age, or marital status. The water user questionnaire included

a section on bio data with questions relating to the age, income level, occupation, level of education, and household structure of the respondents. The data collected could thus be analysed in the context of these factors as opposed to simply gender; it therefore helped highlight nuances and differences in perceptions, even among women.

Forty-three men and women representing water users of the irrigation furrows were selected for interviews. In keeping with the grounded and woman-focused approach adopted, an almost equal number of women and men users was sought, with the distribution of female and male respondents being 49% and 51% respectively.



A VIEW OF ONE OF THE IRRIGATION FURROW LINES

In order to aggregate and analyse data according to socio-economic factors, the water user questionnaire included data on the income level of the respondents. Respondents chose from one of four main income brackets that is a monthly income equivalent in Euro: below €50 (16%); €50–200 (56%); €210–500 (12%) and above €500 (2%). About 14% of the respondents did not reveal their monthly income levels. Data was collected from these selected water users with the aid of semi-structured questionnaires. The water users provided a different perspective on the water governance system from that of the council members.

Key informant interviews were also conducted with an official from the Eldoret Water Services Company (ELDOWAS) and the Lake Victoria North Basin Authority (LVBNA) Office in Eldoret. The objective of these interviews was to gain an insight into the actual operation of the statutory institutional mechanisms and the extent to which these integrate the customary (law) governance institutions.

Further, information was also obtained through informal discussions between the researcher and various persons with knowledge of the community governance systems. These included an official from the Kerio Valley Development Authority (KVDA), which is a State corporation set up for purposes of co-ordinating development projects in Marakwet; a researcher working for a not-for-profit initiative of water professionals; the assistant chief; and the local parish priest.

3. THE MARAKWET STUDY

The findings from the data collection are discussed in this section, highlighting the gender perspectives.

The focus group discussions provide information on what the people said regarding their water laws. The interview with the male and female water users was used to corroborate what the elders and the two groups of women explained and also to determine to a certain extent the operation of the customary norms and practices. Interviews with the assistant chief, the parish priest, and the official from KVDA provided an opportunity to gain insight from outsiders into the community customs and practices. Further, what the people said about their water law was compared with other ethnographic studies of the Marakwet.

3.1 An introduction to Marakwet: the people, their history, and the irrigation system

The Marakwet communities have a tradition of customary law and gov-

ernance that predates colonial rule (Beech, 1921). To date, societal life in the area under study is, to a large extent, governed primarily by customary norms and practices. Most of the participants interviewed during the fieldwork frequently spoke of the 'the law of our forefathers', referring to the norms and mores governing their water resources and community life in general. An interview with the area chief, who is also an administrative officer appointed by the government, further confirmed the prevalence of customary normative and institutional frameworks among the community members. He explained that most aspects of life in the community, including the use of land and water resources, are governed by the customary norms of the community. Due to its location and size, the area has few State administrative offices and no law court. As a result, most of the affairs of the community are governed by its customary normative and institutional structures, as opposed to the normative and institutional frameworks anticipated in Kenya's formal statutory framework.²⁰ This was confirmed by the parish priest of the area.²¹

There is no written record of the customary normative and institutional frameworks governing the furrows; since its inception, customary law has been passed on orally from one generation to the next. In the discussion with the representatives of the elders, who are seen as the custodians of customary law, they explained that though they do not have a written record of this law, its existence is not disputable. According to tradition, the origin of the customary law relating to the furrows dates back to the time of their forefathers.

*After the construction of the furrows, the elders sat down and determined rules on the allocation of water resources and this marked the beginning of the role of the elders.*²²

This customary law also forms the basis for their robust water resource governance system. In describing the genesis of the customary law for water governance, the elders pointed out that this law was developed following the construction of irrigation furrows to provide water to alleviate scarcity caused by drought. They explained that the law was the result of

20 Interview with Joseph Yego Lokanda, Chief of Kaben Location (Marakwet District, 22 November 2010).

21 Interview with Parish Priest of Tot (Endo, Marakwet District, 21 November 2010).

22 Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District, 10 February 2010). The Swahili term used by the elders was 'sheria ya maji' which literally means the 'water law'. The term 'sheria' is also used to refer to statutory law in common parlance.

negotiation among clan elders who had been involved in the furrow.²³ When asked about the origin of the furrows, one of the women in the focus group discussion with older women indicated:

*We were born when the furrows were already in existence. We know little about the furrows as it is the men's issue.*²⁴

The younger women interviewed confirmed that male community elders in the past had surveyed the land and constructed furrows to bring water from the source on the escarpment to the valley floor to alleviate water scarcity:

*Men used to go to highlands to make furrows. Now, cement is used to repair them in case they break. More recently, the government has helped to repair the furrows.*²⁵

As noted, the Marakwet's irrigation system predates colonial rule. The actual age of the irrigation system is not known with certainty, with some literature estimating that the furrows are more than 200 years old (Ssenyonga, 1983), and others more than four hundred years (Kipkorir and Kareithi, 2012). Studies based on satellite imaging suggest that irrigation occurs along more than 4,000ha of the Marakwet Escarpment from south of Arror to north of Tot, though this figure is speculative in so far as it is difficult to distinguish between rain-fed and irrigated crops (Adams and Watson, 2003).

The customary law on furrow management is composed of rules on allocation of water, management of the furrows, and preservation of water quantity and quality. For instance, the elders explained the first and most fundamental rule of the furrow laws:

*From the very beginning, there was a rule that all male community members were required to participate in the design, maintenance and repair of furrows. If they did not participate, they would lose five goats in the form of a fine. This was a rule from the beginning and all obeyed it.*²⁶

There are strict rules regarding allocation of water. Each clan had access to a particular furrow as determined consultatively after construction. The water from the canals was and continues to be directed to the farms

23 Ibid.

24 Ibid.

25 Ibid.

26 Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District, 10 February 2010).

of each clan in accord with the allocation rules decided consultatively by clan members involved in maintenance and repair of furrows. In some cases, two clans could share a furrow. Once the furrows are allocated, community members can only source water for irrigation from their clan's specific furrow. When asked if there was a restriction on clan members using the allocated water for commercial as opposed to subsistence farming, the clan elders in the focus group discussion clarified that, once the water is allocated to each household, the members are free to choose what to do with the water. The participants clarified that water for domestic use is not subject to this restriction.²⁷

The furrow law also included a rule prohibiting the felling of trees near River Embobut, the source of the irrigation furrows. The clan elders say that this prohibition is as old as the furrows and extended to felling of trees or cutting of vegetation even for use in the construction of furrows, which meant that the material for furrow construction had to be sourced from elsewhere. The rule forbidding felling of trees near the Embobut River is still in force today. There was also a requirement that all community members report furrow overflows.²⁸

Other customary rules related to water resource governance include the general prohibition on bathing in the furrows. The elders clarified that although at present the rule is popularly considered to refer specifically to women, it was originally considered a taboo for either men or women to bathe in the furrows. It was not clear why, over time, the restriction had been limited to women. The reason for not permitting people to bathe in the furrows was born of reasons of hygiene to prevent pollution of the water. However, the prohibition is also symbolic, intended to emphasize to the community members the sacredness of water and the need to respect the furrows. Other taboos associated with the water resources include the sighting of bad omen signs in the course of water management. One example given by the participants was an association of bad luck with hawks. Clan elders can decide, upon hearing a particular noise made by a hawk, not to allocate water to a particular clan but rather to another.²⁹

Some of the other rules also reflect gendered customs and practices. For instance, women are not permitted to draw water from furrows for three to five months after childbirth. During this period, they must rely on their spouses or other relatives to bring them water. According to

27 Ibid.

28 Ibid.

29 Ibid.

the clan elders interviewed, the community's concern for the health and well-being of women after childbirth led to their being prohibited from the task of drawing water so as to require their spouses to help them in chores ordinarily regarded as theirs.

Other customary norms associated with impurity are also observed in relation to water governance. For instance, a man whose wife has delivered twins or a child in a sac must undergo cleansing before taking part in furrow matters.³⁰

More than 75% of the female respondents indicated that they rely on farming for their livelihood. The irrigated crops farmed include cassava, finger millet and sorghum. During the interviews and focus group discussion, it was explained that, among the Marakwet, women play an important role in subsistence farming. While male members of the community are charged with clearing communal land for farming, the women are responsible for the actual farming of the irrigated crops. It was also observed that there is a flourishing commercial rain-fed mango farming business that is controlled to a large extent by women.

3.2 Norms governing ownership and access to water resources

Water is considered a sacred resource by the Marakwet. According to the community elders interviewed water resources are not, nor can they be, owned by anyone. When asked who originally owned the water resources from the Embobut River, they explained:

When there were no inhabitants, the water flowed and belonged to nobody. It flowed into Kerio and ultimately to the seas.³¹

This is because water is a naturally occurring resource provided by God, as explained in all three focus group discussions and reiterated by water users. Of the water users, 95% indicated that the ownership of the irrigation furrows lies with the community. The other 5% placed ownership of the furrows with the clan elders. There were no significant gender differences in perception of ownership of the furrows or water resources in general.

While conceding that water resources are not subject to ownership, respondents clarified that every member of the community has a right to use the waters of the river Embobut, given the proximity of the resource to their land. This investigation sought to understand the nature of the

30 Ibid.

31 Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District, 10 February 2010).

rights over water resources under the community governance system. The clan elders explained:

*When our forefathers constructed furrows, they acquired the rights to use for the community (...) the Embobut water belongs to the Marakwet community.*³²

The Marakwet water rights are thus distinct from the water rights granted under statute. Kenya's Water Act, as is the case with most modern water legislation, only recognizes a right over water as granted under the provisions of the Act: that is, as granted by the State. The source of authority for the granting of permission to use the water resources from the furrow system was justified by the clan elders on two counts. Firstly, the community's proximity to the natural resource, the Embobut, entitles the community to use the water from the river. Secondly, the rights of use are justified on the basis that the community members originally took the initiative to construct the infrastructure relating to the furrows. This notion of water rights among the Marakwet is thus fundamentally distinct from the notion of water rights contained in Kenya's Water Act.

Marakwet's nature of water rights demonstrates principles similar to those contained in the notion of 'hydraulic property rights' (Coward, 1986). Firstly, the notion of right is specific. The translator clarified that the term 'right' was not in the original Marakwet dialect. The terms 'imaan' or 'chamalat', which are the terms used to refer to the community's 'rights' over the water resources, refer to the permission, or being allowed to have a right, to access water resources. Secondly, content of the right granted under this permission is similar to the water rights granted in most farm-managed water use systems. The right relates to the use of a flow of water, which authorization is subject to certain privileges, restrictions, obligations and penalties, and the right to take part in collective decision-making relating to the furrow system (Boelens and Vos, 2014). The notion of water right in the context of the Marakwet's furrow system thus relates not just to the relation between the users and their irrigation infrastructure but also to the inter-relations among the users of the water resources, thus fitting within the notion of hydraulic property as expounded by Coward (Coward, 1986).

The rights to use furrow water for irrigation are exclusive to identified clans, which suggests that the community considers the right to use the resources from the Embobut as exclusive to them. However, there is no

32 Ibid.

restriction on the use of the water for domestic purposes. The clan elders interviewed indicated that there have been no conflicts arising over use of water resources within the community or with other neighbouring communities. When probed regarding the conflict between the Marakwet and the neighbouring West Pokot, the clan elders argued that this was not a conflict regarding water resources, as the Pokot have their own water sources.

The respondents from the focus group discussion with clan elders explained that the land amongst community members, though owned communally, is also allocated to individual households. As the Marakwet are a patrilineal society, this arguably means that individual ownership of land vests with the male head of the household. The land and water resource ownership model of the Marakwet, in the view of the researcher, resembles a form of semi-commons in which both private and common property systems not only co-exist but also seem to overlap and interact (Smith, 2008).

Few landowners have formal titles over the land claimed as private property, though the respondents explained that the boundaries are clear to community members. The clan elders explained that, although their land has not been subjected to formal adjudication, there are, among community members, clear demarcations of the boundaries of individual plots of land.

As noted, the fundamental basis of the community's right to extract water from the river is the right to the land adjacent to the river, though rights to use water from the furrows also depends on involvement in construction and maintenance. However, allocation of water resources is a communal affair determined consultatively upon consideration of a myriad of socio-cultural and economic factors, including the needs of the water users, joint construction and maintenance of the furrows, previous allocation, the bargaining power of users, etc. (Adams et al., 1997). Construction and maintenance of the furrows are particularly important to confirm claims: the clan elders explained that the rules on allocation were determined after construction of furrows. However, the rules continue to be revised, as the elders indicated that, each time there is work done on the furrows, those participating will sit down after the work is complete and discuss allocation.

The clan elders further confirmed that no tariffs are charged on water from the furrows. There is no restriction on the use of furrow water for domestic use, but the community members must comply with allocation

rules set by the male members of the furrow council for use of furrow water for irrigation. The elders explained that:

*According to our law, the collection of water for drinking either by people, their animals or even by an owl is not restricted. Even if one was to collect 100 drums of water for drinking that is not prohibited. But the use of this water for irrigation is NOT permitted.*³³

According to the clan elders, water allocated for irrigation is not dependent on what one farms or does with the water on their plot of land. There is thus no distinction in allocation rules for subsistence or commercial farming.

While there is no charge on water from the furrows, community members are obliged to contribute to the construction and maintenance of furrows through their work or in cash where work contribution is not possible. The failure to contribute elicits sanctions under their customary law such as the fine of goats referred to earlier.

3.2.1 Sanitation and Water Quality

The majority of the water users interviewed indicated that the quality of water supplied for domestic use was unsatisfactory. This is because the hill furrows are open earth canals, thus escalating the risk of water contamination. One water user indicated that water-borne diseases are a major issue for community members. Despite their awareness of the poor quality, only 53% of the total respondents boil or purify their water. The other 47% explained that, although they are aware of the poor quality, they do not boil the water due to time constraints and lack of resources. Of the female respondents, 57% indicated that they boil their water.

Several respondents indicated that on some occasions they use treated water, and the majority of these respondents were women. They explained that they rely on free treated government water for domestic use. This water is not easily accessible, as often the taps are at central locations such as trading centres. The distance from these sources explained why most community members rely on untreated furrow water for domestic use despite knowing the about the risk of contamination.

Of those interviewed, 91% responded affirmatively to the question "Do you have access to a pit latrine?" However, one respondent explained that in many homesteads the pit latrines are not always functional, a fact which was corroborated through observation. As a consequence, many

33 Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District, 10 February 2010).

people still use open spaces or pit latrines in public places. This raises sanitation challenges for women.

Only 11% of those interviewed indicated that they had a water source close to the sanitation facility and only about 44% have access to either soap or ash for sanitizing their hands. More than 75% of the women users interviewed indicated that they had experienced some challenges in accessing water for both irrigation and domestic use.

In spite of the challenges in provision of water and sanitation services, the community members interviewed, and particularly the clan elders, expressed the conviction that management of their water resources should remain in the hands of the community. While recognizing the need for assistance in terms of funding and capacity building, they affirmed that the customary law governance system has served them over many centuries and is thus sustainable.

Contrary to this optimistic view of the customary water resource governance system, a hydro-geologist working in the area expressed scepticism about the sustainability of the customary law governance system. She highlighted the primary challenges as its incapacity to supply potable water to community members, failure to provide sanitation, the inefficiency of the furrow systems in tapping water resources, and the problems surrounding management of furrows. While the furrow system does result in a loss of water due to evaporation and also runs the risk of contamination, in the absence of better systems to reduce evaporation and contamination, the community's furrow system remains its most reliable source of water for irrigation and domestic use.

3.3 Norms concerning participation in decision-making

The water users and the participants of all three focus group discussions confirmed that the clan elders are the custodians of the law of the furrows and consequently they also determine the norms or rules relating to water use.

The clan elders are also responsible for allocating water resources and ensuring compliance with customary rules related to water use and management. They explained that the various clans have male representatives in the furrow infrastructure committees who are involved in the consultative process through which allocation and other furrow rules are determined. The clan elders explained that when a member fails to comply with water rules the elders impose sanctions, but only after having heard the offender:

This is how it happens. When we call the person, first we want to hear from him how it happened. Someone may even ask for pardon and he explains what happened and led to the non-compliance we forgive. There may be some young person who failed to work but who asks if there is some pending work and they say let us do this. First, is to agree. Sometimes the elders forgive and even the peers forgive. The important thing is to agree. We cannot say that when one offends, they are necessarily punished.³⁴

The elders also explained that persistent offenders who fail to contribute to maintenance work on the furrows are denied water. If they attempt to access the water, they may be referred to the chief, who may arrest the person or may identify certain members of the offender's family and order these, together with the offender, to undertake some community work. They explained that in some cases the offenders may be charged in court.³⁵

Only men are involved in management and repair of furrows. The focus group discussion reiterated this, clearly indicating that women had no right to participate in the management of the furrows. One of the lessons learnt in the course of conducting the fieldwork was that women preferred not to be interviewed in public but rather in their homesteads. The female respondents explained that the reason for this was that they feared the social disapproval that is associated with women purporting to give opinions on furrow governance issues, a task which is by custom exclusive to men. However, when interviewed in their homesteads, women demonstrated a keen interest in water governance issues.

As noted, the allocation of water resources through the furrow systems is the responsibility of clan elders, all of whom are male. Of the female respondents, 100% of those interviewed indicated that they played no direct role in the management of the furrows, except to carry construction materials or prepare meals for the male family members involved in the management of the furrows.

During the focus groups discussion with clan elders, we sought to understand the rationale for the exclusion of women from the management of furrow issues and the other taboos associated with women and the furrows. One of these taboos relates to the prohibition of women from accessing the furrows after childbirth. The clan elders explained that

34 Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District, 10 February 2010).

35 Ibid.

the taboo has its origin in the community's concern for the health and well-being of women and that the intention was to shield them from the task of drawing water soon after giving birth. The existence of the taboo was intended to serve as a requirement for their spouses to help them in chores ordinarily regarded as theirs. According to the elders, respect for women and the need to ensure that they are not oppressed also explained the traditions and customs forbidding women from taking part in the construction of the furrows. One focus group participant explained that the work of construction was physically challenging; thus, to require women to do this in addition to their other household tasks was regarded as oppressive and likely to displease the gods. Nevertheless, women were required to contribute to the task by providing food to the men involved in the construction or repair of furrows.

Households whose male members did not contribute to furrow maintenance and repair are not entitled to water. Most water users interviewed confirmed this. However, the elders pointed out that this rule can be adjusted to take into account the good of the rest of the household members; they can thus allocate water resources in spite of the male members of a particular household being guilty of failing to contribute to maintenance.³⁶

This system of water resource allocation seems, *prima facie*, adverse to women, given that water resource governance issues as explained above are considered a male task. Cultural taboos surround the association of women with management of furrow issues, thus ensuring that women remain on the fringes of water resource allocation decisions. Access to water rights is indirect, given that water is allocated through clan lines to households, presumably headed by male members. As already observed by Watson et al. (1998), there is a rise of women-headed households, as is the case with unmarried women, widows, or *de-facto* female house heads (where husbands are absent for most of the year due to work reasons, etc.).

This allocation system of water resources and the social status of women give rise to a potential marginalization of such women in terms of allocation of water resources. However, the respondents explained that customary law rules on water allocation are evolving to reflect the dynamism of modern society. Consequently, households without male heads or members can still obtain access to water resources by paying cash in lieu of contributing to the manual repair of furrows. Further, clan elders explained that household water needs are determined independently of

36 Ibid.

the gender of the head, so it would appear that women heads get a fair share of the water resources. Nevertheless, such heads are at a disadvantage insofar as they have no direct say in decision-making and must rely on their male family members, who can participate in maintenance and repair of furrows and thus be included in consultations on allocation of water from the furrows.

Arguably, the lack of direct access to water resources disadvantages women. However, the complexities of water allocation rules and practices provide women with other 'informal' avenues for accessing water resources (Adams et al., 1997). Further, it was observed in the course of this fieldwork that most women are presently engaged in flourishing commercial mango farming. The female respondents explained that this type of farming does not require irrigation, and thus their reliance on irrigated farming as a source of sustenance has reduced. In addition, most female respondents considered the water supply from the furrows inadequate for both irrigation and domestic use; they explained that they therefore often supplement this supply with water from other sources, such as naturally occurring streams and, in certain rare cases, public wells and pipes. These sources fall outside the ambit of the customary norms on furrow water governance. While these sources provide a supplement, the furrows still constitute the main source of water for irrigation and domestic use for the community.

The above mitigating factors may explain the responses obtained from the questionnaires and focus group discussions. The water users' questionnaire sought to establish if the respondents were in agreement with the customs and practices relating to ownership and allocation of water resources, including the gendered roles and customs. Less than 10% of the respondents did not express agreement with the customary rules and practices surrounding water governance, and this included a fraction who thought this question was not relevant. It is interesting, however, to note that 100% of those in disagreement were women.

The author sought to determine the reasons for compliance with the customary rules and norms on water governance. Most of the respondents gave their reasons for compliance as tradition, taboos associated with non-compliance, conviction and belief, fines, and need to conserve water resources that are the lifeline of the community. The respondents laid greater emphasis on tradition, taboos and conviction as incentives for compliance with customary rules and practices than on fines.

The above position was confirmed by the focus group discussion with

senior female members of the community. They explained that women have no say in decision-making relating to furrows and water resources, and they preferred that the situation remain this way:

*No women would risk disrespecting the laws relating to water and the furrows because the penalty for this is a curse. Women have never had rights over water and so we cannot even imagine demanding rights now.*³⁷

The women pointed out that in the past there were no associations of women, as women were not expected to come together to form groups. However, more recently they have formed women's associations.

3.4 Dynamics of change

Many of the rules of Marakwet's water resource governance system are broadly defined. Nevertheless, in many cases, they are subject to negotiation. The community members' description of their laws suggests that it is closely linked with traditional customs. Many of these traditional customs and practices are still in force today; these include the taboos associated with women engaging in the management of furrows and the prohibition of work on furrows if certain signs of 'bad omen' are identified, as in the case of the cries of a hawk, mentioned above. These age-old norms seem to confirm the argument that their customary normative framework consists primarily of hallowed rules of immemorial usage.

However, changes have been made and are being made to the system to adapt it to contemporary circumstances. An example of this is the composition of the clan of elders responsible for furrow issues. The researcher observed that among the present clan council representatives there was a mix of elders and relatively younger men who have been co-opted into the council. One of the elders of the group explained that the community now recognizes the value of formal education received by younger community members, who can help the elders identify opportunities available to the community, especially in terms of accessing donor funding.

Further, due to the fact that the rules are not written and their implementation is subject to consultation and discussion among community members, customary practices, though retaining some essence of the past, are reflective of changing circumstances in community. The requirement to provide labour for maintenance of the furrows at present can be substituted for money. This modification of the rule is based on the apprecia-

37 Focus Group Discussion with a group of older women on the customary water governance system (Marakwet District, 10 February 2010).

tion of the changing circumstances. Young clan members may at times be unavailable for furrow work due to their attending school or work outside the community. In such cases, the system recognizes the usefulness of the alternative occupation and substitutes monetary compensation for the contribution of physical labour required. This example demonstrates the appropriateness of the more dynamic definition of customary law that has been adopted in this chapter.

During the feedback session at the conclusion of the study, the researcher observed that one of the women present requested the opportunity to speak and made some observations regarding the participation of women and their interests in the community's water resources. Considering the taboo on women participating in furrow governance issues, the researcher inquired into the exception, and it was explained that, by customary law, post-menopausal women are permitted to give their opinion in public and to participate more directly in water governance issues.

The focus group discussion comprised of younger women confirmed the current position on participation of women in furrow issues under customary law. They were also unaware of any forms of registered water user groups. Nevertheless, unlike the case with the focus groups discussion with the senior women, the younger ones indicated that they would be interested in forming part of any such organizations. The participants in this focus group discussion expressed their wish for representation in the furrow system infrastructure management committees. They clarified that the role of such committees would be to buy cement and other materials for construction and repair of furrows. They were adamant that such representation would not constitute decision-making in relation to furrow issues, as it would not, in a strict sense, relate to the construction or maintenance of the furrow, a task for male community members. The focus group discussion with younger women provided an interesting insight into the changing attitudes among female community members and the future management of water resources. Several members of this focus group discussion were of the view that if, in future, the water for domestic use is piped and tapped, then it would cease to form part of the furrow system and so would not be subject to customary law. This, in their view, would imply that women could then be involved in water governance issues, as the curse would not hold.

None of the female respondents interviewed had received a college education. In answer to further probing, the respondents explained that women who received college education would ordinarily not return to live

in the village, which may explain the results from the population sampled.

The stratification of perspectives on Marakwet's customary law system for water governance along generational and gender lines provides insights into the gender dimensions of the various facets of water governance issues. Further, the gendered study demonstrates the potential direction of evolution for the rules governing water resource allocation and management of furrows.

4. RECOGNITION OF COMMUNITY-BASED WATER GOVERNANCE IN KENYA'S LEGAL FRAMEWORK

4.1 Status of customary normative and institutional systems in Kenya's statutory framework

As is the case in many other parts of eastern and southern Africa, in Kenya local informal water rights, norms and institutions, such as that of the Marakwet, often lack formal recognition and operate on the periphery of the statutory framework (Van Koppen et al., 2007).

This is because the dominant theory of jurisprudence in Kenya is based on a legal, centralist and positivist notion of law.³⁸ An effect of adopting such a narrow notion of law is that the legal regulation of water governance perceives of law 'properly so called' as statute.³⁹ The dominant legal positivist school of thought requires that rules seeking the status of law demonstrate certain features that serve as insignia for the legally normative. The positivist conception of law lays emphasis on sources of law like statutory law and cases decided by the superior State courts (and the legitimacy of the sources).⁴⁰ With such a conception of law, the legitimacy of informal norms and institutions as law is disputed, subject to the recognition of their validity by the formal laws. Under such a legal, centralist or positivistic system, customary law is defined as a static body of law based on ancient customs and traditions, which gained its legitimacy from its recognition by the formal colonial law.

Nevertheless, the application of the term 'living customary law' to these informal frameworks, according to some authors, provides an opportunity for their legitimacy even in a positivist State. This is because most legal systems recognize the existence of customary law, either as an indepen-

38 Twining (2009).

39 The view of law primarily as statute is evident in the notion of law proposed by common law jurisprudence. See for example Hale (1971), p. 46.

40 Kletzer (2007) demonstrates this point using Savigny's approach to customary law.

dent component of the legal system or as an independent system with the potential for incorporation into the legal system (Hinz, 2008).

Kenya's legal system recognizes customary law as a source of law in the country, albeit as subordinate to all written laws and subject to the proviso that its application ought not to be repugnant to justice and morality. The Constitution recognizes customary law, provided that any customary law that is inconsistent with the Constitution is void to the extent of the inconsistency.⁴¹ The Kenyan State thus recognizes that customary law may validly operate in limited matters relating to personal law such as marriage and succession.

While the existence of informal, normative and institutional frameworks for governing water resources such as that of the Marakwet is undisputable, there is no explicit recognition of such customary law systems in the statutory legal framework for water governance, which hinges on the Water Act, its supporting legislation, and the national policies on water.

The Water Act, which is the main legislation governing water resources in the country, preceded the Constitution. Under the new Constitutional dispensation, the overall responsibility for the management of water resources and the upholding of the human right to water lies with the national government. However, the provision of water and sanitation services has been devolved to the county governments.

The Act does not explicitly refer to the right to water and sanitation, as the Constitution does. Neither does the Act contain explicit provisions relating to gender equality, discrimination and empowerment. However, strategic and policy documents relating to water resources have, in recognition of the provisions of the Constitution, addressed issues of gender discrimination, empowerment and affirmative action. The National Water Quality Management Strategy (2012-2016) recognizes the importance of the effective participation of women at the catchment and sub-catchment levels, as they are critical water managers and players.

The Water Act is currently under review in a bid to better align it with the Constitution. Although not yet enacted, the draft Water Bill 2014 points to the direction the new Water Act is likely to take. The various drafts of the Water Bill have contained provisions seeking to operationalize article 43 (1) (d) of the Constitution. The institutional frameworks established under the revised Water Act will, by nature of the provisions of the Constitution on gender representation, be required to foster greater

41 Constitution of Kenya, 2010, art. 2(4).

participation of women in decision-making related to water resources.

The Water Act makes no explicit recognition of customary rights or law. Neither does it recognize, as is the case with other water legislations in Africa, any pre-existing customary rights over water or the rights of traditional institutions. This raises questions of legitimacy of such customary law systems for water governance in the context of the statutory water governance framework.

Amongst rural communities in Kenya, such as the Marakwet, common water resources have multiple uses, including domestic use, sanitation, and irrigation for both subsistence farming and livelihoods. The statutory framework for water resources is founded on a dichotomy of water uses, with water and sanitation distinct from irrigation and other agricultural and productive uses. Consequently, the Water Act does not explicitly regulate the use of water resources for irrigation, which has a separate legal framework. Nevertheless, the requirement for a permit to extract water resources implicitly extends to extraction of water resources for irrigation.

The legal framework for irrigation is inadequate. There was no comprehensive national policy for irrigation until 2014, when a draft irrigation policy and draft Irrigation Bill (2015) was developed. The existing Irrigation Act has a limited scope, extending only to the management of national irrigation schemes through the National Irrigation Board. This is despite the fact that other categories of irrigation schemes exist in Kenya. There are three main categories: private schemes operating as commercial enterprises, which are developed, owned and managed by individual farmers or companies; public schemes, which are developed and centrally managed by government agencies through grant of tenancy rights to farmers; and smallholder community irrigation schemes, which are owned, operated and managed by their users through water user associations and which operate on a cost-sharing scheme between the users, government, and development partners.

The Marakwet irrigation scheme under study could, at first glance, appear to be an example of a smallholder community irrigation scheme. However, as has been discussed in the course of this case study, the water resources from the Marakwet irrigation furrows are not, as is the case with other smallholder community irrigation schemes, governed through formally established water user associations but rather through customary institutions such as the Markwet Furrow Council of Elders. In addition, the water resources, according to the users interviewed, are used for drinking, other domestic uses, livestock watering and irrigation. This is

partly due to the limited access that community members have to piped water.

Thus, the Marakwet system of water resource governance does not fit neatly into the categories anticipated by the statutory legal framework for water resources.

4.2 The importance of customary water governance systems

Kenya has a long history of customary institutions for governance of water resources (Davies, 2008; Ssenyonga, 1983). These institutions play a vital role in water resource management, particularly in rural areas where two-thirds of the country's population lives. A comprehensive legislative and institutional reform of the water sector in the country conducted at the beginning of this decade was intended to co-ordinate all institutional arrangements for water resource governance into the statutory legal framework.⁴² The reforms were also directed at improving provision of water and sanitation both in urban and rural areas.

However, in spite of the reforms, water management in the country continues to be a challenge. Approximately 60% of poor people living in rural and urban areas in the country do not have access to adequate water and sanitation services.⁴³ The reason for this is not just physical scarcity but economic scarcity of water, the latter referring to a lack of water caused by lack of infrastructure or investment necessary to ensure adequate water supply.⁴⁴ Notwithstanding the government's efforts to increase investment in the sector, formal administrative structures set in place by the water law continue to face serious challenges in meeting the increasing demand for water, given their limited resources and implementation capacity (Gakubia, 2010).

In view of the above, customary institutions developed by users have, in the absence of State supplied services, provided the framework through which users develop water infrastructure and manage the allocation of water resources (Mumma, 2007). This provides an important motive for investigating the nature of customary frameworks used to govern water resources so as to appreciate their features and the extent to which they are in congruence with the norms and institutional frameworks anticipated by statutory frameworks.

Kenya's water policy acknowledges that women are among the most

42 The reforms resulted in a new Water Act in 2002.

43 Ministry of Water and Irrigation Kenya, 2008.

44 Ibid.

affected by inadequacies in water supply and sanitation given that they often form a significant proportion of the poorest in society.⁴⁵ A fundamental policy directive adopted by the government to address the plight of women's access to water and sanitation is thus the implementation of the one-third constitutional provision for participation of women in water sector leadership, as well as their encouragement to invest in the water sector.⁴⁶

Given the importance of women in water and sanitation issues, it is imperative to investigate the gender dimensions of customary frameworks for water governance to determine the extent to which they are in congruence with the policy and regulatory frameworks for water resource governance.

4.3 Recognition of customary water governance systems

In spite of the absence of explicit provisions recognizing customary law, the legitimacy of these informal frameworks may be inferred in various laws. For instance, it may be argued that the various provisions in Kenya's Water Act recognizing and fostering the right of community members to participate in the governance of their water resources is an implicit legal basis for such customary law frameworks. Arguably, article 11 of the Constitution by recognizing the importance of protecting and fostering the culture of Kenyan people also implicitly envisages the legitimacy of customary, normative and institutional systems of water governance.

Although subordinate to written law, customary law in Kenya has been recognized in practice. The unwritten nature of customary law has been acknowledged by judges who have applied it subject to the requirement of proof of its existence as a question of fact.⁴⁷ Courts have thus admitted evidence on customary law as provided by witnesses who often consist of elders regarded as knowledgeable of customary laws. The law is thus potentially capable of recognizing the existence of Marakwet's customary law on water governance provided such law can be proved as a question of fact.

5. WOMEN'S RIGHTS IN CUSTOMARY WATER GOVERNANCE

5.1 Marakwet Norms on participation of women in water governance in the context of the CEDAW and the Maputo Protocol

Article 14(1) of the CEDAW explicitly provides for the need for State Parties to 'take into account the particular problems faced by rural wom-

45 Government of Kenya (2012).

46 Ibid.

47 *Kinyanjui Kimani v. Muiru Gikanga and Another* (1965) EA 735.

en' as well as the 'significant roles that rural women play in the economic survival of their families'. Both the CEDAW and the Maputo Protocol highlight the gender stereotypes that underlie rural water governance systems resulting in women and girls bearing a heavier burden in the responsibility for fetching and securing safe water for domestic chores, personal use and livelihoods. To redress this, Article 5(a) of the CEDAW and article 2.2 of the Maputo Protocol require State Parties to take all appropriate measures to eradicate gender stereotypes embedded in norms, beliefs or practices. Further, the Maputo Protocol obliges contracting States to take all appropriate measures to 'provide women with access to clean drinking water, sources of domestic fuel, land and the means of producing nutritious food'.

An analysis of Marakwet's customary law water governance system confirms some of the gender stereotypes anticipated by gender specific instruments in relation to the plight of rural women and the management of their water resources.

The gendered analysis of the Marakwet customary law system highlights some apparent forms of direct discrimination. A fundamental norm of the Marakwet customary law for the governance of water resources provides that only male community members can be involved in furrow issues. Women are, under pain of curse, prohibited from participating in governance issues relating to the furrow system which forms the basis of water resource management in the community. The respondents confirmed that the reason for this fundamental distinction in roles is based on social, cultural and religious notions of the gendered roles of community members.

Direct discrimination may also be inferred in some of the customs and practices of the Marakwet. The fact that women are prohibited from participating in the construction and management of the furrows seems to suggest that they are excluded from development and management of water resources. The Council of Elders responsible for furrow issues explained that decision-making in relation to allocation of water resources is often conducted after expeditions to maintain or repair furrows. As women do not participate in these tasks, they do not have a direct say in the allocation of water resources. This constitutes direct discrimination: exclusion from construction means that one cannot participate in decisions regarding the allocation of water rights. Such discrimination could, thus, constitute a mechanism for keeping women away from claims to water, or could make water more expensive for them by requiring women

to hire men to speak or act on their behalf. Such discrimination against women is exacerbated by the fact that they have different perceptions from men on water use, quality and sanitation as demonstrated by the study and thus their exclusion could imply that these perceptions are not taken into account.

The right of women to participate in decision-making related to water resource management is recognized by international gender instruments. Article 14(2) of the CEDAW obliges State parties to ensure that rural women have a right to 'participate in the elaboration and implementation of development planning at all levels'. As demonstrated in Section 3 of this chapter, women in the Marakwet community are by custom not permitted to participate directly in the Council of Elders responsible for furrow issues. They do not participate in the consultative furrow committee meetings established after work on a furrow and through which resource allocation is discussed and determined. In fact, there is a taboo associated with women participating in furrow issues. As primary users and actors, this exclusion constitutes a form of discrimination.

The research further revealed that the knowledge of women regarding the community's water needs and furrow issues is no less than that of the men, despite their exclusion from the physical design and construction work. Arguably, women thus have the potential to make decisions on water resources. Further, there is, among younger women, a keen interest to participate in water governance issues.

As discussed in Chapter 2 of this book, systemic gender discrimination is perpetuated by certain negative gender stereotypes that foster harmful cultural traditional practices that are based on the mistaken notion of inferiority or superiority of either of the sexes. The investigation into the plight of Marakwet women and girls seems to point out some of these stereotypes. As confirmed by most respondents the primary responsibility of sourcing water for domestic use belongs to women. However, in the case of the Marakwet the role of women is limited to any additional water required to supplement the water from the furrows, as the primary source of water is the furrows which direct water to the household. As was observed the furrows provide water for their multiple uses and they resort to other sources of water only in cases of shortage or where the household seeks more potable water. The responsibility of ensuring the furrow water is sufficient for the household needs lies with the men and this responsibility extends to the multiple uses of water. However, as noted, insufficient water supply from furrows results in women bearing a

greater burden in seeking supplementary sources of water.

Arguably, Marakwet's customary law does not provide opportunities for participation or inclusion of women in water governance issues. As confirmed by the data collected, gendered roles in furrow management and certain norms, customs and beliefs are inherently discriminatory. The apparent conclusion from the above observations is that Marakwet's customary law framework for water governance needs to address the apparent inherent forms of discrimination against women.

5.2 Redressing conflicts and the disconnect

The foregoing gendered analysis of the Marakwet's customary law system for furrow governance demonstrates some discriminatory elements in the normative and institutional structures. As noted above, the CEDAW requires that State Parties take legislative and other measures to eliminate these forms of discrimination contained in informal normative and institutional structures of governance. As Musembi aptly discusses, the achievement of the CEDAW objective in such contexts requires an intricate balance between the right of communities to self-governance of their resources through customary law systems and the right of women to be protected from gender-based discrimination (Musembi, 2013). This section analyses two options for remedying the apparent discriminatory practices observed in Marakwet's system.

5.2.1 Change of discriminatory customs through State Law

One approach to redressing the apparent gender inequalities inherent in Marakwet's customary law system would be to resort to the national laws and policies which prohibit discrimination among women and form a basis for the right of women to participate in decision-making relating to water resource governance.

The current statutory framework for water governance provides opportunities for Marakwet women to use formal law to assert their right to participate in water resource governance. The Constitution of Kenya 2010 is replete with provisions barring discrimination along gender lines as well as provisions promoting affirmative action in ensuring representation of women. These provisions could provide windows of opportunity for the Marakwet women to assert their right to water resources as well as the right to participate in water governance. The provisions on the protection of the right to private property, the recognition of communal property, and the elimination of gender discrimination in law, customs and practices related to land and property in land provide a constitutional

basis for Marakwet women to assert their right over land and water resources.

Article 27(3) guarantees that women and men have the right to equal treatment and thus to equal opportunities in the political, economic, cultural and social spheres. This provides a constitutional basis for challenging the exclusion of women from customary law governance institutions such as that of the Marakwet. The Constitution goes further in article 27(6) by creating an obligation on the part of the State to take legislative and other measures including affirmative action programmes and policies designed to redress past discrimination. Arguably, these provisions provide a strong basis for using a human rights framework to assert the rights of Marakwet women to challenge discriminatory customs and practices in their customary law. As noted, the supremacy of the Constitution over customary law would render any inconsistencies with the rights granted invalid.

The obligation to put in place affirmative action extends to the obligation to ensure that minorities and marginalized groups have reasonable access to water (art. 56). This provision could potentially provide a legal basis for women in Marakwet to advocate for the support of formal State institutions in ensuring their effective participation in water governance issues.

While the use of statutory provisions is possible and likely to resort in successful outcomes given the subordination of customary laws to other written statutory laws, the appropriateness of such an approach needs to be critically evaluated. The investigation into Marakwet's customary law governance system for water resources demonstrates the complexity of water governance issues and thus the need for a holistic approach to redressing apparent gender inequalities in existing systems.

Further, there is a need to appreciate the specific context in evaluating the presence of and need to redress gender stereotypes in relation to water resources governance so as to avoid applying models that assume a simplistic approach to gender equality and empowerment in which a profile for the 'ideal rural female water user' is developed and fostered. Such a female water user should not be engaged solely in the traditional role of fetching water for domestic use or subsistence agriculture but should also play a central role in planning and decision-making related to the management of integrated water resources. Further, gender equality and empowerment would require that rural woman also play a central role in the contribution of resources for construction and maintenance of water

infrastructure and be involved in regulation of water distribution. Such approaches when translated to policy and law could have the opposite effect intended as they may only serve to reinforce the inequitable gendered divisions of labour by increasing women's workloads (Clever, 2000).

This perception of gender equality is to a great extent confirmed by case studies that have been put forward as depicting best practice rural water and sanitation governance frameworks. Successful outcomes in such projects are described in words such as: 'Women are actively involved in decision-making and now feel strongly that they are equally effective agents of change with men'; 'Women now have more time to dedicate to income generating activities'; 'There is increased acceptance of women's leadership roles by community members, local government and NGOs, as well as an increased collaboration between women and men'(United Nations, 2006).

The pursuit of gender equality in the context of customary law systems for water governance such as that of the Marakwet should be undertaken with caution. Such efforts must appreciate the complexities of gender discrimination in the context of legal pluralism. An example of such complexities include the notion of intersection discrimination, requiring that efforts to achieve gender equality do not overlook the significant differences between and among 'particular women' depending on their age, social status, place in course of life as well as other factors.⁴⁸ For instance, the discussion with the women respondents in this particular case study demonstrated the complexities of power structures in the context of social, cultural and economic considerations. A significant percentage of the women interviewed indicated they had no problem with the status quo. With probing, the women indicated that though they did not have direct access to the decision-making, their influence in the family setting provided opportunities for influencing the decisions made by their male representatives in the Council of Elders responsible for furrow issues. Such nuances demonstrate that participation ought not to be understood solely in the context of participation in public life. Gender relations and power dynamics in the context of a living customary law are often complex.

The use of statutory rights to ensure inclusion of women in the Marakwet's customary law water governance system is not, *per se*, a silver bullet and will only be effective if it results in gender equality without threatening the very sustainability of the entire customary law governance system.

48 See Chapter 2.

5.2.2 Dynamics of Change from within the Customary Law Governance System

The study of the Marakwet's customary law system for water governance demonstrates that as is the case with most informal systems of resource governance, the characteristics of the system design contribute to its sustainability (Basurto and Ostrom, 2009). One of the design features crucial to the sustainability and success of such systems is their capacity to adapt to change (Bosselman, 2005). Marakwet's customary law system for water governance pre-dates colonial rule and subsequent statutory laws.

However, the furrow system is also facing challenges particularly with respect to domestic water supply and sanitation, as well as infrastructure to reduce the loss of irrigation water through evaporation. Further, as discussed in the foregoing section, there are apparent shortcomings inherent in the system in relation to gender equality and the right to participation of women in the system.

Nevertheless, the resilience of this system suggests that such a system contains certain inherent mechanisms that have contributed to its sustainability. In spite of the apparent shortcomings in relation to the approach of the system to gender, the overall resilience of informal systems of water governance such as the Marakwet one has ensured access of women to water resources for irrigation and domestic use particularly in underserviced rural areas. The resort to statutory remedies to redress gender inequality must be applied with caution to avoid threatening the aspects of the living customary law of the Marakwet which, arguably, sustains the functioning of the furrow system.

The gendered analysis of the customary law system of the Marakwet indicates that although based on age-old tradition and customs, the normative and institutional frameworks have evolved over time. While traditionally, the custodian of the customary laws was a Council elected from a group of clan elders, presently younger male community members have been co-opted into the Council of Elders responsible for furrow issues. The respondents explained that this reflects the growing appreciation of the value of formal education. The young people incorporated, though lacking in experience on furrow issues, have proved resourceful particularly in relations with potential development partners and also in the use of new technologies for maintenance of the furrows, for example, the use of cement and other more durable materials for construction (Gachenga,

2012). This demonstrates that the existing inherent mechanisms for evolution of the customary law system can be used to redress the apparent gender inequities. Such an approach is likely to be more systemic and respectful of the complexities of the existing customary law water governance system than the exclusive use of statutory law to eliminate gender discrimination.

As the clan elders and community members participating in this research indicated, some of these challenges could be resolved through co-operation with State systems and resources. The clan elders interviewed indicated that they do not view the customary and formal system as being mutually exclusive in the water resource governance, but rather as ideally operating as a unit to ensure sustainability of water resources.

6. CONCLUSION

This chapter describes and discusses community based water governance from a gender perspective. The case study demonstrates the customary norms and institutions governing the Marakwet furrow governance system with a focus on women's right to access water for irrigation and domestic use.

The Marakwet furrow system continues to provide the primary source of water for productive and domestic uses among the Marakwet. The water resources from the furrow are governed by a customary normative and institutional framework, which has its origin in the construction of the furrows.

The focus on women helps to highlight apparent forms of discrimination against women in the normative and institutional structures for the furrow governance. The male dominated norms concerning design, construction and maintenance of furrows constitutes an exclusion of women from the direct role of decision-making. These norms point to the need for the elimination of gender discrimination as required by the Kenyan Constitution, the CEDAW and the Maputo Protocol, in Marakwet's customary law system.

The chapter illustrates the dilemmas and conflict that plural water governance: that is the coexistence of formal and informal norms and institutions, gives rise to from a gender perspective. On the one hand, in a situation where the State does not provide water resources, rural women's access to water for multiple purposes is dependant on their rights and duties as members of a group that hold water in community. On the other hand, their rights and duties as community members are inferior to those

of men and come into conflict with their rights as individual citizens with equal rights under the Kenyan Constitution.

While statute provides for mechanisms that could be used to redress this discrimination, its application should not be at the expense of the sustainability of the customary law system for furrow governance.

The analysis of the normative and institutional frameworks of this customary furrow governance system confirm that the governing norms are a form of living customary law which are evolving to reflect changes in society.

An integrated approach that seeks to appreciate the capacity of living customary law to evolve and reflect changes necessary to ensure its sustainability, and seeks to build on this together with the positive aspects of statutory law, provides the best solution to addressing the issue of gender discrimination in the context of legal pluralism.

Part III

Malawi

Chapter 7

The Political Economy of the Human Right to Water and Women in Malawi

Ngeyi Ruth Kanyongolo, Timothy Chirwa, Asiyati Chiweza and Michael Chasukwa

1. INTRODUCTION

Malawi is a country endowed with relatively abundant water resources. An extensive network of rivers and lakes cover more than 21% of the country's territory (Mulwafu and Ferguson, 2004). Malawi has 16 billion cubic meters of annual renewable water resources. Major water users include the agricultural sector, domestic sector, industry, navigation, recreation and tourism, and fisheries. Eighty per cent of water is used by agriculture. Domestic water uses include human needs (drinking, bathing, cooking) and income-producing activities such as brick making, livestock watering, beer making, and gardening. Nonetheless, Malawi is considered a water stressed country with less than 1,700 m³ of freshwater per capita. This stress owes more to challenges faced in the distribution than decreased availability of water. However, as the country's population grows, water availability declines further. Future water demand projections pre-

dict that Malawi will fall to less than 1,000 m³ of fresh-water per capita by as early as 2015, making it a 'water scarce' nation (see Malawi: Water and Sanitation Profile, 2007).

Malawi, in accordance with the World Banks' development indicators, continues to face challenges of impoverishment among its population. In 2010 the portion of the country's population living below the poverty line was 50.7% (World Bank, 2015). This poverty manifests itself, at a household or individual level, in the lack of access to available and adequate water. According to the National Statistical Office (NSO), the proportion of households with access to 'an improved water source' is about 85% (NSO, 2013). In rural areas, boreholes constitute the primary supply of improved water. However, boreholes are not evenly distributed in these areas and substantial numbers are not functional. Poverty faced by the rural population limits their ability to make timely repairs to these boreholes. Among Malawi's urban population, 35% faces water poverty. While communities in urban and peri-urban areas are connected to the formal water supply system, a large number of households cannot meet the cost of water and are forced to use water from unprotected sources.

As stated by WHO, globally, water poverty is a cause of several water-borne diseases (WHO, 2013) among the 'water poor', the majority of whom are women, causing 3.4 million deaths annually and 4,000 deaths of children each day (WHO, 2013). Similarly in Malawi, the disease burden as a result of water poverty continues to be high. Further to this, the United Nations Development Programme holds that the problem of lack of, or inadequate, access to water results in, or reinforces, social exclusion among the water poor. This is especially because it leads to exclusion on other domains, such as education or health. In Malawi, women spend a lot of time and effort on fetching water. This limits their productive capacity and reinforces the social exclusion that they face.

The problem of limited access to water in Malawi, just as elsewhere, is a human rights issue under international and national human rights law. It implicates several fundamental rights such as the right to health, the right to life, the right to dignity and the right to development. International human rights law has advanced the right to water as a vehicle through which access to water among the water poor can be increased. Added to this, an emergent discourse posits that decentralization of water governance structures, with spaces for women that allow them to participate in the governing of water can effectively facilitate the realization of the right to water, with the result of improved access to water among the deprived.

There is a gap between Malawi's human rights obligations and the Constitution on the one hand and national laws and policies on the other. Malawi has ratified the international and regional instruments that embody the human right to water such as the International Convention of Economic, Social and Cultural Rights (ICESCR), the Convention on the Child Rights (CRC), the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) and the Maputo Protocol. Nonetheless, it has taken about 15 years for the Water Resources Bill to be passed by Parliament. Despite being assented to by the President, the Water Resources Act of 2013 is yet to come into force. However, a progressive interpretation of the Malawi Constitution does provide for the right to water without discrimination. There is, however, a tense relationship between the human right to water embedded in national law and Malawian water policy (2005), which is based on the user pay principle, and this implies that communities, NGOs and the private sector will bear the cost of maintenance and operation. It is against this background that the Malawian Gender, Human Rights and Water Governance research team carried out a study of how the human right to water has made its mark on national laws and policies and implemented in selected rural and peri-urban areas (see Chapters 8 and 9). The aim these studies was to understand how women, as holders of the right to water, participate, influence and benefit from decisions of institutions on access to water at the local as well as at national levels. Our research shows that access to water is not a politically neutral exercise: that the usefulness of the right to water depends on the political and economic contexts in which it is exercised. It is within this context that we argue in this chapter that the right to water is unlikely to translate into improved access to water among the deprived, especially women, in Malawi given the disjuncture between the rhetoric on the right to water and the 'reality' of the right to water on the ground. We further argue that the outcomes, successes and failures of the human right to water will be influenced and shaped by political processes resulting from the interaction and contestation of diverse stakeholders involved in the 'governing' of access to water and endowed with differing forms and varying degrees of power, authority and influence. This chapter concludes that the prospects of the human right to water translating into improved access to water among the water poor are diminished given the prevalence of the power politics around water including women's participation in water governance structures as active citizens who can demand the implementation of the right to water from the relevant duty bearers.

The chapter is organized as follows: Section 2 articulates the conceptual and theoretical framework within which women's experiences of the human right to water are understood and analysed. Section 3 presents a historical background to the legal and policy context for water provision in the pre colonial and colonial era. Section 4 discusses the human right to water and post-independence water laws and policies. Section 5 provides an in-depth discussion of the human right to water and perceptions from below. Section 6 discusses the institutional framework for the human right to water. Section 7 critiques the financial outlay for the provision of water. Lastly, Section 8 offers some concluding remarks.

2. CONCEPTUAL ISSUES: POLITICS AND THE POLITICAL ECONOMY ON WATER

The basic question for inquiry in this chapter is whether the outcomes of the right to water in the form of improved access to water among the water poor, the majority of whom are women, depend on the nature of the politics and water governance institutions that underlie the 'governing' of access to water. To succeed in this inquiry, there is need for clarity of conception of the following terms: politics, institutions, water poverty, and access to water in the broader context of critical gender principles of participation, equality and non-discrimination.

2.1 Politics and the water poor

The term politics is open to various conceptions. In this paper, politics is understood as the determination of society's goals and ideals, the mobilization of its resources to achieve those goals and ideals, and distribution of rights, duties, costs, benefits, rewards, and burdens among members of that society (Murphy, 1979, quoted in Kanyongolo, 2004). The understanding is that the outcome of the right to water will be driven, influenced, and shaped by politics resulting from the contestation of diverse interests made up of differing forms and degrees of power, licit or illicit, formal or informal. The view is generally that politics entails who should gain access to water, who should pay for it, how much water should each person receive, and how it should be utilized. Over and above this, the understanding is that political contestations underlie and shape the institutions that govern access to water. Such politics are manifested in the architecture of institutions, in the disciplining of social relations, in ideas about what constitutes access to water and in the definition of the right to water.

Institutions, as suggested by writers such as Leftwich (2006) as quot-

ed in Chinsinga (2008), can be understood as the essential structural properties of societies, which are constituted by the rules and procedures that constrain some forms of behaviour and interaction between people and groups and enable others in social, economic and political domains. For these writers, institutions can be categorized as formal and informal. Formal institutions, as these writers variously contend, are rules and procedures that are created, communicated and enforced through channels widely accepted as official whereas informal institutions are socially shared rules, usually unwritten, created, communicated and enforced outside officially sanctioned channels. Institutions therefore represent durable social rules and procedures, formal or informal, which structure the social, economic, and political relations and interactions of those affected by them. They thus forbid some forms of behaviour and encourage others, and the form that such rules take may either hinder or promote development (Leftwich, 2006). For his part, Chinsinga, 2008, maintains that institutional arrangements are not neutral: they distribute advantage to some and disadvantage to others and thus express a mobilization of bias in some way or another. It is for this reason that institutional change is heavily contested by diverse interests with different forms and degrees of power, influence and authority, creating in the process winners and losers (Leftwich, 2007; Leftwich and Hogg, 2007, Chinsinga 2008). Besides, politics of access to water is very closely linked to the processes of state formation and nation building. This is because, since the colonial days, states have sought to create and transform the institutions that shape access to and use of water just as they have sought to construct the means by which access to and use of water is justified and legitimized (Alexander, 2006: 118). It would be contended that this is usually part of the State's efforts to fashion institutions of governance able to order, discipline, develop and at times even represent the people. In this context, one fundamental assumption in this chapter is that the right to water, within the context of local institutions that govern water, can result in improved access to water for the water poor and the excluded.

With respect to 'water poor', the starting point is a conception of the 'poor'. Observably, there are various conceptions of the 'poor', depending on context and history. Based on the World Bank's definition, the measure of poverty is the living of a person on less than a (US) dollar a day. It has been said that in nations which do not use the US dollar, 'a dollar a day' does not translate to living a day on the amount of local currency as determined by the 'exchange rate'. Rather, that it is determined by the

‘purchasing power parity’ that would look at how much local currency is needed to buy the same things that a dollar could buy in the United States. Notably, this would translate to less local currency than the exchange rate in a poor country such as Malawi, as the United States is a more expensive country. This chapter, nonetheless, understands the poor to be people who live on less than a dollar a day, in terms of daily living on the sum in Malawi Kwacha as determined by the prevailing exchange rate. In this chapter, the supposition is that living on less than a dollar a day, in terms of the Malawi Kwacha as determined by the prevailing exchange rate, will manifest itself in lack of, or limited access to water. As such, the water poor are those who experience pronounced deprivation of water due to low incomes and the inability to access water to meet their daily basic water needs.

In order to adequately establish that the water poor lack access to water, it is paramount to determine what ‘access to water’ entails. Generally, access to water is understood to entail four overlapping dimensions, as is stated by the CESCR Committee in General Comment No. 15 on the human right to water of 2004. Firstly, that it entails *physical accessibility*. This means that water and adequate water facilities and services must be within safe physical reach of all sectors of the population, which is defined as ‘within the immediate vicinity of each household, educational institution and workplace’. It is said that water should be of sufficient quality, culturally appropriate and sensitive to gender, life cycle and privacy requirements. Secondly, that it entails *economic accessibility*. This means that water, water facilities and services and the direct and indirect costs and charges associated with securing water, must be affordable for all. Thirdly, that it entails *non-discrimination*. This means that access to water and water facilities and services should be realized for all manner of people, in law and in fact, without discrimination on any of the prohibited grounds – race, colour, sex, etc. And finally, that it entails *information accessibility*. This is defined as including the right to seek, receive and impart information concerning water issues. This chapter understands ‘access to water’ as entailing that these four incidents of access are mutually exclusive. In this regard, we employ the term ‘access to water’ to denote the absence of any of these four incidents. However, it is primarily employed to refer to economic accessibility and physical accessibility.

At the core of this chapter is an assumption that the ‘right to water’ – within the prevailing institutions that govern access to water at the national and local level – hardly translates into improved access to water

among the water poor because it is yet to attain a 'reality'. In advancing this assumption, this paper relies on Scandinavian legal realism as a framework for analysis. The view among Scandinavian realists is that the only 'reality' to which 'law' may correspond is psychological reality. Within this school of thought, Hågerström, (as quoted by Mindus, 2009: 194) contends that one has a 'right' only when its assertion produces psychological sensations, especially the sensation of 'power', in the right holder. Conversely, an assertion of the right typically produces in the correlative duty bearer sensations of constraint. Within this framework, the paper supposes that the 'reality' of the right to water entails two occurrences. Firstly, it entails that, at the psychological level, its assertion should produce in the right holder sensations of 'power' to claim or demand access to water, and, in a correlative duty bearer, sensations of restraint from depriving the right holder access to water, or of compulsion to do something about the water poverty faced by the right holder. Secondly, it entails, at the level of 'action', the right holder, as an 'intelligent' being acting with choice, taking positive steps to demand his or her entitlements to water, and then the correlative duty bearer taking positive steps to effectively respond to the demands of the right holder.

2.2 Political economy and water governance

Political economy discourse focuses on the interaction between political and economic processes, examining how power and resources are distributed and contested in different contexts. Political economy analyses look beneath surface appearances to uncover the underlying incentives, formal and informal institutions, and economic structures that drive, or constrain, change (O'Meally, 2009). From this point of view, we see that water resource use in Malawi, as elsewhere, is governed by a range of political, economic and institutional systems. Applying political economy analyses, we can establish that such systems contribute to or hinder pro-poor change and identify where the main opportunities and barriers for water policy reform exist, and thus provide information on how positive change can be promoted.

Various political economic factors are barriers to successful management of water use in Malawi. Firstly, there is power and vested interests in water management. For instance, from the late 1990s the Malawi government built a number of water kiosks in urban areas – most were built through the Malawi Social Action Fund.¹ The City of Blantyre also

1 See discussion in chapters 8 and 9.

built a number of kiosks with donor funding. These kiosks were managed through community development committees. There was, however, serious political interference in the running of these committees by the then ruling party, and the committees diverted funds to the party. Vested interests and political patronage made it impossible for the Board to disconnect the kiosks to enforce payment of bills. By 2007, the kiosks had accumulated massive water bills and the Blantyre Water Board (BWB) disconnected them all. It had to take a presidential directive (following a public outcry for water; by then, there was another party in government) that the kiosks were reconnected. It was within this context that Water User Associations (WUAs) were tried out by the BWB as a mechanism for managing water use in Blantyre – whereby water management was weaned as far as possible away from political interference.

Secondly, political economy is interested in the impact of values and political ideologies on behaviour. In Malawi, as elsewhere, various ‘sustainable water management schemes’ face political economic obstacles. Contrary to some narratives, ‘sustainable water development’ can mean different things to different actors depending on their interests, values and ideologies (O’Meally, 2009). It is perhaps because of disagreements on how to operationalize ‘sustainable water development’ that an official from the Regional Water Development Officer for the southern region of Malawi indicated that donors may have their own sets of conditions attached to the funds, which they give to NGOs that directly provide water and such other services, but that these conditions may conflict with set standards of the Ministry of Water Development and Irrigation (MWDI). Thus, there are times when NGOs, who try to conform to donor conditions, may find themselves in conflict with the ministry’s set standards. As such, practitioners should be aware that their approach may not be politically neutral and may well be contested. By better appreciating this, practitioners can identify the actors who are likely to support, or oppose, their understanding of water management, and can promote consensus-building that goes ‘with the grain’ of political reality (O’Meally, 2009). Such insights can help practitioners to pinpoint the processes that hinder water reform and to devise strategic entry points to address any such hindrances.

It is against this background and within the above context that this chapter links the research findings presented in chapters 8 and 9 to the broader historical, political, economic and legal context of the right to water in Malawi. The aim is to provide a picture of how women take

part, influence and benefit from institutions, mechanisms and processes on use and management of water at the local as well as at national levels in Malawi.

2.3 The empirical case studies

This discussion in this chapter relates to data that was collected as part of a three-year research study that began in 2011. The aim of the study was to analyse how the right to water was adopted or resisted at the national and local level. It was based on a pragmatic grounded approach that used a mixed methodology by carefully considering the usefulness and appropriateness of various alternative procedures including qualitative or quantitative methods. (Yin, 2003) Initially, during the pilot study, a qualitative grounded exploration of women and human rights in decentralized water governance in Malawi was adopted. This was to allow a detailed analysis of local water governance and learn from women as citizens by identifying their experiences and knowledge of the WUA, and the evolution of the system. We thus took women's perceptions and practices as the starting point. By observing women in sites where they experience the issues under study, interpreting their narratives and material practices, it was a useful approach for gaining insight into the challenges women face with regard to access to water, their inclusion/exclusion in WUA processes, and the practice of participation (Denzin and Lincoln, 2005). However, lessons from the pilot study revealed that there was need for a deeper triangulation of evidence and that certain issues, such as extent of women's engagement with the WUAs, and access to information, could not be realistically dealt with or generalized from small samples. We, therefore, incorporated a quantitative approach to supplement the qualitative data. We adopted the mixed model design in recognition of the increased depth of understanding that a judicious combination of qualitative and quantitative methods would offer the investigation regarding the reality of the right to water.

In line with the mixed methods approach, a variety of data collection methods were used. A literature review was conducted, and records of the Nkolokoti WUA board and of water point committees were examined. Semi-structured interviews and focus group discussions with water users in the peri urban area with separate groups for men and women were held. However, borrowing from Bentzon, Hellum and Stewart (1998) we took women's perceptions and practices as a starting point because, in Malawi, as is the case with many African countries, women are the

primary water resource users for domestic purposes and they generally provide most of the labour associated with water collection. Therefore we considered that they would be better placed to understand the intricate dynamics of the WUAs and of water point committees with regard to domestic water provision.

Discussions were also conducted with members of the various water providers. These ranged from male and female members of the Nkolokoti/Kachere WUA executive and Board, WUA kiosk water sellers, WUA members of the secretariat, individual private water providers, NGOs and church actors providing water, to individual women managing unprotected various water sources. Discussions were also conducted with institutional actors providing, regulating and supporting urban water service delivery. These include Blantyre City Council Regional Water office, and Blantyre Water Board officials and the non-governmental organizations supporting the development of WUA water initiatives in the city. Observation of participants and various water sources was also used and photographs were taken in each case.

These qualitative enquiries were followed by a household quantitative survey targeting women water users living around various WUA controlled kiosks in the location. Systematic random sampling was adopted to identify the respondents with every tenth household within the WUA catchment area, giving a total sample of 69 households. A validation workshop was organized in Blantyre where various state and non-state actors with an interest in water provision for peri urban informal settlements were invited. This proved an important mechanism of sharing the study's findings with the relevant stakeholders but it was also an important means of confirming the findings and getting feedback on areas that were not fully grasped by the research team.

3. HISTORICAL BACKGROUND

3.1 Pre-Colonial Malawi

The pre-colonial history of Malawi refers to the history of the country from the pre-historic times to the latter end of the nineteenth century when the colonial period began. (Pike, 1965) Much of Malawi's pre-colonial history, as is the case elsewhere in Africa, remains largely unknown, as it was never comprehensively written down (Nkhata, 2011). But, the picture that emerges from various studies that have been carried out about this period is that pre-colonial Malawi was occupied by various

social groups that exercised authority within their specific precincts. The Lake Malawi basin, with its high borderlands, formed a favourable area for fairly dense human settlement. The north-south oriented watersheds on either side of the lake also afforded an important route for migrating Bantu peoples from East Africa to the area that is now Zimbabwe. Those who stayed essentially form the people of Malawi today (Pike, 1965). These first inhabitants did not live as part of an organized state in the modern sense. They did not have a common legal system and each group was governed by traditional norms that were only considered as binding on members of that group (Nkhata, 2011).

The watershed was part of the reason for widespread human settlement in what is now Malawi. Water was a very important resource in terms of food security and basic human needs such as cooking, drinking, and personal hygiene. Each ethnic group had its own norms, customs, or traditions that regulated access to water among its members. It is, however, generally accepted that ownership of property across various groups in the country in the pre-colonial period was communal. Land ownership belonged, under customary law, to the African communities that occupied it. Within the same framework, and as is suggested by norms, customs, or traditions of the people that have survived to the present day, water was communally 'owned', and available to all. Water was considered indivisible from land. Those who could were obligated to develop water works for the benefit of others.. For instance, neither lake nor river had anything like the prominence in Mang'anja tradition than iron and iron smelting had (Pike, 1965). This suggests that water was indeed a non-issue, available to all, and none was deprived; there was little need, if any, for customs or traditions deliberately designed to ensure access to water among the people.

3.2 Water in the political economy of colonial Malawi

The political economy of Malawi during the colonial period – which began in 1891 with the proclamation of a protectorate over Nyasaland (as Malawi was then known) and ended with independence in 1964 – has been a subject of substantial comment and analysis in a wide range of scholarly work. One of the major themes of these studies is the landlessness of Africans (blacks) that resulted from colonial land law and policies. It is widely acknowledged that the latter structured land ownership in favour of white enterprise (Kanyongolo, 2014). However, unequal and widely divergent access to water has scarcely been interrogated. This may

suggest that access to water was not an issue but as issues of access to land usually correlate with issues of access to water, it seems unlikely. Usually, landlessness entails 'waterlessness'. As ownership of land was being privatised, and appropriated, access to water became an issue, especially among those Africans living on or near white settler estates.

It is also the case that cities and the peri-urban areas in Malawi first emerged during the colonial period. It was during this period that water boards were established to cater for water needs in the developing cities such as Blantyre. By 1930, the BWB was fully in-charge of the formal and informal water supply system in the city. Apart from piped water supplies, the Board was also in charge of wells and boreholes. By 1935 there were boreholes, wells, piped water, and protected wells with buckets, chains and windless handles. This suggests that access to water in the city, and in the country generally, was now a matter of law and policy, with water boards as implementing agencies.

The Water Works Act, of 1923 regulated the establishment and management of water works in Malawi. The Blantyre Water Works Act regulated and controlled the use and management of water in the city of Blantyre. This was later reconstituted as Blantyre Water Board. The Lilongwe Water Works Act of 1947 established Lilongwe Water Works to regulate and control the use and management of water resources in the district of Lilongwe. This was later reconstituted as Lilongwe Water Board.

The focus of State law and policy was the supply of water of adequate quantity and safety. In particular, the State identified the need to supply water in the emerging peri-urban areas. For instance, by 1950, there were plans to provide piped water to Ndirande from Blantyre water supplies. Even so, priority for water provision to Africans was first given to staff in government departments (based on tables that recorded the number of staff, location and where they were drawing water). Ultimately, it became the case that in peri-urban areas the majority drew their water from wells while a smaller percentage obtained their water from water kiosks or stand pipes, and a still smaller percentage drew their water from streams and rivers.

An interrogation of colonial water law and policy in Malawi discloses a fragmentation in law and policy that has not been overcome to date. Water law remains patchy because aspects of it may be found in laws about the environment or health. In addition, the division of tasks between various social actors and levels remains somewhat unclear. Water policy is, thus, pushed in a number of different directions, reflecting the

specifics of the legal situation in the country, such as its overlapping and sometimes contradictory water rights as provided under statutory and customary law, and the difficulties in allocating water in the most socially and economically appropriate manner.

4. THE HUMAN RIGHT TO WATER AND POST-INDEPENDENCE LAWS AND POLICIES

Internationally, the problem of water poverty has provoked debate and has led some to conceive it as a human rights issue. Commentators such as Gleick (1999) pioneered the view that access to a basic water requirement is a fundamental human right implicitly and explicitly supported by international law. Over time, this view has increasingly been accepted: the right to water now forms part of the existing international human rights law. In particular, the United Nations Committee on Economic, Social and Cultural Rights (CESCR) affirmed, in General Comment No. 15, that the right to water is part of the existing international law. Construing Articles 11 and 12 of ICESCR, which provide for the right to an adequate standard of living, the cited Comment states that every person has the right to sufficient, safe, accessible and affordable water for personal and domestic uses. Recently, the right to water has acquired a legally binding effect on States. In July 2012, the General Assembly of the United Nations passed a resolution that formally recognized the right to water (and sanitation). And, on 30 September 2010, the UN Human Rights Council affirmed, by consensus, that the right is an integral part of existing international law and, thus, legally binding on States. In addition, African countries are bound by the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa, 140 Art. Clause 15(a) of the Protocol states that State Parties shall, 'take measures to provide women with access to clean drinking water'.

Based on these and other international instruments, the current dominant discourse asks if the right to water is legally enforceable human right under international human rights law. One view is that a State has a duty to protect, respect and fulfil the right to water. As such, any person who suffers water poverty suffers a human right violation. Such a person has a right to demand that the relevant State institutions fulfil their obligation, and he or she can enforce their right to water through the courts to achieve an effective remedy. It is on the premise of this discourse that various commentators have advocated for the adoption and recognition of the right to water under the laws of Malawi. The view is that the right to water, especially within decentralization of water governance struc-

tures, which allow women to participate in the governing of water, can effectively facilitate the realization of the right to water, with the result of improved access to water among the deprived.

Post-independence, the Water Resources Act of 1969 was enacted at a time when the country did not pay particular attention to issues of human rights. Hence the Act does not formally and specifically recognize the human right to water. Notably, the Act makes provision for the control, conservation, apportionment and use of the water resources of Malawi. It is notable, for instance, that under section 3(1) of the Act ownership of all public water, as defined by section 2 of the Act, is vested in the President. The vesting of public water in the State reflects the 'public trust doctrine' under English law, but especially the thinking under Roman water law (Van Koppen, B., 2007). The Act determines water as a State owned 'commodity', or as a State property, over which the State has discretion to apportion to persons. Further, section 6(1) of the Act grants the State discretion to permit any person having lawful access to public water to abstract and use the same for domestic purposes. Section 2 of the Act defines 'domestic purposes' to include the provision of water for household and sanitary purposes and for the watering and dipping of stock. It could be said that this section guarantees some access to water for the people. However, it is far from providing for the right to water. For instance, the section does not allocate a power to the citizens to demand from the State that it should provide sufficient water, of appropriate quality, and within physical reach for all manner of persons. Crucially, it provides for discretionary power to the State and does not impose on it a legal duty or obligation to ensure access to water.

The Water Works Act, 1996 under section 69 repealed the Water Works Act, Blantyre Water Works Act, and the Lilongwe Water Works Act. It provided for the establishment of Water Boards and water-areas, for the administration of such water-areas and for the development, operation and maintenance of waterworks and water-borne sewerage sanitation systems in Malawi. The Water Works Act did not grant those within the jurisdiction of Malawi a legally enforceable right to water. There is no right, for instance, to demand from the State and the water boards that water should be economically accessible. Yet, the Act was enacted during an age of human rights and after a Bill of Rights had been introduced in Malawi's Republican Constitution. Nonetheless, what the Act principally does, under section 3, is to mandate the Minister to proclaim 'water areas' in the country. As provided under section 4 of the Act, water boards are

established for each of the proclaimed water areas, and these boards are mandated, subject to the general authority of the Minister, to have the control and administration of the waterworks, and to manage and supply or distribute water, in their respective water areas.

Within this context, the Government of Malawi, in 1994, adopted the Water Resources Management Policy and Strategies, subsequent to which the Lilongwe and Blantyre Water Boards were reorganized. Furthermore, a water board was created for each of the three regions of the country, making a total of five water boards in Malawi established under the schedule to the Act. Crucially, all these boards were mandated to operate on a commercial basis emphasizing cost recovery (Mulwafu and Ferguson, 2004). These water boards are mandated to impose charges on water supplied in the respective water areas. In this regard, water is effectively regarded as an economic commodity in the country. Recently, these boards have been encouraged to employ costing principles aimed at managing the consumptive demand of water in their areas. It is said that some aspects of water demand management have been employed by these boards to serve as a disincentive to water wastages (Mulwafu et al., 2002). Of course, it is maintained that these boards do not provide water on full cost recovery principles and that the water demand management principles have not been fully incorporated for fear that this could result in the exclusion of the water poor. For instance, an official of the BWB asserted that these boards consider 'social equity' in their costing of water i.e. water of a certain minimum volume is given a price which ensures that it is affordable to the people in low-income communities. However, experiences on the ground indicate that water remains unaffordable to the poor in the country's peri-urban areas. It has been shown, for instance, that the shift from supply of water paradigm to demand water management systems has had the effect of making poor rural and urban dwellers, often widows, divorcees and single mothers, resort to unsafe water because they are unable to pay (Ferguson, 2005).

Although the above-cited Acts do not specifically provide for the right to water, it is arguable that this right is part of the existing human rights law in the country. It may, for example, be established under Malawi's Republican Constitution (the Constitution). However, the Constitution does not specifically provide for the right to water. Indeed, it was adopted hurriedly to allow for canvassing of public opinion and participation. As a result, most issues, including the protection of socio-economic rights, and which of these rights to enumerate, were not fully discussed and proper-

ly addressed (Chirwa, 2005). Besides, it is noteworthy that the Constitution allows for an expansive interpretation of its provisions (*Nseula v AG*, 1996). Within this framework, the right to water can be read from the other provisions that are expressly mentioned in the Constitution. In particular, section 11(2)(c) of the Constitution states that in interpreting its provisions regard should be given, where applicable, to current norms of public international law and comparable foreign case law. Within this framework, the comments and recommendations from the various treaty bodies, such as General Comment 15 of the CESCR, form such norms of public international law.

In this context, several provisions in the Constitution may be expansively read so as to provide for the right to water. Section 16 of the Constitution, for example, provides for the right to life. At minimum, this right could be read to implicitly provide for the right to water. Indeed, it is arguable that this provision obliges the State to provide a minimum level of water necessary for human survival to all people. From this reading, it could be argued that the right to life provides protection against arbitrary and intentional deprivation or denial of access to safe and sufficient water among the people by, for instance, unaffordable pricing – water being one of the most fundamental and necessary resources needed to sustain life (*SERAC v Nigeria*). Furthermore, section 211 of the Constitution provides that binding international agreements form part of the law of the republic and thus provide for the human right to water have the force of law in Malawi. This lays the basis for incorporating this human right from binding international instruments into the country's legislation and policy framework. Thus, arguably, the human right to water has the force of law in Malawi because the country is bound by several international agreements, such as ICESCR, that provide for the right to water.

The recognition of the human right to water, as a matter of law, in Malawi would mark a significant departure from the economic approach assumed by the country's current law and policy on water. In subsequent sections, this chapter presents realities from the field. The resultant discussion interrogates the impact of the marketization of water on the poor, especially women, and assesses whether the right to water, if formalized under the law, would result in an incremental transformation of the condition of the water poor in the country.

In the main, the post-1994 policy and law on water were heavily influenced by the 'economic approach' that recognizes water as an economic good (Gleick, 1999). Elsewhere, it has been shown that this approach, or

what may be termed as the marketization of water, limits access to water among residents in the peri-urban areas. In countries where extreme marketization of water was attempted, and where, for instance, there was no definite intent in the legislation to prevent water hoarding, speculation, monopolies and waste, the economic framework has resulted in the exclusion of the poor from access to water. In Chile, for example, marketization of water resulted in speculation, hoarding, and impaired water management to the detriment of water users, especially the poor (Bluemel, 2005). Nonetheless, since the adoption of the Dublin Statement (1992) the economic approach has informed the formal provision of water in many countries. Indeed, relevant water policies in Malawi seem to perceive water largely as an economic good: see, for instance, the National Water Policy (2008). Based on the national water policy goals, the policy seeks, inter alia, to promote and advocate water services' pricing and charging systems that recognize water as both a social and economic good in order to institute cost recovery principles.

The 'economic approach' clearly underlies the Water Resources Act (1969) and the Water Works Act (1996), which are the two most relevant pieces of legislation on access to water in Malawi. Before the Water Resources Act of 1969, Malawi was using the English law on the control, conservation, apportionment and use of the water resources. In fact, from 1902, laws of general application in force in England applied in Malawi in so far as local circumstances permitted.² These laws scarcely took heed of human rights as we have understood them since the United Nations Declaration of Human Rights which was adopted in 1945.

The Water Resources Act, 2013 was passed by the Malawi Parliament on 5 March 2013 and was assented to by the President on 9 April 2013. However, it is yet to come into force since the minister has not yet appointed a date by notice published in the *Gazette* for the same as required by section 1 of the Act.

The Act repeals the Water Resources Act, 1969 and under section 161 claims supremacy over other Acts of Parliament including the Environment Management Act, which, incidentally, also claims supremacy of its provisions over other Acts of Parliament provided under section 7 of the Act. The 2013 Act addresses deficiencies of the 1969 Act, particularly its lack of a schedule of offences and penalties; its inadequate provisions

² See the 1902 British Central Africa Order in Council, Article 15(2), otherwise termed the 'reception clause', provided that laws in force in England from time to time applied in Malawi.

concerning water rights, water harvesting, water savings and transfer; and its failure to provide for stakeholder participation. The new legislation recognizes recent international treaties and conventions to which Malawi is a signatory (Ferguson and Mulwafu, 2004).

5. THE HUMAN RIGHT TO WATER AND PERCEPTIONS FROM BELOW

In essence, the 'human right to water' is a legally enforceable claim of anyone to sufficient, safe, accessible and affordable water for personal and domestic use. It entails the State's the duty to respect, to protect, and to progressively fulfil that right without discrimination for residents in its jurisdiction, given its resources, and with, when available, international assistance and co-operation. Based on General Comment 15 of the CE-SCR, the right to water is conceived as entailing three factors applying in all circumstances: availability, quality and accessibility. Availability means that each person must have access to a water supply that is sufficient and continuous for personal and domestic uses, such as drinking, personal sanitation, food preparation, personal and household hygiene. Quality of water means that not only are people entitled to a sufficient, continuous supply of water, but they are also entitled to water of adequate quality. The water for personal or domestic use must be safe and free from micro-organisms, chemical substances and radiological hazards, all of which constitute a threat to a person's health. Additionally, water should be of an acceptable colour, odour and taste for personal or domestic use. Thirdly, accessibility of water means that water and water facilities and services must be accessible to everyone at affordable rate, without discrimination, within the jurisdiction of the State party.

The human right to water entails freedoms and entitlements. The former include the right to maintain access to existing water supplies necessary for the right to water, and the right to be free from interference, such as arbitrary disconnections or contamination of water supplies. By contrast, the entitlements include the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water.

5.1 'Water is life': perceptions among water users

Our study sought to discover if water users perceive themselves as having legally enforceable freedoms and entitlements to water. Our findings indicate that the popular perception in Mpemba and Nkolokoti is that 'water is life'. The majority of people in these areas situate access to water

within the realm of the right to life. The findings revealed that water is perceived more in terms of freedoms than entitlements. The dominant response was that they are free to draw water, and no person can take away that freedom. This perception is perhaps aptly captured in a response by a female water user in Luno Njowe, Mpemba:

Water is freedom. If I have water in my home I am free to do other productive work in my house. If I don't have water, I am not free to do other things. The freedom that water gives me allows me to live my life. If there is no water, I don't have a life (Mpemba, 2011).

Further to this, interactive interviews with the water users revealed a weak sense of water as an entitlement. This is perhaps revealed in a view by one water user:

I am a human being just as others. Every person has umunthu (inherent worth), regardless of their location and status. One can have less water than others only because it is her problem, for instance when she does not have enough buckets, or she is lazy to carry water. Otherwise, no person should have more water than others. This is why I personally cannot allow another water user to draw more than two buckets of water at any singular time. Water is an entitlement to everybody and must be shared equally (Mpemba, 2011)

It is notable that these findings point to a perception of freedoms and entitlements at a horizontal level of application. The water users seem to conceive of these freedoms and entitlements against other fellow water users or third parties. What is pointedly lacking is a conception of these freedoms and entitlements at a vertical level of application, as against duty bearers.

5.2 Right to water as a legal power

The voices from a focus group discussion with women in the study area indicated a view of water as a 'power'. Essentially, most women water users stated that they feel that the right to water gives them a 'power' (*mphamvu*) to ask other water users to refrain from behaviour that can interfere with their access. They also indicated that it gives them a 'power' to engage with appropriate duty bearers on their water issues.

A right as a power is, typically, a capacity to create or change a legal relationship. For he or she, a right (as a power correlatively) creates a duty in terms of a legal liability in a person at the opposite end of a legal relationship. Among the water users we interviewed, there was some glimpse of a perception that they see themselves in a legal relationship with fellow

water users or a third party, and that they can enforce the right to water to make other water users or third parties 'liable' in the traditional venues of dispute resolution. The water users gave examples of instances when a person causing damage to the water facility has been taken before a traditional chief where they were punished accordingly. Even so, there was no sense that they can legally enforce the right to water to make other water users or third parties liable in the formal venues of dispute resolution. More importantly, there was no appreciation that the right to water allocates to them a power, which gives them a capacity to change the legal status of corresponding duty bearers, especially State actors at the national level. Rather, what emerges is a pervasive sense of powerlessness among the water users that they can legally enforce the right to water against others.

Our analysis of the socio-economic characteristics of those who indicated that the right to water allocates to them a 'power' is that, first, they are more likely to live in the rural areas. We reasoned that this is because people in these areas are generally aware of human rights due to various media campaigns. Second, such a perception tends to be among those with some primary or high school education, and with access to information e.g from the radio. Third, they fell in the age range of 20-40. These characteristics were especially apparent from our analysis of those who, as active citizens, mobilized others and initiated the borehole in Luno-Njowe, Mpemba. However, it is also apparent that the people of this area are not fully aware of the right to water as a formal legal determinant, which they can employ to require others, especially duty bearers, to fulfil their obligations. It is also apparent that economically they don't have the capacity to take positive steps to formally enforce this right.

5.3 The right to water at Custom

Access to water can be established from the customs and lived practices of a particular people. It is implicit in practices that strive to ensure that water for basic livelihood needs will be available for all. From the various interactive interviews and observations in the study sites, it was common to find widespread customary norms that specify rights to water for basic needs. There are several traditional beliefs and practices regarding access to water. Most are linked to the care and hygiene of a water point. For instance, there is a point on a stream reserved for drinking water, and another for washing or bathing. There is a striking belief that a person cannot own a natural source of water to the exclusion of others. One

common view was that water is a free good for all. Generally it was felt that even where a person has expended his effort to dig a well on a common land, such a person is not entitled to exclude others from accessing water from that well. He can, however, ask others to contribute towards caring for the well. For some respondents, water is a gift from God granted to man for the benefit of all human beings.

In Mpemba and in some sections of Nkolokoti, there is a relatively low penetration of State agencies. The indications were that customs were strong and State law virtually unknown or regarded as irrelevant with regard to access to water. Several instances were given of how customary practices were backed by local authority and social norms. In Luno Njowe, Mpemba, an example was given of a person who, prior to the construction of the borehole, had dug a well on his land near a stream. He had attempted to exclude the rest from the well. Based on their customary beliefs, concerned villagers reported the matter to the village chief who ordered the man to maintain open access to the well.

It was also evident that customarily access to water is linked to access to land. In Mpemba, it was observable that private land rights seemed to have no adverse effects on access to water. It was common to find the land where a natural source of water is held in common and was open to all. Such was hardly the case in Nkolokoti. Here, private land rights adversely affect access to water. It was notable that a natural source of water, a well for instance, would be claimed as private for the reason that it is located on 'private' land.

Nonetheless, it was apparent that the right to water has a weak correspondence to the formal right to water. Besides, there was no indication that the water users can enforce the right to water at custom against duty bearers in the formal venues of dispute resolution.

6. INSTITUTIONS ON PROVISION OF WATER AND PRACTISE OF THE RIGHT TO WATER

Regarding the issue of institutions on water governance in the country, these may be categorized into two tiers: upper and lower.

6.1 The upper tier

The Ministry of Agriculture, Irrigation and Water Development (MoAI-WD) is the principal institution at the upper tier. It operates at the national, regional, and district level. The ministry draws mandate from the Water Resources Act. Based on this mandate, it has the overall responsibility for the management of water resources in the country. The ministry

is also tasked with the formulation and implementation of policies regulating the country's water resources. Over the years, the MoAIWD has been devolving some of its function to local authorities. The devolution to the district level can best be understood against the backdrop of broader efforts to decentralize service provision authority to local government. It has been said that Malawi has, over the years, been constitutionally committed to decentralization as part of its poverty reduction strategy since the principal legislation underpinning this process was established in the Local Government Act of 1998. Since the late 1990s, there have been a series of initiatives to address this commitment through the decentralization efforts across government. With respect to the water sector reforms in the country, the process is partly being led by the Ministry of Local Government and Rural Development (MLGRD) in an attempt to both strengthen local capacity and improve co-ordination between sectors at all levels. In order to put this into operation, the Ministry of Finance (MoF) established the Local Development Fund (LDF) as the intended countrywide funding mechanism to increase fiscal decentralization and address delivery of all technical public services, including rural water services (Lockwood et al., 2012).

Through the LDF, thematic working groups (including NGOs) in the water and sanitation sector, make decisions on access to water within the context of a 'sector-wide approach'. Stakeholders, including donors, provide pooled funding channelled to the local government to fund provision of water and sanitation services (Lockwood et al., 2012). Parallel to this 'sector wide approach', the MoAIWD also has the second National Water Development Programme (NWPDI). This programme relies primarily on large-scale loans from the World Bank, the African Catalytic Growth Fund, and the African Development Bank, as well as grants from bilateral donors such as the UK's Department for International Development and the Australian Government's Overseas Aid Programme. NWPDI serves as a mechanism to channel these large investments towards provision of water in the country (Lockwood, 2012). It is notable that these efforts and investment initiatives are resulting in the provision of first time access to infrastructure for substantial numbers of the rural population, with some official assessments estimating coverage levels at 77% (Lockwood, 2012). Despite these apparent gains, the water sector continues to face new challenges of second-generation functionality of the water facilities, as well as increasing demand for higher service levels.

As a result of our research we found that the right to water hardly

features in the institutions at the upper tier. Notably, the dominant approaches adopted by the various actors emphasize 'cost recovery principles'. From MoAIWD's National Water Policy (2007), it is clear that the government has adopted and is implementing the 'demand-driven' and 'demand-responsive' approaches. This policy reflects the dominant discourse, as stated under the Dublin Water Principles, which posits water as an economic good. However, this 'economisation' of water has been shown by various studies as having the effect of excluding the poor from access to water (Chirwa, 2012). However, the policy does make a tangential reference to guaranteeing access to water to people, by declaring that the protection and use of water resources for domestic water supply shall be accorded the highest priority over other uses. We noted that this hardly provides a basis of legally claiming the right to water in Malawi. Nonetheless, as stated above, a legal claim to a right to water can be founded on the Constitution. Under section 5, the National Water Policy, to the extent that it is an act of Government, is inconsistent with the provisions of this Constitution regarding the right to water. Thus, arguably, and as a consequence of such inconsistency, it could be said to be invalid.

An interactive interview with an official from Water For People, a dominant NGO in the provision of water in Blantyre, indicated that most non-state actors are driven by 'economic' approaches, especially 'demand driven' and 'demand responsive' approaches. They are guided by the demands of their donors. The emphasis is on the ability of the communities to contribute to the cost of provision and running of a water facility. Some place emphasis on the recovery of such costs. There was no indication that some actors are providing water from the 'right to water' perspective. It is apparent that 'cost recovery' distributes advantage to communities with the ability to mobilize resources and contribute towards cost and running of the water facilities. The communities without such ability are disadvantaged.

Our findings further noted that Malawi had a draft Water and Sanitation Bill (1999). This Bill expressly provides for the right to water and was largely donor driven, although most donors advocate for the economic approach to water provision. It has been observed, (Mulwafu and Ferguson, 2004) that the World Bank and other lending institutions demand, by way of loan conditionalities, that a country such as Malawi should remove subsidies and institute pricing and other regulatory measures, which can limit the demand for water and channel its use to the most productive economic sectors.

While, the Bill indicated recognition by the relevant State institutions that it should include the right to water within a binding national law, its progress through Cabinet and Parliament took over a decade. One official from MoIWD suggested that this slow pace could have been due to a fear of the cost implications. In his view, a right to water would essentially entail the government having to respond to a flood of claims for water, at the expense of other equally pressing priorities and freedoms. Yet water, he opined, is no more of a practical essential need than food, clothing or shelter. However, the delays may also have been caused by the loan conditions of the World Bank and such other lending institutions. Whatever the official reason, the time that elapsed could signal an unwillingness by the relevant State institutions to translate and localize international human rights standards with respect to the right to water becoming a binding national law. One should add that the Malawi government has never reported to the relevant international human rights with respect to issues of the right to water.

This position is compounded by the fact that budgetary allocations to MoIWD are very low. For instance, the share of the MoIWD budget as a proportion of total GoM budget was 0.98% in 2004/05, and 2.01% in 2009/10. This shows an increase, but one that reflects the department of irrigation moving from the agriculture ministry to the water ministry during this period (MoIWD's Sector Performance Report, 2010). But even considering this upward trend, it is evident from the figures that national budgetary allocations to the MoIWD are relatively small.

6.2 The lower tier

Institutions at a lower tier operate at the community level. These consists essentially of WUAs and WPCs. Officially, WUAs are community trusts in local income areas which fall under water areas of a water board, and they manage composites of water kiosks in these areas for the benefit of the respective communities. WUAs are adequately discussed in Chapter 8 suffice to note here that our study of the Nkolokoti-Kachere WUA shows that such an institution is generally composed of an elected board, an executive committee, and paid staff, including a bookkeeper, water sellers, water inspectors, and plumbers. A representative from Blantyre Water Board sits on the WUA's board. The WUA sells water to people through communal water kiosks, where people purchase by-the-bucket water from sellers. A WUA has a legally binding contract with the BWB. In collaboration with BWB, it sets tariffs for water. It is responsible for

paying the BWB for all the water piped to the water kiosks under its management. Because the WUA is paying for the water, it is in its best interests to ensure that the water points are well maintained (no leakages or outages) and serving the community, so that it can continue to make a profit.

From our inquiry, it emerged that, in setting tariffs on water for low-income areas, BWB is guided by principles of 'social equity'. Notably, these principles are not the same as those under the right to water. The 'social equity' principles are discretionary in nature and do not impose a legal duty just as under the right to water. An interactive interview with an official from BWB indicated that tariffs for communal water points under WUAs are greatly subsidised by other consumers on the higher end of social stratum. Also, tariffs are subject to approval by government before being implemented to protect these consumers from prohibitive water tariffs. From this interview, it is clear that the official narrative is that BWB and water boards elsewhere in the country do not make a profit or even sometimes recover their full costs from water sold by WUAs. However, it was not possible to verify this point because of difficulties in accessing the accounts on returns from sale of water under WUAs.

Nevertheless, observations on the workings of the WUA reveal that it is heavily oriented towards making a profit. The cost that BWB puts on a unit of water sold by the WUA, is lower than would have normally been the case. This allows the tariffs that the WUA puts on water to be relatively lower, thus enabling people to access it. But as shown above, this cost of water is still much higher than people can afford. This results in lower quantities of water per person in a day than is recommended by the World Health Organization. The observation also showed that the BWB, through its representative on the board, exercises a soft power, which can limit the latitude within which the WUA can make a decision to favour those who face water poverty. From the observations, it was evident that the rest of the board and executive members in the WUA are not aware of the right to water as formally stated. There was also lack of voice championing the right to water in the WUA. But, even if there were such a voice, the BWB's influence through its representative would undermine its argument on behalf of the poor. Indications positively suggest that the primary consideration is to enable a water board not to make a loss, and make a profit, on water sold in the respective communities. Guaranteeing access to water for the water poor and such other considerations appears secondary.

For their part, WPCs manage boreholes in their respective communities. This framework for governance of water at the local level is guided by the community based management approach adopted by government to empower communities to make informed decisions, identify their needs, initiate, construct, operate, manage and maintain their own water and sanitation facilities (MoAIWD' Devolution Guidelines, 2002).

Our findings indicate that members of a WPC on a borehole provided by the government tend to perceive themselves more as agents of the state. This perception is captured in a view of one WPC member in Mpemba:

We are the hands of government. We are in the committee to work for our communities to access water. Importantly, we are in the committee to work for the government. We are working on behalf of the government to ensure that its people have water.

Seemingly, this perception is reinforced by the training that WPC members receive from the water office in the district assembly. A shared view among WPC members on the boreholes studied was that they have, as agents of the state, a duty to ensure that people in their communications have continued access to water. What was lacking was an idea of the right to water as empowering them to engage with higher state institutions. There is a lack of an urgent sense of duty to mobilize the communities and engage with higher state duty bearers to demand action on issues such as physical inaccessibility of water so that more boreholes are constructed in the communities. Arguably, a Member of Parliament is one of the most immediate State actors who WPC members, and the communities at large, can engage on issues of water poverty. Moreover, the informed in the WPCs and in the communities are generally aware of the LDF in the local government, which can be utilized, through an MP, to address issues of water accessibility. However, interactive interviews with WPC members in Mpemba and Nkolokoti showed a lack of immediate willingness and ability to invoke the right to water and engage with the local MP.

7. FINANCIAL RESOURCE OUTLAY FOR WATER SECTOR: DONORS, NON-STATE ACTORS AND GOVERNMENT

Water financing in Malawi is comprised of public funding through the national budget plus support from development partners. NGOs and private companies also play a significant role in complimenting government efforts in overall financing of the water sector. The responsibility of deliv-

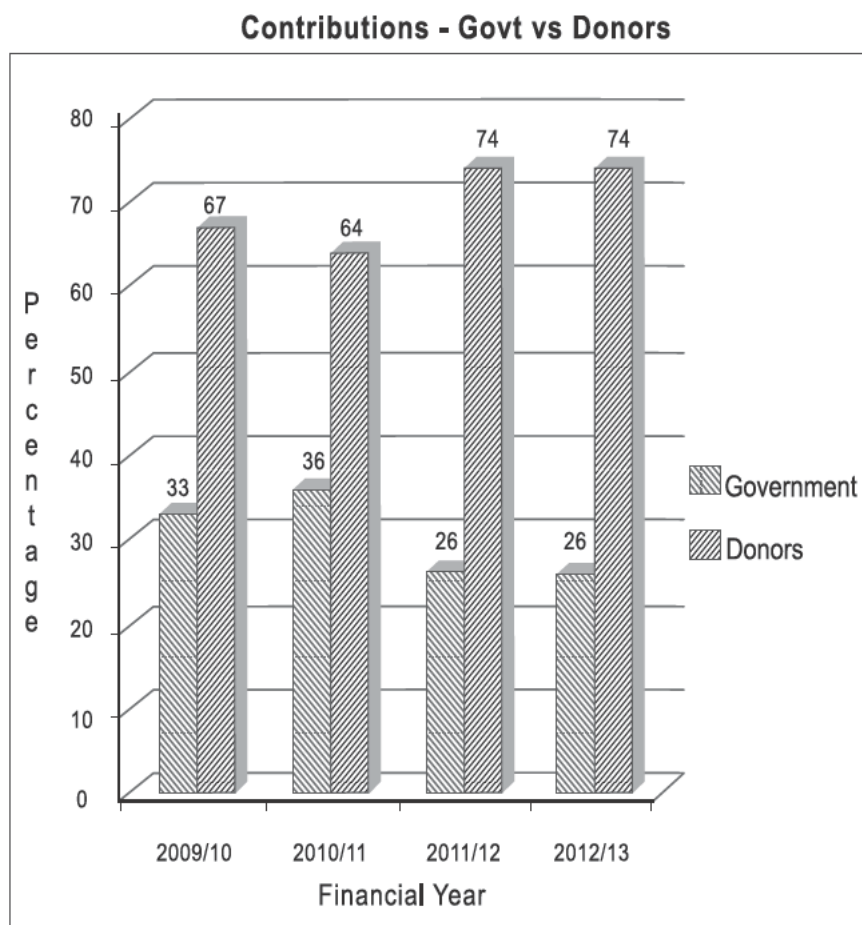
ering improved water services in Malawi lies with the Ministry of Water Development and Irrigation. The Ministry has overall responsibility over three core sectors namely water, sanitation and irrigation. Government has been increasingly paying attention to the Ministry so that it delivers its mandate and meets country, regional and international targets. This commitment is reflected in the increase of financial injections over the last five years. However the sector budget is still only about 3% of the overall annual budget. In 2004/05 and 2005/06 financial years (FY), water accounted for only 0.98 and 0.75% of the total budget respectively. The allocation to water sector continued to increase so much so that in 2008/09 FY, 2009/10 FY and 2010/11 FY, water sector controlled 1.66%, 2.01% and 3.1% of the total budget but dropped in the 2011/12 financial year to 2.6%. The allocation that goes to water, sanitation and irrigation is on the lower side as compared to other service delivery Ministries such as Agriculture, Education and Health. For example in 2010/11 FY and 2011/12 FY, the share for agriculture was 8.1% and 13.2% of the total budget.

Trend analysis of the budget in the past ten years indicates that many water activities are covered by foreign financial injections. Interestingly, whilst donors make the largest financial contributions to the water sector, the whole recurrent budget is met by government and the development budget by both local and foreign financial contributions. In 2009/10 FY, the total expenditure for ISSW was MK 4,946.20 billion. Government spent a total of MK1,626.17 billion (MK483.6 billion for recurrent activities and MK1,142.57 billion for development interventions) whereas donors expenditure was on development budget amounting to MK3,320.03 billion. In other words, 74.4% of development budget was covered by donors. In 2010/11 FY, the approved budget for ISSW was MK5,145.99 billion. Donors covered MK3,316.50 billion representing 64.44% of the total budget. Just as in 2010/11 FY, donors' contribution was only for development budget. The contribution of government was MK532.39 million for recurrent budget and MK1,142.57 billion for development budget making a total of MK1,829.49 billion which is 35.56% of the total budget. The contribution of donors is actually on the higher side when 'off-budget' injections are factored into the equation. Figure 1 below depicts contributions (actual and projections) for donors and government from 2009/10 FY to 2012/13 FY.

The 3% of the annual budget for IWSS is expected to cover all the three core sectors: water, sanitation, and irrigation. The observation is that

irrigation gets the lions' share because of the government's interest in developing water bodies under the Greenbelt Initiative meant for enhancing agriculture production. In this regard, as much as the Ministry has garnered increased financial support, much of it is concentrated on irrigation development and not necessarily provision of water and sanitation facilities.

Figure 1: Trends in Ministry of Water Development and Irrigation for IWSS



Source: GoM, 2012 Sector Performance Report (2012)

GoM (2012) indicates that the majority of funding is meant for urban water supply. In 2008/09 FY, 52% of the allocation for water was for urban water supply. This is supported by the observation that per capita government spending is around MK190 a year in rural areas whilst for

the urban areas it is MK3,600.00. It appears that this situation will not be resolved in the immediate future because government acknowledges that ‘...even with planned increases of funding to the areas through development partner consortiums, rural areas will remain relatively underfunded by the Government’ (GoM, 2012). From the discussion above, it is evident that the water sector is being ignored as evidenced by the small resources allocated to it when compared with health and agriculture.

8. CONCLUDING REMARKS

The human right to water does offer a means of addressing the problem of water poverty faced in Malawi. The adoption and implementation of this right is imperative. This is in view of the exclusion from access to water, with the ancillary problems of water borne diseases and social exclusion, faced among the poor, especially widowed and single women, and orphaned children. Clearly, the realization of this right can address the inequalities in access to water, where the poor have far less water than those with the ability to pay.

However, water specific laws and policies exhibit a lack of willingness from relevant State institutions to adopt and implement the right to water in the country. This is exemplified by the failure of government to approve the Water Resources Bill for Parliament’s consideration, 14 years after it was drafted. Nevertheless, a progressive interpretation of the Constitution does provide for the human right to water. However, indications on the ground are that even if the water poor, particularly the excluded women, were adequately aware of the right, they would not invoke the right to engage with relevant duty bearers. The absence of a sense of power and capacity to make duty bearers liable or willing, able, and active citizens, who *will* demand the implementation of the right to water, diminishes the prospects of this right being employed to facilitate improved access to water.

Chapter 8

Women's Right to Water and Participation in Practice: Insights from Urban Local Water Governance Systems

Asiyati Lorraine Chiweza, Ngeyi Ruth Kanyongolo, Michael Chasukwa and Timothy Chirwa

1. INTRODUCTION

The human rights based approach to water governance prescribes normative standards regarding men and women's access to water and their involvement in processes through which decisions regarding water are made.¹ We examine how the right to water and to participation in water governance is put into practice in a local, low-income urban setting. This chapter addresses the need for individuals to have access to sufficient, safe, acceptable, physically accessible and affordable water regardless of location. It explores how the relevant authorities respect, protect and fulfil the right to water without discrimination between rural and urban locations, between men and women, or against other vulnerable groups. Emphasizing the importance of having both women and men participate in decision-making processes regarding the provision, location, and technology of water and sanitation facilities in the community, we examine how governments and other relevant actors fulfil their responsibilities regarding their duty to ensure equal and meaningful participation.

We draw on empirical knowledge collected over a three-year period using a peri-urban case study of Nkolokoti-Kachere Water User Associ-

1 The right to water for personal, domestic and livelihood uses and women's right to participate in water governance is elaborated in Chapter 2.

ation in Blantyre, Malawi. Peri-urban settings are important sites in Malawi because a majority of the urban residents live in them. These areas are classified as unplanned, informal or low-income settlements, which are characterized by high poverty rates, overcrowding, poor road access, and significant challenges related to access to social services, water supplies, and sanitation facilities (UN-Habitat, 2011; Water for People, 2008). Nkolokoti/Kachere Water User Association serves as an important case study because it was the first association among the eight Water User Associations (WUAs) established in Blantyre, and was considered as a model for sustainable peri-urban water systems.

We address three key issues:

- (i) How do WUAs in peri-urban settings facilitate women's access to safe, acceptable, physically accessible and affordable water for personal and domestic uses?
- (ii) What space do the WUAs provide to enable women living in low-income, peri-urban area to participate in water governance, and how is accountability to water users established?
- (iii) How do women actually participate in water governance and exercise active citizenship to articulate and further their water-related interests?

Our findings illustrate the intricate water access and participation position in which peri-urban women have found themselves following the introduction of a particular model of WUAs in peri-urban water governance. We conclude with a discussion of the implications of our findings on Water Policy in Malawi.

2. CONCEPTUAL FRAMEWORK: A HUMAN RIGHTS BASED APPROACH TO WATER GOVERNANCE

A human rights based approach to water governance uses a human rights lens to interrogate water governance arrangements; fundamentally, it is about inducing reforms in the society's approach to water governance. By stipulating an internationally agreed-on set of norms, backed by international law, the approach provides a strong basis for citizens to hold their states to account for the realization of their rights. Approaching the provision of safe drinking water from a human rights perspective introduces a paradigm in which such a commodity or service is perceived not as charity but as a legal entitlement with individuals at the centre (Miroso and Harris, 2012). Where decentralized institutions adopt the human

rights framework, they will take into account factors that go beyond a strict understanding of local government water service delivery to a focus on the five standards that make up the right to water. Doing this will improve the quality and reach of water services, because water service delivery can be assessed against the five standards of (i) sufficiency, (ii) physical accessibility, (iii) safety, (iv) affordability, and (v) acceptability.

The focus of this chapter is on Water User Associations in domestic water supply. These are decentralized water governance mechanisms for facilitating a demand-oriented approach, which includes sustainability and empowerment of citizens, because their organizational structures can be designed to enable users to:

- express their preferences,
- negotiate both pricing and other community contributions, and
- provide a platform for users to exercise their ‘voice’ with outside organizations, be they local governments, NGOs, or private (Subramanian et al., 1997).

We explore here the potential of such decentralized arrangements to facilitate the effective inclusion and protection of women’s water rights and women’s participation.

3. RESEARCH METHODOLOGY

Our discussion is based on data that was collected as part of a three-year research study.² It was based on a pragmatic, grounded approach which used a mixed methodology by carefully considering the usefulness and appropriateness of various alternative procedure, be they qualitative or quantitative (Yin, 2003). Initially, during the pilot study, we adopted a qualitative grounded exploration of women and human rights in decentralized water governance in Malawi. This qualitative approach was designed to allow a detailed analysis of local water governance and its evolution, and to learn from women as citizens by identifying their experiences and knowledge of the WUA, taking their perceptions and practices as the starting point. By observing women on site and interpreting their narratives and practices, this approach provided insight into the chal-

² Field work started in April 2011 with a pilot study and continued up to August 2013. During this period, the research team was in and out of the research site, with regular follow-up visits, thus clarifying issues and capturing any new developments. Visits and phone calls to clarify certain issues continued as we did the analysis and write-ups through 2014.

lenges women face regarding access to water, their inclusion in/exclusion from WUA processes, and their means of participation (Denzin and Lincoln, 2005). However, lessons from the pilot study revealed that there was need for a deeper triangulation of evidence. We therefore incorporated a quantitative approach to supplement the qualitative data (Bentzon et al., 1998) and adopted the mixed model design. While acknowledging philosophical debates surrounding the paradigms associated with each of the approaches and how adoption of a particular paradigm leads to specific methods of enquiry, we took the line of scholars, such as Brewer and Hunter (1989), Howe (1988), Patton (2002) and Creswell (2003), who argue that a multi-method approach allows investigators to study a research problem with the widest array of tools that have few overlapping weaknesses but many complementary strengths. As Berg (2004, p. 5) explains:

Every method is a different line of sight directed toward observing social and symbolic reality. By combining several lines of sight, researchers obtain a better, more substantive picture of reality; a richer, more complete array of symbols and theoretical concepts; and means of verifying many of these elements.

However, we took women's perceptions and practices as a starting point because in Malawi, as in many African countries, women are the primary water resource users for domestic purposes and they generally provide most of the labour associated with water collection. We therefore considered them the best placed to understand the intricate dynamics of the WUAs with regard to domestic water provision.

In line with the mixed methods approach, a variety of data-collection methods were used. A literature review was conducted, and minutes of WUA Board and annual general meetings were examined. Semi-structured interviews and focus group discussions were done with water users in the peri-urban area, with separate groups for men and women. Discussions were also conducted with members of the various water providers. These included male and female members of the Nkolokoti/Kachere WUA executive board and secretariat, WUA kiosk water sellers, individual private water providers, NGOs, and church actors, which provide water to individual women and manage unprotected water sources. Discussions were also conducted with institutional actors providing, regulating and supporting urban water service delivery; these included officials of

the Blantyre City Council (BCC), regional water office,³ Blantyre Water Board (BWB), and NGOs supporting the development of WUA water initiatives in the city.

These qualitative enquiries were followed by a household quantitative survey targeting women water users living around various WUA-controlled kiosks in the location. Systematic random sampling was adopted to identify the respondents selecting every tenth household within the WUA catchment area, giving a total sample of 69 households. A validation workshop was organized in Blantyre to which various State and non-State actors with an interest in water provision for peri-urban informal settlements were invited. This was an important mechanism of sharing the study's findings with the relevant stakeholders; it also proved an important means of confirming the findings and getting feedback on matters not fully grasped by the research team.

4. THE PROFILE OF BLANTYRE CITY AND NKOLOKOTI PERI-URBAN AREA

Nkolokoti is one of 21 low-income, informal settlements in Blantyre, the second largest urban area in Malawi. Established in 1876, the city has a long history of commercial activity and has been very attractive to rural-urban migrants. The population, with an annual growth rate of 2.8%, was 661,444 in 2008, over a land area of 329 square kilometres (GoM, 2008). The average household size in Blantyre is 4.3 members, and 49% of the population is female. Poverty rates in Blantyre stand at 24%, but poverty is being driven up by the steady increase in prices of basic commodities such as food and by the high rates of unemployment (UN-Habitat, 2011). The city faces considerable challenges related to the provision of potable water and sanitation (Water for People, 2008). The first of these is related to the city's water supply system. The BWB, a statutory corporation established⁴ under the Malawi Water Works Act No. 17 of 1995, is responsible for abstracting, treating and selling potable water not only to the city, but also to the surrounding rural areas of Chileka, part of Chiradzulu, Lunzu, and Nkula Falls. The Board faces acute water supply problems due to insufficient production capacity of its plants and rapid population growth. It relies on two extraction and treatment plants for

3 This is a regional office of the Ministry of Water and Irrigation Development.

4 Statutory Corporations are organizations owned by the Central Government, although structurally operating outside the regular civil service framework. In other literature they are also known as Public Enterprises or Parastatals.

water supply: Walker's Ferry⁵ and Mudi Dam. By 2012, the daily production capacity of the BWB was 86 million litres (78 million litres at Walker's Ferry and eight million litres at Mudi Dam), but the daily demand for the growing population was 96 million litres (Maoulidi, 2012). The low-income peri-urban areas on the fringes of the city are particularly badly affected by the negative supply of water.

In addition to an outdated, inadequate piping and pumping system, the existing water supply is also characterized by frequent breakdowns and maintenance works. The two water extraction and treatment plants are in need of major rehabilitation, and the BWB has not been able to generate the required financial resources to overhaul and replace the water supply infrastructure (Maoulidi, 2012). These capacity shortfalls translate into frequent water shortages and irregular or weak supply for city residents. Chipeta (2009), writing on peri-urban areas in Blantyre, noted that water crises are common in Malawi's major urban areas; these disrupt the activities of women and girls because they must spend a disproportionate amount of time standing in queues or looking for water.

It is estimated that over 70% of Blantyre's population lives in unplanned, informal settlements that occupy 23% of the land in the city (UN-Habitat, 2011), yet up-to-date data is not available. As unplanned, informal areas, they also fall into the high-density category and are sometimes referred to as low-income areas, squatter settlements, or slums (Chirwa and Junge, 2007). In this chapter, we refer to them as peri-urban areas. The water challenge is worse in these areas because the disorganized housing arrangements make water service delivery difficult (MAKNET, 2010). In addition, the urban poor's situation worsens because of the pollution of water surfaces due to mass deforestation of the water catchments; effluent discharges from industrial, domestic and commercial sources; seepage and overflow from pit latrines and septic tanks; and open defecation and urination that, in one way or another, finds its way into traditional water sources (Mughogho and Kosamu, 2012).

The provision of safe water in these informal settlements is dominated by the kiosk system. This was introduced to ensure regular and affordable supply in traditional housing areas and squatter settlements when the government launched the Urban Communal Water Point Project in 1981, with financial and technical assistance from the United Nations Capital Development Fund and the World Health Organization (Manda, 2009). According to Manda, the objective of this initial project was to construct

5 Built on the Shire River in 1963 and upgraded in 1996.

600 communal water points in 50 urban settlements country-wide in order to provide affordable and safe drinking water to over 24,000 low-income families living in peri-urban areas. Problems, however, developed when water-point management committees and people in these settlements stopped paying the water tariffs to the utility provider, the BWB.

Nkolokoti ward is one of the three local government wards in Blantyre City East, lying on the eastern edge of the Ndirande Mountain with the Lunzu River running northward. The 2008 national population census gave Nkolokoti a population of 35,348, with women comprising 49% of the whole (GoM, 2008). Household sizes were generally above the national average of 3.4, with about 44.9% of households having 2-4 members and 46.4% having 5-7 members. Matita and Chirwa's 2009 study of educational attainment and its influence on welfare suggested that an adult household, with members having had high school education, significantly contributes to the welfare of the household. However, according to the study statistics, only 23.2% of adults in the Nkolokoti ward had some secondary education and only 13% had completed high school. This implies that few households in Nkolokoti receive the benefits of education as outlined in Matita and Chirwa's study.

Information from the survey showed that most of the respondents were married women (83%) with very few single (7%), widowed (7%) or divorced/separated (3%). In terms of main occupation most of them served as housewives (36.2%) while others engaged in some form of informal trade (26.1%) and subsistence farming (24.6%).⁶ The rest were office workers (7.2%), domestic workers (2.9%), casual labourers (1.4%), student (1.4%) and skilled manual workers (1.4%) For the married, their spouses were mainly involved in informal trade (24.6%); others worked as skilled manual labourers – mostly as carpenters and builders (18.8%); and some served as office/shop workers – mainly as messengers and clerks (13.0%). These findings do not depart significantly from city-wide trends. The 2011 Blantyre Urban Profile indicated that about 45% of Blantyre's residents are employed in the private sector, 12% are employed in the public sector, and 36% are self-employed and mainly working in the informal sector (UN-Habitat, 2011). A situation analysis of Blantyre's informal settlements in 2006 found that average monthly household income in the squatter and traditional areas that make up the peri-urban settle-

6 It is common practice in Malawi for people to reside in an urban area and have a piece of land in the village for subsistence farming, mainly maize production from which the staple food is derived.

ments was much lower than in other areas. For example, average income was MKW6,816 in squatter areas and MKW6,991 in traditional housing areas, compared to MKW8,881 in high density areas, MKW12,442 in medium density areas, and MKW34,052 in low density areas (Blantyre City Assembly, 2006).⁷ Our findings in Nkolokoti showed that over half of the households fell within the MKW5,000 – MKW15,000 income bracket: 36% in the MKW5,000 – MKW10,000 bracket and 18.8% in the MKW10,000 – MKW15,000 income bracket. Poverty and an inability to pay for utilities are thus characteristics of these households

In terms of water supply, Nkolokoti, potable water is mainly provided by the BWB through kiosks managed by Nkolokoti-Kachere Water User Association. Initially, the city council used to manage these kiosks, but with the onset of the decentralization reforms, the management shifted to community development committees (CDCs).⁸ When the BWB began serving the peri-urban areas, it constructed kiosks; initially, these were also owner-operated and managed by the Board's personnel, but later on most were handed over to community-based committees while a few were leased to private individuals (Chirwa and Junge, 2007). A few kiosks and boreholes were provided by NGOs and churches under various charity arrangements. The Nkolokoti-Kachere WUA started operating in 2009 and handles most of the kiosks which were being previously managed by BWB and the other actors. By 2014, the Nkolokoti-Kachere WUA was managing 72 kiosks and was catering for a population of more than 26,000 people.⁹ Twenty of these kiosks were located in Nkolokoti ward, where the study was undertaken.

5. THE EMERGENCE AND INSTITUTIONAL DESIGN OF NKOLOKOTI-KACHERE WATER USER ASSOCIATION

5.1 Introduction of Nkolokoti-Kachere Water User Association

The extent to which particular water governance mechanisms such as WUAs can incorporate women's right to water and to participation very much depends on the interests of the actors responsible for their introduction and the principal beliefs regarding sustainability of water supply. Whether the actors treat water as a social or an economic good, and

7 In 2006, the dollar:kwacha exchange rate was 1\$ to K136.01, but at the time of the survey the value of the kwacha had fallen and the rate was \$1 to K249.11.

8 These are local level committees in the planning structure of local government. They are linked to the Council through Ward Development Committees.

9 Information sourced from Water for People database.

whether cost recovery principles are adopted as a measure of sustainability, become important determining factors in the design and implementation of a WUA in domestic water supply. Although the concept of an association presupposes the existence of individual water users who wish to undertake water-related activities for their mutual benefit, the emergence of WUAs in the peri-urban areas was not driven by the users themselves.

Indeed, the introduction of Nkolokoti-Kachere WUA was driven by political and economic imperatives, and was initiated by the BWB with support from its NGO partners in 2009 as a means of resolving the bill payment crisis in the peri-urban community kiosks, which arose because the political elite assumed control of the water-selling committees. According to city officials, the kiosk management system was subjected to abuse by political and traditional leaders who were levying different charges for water sold to communities and never remitted the funds they collected to the BWB. This led to an accumulated water bill of MKW1,700,000 (\$11,500) and eventual disconnection by Blantyre Water Board in April 2007. On instructions from the DPP10 government to have water access restored, the BWB and BCC approached the NGO called Water for People for support. Water for People, in turn, introduced the concept of the WUA, offered maintenance training, and established the initial appropriate user fees for water so that the WUA could become self-sufficient.

On the political front, the instruction from government was that community mobilization for the WUAs had to be done through the constituency MP. The study informants we interacted with argued that the committees that were managing water at the time were perceived by the ruling elite to be controlled by the opposition parties, who were using the water proceeds to finance party activities. Water is an important political resource in Malawian politics, one that political parties seek to exploit during electoral campaigns. Gaining control of the resource and being associated with any water initiative becomes a significant means of fulfilling campaign promises. Thus, the introduction of the WUAs in each location had to be done through an MP, who had to give his/her consent for it to be established. In some locations in Blantyre, WUAs were not established because the MP refused his or her consent. Given the limited information about the associations at the time, this explains why many community members in Nkolokoti viewed the introduction of a WUA

10 Democratic Progressive Party, which was the ruling party at the time, after breaking away from United Democratic Front in 2004.

and any associated improvements in water supply as benevolent acts by their MP, John Bande.

However, the Water for People analysis is that while the political events and the bills crisis provided the last straw, the introduction of the WUA system already formed part of a plan developed by the two water boards in 2006 for promoting private sector participation in the delivery and management of urban water (Water for People, 2008). Furthermore, the principles of the 2005 National Water Policy promoted private sector participation in the delivery and management of water. A BWB official corroborated this analysis when he said, 'DPP instructed us to open the kiosks and find a sustainable management solution to the problem but the European Union gave us the funding to form associations and organize water supply in the peri-urban areas.' The objective was that the physical components of the project would be implemented by a private sector service contractor and the 'software' aspects would be implemented by facilitation services providers, i.e. Water for People working in close co-operation with the BCC and other local NGOs (Water for People, 2008).

Therefore, even though WUAs are generally promoted as organizations for facilitating the attainment of social goals such as democratization and the empowerment of women, our study demonstrates that the primary motive for introducing WUAs into peri-urban water governance was to recover fees from water users and to ensure the sustainability of water supply by promoting private sector participation and cost recovery principles in the management of urban water. How did these motives influence the design of the association?

5.2 The Institutional Design of Nkolokoti-Kachere Water User Association

Conceptually, a WUA is a co-operative association of individual water users who wish to undertake water-related activities for their mutual benefit (Department of Water Affairs and Forestry, 2007). Community ownership of the WUA is established through individual membership of the association, and there is usually a defined criterion for one to become a member. However, the WUA, as it unfolded in Nkolokoti, is not membership organization. It is structured as a mini board that permits the market-oriented principles of cost recovery, and comprises a secretariat with professional staff who run day-to-day operations, i.e. maintaining the water supply and collecting revenue. Staff members include an administrator, inspector, plumbers, office assistants and water sellers, all working full time and

paid by the WUA. The WUA Constitution limits the main mandate of the board to the supervision of the executive committee. This, in turn, is supposed to manage the secretariat, which is responsible for employing staff to run and sell water through the public kiosks. The WUA Board reports to and is supervised by the BWB and its partners.

The members of the executive committee and main board are not directly elected by the community through open meetings, although they are assumed by the implementers to be the ‘*bona fide* community representatives’. Members are drawn by nomination from organizations operating in the locality, such as churches, mosques, and other community-based entities. We noted that other members classified as prominent members of society are invited to board formation processes.¹¹ Thus, it is questionable whether the officers and association members really represent the community. The MP, traditional chiefs of the locality, political party representatives, and representatives from BWB, Water for People and BCC also attend board meetings, but in an *ex officio* capacity.

This membership model has created a dilemma, because the representatives are generally not known in the community. It also affects how the nominees view themselves. Do they represent the organization that nominated them or the water users in the locality where they reside? Our interviews with both men and women water users indicated a low level of perceived community ownership of the WUA. The majority of women water users interviewed had heard of the WUA, but they were not aware of how it was managed and had no idea about its membership. When the women were asked to mention the names of the female representatives, about 68.1% indicated that they did not know them. (See Table 1.)

Response	Frequency	Per cent
Yes	22	31.9
No	47	68.1
Total	69	100

Source: Study survey data

These data reflect a common challenge and misplaced assumptions regarding representation in community water governance institutions. The

11 There was no definitive criterion for this group, a factor that opens up the process to subjective judgment.

WUA executive committee and board members were also ambivalent about the issue of ownership, given the preponderant role of the BWB in WUA decision-making processes. They also appeared to lack the power to influence policy direction or influence the Water Board to deal with a variety of concerns emanating from the community. The members interviewed generally expressed impotence about engaging with the BWB or influencing them to address concerns regarding water supply in the location:

BWB are owners of water and we are only helping them to sell their water. We make money for them. We have paid back their millions but they cannot say congratulations. Blantyre Water Board feels they are our top bosses hence we cannot control them. They have no time to engage us into a fruitful and honest discussion. WUA seems to be helpless over Blantyre Water Board. (Excerpt from a discussion with Nkolokoti-Kachere WUA executive, January, 2012).

This perception was also evident among the WUA secretariat. Asked whether they saw the WUA as part of the government's decentralization strategy of giving power to the people, one of the senior WUA officers replied, 'No, how can it be power to the people when the Blantyre Water Board does not listen to our request or concerns. It does not prioritize the WUA in provision of water.' (Interview with WUA secretariat official, January, 2012). The evidence from the WUA executive and staff reflects a perception that key decisions were not being driven by the people themselves. The BWB determines water tariffs, kiosk and water supply infrastructure. It also serves as the secretary of WUA Board and as a signatory to the WUA bank account. WUA officials cannot withdraw funds without the authority of the Blantyre Water Board.

6. THE NKOLOKOTI-KACHERE WATER USER ASSOCIATION PUBLIC KIOSKS AND WOMEN'S RIGHT TO WATER

The pertinent question here is: how has the introduction of the Nkolokoti-Kachere WUA facilitated or improved women's access to water for personal and domestic use? Using the human rights lens, are poor women in informal settlements now more likely to access water in accordance with General Comment 15 of the UN Committee on Economic, Social and Cultural Rights of 2002? The latter not only describes the normative content of the human right to water but also provides some guidance for its practical application: drinking water must be safe, acceptable, affordable, accessible and sufficient.

Our study found that the number of public communal kiosks did indeed increase from 37 in 2009 to 72 in 2014 and that they were within the government-prescribed distance of 250 metres to fresh water, thus reducing the distance that women had to travel to fetch water. In terms of physical accessibility, the majority of water users we interacted with considered the water provision system in the area to be better than it was before the introduction of the WUA. The water was also considered to be of good quality. However, in terms of access, the rules/norms as illustrated in Table 2 were: no money, no water; men were given priority in queues; and cleanliness (a dirty bucket attracts a fine).¹²

TABLE 2 : PUBLIC WUA KIOSKS AND CONDITIONS OF ACCESS

Formal Source:	Usage	Cost as at 2013	O&M	Norms of access	Quality of the water
WUA public kiosks	Mainly cooking and drinking	Pay MKW 10 per 20 litre bucket	WUA staff	No money, no water. Queuing – first come, first serve but men given priority out of respect; and to allow them to attend to other matters; dirty bucket attracts a fine of MKW 1 per bucket.	Treated and tested by BWB, considered safe per WHO standards.

Source: Study informant interviews

Under the WUA public kiosks, responsibility for operations and maintenance lies with the WUA staff hired and paid for that purpose. The UN General Comment No. 15 indicates that there should be sufficient water for drinking, personal sanitation, washing clothes, food preparation, personal and household hygiene. These uses will normally require at least 20 litres per person per day. Despite the increase in the number of public kiosks constructed and the improved quality of the water coming through the WUA kiosks, some women were not able to use the public kiosks for all their water needs.

Table 3 illustrates the way that Nkolokoti women used different sources for different water uses. For drinking and cooking, 62.3% of the women were able to use water from the public kiosk, and 24.6% of women were using water from communal boreholes. However, when it comes to bathing, the majority of the women were using common boreholes (34.8%)

¹² If you brought a dirty water bucket, extra water was needed to clean the bucket, so the sellers would impose a fine in order to discourage women from bringing unclean buckets.

and unprotected dug wells (31.9%), with only 17.4% using the public kiosk as a source of bathing water. Communal boreholes (39.1) and unprotected dug wells (31.9) also provided an option for many women for washing clothes, as did surface water from rivers and streams (13.0%).

The users pointed out erratic water flow and increased cost as two key factors that influenced their decision to prioritize water for drinking and cooking from WUA kiosks, and to draw the rest from unsafe sources. Although the number of kiosks had increased, many taps were dry. As a result, in the peri-urban areas, distance was less significant than time taken to collect water due to long queues. Our experience of Nkolokoti was that we frequently saw long queues of women at a few WUA kiosks, and long queues of empty jerry cans at the majority of kiosks waiting for water to flow. The reliability of the piped water system from the BWB has declined over the years due to limited system maintenance and the stress placed on the existing network capacity by an ever-increasing urban population.

TABLE 3: MAIN SOURCE OF WATER FOR DIFFERENT USES

Main Source of water	Usage							
	Drinking and Cooking		Bathing		Washing		Gardening / livestock	
		%		%		%	Count	%
Piped water into dwelling	0	0.0	1	1.4	0	0.0	0	0
Piped water into the yard/plot	5	7.2	1	1.4	2	2.9	1	1.4
Public kiosk	43	62.3	12	17.4	6	8.7	1	1.4
Communal borehole	17	24.6	24	34.8	27	39.1	1	1.4
Unprotected dug well	0	0.0	22	31.9	22	31.9	5	7.2
Private supplier	4	5.8	3	4.3	3	4.3	1	1.4
surface water (river, stream, lake)	0	0.0	5	7.2	9	13.0	3	4.3
Not Applicable	0	0.0	1	1.4	0	0	57	82.6
Total	69	100	69	100	69	100	69	100

Source: Study survey data

Intermittent water supply through the kiosks was also an issue of concern to WUA officials and members of the board and executive committee because it had an impact on their revenue. Most of the day the taps were dry; sometimes water would flow at night, but the WUA kiosks

were only open from 6 a.m. to 5 p. m.

The second issue of concern was the affordability of water to meet all daily, personal and domestic needs of the users. Since the Nkolokoti-Kachere WUA began operating in 2009, water prices have increased several times and were largely determined by the Blantyre Water Board. Their criterion was that users should pay enough to cover all the BWB bills, operations, maintenance and kiosk management administration costs. Thus, since 2009, the price of water per 20-litre bucket supplied by the WUA kiosks increased from MKW1.00 to MKW3.00 to MKW3.50 to MKW7.00. By July 2013, the price was MKW10.00 per 20-litre bucket. Most of these increases were triggered by high maintenance costs due to the aging nature of the pipes and infrastructure. Board members suggested that the prices reflected increasing production costs and the need to ensure the sustainability of water supply. However, over half of the respondents (56.5%) indicated that the price was not affordable.

TABLE 4: PERCEPTIONS ON AFFORDABILITY OF THE WUA WATER PRICE

	Frequency	Per cent
Yes	30	43.5
No	39	56.5
Total	69	100

Source: Study survey data

General Comment No. 15 on the right to water states that payment for water is unaffordable when it reduces the ability of a person to purchase other essential goods, such as food, housing, health and education. In this case study, the question of affordability has to be understood within the context of the low levels of household incomes that characterize these peri-urban dwellers, and the rising cost of living, particularly food, in the urban areas. Studies done in the 1990s by the Centre for Social Research in the low-income urban areas found that Malawi’s economic reform programmes impacted negatively on the urban poor through rising cost of living (Chilowa, 1999). These studies found that, on average, monthly household expenditure exceeded household income. Food constituted the major expenditure for all households, with a majority spending over half of their income on food items; those in the lowest income groups, spent up to 80% on food.

Thus, the question of the affordability of water has to be understood within the context of rising cost of living as a result of devaluation and

other structural adjustment economic reforms¹³ implemented within the period of our study. Between 2009 and 2013, the cost of food and other basic necessities increased sharply in Malawi.¹⁴ The price of maize, on which a majority of Malawians rely for their daily sustenance, increased almost three times. In 2009, a 50kg bag cost MWK2,500; by December, 2013, the price had risen to MWK7,250.¹⁵

This demonstrates that neo-liberal reforms in certain sectors of the economy may result in contradictory outcomes for women's interests in other sectors, unless there is a mechanism for cushioning disadvantaged citizens from the effects of the reforms. The 2005 National Water Policy advocates for incorporation of appropriate safety nets/mechanisms that take into account social considerations of low-income and vulnerable communities. However, no legal or institutional mechanism exists to ensure that water provision arrangements, such as those in Nkolokoti, adhere to this recommendation. In the case of the Nkolokoti-Kachere WUA initiative, no attention was paid to addressing the needs of very poor women or the most vulnerable groups, such as orphans, the elderly, and the disabled. There was no mechanism for dealing with such cases. The local community was treated as a homogeneous group equally able to afford the increasing cost of water. A Poverty and Social Impact Analysis study in the water sector commissioned by the Ministry of Economic Planning and Development in conjunction with the Ministry of Irrigation and Water Development between 2006 and 2007 noted that the major risk associated with private sector participation is price increases (Chirwa and Junge, 2007).¹⁶ The study noted that pricing of water in the Lilongwe WUAs, although not high, was inequitable and punitive; the study also suggested the need to include additional social assistance mea-

13 Malawi was one of the African countries that implemented these IMF-inspired reforms promoting market liberalization, devaluation of the currency, and a reduction of subsidies and government social spending.

14 This is based on Centre for Social Concern Monthly Needs Basket. It is a compilation of costs for basic food items and non-food items for a household of six in the three major urban centers of Malawi. In this example, only the cost of food items has been used.

15 Centre for Social Concern Database.

16 The study was conducted to inform proposed water sector reforms aimed at increasing the participation of local private sector operators in the distribution and management of water supply in low-income areas of Malawi's two main cities of Blantyre and Lilongwe. It was supported by the World Bank, UNDP, GIZ and the Belgian Trust Fund.

tures to help the poorest access a minimum level of improved water.¹⁷ While cost recovery is seen as essential to sustainability, placing too much emphasis on it can result in denying the poor access to the service. In the case of Nkolokoti, those who could not afford kiosk water looked to meet their needs through other sources, the majority of them classified as unsafe. Table 5 provides an overview of the spectrum of informal sources to which women who could not afford safe water from the WUA kiosk had to turn.

6.1 Conditions of access and the quality of water from the informal sources

What is apparent is that the norms of usage of water from informal sources are varied but the cost of this water is lower than that of water from the public WUA kiosks. Some water is provided free to neighbours, and there is an apparent shared understanding that water is offered to those who cannot afford to buy it.

However, the issue of critical concern is the safety and acceptability of the water that is being drawn from the alternative sources. General Comment No. 15 of the UN Committee on Economic, Social and Cultural Rights explains that for water to be safe and acceptable, the water for domestic use and drinking must be free from health hazards such as micro-organisms, chemical substances, and radiological hazards. It must also be acceptable in terms of colour, odour and taste. Our field observations revealed that water from the Lunzu River, which women use for washing and bathing, was smelly and greyish in colour as a result of industrial and domestic waste. The women water users were aware of this, but they used it because it was free and there was no queue:

There is nothing good about this river because people dump all kinds of waste in it and women use it to wash dirty nappies. However people still use it because they do not pay anything and there is no queue). (An interview with a 65-year-old woman, who had lived in the area for a long time. March, 2012.¹⁸

17 The Lilongwe example is important in this discussion because the Nkolokoti-Kachere Water User Association was modeled after the Lilongwe WUA.

18 *Ntsinjerwu ubwino wake palibe chifukwa chakuti anthu amatayamo nyasi zosiyanasiyana monga kuchapilamo matewela abibi komanso kutayilamo dzinyalala. Anthu amaugwiritsabe ntchito chifukwa kumtsinje amachapa mwa chanje, olo zobvala zikhale zambiri, komanso kulibe nzere.*

TABLE 5: SPECTRUM OF INFORMAL SOURCES OF WATER AND THEIR CHARACTERISTICS					
Informal Sources	Usage	Cost	O & M	Norms of Access	Quality of Water
Communal boreholes from charity organizations.	Mainly washing and bathing but also cooking and drinking	Pay MKW80 per month.	Water point committee, comprising mainly women	Those needy and vulnerable groups like the elderly, orphans allowed free water and can pay later, even in instalment	Not tested. Water users say it is salty. Probability of high pollution due to seepage from pit latrines.
Private covered wells located on private plots.	Mainly for drinking, cooking, and bathing	Pay MKW 5 per 20-litre bucket.	Owner managed: landlord and tenants.	Pay, but sometimes give to the needy.	Not tested. Probability of high pollution due to seepage from pit latrines.
Community unprotected wells and springs.	Washing and bathing, sometimes cooking.	Free	Community managed. Area chairperson mobilizes women to clean and periodically add chlorine.	Free. Users consider that it is God-given water – it belongs to us all. Water is life.	Probability of high pollution due to seepage from pit latrines.
Private kiosks selling mountain water.	Drinking, cooking, washing and bathing.	Pay MKW5 per 20-litre bucket.	Owner-managed	First come, first serve. They are also willing to share; free to close neighbours and those who are needy.	Not tested. Owners and women perceive it as good water.
Surface river water.	Washing and bathing	Free	Blantyre city responsible for pollution control.	Free usage	Water is visibly grey. Heavily polluted from industrial waste and washing of nappies and soap residues.

Although we did not make a scientific assessment of water quality from the many wells in Nkolokoti or the river during our research, a related study (Palamuleni et al., 2004) found the Lunzu River water very polluted, with 18,500 faecal coliforms per 100 millilitres. The 2013 Malawi State of Environment and Outlook report also indicated that the problem of water pollution from faecal matter is very high in several areas, particularly in the unplanned settlements in river catchment areas, which have either no latrines or pit latrines located near water sources (GoM, 2013).

The study by Palamuleni et al. (2004) also noted that having no latrine or using traditional latrines located close to the water facilities increased chances of pollution of ground and open water sources due to faecal material from open places and seepage from pit latrines. In this regard, a baseline study conducted by Water for People prior to the establishment of the Nkolokoti-Kachere WUA in 2008 found that the latrine situation in the area was not good (Water for People, 2008). Of the households, 54% had their own latrines, with the remaining 46% were either sharing latrines with other households or resorting to open defecation. Among those with toilets, the majority (66%) of the latrines were basic unimproved pit latrines that did not conform to sanitation standards set in the Malawi National Sanitation Policy (2009). The impact of these *ad hoc* methods on ground and surface water sources, and on the well-being of women and their households, cannot be over-emphasized. Drawing water from unsafe sources is precarious, as it makes people vulnerable to waterborne diseases with their attendant health and safety risks (Chipeta, 2009).

7.0 GENDER INCLUSION AND WOMEN'S RIGHT TO PARTICIPATION

General Comment No. 15 of the Committee on Economic, Social, and Cultural Rights (2002) on the human right to water emphasizes the need to ensure that women are not excluded from decision-making processes concerning water resources and entitlements, in order to alleviate the disproportionate burden they bear in the collection of water. It asserts the value of having both women and men participate in decision-making with regard to the provision, location, and technology of water and sanitation facilities in the community and household.

7.1 Gendered practice of participation

In order to make sense of the practice of participation in Nkolokoti, it is important to consider the involvement of men and women in water

matters ranging from the household to the various aspects of WUA operations, management, and oversight. Evidence shows that women serve more as water collectors at household level, and water sellers at community level, and less as decision-makers in management and oversight bodies.

Table 6 illustrates this point. The few women who were not involved in water collection were those with taps or stand-pipes in their yard. Adult males were hardly involved, but occasionally male children were required to collect bathing and washing water. This confirms the widely held view in many southern and eastern African countries that recognizes women and girls as users but also as providers of labour for domestic water supply.

TABLE 6: GENDERED PARTICIPATION IN WATER COLLECTION: WOMEN AND GIRLS AS WATER COLLECTORS

Gender	Drinking & Cooking Water		Bathing Water		Washing Water	
	Yes	No	Yes	No	Yes	No
Adult women	57	12	59	10	59	10
Adult men	0	69	1	68	0	69
Female children	27	42	25	44	29	40
Male children	11	58	13	56	13	56

Source: Study survey data

Moving beyond the household to the WUA, the gendered division of labour continues. There is a distinction between operational levels, on the one hand, and management and decision-making levels on the other. In the former, women largely served as water sellers, while men served as inspectors, guards, plumbers.

TABLE 7: GENDERED PARTICIPATION IN WUA OPERATIONAL ACTIVITIES AS AT 2013

Male and Female involvement in WUA operational activities: women as water sellers

	M	F	Benefits	Decision-making and level of control
Sellers	0	70	Economic empowerment	They sell according to WUA rules. However, due to intermittent flow of water, they sometimes use their discretion to open the kiosks outside specified hours to help women during periods when the water is flowing.
Inspectors	2	2	Economic empowerment	Main duty is to supervise water sellers. They can only report problem areas to the WUA administrator.

Plumbers and Guards	7	0	Economic empowerment	Guards provide office security. Plumbers deal with maintenance issues, mainly relating to pipe leakages and vandalism. Major maintenance works are referred to the BWB.
<i>Source: Study informant interviews</i>				

When we enquired why only women were selling water, the responses were varied. Some suggested that it was preferable to have women selling water, as they are more trustworthy than men about managing funds. However, when we talked to a male inspector who had once served as a water seller, his response suggested that selling water at a public kiosk is considered by the community to be a job for females.

Selling water is so difficult for a man. This is because as a seller you are required to help customers lift their buckets or pails. This was a difficult thing for a man to do since it is mostly women who come to buy water and most of them were not comfortable to be helped by a man. They would sometimes insult me saying that the job was not for men as men were supposed to be doing other jobs not selling water which is predominantly in the domain of women (Interview with WUA male inspector, January, 2012).

What is ironic is that while there appears to be some consensus about water being primarily, and conventionally, a female domain, the same women begin to disappear in the management and decision-making processes. As Table 7 illustrates, women were less visible in the management and the decision-making structures.

Ferguson and Mulwafu (2001) have also noted that most Community Based Natural Resource Management strategies in Malawi regard community members or users as a homogeneous group and focus principally on developing means to limit outsiders' access to the resource in question. Where gender is taken into account, women's interests are considered to be restricted to the domestic sphere, and they are not involved in new decision-making bodies such as the proposed Catchment Management Authorities. Even in cases where women are included on committees, their roles are circumscribed. But what explains this thinning out of women in the Nkolokoti case?

Education is the main criterion for serving in the WUA secretariat, and the candidates have to undergo interviews. Initially, a female administrator was recruited, but she was later replaced by a man. For the executive committee and board, however, it is the enforcement of gender inclu-

sion provisions during the nomination and selection process that matter. During our interviews, the general picture presented by one secretariat official was that 'women did not want to be nominated maybe because of lack of education as the requirement demanded that a person in the committee should be able to read and write'. Male informants mostly indicated that, 'when a given a chance, female voters do not usually nominate female candidates into decision-making positions'.

TABLE 8 MALE AND FEMALE INVOLVEMENT IN WUA ADMINISTRATION, EXECUTIVE AND BOARD: INVISIBLE WOMEN

	M	F	Benefits	Decision-making and Control
Administrators	2	0	Salary	Recommendations to the executive committee on hiring and firing of support staff
Office Assistant	0	1	Salary	N/a
Executive Committee and <i>ex officios</i>	8	3	Sitting allowance, 2-3 buckets of water per day. Meets every month.	Hiring and firing of staff. Making suggestions to the main board on sanitation issues, areas that needed additional kiosks, and other water problems requiring attention.
Board of Trustees	12	1	Sitting allowance, 2- 3 buckets of water per day depending on agreement. Meets quarterly.	Recruitment of administrator and replacement of executive committee members. The board has leverage on how to utilize the excess income after bill payments, but they have to seek approval from their partners. Water for People is responsible for mapping kiosk location, training WUA staff, and community mobilization, while BCC's main role is community mobilization during the formation of the WUA.

Source: Study informant interviews

However, when we turned to examining the institutional rules guiding the inclusion of men and women in the WUA decision-making structures, we noted that despite the challenges women may have had, the lack of female inclusion was largely a result of the rules guiding the nomination process and the conduct of the process itself. In terms of the rules, the study found that the definition and guidance on gender inclusion in the Nkolokoti-Kachere WUA Constitution are inconsistent with those

in the WUA Formation Guidelines from the Ministry of Water and Irrigation and Water Development. The latter indicated in Section 3.5 that:

[I]t is important to ensure gender equality in the membership of these structures. Preferably, out of these, 15% should represent the youth (18 to 25 years of age) and 5% must represent the physically challenged persons and people living with AIDS (PLWAs), those that are capable of undertaking the required activities, and there should be some women in leadership positions. (GoM, 2010).

The Nkolokoti-Kachere WUA Constitution, on the other hand, stipulates in Section 5.5 that ‘water is a gender sensitive development; as such the minimum gender representation in the WUA shall be 50% female and 50% male’ (Blantyre Water Board, 2009). This provision promotes gender equality in terms of representation in the decision-making structures.

This lack of proper guidance and inconsistent provisions in documents guiding gender inclusion in the WUA can be traced to a weakness within the National Water Policy itself. Mulwafu and Ferguson have argued that the 1994 policy document recognized women’s roles in the provision of water for domestic purposes, and contained stipulations for their representation in community-based organizations. The new policy, with its broadened focus on water in economic production and environmental conservation, is silent on issues related to gender equity and representation (Ferguson and Mulwafu, 2001, p. 14).¹⁹ It only talks about mainstreaming gender in water and sanitation. Ferguson and Mulwafu also note that, as in other new policy documents in the natural resource sector, the term ‘community’ is used unproblematically, overlooking power relations and interests in water by gender, age and class that are present at the local level.

Beyond the inconsistent guidelines, we also noted that, in practice, the WUA constitutional provisions do not feature or are not effective during the executive committee and board election processes. There is a disjuncture between what is written and what obtains. The process of inviting nominees for election does not include ensuring that a deliberate effort is made to receive nominations from local women’s groups and associations. Although gender inclusion requirements are stipulated in the WUA Constitution, no clear guidance is given to nominating organizations. Thus, the process is at the discretion of the heads of the invited organi-

¹⁹ While the authors were referring to an earlier revised version of the policy, the observations are also relevant for the 2005 National Water Policy.

zations, and normally men are nominated. Women are sidelined because the nominees constitute the pool from which executive committee and board members are elected. Since most nominees are male, the results of the election process are unsurprising. Therefore, even though the WUA Constitution specifies a 50:50 gender provision, the election process ignores this requirement, thus subverting women's right to representation in the decision-making water bodies.

7.2 Process rights in WUA governance: Accountability and information sharing

The principle of non-discrimination emphasizes process rights for all groups, including the right to expression, accountability, information and participation for all groups regardless of gender, colour, tribe or physical condition. The right to water means that every person should have access to information about water and sanitation issues, and this right must be afforded without discrimination. With regard to accountability, two questions are significant for the rights-based approach (OHCHR, 2004). First, are there accessible, transparent, and effective mechanisms of accountability? Second, are the mechanisms of accountability accessible to the poor?

Insights from informant interviews and focus-group discussions suggest that water boards are not accountable to their clients, nor are they responsive in dealing with intermittent water quality or supply. In terms of horizontal accountability, the WUA Board reports to and is supervised by the Blantyre Water Board in collaboration with its partners Water for People and the Blantyre City Council. In practice, the role of the city council was not very visible in many of the WUA processes. The WUA appears more or less as an extension of the BWB in the locality; it is not connected to the local government system.

There was no widely known space within the WUA structure for community members to engage and dialogue with the WUA representatives on a regular basis and ensure the accountability of WUA members to local citizens. WUA officials and board members explained that information about the WUA was generally passed on to communities during the annual general meetings (AGMs). Discussions with the WUA Board and executive committee members revealed that these meetings provide a forum for the WUA to report on its performance to stakeholders, solicit suggestions on how the WUA can perform better, and reward outstanding WUA water sellers in order to motivate them to provide better

services. However, the women water users we interviewed did not seem to have this information. As Table 10 illustrates, when the women were asked to indicate if the WUA provided information to community members, only 10% answered in the affirmative, while 52% said they knew nothing about it.

TABLE 9: EXTENT OF WUA PROVISION OF INFORMATION TO COMMUNITY MEMBERS

Response	Count	%
Yes	7	10
No	26	38
Don't Know	36	52
Total	69	100

Source: Study survey data

The figures suggest that ordinary women water users did not attend such meetings or that there is limited effort on the part of the WUA to provide information to their clients on a regular basis, or both. There were mixed accounts regarding the rules governing participation of water users in the AGMs. Some board members said they were open to everyone, while others said attendance was strictly by invitation. One executive committee member clarified the ambiguity for us:

There is always a special invitation to the key partners. As such, representatives of partners (such as BWB, Water for People, Blantyre City, and Member of Parliament) come because they have been informed and invited. Members of the general public (water users) are invited through a general notice of the annual general meeting through posters published throughout the water area of the WUA. (Interview with an executive committee member, March, 2014).

To verify these assertions we examined the minutes of the previous AGM, which took place on 8 February 2013. From these, it became apparent that those who attended included management of the BWB, Blantyre City Council, and Water for People, WUA secretariat staff and board members, executive committee members, representatives of political parties, other interest groups such as churches and NGOs/CBOs, and a limited number of ordinary water users. However, the majority of the participants were WUA employees, especially water sellers. Table 10 shows that because of an absence of information about WUA operations, most women water users were unable to express their concerns. The table shows that most of them (68.1%) had no knowledge of WUA operations.

Those who had (13%) indicated that a lack of fiscal transparency and accountability were their main concerns.

TABLE 10: WOMEN'S CONCERNS REGARDING WATER USER ASSOCIATIONS

Concerns	Fre- quency	Per cent
No knowledge regarding the operation of WUA	47	68.1
The WUA does not disclose the amount of money collected	9	13.0
Need to elect new members the present have overstayed	5	7.2
Long distance to alternate water sources	2	2.9
Water supply is not adequate	2	2.9
No customer care	1	1.4
Favouritism	1	1.4
Late kiosk opening	1	1.4
Closure of the borehole at noon	1	1.4
Total	69	100
<i>Source: Study survey data</i>		

It has been noted in other studies that one of the reasons why Malawian citizens are often unable to establish systems to monitor and assess the performance or behaviour of public officials is a lack of information (O'Neil and Cammack, 2014). Without this information, the ability of users to make decisions about water services and demand a quality service is greatly restricted. It is argued that the accessibility of information and the transparency of practices plays a crucial role in increasing downward accountability, improving users' trust in the provider, creating a foundation for partnership, and transforming negative perceptions (Water Aid, 2010). Transparent rules may also make it more difficult for politicians to use water projects for purely political ends. In Nkolokoti, given the limited information that water users possessed, it is not surprising that most were under the mistaken belief that the additional public kiosks were being built through the benevolence of their MP in fulfillment of campaign pledges.

7.3 Women's proactive engagement with the Water User Association: Exercise of active citizenship

The Human Rights Based Approach principle of participation seeks to create partnerships based on critical and active citizenship, a notion that seeks to turn poor men and women into citizens who are active in their community, promoting the ability of men and women to use their rights

to determine the political and economic systems under which they live (Darrow & Tomas, 2005, p. 507) and to be able to confront and alter the institutions influencing their lives.

The study looked for practices of proactive citizenship among women representatives as well as the women waters users. We noted that the level of engagement with water issues among the women representatives was low. When the respondents were asked to indicate whether the female members organized meetings to engage with fellow women and discuss water issues, the responses showed that they did not. As Table 11 illustrates, 24% clearly said no; most (67%) said they did not know if such meetings took place. This signifies a real disconnect between the WUA executive committee and board representatives are disconnected from the water users. A key WUA board member acknowledged in an interview that:

Indeed by choosing representatives from invited organizations the assumption was that the organizations invited represent people from the areas where they are working. We assumed that the representatives will be reporting back and relaying information to the organizations that nominated them and the people they serve. But there is no obligation placed upon them by the WUA to hold meetings and engage with water users in general. (Interview with a key WUA board member, July 2013)

Response	Count	%
Yes	6	9
No	17	24
Don't know if such meetings ever took place	46	67
Total	69	100

Source: Study survey data

We were also interested in finding out whether there was some proactive way that women might be organizing themselves to channel concerns regarding water issues to particular leaders. The response was largely negative, as indicated by 92.8% in Table 13 below.

When prompted to explain why they had not done this, 60.8% of the respondents stated that they did not know where to channel their concerns. In the qualitative interviews, most female water users pointed out that they had heard that an association had been formed but they were

TABLE 12: WHETHER WOMEN TOOK ANY PROACTIVE STEPS TO ORGANIZE THEMSELVES TO CHANNEL WATER-RELATED CONCERNS TO LEADERS?		
Response	Frequency	Per cent
Yes	5	7.2
No	64	92.8
Total	69	100
<i>Source: Study survey data</i>		

not aware of any committee or board. Most indicated that their main connection with the WUA is through the water sellers. Others (34.8%) indicated that they lacked leadership. In Chichewa this was presented as *'kusowa oyambitsa kuti akuse azimayi kuti tichite zimenezo'* – an expression meaning, 'who could be courageous enough to mobilize women in this community to engage with duty bearers?' It is an expression that demonstrates fear of reprisals against those who would mobilize for collective action over matters of service delivery. This attitude is not confined to the women of Nkolokoti, but reflects a broader problem of collective action in Malawi. Unless action were instigated or mobilized by civil society organizations, many communities would not initiate contact or stand up to leaders to resolve their problems of service delivery. Afrobarometer studies have also shown that, while there is a latent willingness among Malawians to participate in civic and political activities, this potential is not expressed, possibly because people are not aware of their particular civic responsibilities (Khaila and Mthinda, 2006). Others argue that the problem of collective action in service delivery at the community level in Malawi could be attributed to people's lack of education and organizational skills, poor communication, lack of information, deference to authority, and fear (O'Neil and Cammack, 2014). This is particularly true for social rights because, since democratization, much of rights' education has focused on political freedoms. Englund points out that 'while a very narrowly defined system of rights – mainly obsessed with elections and the right to vote – resulted in some political squabbles, the ruling elite and its non-governmental watchdogs effectively silenced public debates on social and economic rights' (Englund, 2006, p. 6). What this means is that knowledge of the law or entitlements alone will not encourage active citizenship among women water users to resolve their service delivery problems. Attention also needs to be paid to building their capabilities so they may understand how these social rights relate to the water issues and

the systems on the ground, how to locate power holders, and how to deal with unequal power relations in local water governance.

8. CONCLUSION

The Malawi National Water Policy of 2005 seeks to achieve 'Water and Sanitation for All, Always'. For the urban and peri-urban centres in particular, the policy is clear on the need to provide water in sufficient quantities and acceptable qualities to all users. They seek to achieve this by

- encouraging public-private partnerships for water supply and sanitation,
- promoting community-based, participatory, value-based investment,
- enabling consultative approaches within the community, and
- incorporating appropriate safety nets/mechanisms, which take into account low-income and vulnerable communities.

However, the Nkolokoti case study illustrates that community-based, decentralized institutions in urban water governance arrangements do not always lead to more effective systems of water provision either in sufficient quantities or of acceptable quality. Much depends on the design of the institutional arrangements and the purposes for which they were established. Our research illustrates a design of decentralized water institutions that tilts more towards cost recovery as a means of achieving institutional sustainability, while equity considerations have not been spelt out. It has been noted that cost recovery through tariffs is one of the main targets of urban water design. In addition to efficiency, equity, and affordability, it is also one of the most obvious areas where *commercial* and *social* objectives come into conflict, illustrating a tension inherent in the Malawi National Water Policy. The Water Policy aims to promote access to water for all in an equitable and sustainable manner, but it also promotes water as an economic good and advocates the use of cost recovery principles in water supply. Our research suggests that a focus on notions of sustainability and financial recovery has overshadowed other goals, including user participation and social equity. In consequence, the gradual increase in water tariffs has perpetuated and legitimized unequal access to clean water for personal and domestic among low-income peri-urban residents. Therefore, although access to water is recognized using international human rights standards as a right to be enjoyed by all, in practice the needs of the peri-urban water

poor in Nkolokoti still fall short of these entitlements.

With respect to women's right to participation, the case study demonstrates the complexities of devolution, participation, and inclusion of women in water resource decision-making. The manner in which the Water User Association was designed and implemented in the Blantyre peri-urban areas did not provide a forum where water users, and women in particular, could express their preferences, negotiate pricing, or exercise their voice with outside organizations. Thus, the devolution to WUAs did not result in effective engagement with community members in democratic water management. The rhetoric concerning female participation is more about paying water bills and selling water than influencing decision-making. It is therefore important that, when women's right to participation in water governance is being promoted, their roles be problematized and well articulated. Otherwise, 'participation', like 'democracy', remains an elusive term utilized to suit various ideological interests that may actually work against gender equality and enhancement of women's right to water. Promoting gender inclusion in water resource governance requires going beyond a preoccupation with numbers. More attention needs to be paid to institutions, as in:

- the regulations that structure inclusionary decision-making,
- their implementation to ensure that the rules create an enabling environment for women to exercise their voice regarding service levels, organizational arrangements, cost recovery methods, water supply infrastructure, and the location of the water facilities.

Similarly, knowledge of entitlements alone will not induce an active citizenship among women water users to tackle service delivery challenges, unless their capabilities link such entitlements with the systems on the ground and reflect how they may deal with unequal power relations in local water governance.

Chapter 9

Primary Actors on the Back Seat: Gender, Human Rights and Rural Water Governance in Malawi – Lessons from Mpemba and Chileka

Michael Chasukwa, Ngeyi Ruth Kanyongolo,
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1. BACKGROUND

The centrality of water to human life and development is recognized by many international and domestic policy and legal frameworks.¹ Such recognition has influenced the orientation of domestic policies and programmes in many countries in southern and eastern Africa. The Malawi government has, for example, adopted a series of reforms to keep pace with international developments in the water sector. The 1999 Local Government Act and 1999 National Decentralization Policy were landmark policy and legal shifts in terms of transferring power, responsibilities and fiscal resources from national to local institutions. Furthermore, devolution signalled a serious commitment on the part of the government to empower citizens to make decisions informed by their own circumstances. Ribot (2004) argues that decentralization provides an opportunity for many actors to become involved in governance including those at the local level. In addition, (Chikulo, 2007: 151) observed that decentralization ‘...promotes democratic self-governance by affording greater oppor-

1 Key international and regional instruments are the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Protocol to the African Charter on Humans and Peoples’ Rights on the Rights of Women in Africa (Maputo Protocol) and the UN General Assembly Resolution 64/292 on the Human Right to Water and Sanitation.

tunities for local “voice”, greater control over programmes by beneficiaries and increased resource mobilization for development projects.’ Decentralization interventions have now been implemented in many sectors in Malawi including water, so improving how governance decisions are made and implemented.

The 1992 Dublin Principles of Water Governance clearly reflects a departure from a centralist governance approach of water sector. They are characterized by the involvement of multiple actors in making decisions relating to the access and management of water. Such principles include:

- fresh water should be seen as a finite and vulnerable resource;
- water development and management should be based on a participatory approach;
- women play a central part in the provision, management and safeguarding of water;
- water has an economic value in all its competing uses and should be recognized as an economic good (Kampata, 2010).

According to Kampata, additional guiding principles should include:

- land and water should be managed together based on the catchment;
- land and water should be managed at the lowest appropriate level;
- the private sector has an important role in water resources management;
- the use be precautionary;
- the ‘user and polluter pays’ principle should underpin the management of water;
- realistic standards and regulations should be applied; and
- that economic and regulatory instruments should be balanced.

He also includes the following principles:

- cross-sectoral integration mechanisms should be established;
- participatory approaches involving the relevant stakeholders should be encouraged;
- open access to information on water should be given to all

stakeholders; and

- international co-operation on the shared international water courses should be promoted (ibid).

In Malawi, proper water governance has been realized through policies and laws specific to the sector. The key policies guiding the provision, operation and maintenance of water facilities for domestic and irrigation uses at district level are the 2005 National Water Policy and 1995 Water Works Act. In addition, water for irrigation is regulated by the 2010 National Irrigation Policy and Development Strategy. District councils in Malawi have the authority to administer the rural areas. In particular, section 15 of the National Decentralization Policy delegates the responsibility for providing and maintaining boreholes, piped water projects, protected wells and gravity-fed piped water schemes among other water facilities. In a bid to further decentralize other water functions, the sector devolution plan stipulated that, through a gradual process, the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) would only assume responsibility for the formulation and enforcement of policies and the formulation of legal frameworks. To date, however, it is only the Operation and Management (O&M) function of water facilities and irrigation schemes, which have been devolved to district authorities due to financial constraints. The MoAIWD justifies devolving responsibilities to the districts and councils as a matter of fulfilling government objectives for managing water as a business i.e. through cost-recovery, as reflected in the National Water Policy, which, in turn, adheres to the Dublin Principles of Water Governance.

In this chapter, we explore the relationship between rural water governance, gender and human rights. We investigate the extent to which the strategy of governing rural water facilities in a decentralized manner, as championed by the MoAIWD, has included women as active members responsible for managing water facilities in local structures. Furthermore, we examine rural women's knowledge of State law and community regulations which women use to (a) realize their right to water and (b) hold State agents accountable. By examining the interface between State law and community regulations, we seek to understand the practice of legal pluralism in water governance.² Thus, this chapter seeks to answer two questions: (i) how does decentralization empower women? and (ii) what do communities know of State law?

2 On legal pluralism in water governance see Chapter 1 in this book.

The chapter is organized in six sections. Subsequent to this introduction we provide a brief overview of rural water governance and gender in Malawi. Section 3 presents the methodological approach used for the research and study areas. Section 4 discusses our findings. Policy implications and conclusions are discussed in Section 5 and 6 respectively.

2. RURAL WATER GOVERNANCE AND GENDER IN MALAWI: POLICY AND INSTITUTIONAL CONTEXT

In Malawi, the district council is critical to activities implemented at local level including those of water. The council reaches out to local communities through sub-district structures established by the 2001 handbook, *Development Planning System for District Assemblies*. The institutional structure is so strongly decentralized that the lowest unit at grassroots level has powers to implement planning objectives together with district authorities.

The pinnacle of the institutional structure for rural water governance in Malawi is the District Executive Committee (DEC) which operates through a technical committee called the District Co-ordinating Team (DCT). The DCT is a sub-technical arm of the DEC chaired by the Directorate of Planning and Development and the secretariat is the District Water Development office. Membership of DCT is drawn from public, private and civil society spheres incorporating actors that have a stake in water, commonly from health, environment, community development, public works and education. Membership to DCT is mainly by co-option based on the relevance of the office to water and sanitation issues and the expertise of individuals. DCT performs different roles including (a) initiating activities that would promote access to potable water and high quality sanitation services in the district, (b) co-ordinating water and sanitation activities in the district, (c) enforcing standards regarding water and sanitation, (e) training sub-district personnel and masons, and resource mobilization by way of writing proposals, (f) monitoring and evaluating activities, and (g) developing work plans. Decisions made by DCT and all other actors are guided by two key documents on domestic water uses namely the District Water Strategy and Investment Plan (DWSIP) and the Water Mapping Results (WMR).³ DWSIP is mainly meant to mobilize and direct resources within and outside the district. Water Mapping Results depict the location of functional and non-func-

3 DWSIP and Water Mapping Results are aligned to District Development Plan and Socio-Economic Profile.

tional water facilities, hence giving a picture of where the need for new water facilities is. It should be noted that many districts do not have DW-SIPs and WMR because of resource constraints. District councils that have DSIPs and Water Mapping Results are technically and financially supported by NGOs in the context of a project.⁴

Four key structures that take technical and representational roles operate below DCT and constitute a core governance web at the local level. These four structures are the Area Development Committee (ADC), the Village Development Committee (VDC), the Area Executive Committee (AEC) and the Water Point Committee (WPC). The common interest of DCT, ADC, VDC and AEC concerns their mandate to oversee development interventions including those on water at different strata of society⁵ (GoM, 2009a). A major feature that distinguishes DCT and AEC from ADC and VDC is the source of legitimacy. DCT and AEC command expertise by virtue of being composed of technical minds from different sectors whilst ADCs and VDCs are constituted by the ballot. Thus, DCT and AEC play an advisory role to ADC and VDC, while the latter play a predominantly representational role.

The *Development Planning System for District Assemblies* handbook (2001) establishes ADC and VDC as representative bodies of their communities on matters related to development in a specific area of jurisdiction. In specific terms, the lowest unit at the local level related to water governance is the WPC. Basically, WPC is a ten-member volunteer committee elected by the user community and accountable to their constituents. The *Implementation Manual* (GoM, 1999a) establishes the tasks of the WPC as (a) getting suggestions from community members on how to organize, (b) filling an application form requesting assistance, (c) planning water and sanitation facilities and defining how they will be managed, (d) collecting money to help build the facilities and maintain them, (e) agreeing on the management of funds, (f) supervising and helping constructing the facilities, (g) organizing the maintenance of the new / improved facilities and (h) promoting the safe use of the new facilities for improved health.

The shift towards decentralized rural water governance is also pursued

4 NGOs that are active in water governance include WaterAid, Water for People, Concern Universal, World Vision, Plan International, Catholic Development Commission of Malawi, Church and Society, Pump Water Africa and UNICEF (GoM, 2010)

5 See Community Based Rural Water Supply, Sanitation and Hygiene Education Implementation Manual (GoM, 1999a).

as an agenda to bring women into managing water affairs. Efforts to incorporate women in rural water governance follows from the realization that water becomes a gendered resource when you factor in who is responsible for fetching, purchasing and using the water. UNDP (2012) observed that in developing countries, such as Malawi, women are most often responsible for domestic and community water management hence they need to understand social positions, geographic location and market forces: factors that affect their ability to make decisions regarding water usage.

MoAIWD considers gender in the membership of WPC as a way of balancing representation of the sexes and enhancing the ability of women to negotiate for better water governance in rural areas. The requirement is: ‘...women should form at least half of the members and office bearers in the committee’ (GoM, 2000: 8). There is no specific criterion regarding the election of women into the WPC; the broad guideline is to elect a group of people in whom the community has confidence; people who are pro-active and willing to take on board people’s ideas. MoAIWD (2000: 8) holds the view:

Women know a lot about water – they manage water and sanitation in the home and will make sure that the new facilities are working. So they should play a big role in deciding about the new facilities – where they are sited, how they are used and maintained, etc.

As indicated above, this chapter looks specifically at attempts made by several players under the leadership of MoAIWD to engender rural water governance. Efforts have been manifest in functional and organizational reforms towards reconfiguring membership of WPCs and their roles.

3.0 STUDY AREAS AND RESEARCH METHODOLOGY

As stated earlier on, this study was about rural water governance, gender and human rights. Specifically, the study examined the interface between State law and community regulations so as to understand the practice of legal pluralism in water governance. Two questions were of interest in this study: (i) how does decentralization empower women? and (ii) what do communities know of State law? The details of the methodological approach are discussed below.

3.1 Profile of study areas

The study was carried out in Blantyre District located in the southern region of Malawi. Blantyre District Council is the local government au-

thority with the mandate to oversee administration of Blantyre Rural. According to the National Statistics Office (2008), Blantyre District covers 1,792 sq. km and has a population of 338,047 people (male = 164,546 and female = 173,501). This is a jump from 307,344 people in the 1998 Population and Housing Census. Blantyre Rural is the seventh most populous district in southern region where there are 15 districts. Population density is 189 people/sq. kilometer. Other relevant social indicators for Blantyre District include: literacy rate, 68% (2008); child mortality rate: 44 per 100,000 live births (2010); infant mortality rate: 98 per 100,000 live births (2008); poverty rate: 46.5% (2005); sex ratio: 104.4 (1998); average household size: 4.2 (2008), crude birth rate: 33.5 (2008), Life expectancy at birth for men is: 48.5 years (2008), and life expectancy at birth for women: 52.1 years (2008) (NSO, 2008; Blantyre District Council, 2007).

Regarding water supply, Blantyre rural is served by the Southern Region Water Board. However, much of the Blantyre rural community relies on boreholes to access water. These are drilled by government, MPs or NGOs. Distribution of boreholes is uneven due to variations in the number of NGOs in the area and the rate of vandalism. The table below presents statistics on the number and percentage of functional boreholes per Traditional Authority (TA) in Blantyre District Council as of 2013.

TABLE 1: FUNCTIONAL BOREHOLES PER TRADITIONAL AUTHORITY IN BLANTYRE DISTRICT

Traditional Authority	Total Number of Boreholes	Number of Functional Boreholes	Percent of Functional Boreholes
Chigaru	292	212	73
Kapeni	360	213	87
Kuntaja	399	313	78
Kunthembwe	189	154	81
Lundu	164	136	83
Machinjiri	192	136	71
Makata	104	88	85
Somba	306	242	79
Total	2006	1593	79

Source: Blantyre District Water Development Office (2013)

As per the table above, Blantyre Rural hosts eight Traditional Authorities (TAs). Specifically, the study was carried out in Mpemba and Chileka areas in TA Somba and TA Kuntaja respectively. TA Somba has a popu-

lation of 61,102 people whilst TA Kuntaja has 71,912 people. Mpemba (Matowa and Luno Njowe villages) and Chileka were purposely sampled because they reflect different aspects of the investigation:

- (1) all villages had Water Point Committees (WPCs). This gave us the opportunity to understand decentralized water governance and gender composition;
- (2) water facilities in the villages were initiated by different actors. This gave the researchers the opportunity to understand who has the duty to provide water to rural communities; and the interface between State Law and community norms with respect to water access and usage;
- (3) WPCs and community members had contact with district-based bureaucrats or extension workers, so the researchers had the opportunity to interrogate how WPCs and community members claim their rights from duty-bearers.

3.2 Methodological approach

The study was carried out using a mixed research design. Thus, both qualitative and quantitative research techniques were used, with the emphasis on the former. The entire research period was three years, 2011-13. As stated in the introduction, we were interested in examining how decentralization works for women in the rural areas, understanding what knowledge communities had about State Law, understanding norms other than State Law governing water and examining the interaction between State Law and local norms in the governing of water in the local community.

Qualitative data was collected through Key Informant Interviews (KII), a literature review, transect walks and Focus Group Discussions (FGD). The discussion during KIIs and FGDs were conducted using a semi-structured guide, which allowed both flexibility and probing questions. Participants in the FGDs and the Key Informants were purposely sampled because researchers wanted specific insights into rural water governance and had to interact with people who had knowledge of that field. Key Informants were district bureaucrats and extension workers drawn from the District Water Development office, NGOs implementing water governance projects in the research sites, and traditional and civic/opinion leaders. A total of 26 KIIs were held. Participants in FGD were members of the Water Point Committees and women from the communities who use water facilities and interacted with the WPCs. Sixteen

FGDs were held involving a total of 85 participants. Transect walks were carried out to appreciate the socio-economic features that would influence rural water governance. A literature review was critical during conceptualization and operationalization of the research. The research team reviewed water related policies and laws including the National Water Policy, Water Works Act, Water User Association (WUA) Manual, Joint Sector Annual Review Proceedings, District Development Plans, District Socio-Economic Profiles, Water Sector Devolution Plans and District Water Investment Plans.

Quantitative data was collected through a questionnaire that was administered by researchers themselves. Seventy-one women who had lived in the communities for at least a year participated in the survey. It is important to note that all data collection tools were piloted before the main data collection exercise with the purpose of fine-tuning them. Content analysis method guided the interpretation of findings. Quantitative data was processed using the Statistical Package for Social Scientists. It should be appreciated that the research team was multi-disciplinary (Law, Public Administration and Political Science) so that the data was subjected to different analytical perspectives adding another layer of rigour to the findings.⁶

3.3 Profile of respondents

A majority of the respondents, 69%, had lived in the study areas for more than ten years. 23% and 8% of the respondents had lived in study locations for 1-5 years and 6-10 years respectively. Participants were grouped in six age categories. 10% and 25% of the respondents fell within the age category of less than 20 years and 20-30 years respectively. Whereas 27% of the sample was within the age bracket of 31-40 years, 11% of the sample fell within 41-50 years. The age brackets of 51-60 years and above 60 had 13% and 14% of the respondents. Other demographic features of the respondents are presented in Table 2 below.

In terms of income, household income per month was for 51% less than USD 11,7 USD 12-22 (for 28%), USD 23-33 (6%), more than USD 34 (7%) and do not know (8%). In the sample, no household gets water for free. 87% and 13% of respondents indicated that a maximum of USD 0.21 and USD 1.1 is spent on water in a month respectively.

6 Refer to Chapter 8 to appreciate other aspects of the methodology for this study

7 1 USD=MK 453 as of January 2015.

Marital Status	
Married	65 %
Single	7 %
Separation/Divorced*	13%
Education	
No formal education	13 %
Attained some primary education	61 %
Completed primary education	6 %
Attained some high school education	14 %
Completed high school education	1 %
Family Size	
2	3 %
3-4	45 %
5-7	46 %
8-10	6 %
Occupation	
Subsistence farmers	92 %
Agricultural worker	5 %
Business	3 %
Occupation of spouses (husbands)	
Subsistence farmer	52 %
Skilled manual worker	17 %
Casual labourer	7 %
Agricultural worker	6 %
Informal business	6 %
Office worker	6 %
* The categories of separation and divorce were collapsed into one during data collection because in our rural study locations, there was no clear distinction between the two.	

4. RURAL WATER GOVERNANCE, GENDER AND HUMAN RIGHTS: EMPIRICAL DISCUSSION

This section discusses the research findings. It is organized in five sub-sections; (1) individuals and institutions responsible for construction of water facilities and provision, (2) formal and informal policies, and awareness thereof; rules on access to, and use of, water, (3) female participation in rural governance structures, (4) challenges experienced by women when fetching water, and (5) women's views on other women in the WPCs.

4.1 Initiating construction of water points and provision of water: whose responsibility?

In order to understand the intricacies around the provision of water in rural communities, female rights holders were asked to indicate who is responsible for ensuring that rural communities have water facilities. Institutions and individuals who were mentioned as responsible for ensuring that rural communities have water facilities were the government (in particular the Ministry of Health – 55%), NGOs (14%), the Blantyre Water Board (6%), chiefs (6%), and MPs (6%). Of the respondents, 7% did not know who was responsible for the provision of water in the rural communities. Generally, it was perceived that the responsibility to provide water was connected to the overall responsibility of government institutions to facilitate development, and NGOs to complement these development efforts. To this effect, 56% of respondents indicated that it is the duty of government, NGOs, Blantyre Water Board, MPs and the district council to look after them, while 23% of the sample said that chiefs and WPCs, (the lowest-level actors), have a duty to provide water because they are responsible for facilitating development initiatives, including water related projects, at local level.

The findings point to the centrality of government machinery in the construction of water points and provision of water. Six other institutions and public figures (MPs and chiefs), who were considered responsible for providing water to rural areas, are government related i.e. they are established by government and draw their resources from it. Thus, we found that the State is considered the primary service provider of water facilities. This conforms to other findings on the extensive role of the public machinery in service delivery in developing countries including Malawi (Mukandala, 2000).

Contrary to what respondents considered should happen, they indicated that, in practice, NGOs took the lead in the provision of water facilities. Of the sample, 48% indicated that their current water facility was provided by an NGO, while 23% of respondents indicated that it was provided by central government. NGOs overshadow government at the local level because of the district council's weak financial and technical base. As a council employee said:

...we get about USD211 in a month to run our administrative and technical duties. It takes about USD4,224 just to drill one borehole.

*So what we get is not even enough to drill one borehole despite the overwhelming demand of boreholes by the communities. In fact, what we get is not enough to run the offices and we are reduced to beggars. We seem to renegade on our responsibility and are overtaken by those that have resources.*⁸

This perception reflects the views of rights holders in local communities captured during a FGD when a participant told us:

*...mostly it is NGOs that come to our rescue. They respond quickly. When we request some assistance from government staff to help us fix our problems with water, they refer us to NGOs so now we just go direct to these NGOs.*⁹

While it is appreciated that government institutions face challenges in fulfilling their obligations, there is also confusion over the roles of different actors, and this only adds to water provision and governance problems in the rural areas. Through FGDs and the survey it was established that water is considered by local communities to be a sanitation issue. This is largely because of the visibility of extension workers and Health Surveillance Assistants (HSAs) in the communities; HSAs and Community Development Assistants are active in both drilling and maintenance of boreholes intended for domestic uses. In addition, HSAs also teach local communities how to harvest and purify water, and they provide Chlorine to villagers. Water Monitoring Assistants (WMA) as field administrators for MoAIWD are conspicuously absent at the local level because of high vacancy rate in the ministry (67.9% of established professionals). Blantyre District Council has less than ten WMAs who serve a population of 338,047 people. HSAs have also an advantage at the local level because of the institutional framework in the National Sanitation Policy.¹⁰

The policy holder of National Sanitation Policy is the Ministry of Agriculture, Irrigation and Water Development, but implementation is led by the Ministry of Health. Thus, the former is a key actor in any review of policy, and enforcement of standards while the execution of policy lies with the MoH. According to the MoAIWD, this does not represent a dilemma that can cause confusion but an opportunity to be explored in the interest of harnessing human resources. They argue,

8 KI, Blantyre District, 13 October 2011.

9 FGD, Chileka, 11 September 2011.

10 It is important to recall that water is treated as a sanitation issue at the local level.

*A policy is simply a guideline. Implementation is something else. As long as you have a policy, you can identify experts from wherever they can be found and implement something. At the end of the day, we are interested in whether or not implementation has taken place.*¹¹

This claim collapses when you consider that Ministry of Health has issued a court injunction restraining the MoAIWD from implementing the 2008 National Sanitation Policy. The MoH is challenging the technical expertise and legality of the MoAIWD to oversee the implementation of sanitation activities. This court injunction also affects the legislation of a draft Sanitation and Hygiene Bill drawn up in March 2013; further progress depends on when the results of the case are determined. Beyond the rivalry over who is best placed to hold the policy and implement the sanitation services, there is tension about the financial resources committed to water and sanitation activities. MoAIWD is implementing the National Water Development Programme II estimated to cost USD354.53 million. The table below captures funds that have been committed to this sector in 2007/8 – 2011/12 fiscal years:

In addition to these investments (Table 1) the Water, Environment and Sanitation Network compiled information about the additional investments in this sector made by 18 NGOs during the financial years 2007/8 – 2011/12 totaling an additional USD 1.04 million.

In our study, it is important to note that respondents indicated that central government is a stronger presence in the provision of water facilities, despite the adoption of a decentralized approach, which, in theory, empowers local councils and sub-district structures to take charge of rural water governance. We can conclude that there is a clear disjunction between theory and practice in the rural areas.

However, beyond the tensions between the two key ministries, the challenges of provision are further complicated by the number of NGOs in the field. For example in the Mpemba area United Nations Children's Fund (UNICEF) and World Alive Church Relief and Development (WACRAD) are all active in community development.

Thus local structures tasked with the responsibility of overseeing water related interventions are undermined by several players who prefer to carry out their functions as they see it fit provided the goal is attained. Moreover, local communities do not really care whether the organizations followed the prescribed path or not provided they have water. Insisting on

11 See McDonald Thom, 'Minister Backs Policy Clash,' Daily Times, 20 October 2014.

TABLE 3: INVESTMENT AND PROGRESS ON SELECTED GOM / DEVELOPMENT PARTNER PROJECTS (2007/8-2011/12)

Source of Funds	1.	2.	3. (%)	4.	5.	6.	7.	8.	9.	Utilization %	
										Pro-ject Amt %	Disb- ed Amt %
NWDP II (IDA)	49	33.4	68	17.7.07	2013	8	5	3	30.6	62	92
NWDP II (IDA) - AF	120	11.9	10	1.11.11	2014	4	1	3	7.4	6	62
NWDP II (ACGF)	25	25	100	27.3.08	2012	4	3.5	0.5	24.4	98	98
NWDP ADF Comp	48.2	23.7	49	19.11.08	2015	5	3	2	20.6	43	87
WASH	0	0	0	1.9.06	2013	7	6	1	0	0	0
Peri-Urban Water Sanitation (EU/IUB)	48.5	29	60	19.12.08	2013	5	4	1	17.7	36	61
NWDP (OFID)	10	5.5	55	11.4.08	2015	7	6	1	5.5	55	100
GOM Part II - NWDP	10.6	6.6	62						6.6	62	100
NWDP Com Contribution	10.1	4.7	46						4.6	46	100
TOTAL	335.6	143.5	43%						119.7%	36%	83%

Source: Government of Malawi, 2012

1. Project Amount
2. Disbursement amount to date (USD million)
3. Disbursement rate to date (%)
4. Date Agreement signed
5. Expected completion date
6. Project time-frame
7. Period covered to date
8. Period remaining
9. Expenditure to date

the observance of a prescribed formal channel is considered to be scaring 'well-wishers' away. This sentiment was echoed by a participant in a FGD:

*...all we want is water. It does not pay to make well-wishers go with their resources just because there is insistence that they go through ADC and VDC as required by District Development Planning System to Water Point Committee to be established. They may have their own way of doing business and attain results. It is just that drop of water we need as soon as possible and not necessarily by this winding road of getting things done.*¹²

4.2 Awareness of formal and informal policies and rules on access and use of water

At the core of rural water governance are laws, policies, guidelines and local norms that regulate access and control of water facilities and resources. In a rural area, both state and community governance frameworks run concurrently. It is reasonable to assume that the success of a policy depends on the extent to which it serves the needs of the people, whether they give it their support, and if they understand the reasons behind it. This implies the need for people to be aware of the policies and laws.

Our main finding is that the majority of community members in Mpemba and Chileka areas is not aware of government laws and policies regulating access to and use of water. Indeed, 89% said that they do not know of these instruments. The remaining 11%, who indicated that they were aware of them, were unable to name any specific policies and regulations guiding the water sector. They were, however, able to point to the general rules that guide the local development planning system such as channeling all issues to the VDC and the ADC for referral to higher authorities. In so far as people had water-related knowledge or information, it was acquired through the village health committees not the WPCs. This finding adds weight to our observation that central government operations and its visibility on the ground are too dismal to be recognized. We realized, moreover, that the government could not address this issue with a campaign given its current financial and workforce constraints. Conversely, when respondents were asked, 'Are you aware of any community-made rules regulating access and use of water that you draw from the communal facility?' 92% of the sample responded in the affirmative. In addition, respondents were able to specify them as (i) keeping water point premises clean (70%), (ii) being required to make a monthly mon-

12 Luno Njowe FGD, 23 October 2011.

etary contribution (21%), and, (iii) no queue jumping (4%). Community members find these regulations useful because observance is high and easily enforced by the communities themselves. In a FGD with women in Mpemba, a participant said:

...rarely would you find people washing at the borehole because we all know that is prohibited. The fact that the borehole is located in an open space is an in-built enforcing monitoring mechanism. Again, we all know that it is first come first serve so you would not jump the queue. Its only unmarried men that do not need to join the queue. It is out of respect but also we do not want them to be part of our women-talk.¹³

Our findings raise the need to discuss the efficiency of formal institutions governing the water sector in an environment where formal regulations are unstable (Helmke and Levitsky, 2004; North, 1990). Based on data from the research sites, it can be argued that the community accommodates the interacting formal and informal rules that exist in rural water governance. State Law is not completely removed from the point of action as it co-exists and interacts with the community rules. State Law has diverged to accommodate the living law, which is the immediate regulatory framework for the local communities.

Monetary contributions go towards O&M costs managed by WPCs. In all study sites, we established that the monthly contribution guaranteed access to the water point without restriction on the volume of water collected. However, regulations exist on water usage, which is restricted to domestic use i.e. borehole water should not be used for moulding bricks or for commercial purposes, but it can be used for homestead gardening. These limitations are meant to control water levels. The enforcement of this regulation has become tighter with growing awareness of climate change. Local communities have already experienced the negative consequences and have a fair idea about the connection between climate change and availability of water. As one participant observed during an FGD:

...moulding of bricks requires a lot of water. Water goes down during dry season because we have cut down trees. It is tricky these days to know when rains will begin because of climate change. So we do not want members of the community to aggravate the problem of water scarcity further by undertaking projects such as those on molding of bricks whose benefits accrue to individuals.¹⁴

13 Matowa FGD, 23 October 2011.

14 FGD, Luno Njowe village, 23 October 2011.

However, a waiver is made if the bricks are for a community project such as the construction of blocks for a school or teacher's house. It was observed that monthly contributions peak during the rainy season when alternatives to the borehole are fewer due to fear of water-borne disease. On the other hand, in our study areas, we established that during the dry season, boreholes dry up because of a low water table, and this would anyway inhibit usage.

In general terms, monthly contributions for borehole water are affordable considering that the payment is for the whole month with no regulation on how much water is collected for domestic use. However, we understood that community members will sometimes deliberately default in protest at the non-accountability of WPCs. A further disincentive to making the regular monthly payment occurs when the water supply is erratic because the borehole pump is not working.

4.3 Just play their game: women's participation in rural governance structures

As discussed in Chapter 8, water governance reforms in Malawi were instituted in tandem with the global movement towards empowering women as primary interested parties in water affairs. The 1999 Implementation Manual of MoAIWD clearly accords space to women to participate in rural water governance, acknowledging that their enthusiasm is often frustrated by structural factors. MoAIWD (GoM, 2000: 8) states, '... make sure that women are on the committee and its executive, and take an active part in discussions and decision-making. And hold the meetings at times which are suitable for them.'

However, despite the MoAIWD guidelines that women should make up at least half of the members and office bearers in the WPCs, membership of women in both Mpemba and Chileka fell below this standard. Nonetheless, all WPCs were elected by community members as required by the guidelines and a key distinguishing feature between Mpemba and Chileka WPCs was that in the former, the positions of chairperson, treasurer and secretary were occupied by women, even though they made up less than half of total membership. In the Chileka WPC most women were just committee members. However, according to the assessment of fellow committee members and the community, women in both WPCs, were not very active. Major contributing factors for this were: the

dominance of male elite, lack of knowledge, and inconveniences¹⁵ deliberately created by their male counterparts. Male dominance was more pronounced in the Mpemba than in the Chileka WPC. The Mpemba WPC is applauded by government officials and Civil Society Organisations (CSOs) for having women in key positions but male committee members still control decision-making processes. The reasons for this are attributed to traditional gender bias, social networks, and how water facilities were provided in the community. At Matowa Village, traditional leaders played a critical role in convincing the Department of Forestry to drill the borehole. At Luno Njowe village, male civic leaders¹⁶ within the community were at the forefront of the negotiations with UNICEF and district council officials for over a year before funders were convinced they should put down a borehole. WPCs, however, are generally only established once there is a solid agreement to drill a borehole. In other words, WPCs are an afterthought and the perception is that the WPC were '*...reaping fruits in an orchard where the bush had been cleared by few volunteers*'.¹⁷ Such power struggles alienated those who initiated the projects from applying to be committee members. Moreover, the regulations do not finesse such complexity. For instance, according to the District Development Planning System, 2000, traditional leaders cannot be chairpersons of a local level committee, in the interests, apparently, of creating conducive environment for discussions. Indeed, according to a key informant, traditional leaders would give in to demands of government with regard to the establishment of committees '*...to avoid being perceived as sympathisers of the opposition parties and not serving the government of the day as required by the law*'.¹⁸ However, the apparent acquiescence of traditional and civic leaders is superficial; they find other means of retaining their hold as initiators of the project. Crawford (2009: 76) considers the game being played by traditional and civic leaders as an 'Incorporated Strategy' where

15 In Mpemba, it was reported that men were scheduling meetings at times that women were likely not to participate; close to lunch hour when women are busy preparing food or later in the afternoon when it is too late for women to be outdoors.

16 One such leader was Mr M., who, despite the formal rules, acquired a dominant influence on the selection as well as the working of the committee. We noted, for example, that most of the members of the committee were his relations.

17 FGD, Luno Njowe village, 23 October 2011.

18 KII, Luno Njowe village, 24 October 2011.

...local citizens may feel that they have some involvement in decision-making processes, yet this is illusory: control over resources remains in the hands of others, both inside and outside local government.

This fact is illustrated in Luno Njowe village whereby the chairperson and secretary are related to the key figure behind the borehole drilling, himself an influential figure in the community as chairperson of a community based organization. Our central point is that the ministerial guidelines on the establishment of WPCs have not disabled the implicit structural forces that inhibit women from active participation in rural governance. Influential actors feign a belief in gender equality and women's access to governance, but have built-in strategies that give them access and control of the WPCs. (It remains, for example, a stigma for women to be active in public spaces.) Thus, even if women are well represented in WPCs, control of proceedings resides beyond them and the WPC.

In addition to the hijacking of control by male elites, WPCs have also limited participation by women by devising strategies that push them to the periphery of core activities. Male committee members arrange meetings at fixed times when it is inconvenient for women to attend. Interestingly, however, when a majority of women have assumed the key positions as in Luno Njowe village WPC, they have not used their influence to block decisions that put them at a disadvantage. In an FGD at Luno Njowe, a participant pointed out that, '...men usually say we meet at 11 a.m. or 4 p.m. But that is the time for us to prepare meals. We usually do not attend meetings because they are held at inconvenient times for us.'¹⁹ From our research we concluded that effective power within rural water governance structures remains largely in the control of male elites. This observation confirms findings of other studies including Ferguson and Mulwafu (2001), Mulwafu et al. (2003), and Chipeta (2009).

4.4 Challenges experienced by women when fetching water

Proponents of water governance reforms state that the reforms are not an end in themselves but a means to ends (UNDP, 2007; Calder, 2005; Cleaver et al., 2006). The ultimate goal of improving rural water governance is to attain sustainable supply of potable and safe water. The notion of a sustainable water supply is also connected to poverty reduction. Harvey (cited in Mkondiwa et al., 2013) argues, '...poor people identify lack of access to water as one of the key causes of poverty and thus improving

19 FGD, Luno Njowe village, 23 October 2011.

access to water is one of the priorities in reducing poverty.’

Through questionnaires, we established that the reforms to reorganize rural water governance for better water supply had proved inadequate in practise, and that this could have knock-on effects on other interventions. This is especially the case when women still find it difficult to access water.²⁰ According to the women, these included: (i) long distance to supply, (ii) physical obstacles such as rocks and bushes on the way, (iii) high demand, hence queues, (iv) the water facility is often out of order, and (v) dirty stagnant water. Below is a figure capturing details on challenges faced by women when fetching water for different uses.

	Drinking and Cooking	Washing	Bathing
Long distance	38%	24%	27%
Physical Obstacles	10%	11%	14%
High Demand	6%	6%	4%
Maintenance	7%	0%	0%
Dirty stagnant water	0%	13%	16%

Source: produced by authors based on data from the survey

4.5 Female Water Point Committee members: views of fellow women

We were also interested to explore the quality of representation of women by fellow women. When respondents were asked, ‘Do you know the female members of Water Point Committee in your area?’ it was encouraging to note that 92% of respondents in Chileka and Mpemba knew the female committee members of WPC. Given this fact, one would expect a strong working relationship between the former and female community members. However, this is not the case. Despite concerns raised by women regarding water governance and access to water, they have not organized themselves to present these concerns to leadership, in particular the women committee members. 66% indicated that they do not know of any initiatives taken by women to make the female leadership more accountable to their fellow

²⁰ Respondents indicated common sources for cooking and drinking water which might be different from water for bathing and washing because of financial implications.

women. 34% of women indicated that they know initiatives that were taken by women in the communities to get hold of fellow women in leadership positions to account for their decisions. However, they qualified such initiatives as:

...a meeting of women summoned by the chiefs not that we women passed a word to each other to have a meeting with our women leaders in WPC.²¹

The interaction of WPC members and women is limited to the provision of support in cash or kind towards the cost of borehole drilling; thereafter the WPC tends to ignore women. For example, 66% of women contributed to the drilling of boreholes in Mpemba and Chileka by fetching water for moulding bricks, ferrying sand and bricks to the drilling site, preparing meals for drillers, and providing money to buy the necessary materials. These findings only reinforce those of Mulwafu et al. (2003) and Chipeta (2009). Interventions by different sectors, including water, in the rural areas have thrived on a huge labour base of women while their inclusion in governance has been purely cosmetic.

For instance, the involvement of women in borehole development did not extend to being given an opportunity to suggest where the borehole should be located. At Matowa village, the borehole is near a nursery school. Women wanted the borehole drilled close to chief's house for security reasons, '...the chief has dogs and thieves would be scared. Vandalism of boreholes has hit us badly in the past ... proposing that site was a way of dealing with these thieves.'²² However, the borehole was drilled close to the nursery school contrary to the wish of women because UNICEF, who had funded the borehole through WACRAD, had a sanitation project being implemented at the nursery school. At Luno Njowe village, where the borehole was provided by Department of Forestry, the site was decided by the drillers. The community wanted the borehole placed at the centre of the village for easy accessibility. They were overruled because drillers advised that the suggested site had a low water table and the water itself was of high salinity. In Mpemba, the site for the borehole was also selected by the drillers based on technical reasons including high water table and low salinity.

21 Female FGD Matowa village, 22 October 2011.

22 FGD Matowa village, 22 October 2011.

5. POLICY AND PRACTICE – IMPLICATIONS

Thus far, we have considered the interface between national policy, its legal framework and community-based norms in governing access to and usage of water in rural areas. We have examined how decentralized water governance structures have worked in terms of enhancing the involvement of women in decision-making and water as a human right. This section highlights implications of our findings on policies and the practice in rural areas.

Government has to observe standards and fulfill its commitments as outlined in the 1999 MoAIWD Implementation Manual. This states that government is responsible for:

- (a) providing technical expertise and training,
- (b) monitoring water quality,
- (c) providing matching funding to eligible communities through community projects, i.e. for capital items required for the development of the local water supply and sanitation sector, and, among others,
- (d) co-ordinating all efforts in the sector. (GoM, 1999a: 19)

The manual indicates the responsibilities of a community as follows:

- (a) identifying the project,
- (b) choosing the technology,
- (c) selecting the site, and
- (d) providing security of the facilities against vandalism.

The manual allows a small window of flexibility for bureaucrats to exercise discretion to accommodate contextual or institutional factors.

However, we observed that improved standards will mean strengthening the financial base of local councils. The monthly subvention for local councils (as acknowledged above) is not enough to drill one borehole. In the 2011/12 fiscal year, of the USD 16.05 million (4.6%) of the national budget allocated to the water sector, district councils received USD 0.55 million (0.34%) (GoM, 2012). Such inadequate sums, in the face of local need, act as a disincentive. Local councils are also expected to ensure that all players in rural areas observe the appropriate standards and provide strategic guidance based on the District Development Plan, Socio-Economic Profile, District Water Investment Plan and Annual

Implementation Plan. However, non-state actors by-pass the councils (Chasukwa and Chinsinga, 2013; Kayuni and Tambulasi, 2011; Chiweza, 2010). Non-state actors should align with the planning processes of district councils; and the DCT, as a sub-technical arm of district council, should play a leading role in planning and co-ordinating interventions of different players and enforcing standards. However there is a grave disjunction between what should happen in principle and what does happen in practice. In such a muddled situation, rural water governance has not fully benefited from the multiplicity of non-state actors due to unco-ordinated efforts and duplication of interventions. It is recognized here that non-state actors have different, sometimes competing, interests. District councils are supposed to use the stated procedures and systems so as to bring sanity in water sector.

After a decade and following 20 May 2014 tripartite elections, councillors have been re-incorporated into the local governance system. By virtue of being local representatives, councillors are members of development committees in their ward. As stated above, our research has established that competition exists between male elites, traditional leaders, ADC and VDC over control of water governance structures. The presence of councillors adds another layer of political rivalry to the constitution of the WPCs. As the power struggle is mainly between councillors and MPs, it puts bureaucrats, who are supposed to provide direction, in a fix. Both MPs and councillors ‘...are politically connected figures with the potential of making the life of civil servants difficult.’²³ Subsequent to amendments made to the Local Government Act in 2010, the MoAIWD has to clearly stipulate the roles of MPs and councillors in rural water governance, especially because MPs are voting members of the councils, and hence on or at par with councillors in so far as formulation of policies and by-laws is concerned.

Despite governance challenges, it is acknowledged that water boards through WUAs have improved water supply to their customers (see Chapter 8). However, across the country, water boards and CSOs have to a large extent concentrated on peri-urban areas only. Coverage is limited because interventions are implemented in a project context with boundaries on resources and target groups. We suggest that the concept of WUA be extended to rural areas with adaptations to allow the effective participation of women in decision-making. One remarkable difference between the WUA and the WPC is that the former is profit-oriented

23 Interview with a district bureaucrat, 12 October 2011.

whilst the latter is community-oriented. However, if introduced into the rural areas, WUAs would have to temper their profits with tariffs that are just above break-even since they would be serving a majority who are struggling financially. However, in our view, and properly mandated, WUAs could assist with the sustainable provision of water. Government is obviously financially and technically constrained to assume this responsibility. Water as a sector is an orphan and has been pushed to the periphery given its politics and its low budget despite the huge demand for effective water governance in the rural areas (WESNET, 2013; Baby and Kurian, 2013). Thole et al. (2009:13) doubt if water boards can cope with additional responsibilities since they already ‘...often have negative net-incomes attributable to unwillingness to pay by the general public and lack of political will to allow the water boards to revise tariffs to reflect the cost of water supply.’

In our view non-state actors will have to utilize policy spaces accorded to them. They are already represented in the technical working groups²⁴ of the Joint Sector Review meetings which are held annually ‘...to allow for joint planning and review of the Water and Sanitation Sector... and ensure more aid effectiveness and increased donor harmonization in the sector.’ (GoM, 2009a: vi) In terms of advocacy, non-state actors will have to present evidence about the realities of rural water governance. Joint Sector Review meetings could provide a useful fora for advocacy as they provide a space for influential, decision-makers in the water sector. In addition, non-state actors can take advantage of the activities being facilitated by a number of NGOs (including Fresh Water, Village Hygiene Project, Water For People and WaterAid) to generate and consolidate their evidence when engaging public officials. Non-state actors consider themselves as a bridge between the duty bearers (government officials) and rights holders (rural communities). In view of the above, a key informant from an NGO that has a water project in Chileka said:

...non-state actors complement effort of government. They do not hold policies or laws in water sector but only help government to achieve its aspirations. It might not be realistic for rural communities to start pushing non-state actors to provide water

24 The six Technical Working Groups are: Water Supply, Water for Irrigation, Water Resources Management, Sanitation and Hygiene, Institutional Development and Capacity Building and Monitoring and Evaluation.

*as if non-state actors are part of government machinery.*²⁵

As a forum for civil society, non-state actors should facilitate a discussion between government officials and local communities by way of empowering the latter to demand their right to water. Non-state actors have a good understanding of the right to water. They are, however, often coy when it comes to promoting this right because they argue that water as an economic good, a position that does not appeal to poor rural communities.

6. CONCLUDING REMARKS

Based on empirical data from Blantyre Rural, the chapter considered the interface between national policy and its legal framework and the community-based norms in governing access and usage of water in rural areas. The chapter looked at how decentralized water governance structures have functioned in terms of enhancing the involvement of women in decision-making. The study agrees with International Fund for Agricultural Development (IFAD, 2007) that rural decentralized water governance has contributed to the increase in the number of women in WPCs with some of them occupying positions of influence. However, despite this, the responsibility for making critical decisions about the access and use of water in local communities, and the effective control over such decisions is not entirely within the hands of women or the committees on which they sit as members. Elite male hijack stalls their ability to exercise a positive influence in the decentralized water governance structures such as WPCs. It is recommended that further efforts should focus on contextual institutional factors. These are critical in designing governance frameworks if they are to improve the gender power dynamics. In addition, if the reform agenda is to bear fruit, the involvement of women in water governance should not be perceived as a burden, hence deterring women who are capable of delivering when given a chance. It should also be appreciated that it is unrealistic to expect immediate assumption of control by women because of the in-built traditional resistance of male and local elites. Regarding laws and policies on water, we established that community members are not very conversant with the government laws and policies which regulate the water sector, when compared with the communal rules and regulations, which they understood. We show that in rural areas, the living law takes precedence over coded State Law in regulating water matters including access and usage of water. State Law

25 NGO project staff, 13 April 2013.

is limited in its influence in rural water governance because of the invisibility of public machinery at the local level, in particular MoAIWD, and poor service delivery. Lack of knowledge about State Law and policies has also contributed to the inability of community members to navigate the structures and institutional framework and demand water facilities.

Part IV

Zimbabwe

Chapter 10

Governance, Gender Equality and the Right to Water and Sanitation in Zimbabwe: Contested Norms and Institutions in an Unstable Economic and Political Terrain

Anne Hellum, Bill Derman, Ellen Sithole
and Elizabeth Rutsate

1. INTRODUCTION

Zimbabwe signed the UN resolution on the Human Right to Water and Sanitation which was adopted by the General Assembly 28 July 2010.¹ Its new Constitution² signed by President Robert Mugabe on behalf of the Government of National Unity (GNU)³ on May 22 in 2013, includes the human right to water in Section 77. The right to sanitation is not directly addressed but is implicit in the right ‘to an environment that is

1 General Assembly Resolution 64/292 ‘The human right to water and sanitation’ (2010).

2 Constitution of Zimbabwe - 20th Amendment 22 May 2013.

3 Agreement between the Zimbabwe African National Union Patriotic Front (ZANU-PF) and the two Movement for Democratic Change (MDC) formations, on Resolving the Challenges Facing Zimbabwe (2008).

not harmful to their health for well-being;’ in Section 73 (1) (a). Unlike the previous Lancaster House Constitution,⁴ Section 56 in the new Constitution provides protection against gender and sex discrimination in all economic, social, cultural and political spheres. Defining gender balance as a national value, Section 17 calls for proactive measures to ‘promote the full participation of women in all spheres of Zimbabwean society on the basis of equality with men’ and to ‘take all measures necessary’ to ensure that ‘both genders are equally represented in all institutions and agencies of government’. Furthermore, Section 46 of this new Constitution requires Zimbabwean courts and other similar bodies to take into consideration Zimbabwe’s obligations in accordance with international agreements to which it is a party.⁵

On paper these legal developments hold promise for urban and rural Zimbabweans in a time of political, social and economic upheaval.⁶ In the aftermath of the political and economic crisis that followed the controversial Fast-Track Land Reform Programme beginning in 2000 Zimbabwe’s rural and urban water and sanitation infrastructure has been seriously degraded. The breakdown of public water supply and sanitation in both urban and rural areas has compromised the health of Zimbabweans and increased the burden of providing water for drinking, domestic use, sanitation, care of the elderly, children and sick, and food production on women.

Zimbabwe, at this turning point, makes a good case for studying the relationship between women’s and girls’ right to gender equality and their right to sanitation and clean, accessible and affordable water for domestic, sanitary and livelihood uses. In this chapter we situate the new constitutional adoption of the human right to water and sanitation, the right to participation and the right to gender equality in a terrain of shifting,

4 The independence Constitution of 1980 was the result of the 1979 Lancaster House Agreement and is sometimes called the Lancaster House Constitution.

5 This would include the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Protocol to the African Charter on Human and Peoples’ Rights on the Rights of Women in Africa (The Maputo Protocol) (and all other treaties and conventions to which Zimbabwe is a party).

6 Yet as we write the fate of the new Constitution is unclear as Zimbabwe’s Minister of Justice, Patrick Chinamasa, has declared that ZANU-PF after having won the 2013 Parliamentary election will use its two-thirds majority in Parliament to ‘clean up’ the new Constitution which was a product of the GNU Government and international human rights treaties and covenants.

overlapping and conflicting transnational, national and local water norms and governance regimes.

The chapter unfolds in seven sections. Following the introduction, Section 2 sets out the methodological framework. Section 3 addresses the intersection of race and gender inequality and water's colonial legacy. Section 4 focuses on the water reform programme which was started by the Government of Zimbabwe in 1993 and resulted in the Water Act and Zimbabwe National Water Authority Act of 1998.⁷ It shows how this reform responded to the World Bank initiated proposals for water reform in southern Africa based upon managing the water on an economic basis, the Dublin Principles as well as the need to address the inequitable division of land and water in Zimbabwe (Derman and Manzungu, 2015; Manzungu and Derman, 2015). Section 4 describes how Zimbabwean civil society and the women's rights movement have responded to political and economic misrule resulting in violations of civil, political, social and economic human rights, and most importantly in this context, the right to water and sanitation. In Section 5 we situate the GNU's accession to the human right to water within the context of the accelerating water crisis culminating in the cholera outbreaks in 2008. The political process resulting in a new Constitution and a new Water Policy that recognizes the right to water, the right to participate in water governance and the right to gender equality is addressed. Through focus on the different international and national State and non-state actors⁸, including the United National Children's Fund (UNICEF), the World Bank, international donors and NGOs, it shows how a series of challenges regarding the implementation of the human right to water and sanitation and the right to gender equal participation are yet to be addressed. Section 6 provides an overview of the constitutional challenges regarding the implementation of the duty to provide adequate, available and affordable water for urban and rural people in Zimbabwe. By way of conclusion, Section 7 emphasizes the fragile commitment to human rights within the context of a national economic crisis under a ZANU-PF government, which came back into power after the 2013 elections.

7 It also included the development of a national water resources management strategy known as WRMS (GoZ, 2000).

8 In practice the boundary between State and non-state actors is blurred as a wide range of actors that not formally are part of government are assuming governance functions.

2. GENDER, HUMAN RIGHTS AND WATER GOVERNANCE: QUESTIONS, CONCEPTS AND METHODS

The overall aim of this chapter is to explore how the human right to water and sanitation, the right to participation and the right to equality and non-discrimination embedded in international and regional human rights instruments, have been invoked, resisted or adopted by international, national and local actors and institutions that have been, are or will be involved in the reconstruction of Zimbabwe's water infrastructure and governance structure. Addressing a plurality of international and national state and non-state actors we are departing from a state-centered notion of law and governance.

2.1 Key gender, human rights and water and sanitation issues

The observance of human rights, including socio-economic rights, participation rights and non-discrimination rights, is critical to good governance of domestic and productive water service provision. Key concerns in this observance include giving priority to water and sanitation for vulnerable groups such as the very poor, disabled, displaced and elderly and women and children within all these groups. The Zimbabwean water crisis has resulted in an increasing burden on rural and urban women and girls to provide water for sanitary, domestic and livelihood needs.⁹ This situation has led us to explore whether and to what extent the right to water and sanitation and the right to participation in water governance without discrimination under Zimbabwe's regional and international legal and political commitments¹⁰ have been implemented by the multiplicity of international and national state and non-state actors that are involved in water governance and management of water.

The relationship between substantive gender equality and access to water and sanitation is emphasized by the CESCR Committee in General Comment No. 20 on Non-Discrimination. It stipulates that states have a duty to immediately adopt measures necessary to prevent, diminish and eliminate the conditions and attitudes that cause or perpetuate substan-

9 For research on women's and girls' rights to water and sanitation in Zimbabwe see Stewart (2007); Hellum (2007); Katsande (2006); Kanyerere (2012); Moffat (2012), Mutopo and Chiweshe (2014a) and chapters 11, 12 and 13 in this book.

10 Most importantly the International Convention on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Maputo Protocol, the SADC Regional Water Policy of 2005 and the SADC Protocol on Gender and Development.

tive or de facto discrimination, and provides, by way of example, that, 'all individuals have equal access to adequate housing, water and sanitation' and that achieving this 'will help to overcome discrimination against women and girl-children and persons living in informal settlements and rural areas.'¹¹ With a view to the injustices deriving from the gendered division of labour and gendered uses of land and water Article 14.1 of the CEDAW states that: 'States Parties shall take into account the particular problems faced by rural women and the significant roles which rural women play in the economic survival of their families, including their work in the non-monetized sectors of the economy.'

Seeing water and sanitation as a gender equality issue we examine if these rights have found their way into laws, policies and practices in Zimbabwe.¹² How has the right to water and sanitation been defined and operationalized in Zimbabwean laws, policies, programmes and practices? How has women's protection against direct, indirect, structural and intersectional discrimination regarding access and participation in the governance of these resources been integrated into the work of international, national and local state and non-state actors involved in water governance?

In the light of the gender-neutral character of laws and policies guiding the provision and governance of water and sanitation services, and the gendered perceptions and norms that are prevailing on the ground, a key question is what measures have been taken to protect women against indirect discrimination, which occurs when a law, policy or programme does not appear to be discriminatory at face value, but has a discriminatory effect when implemented. Another key issue concerning the provision of water and sanitation in rural and urban areas is the need of measures to relieve women of the burden imposed on them by the water related duties they assume in the 'care' economy.¹³ Gender discrimination is often a result of systemic discrimination understood as 'legal rules, policies and practices or predominant cultural attitudes in either the public or the private sector which create relative advantages for some groups and dis-

11 CESCR General Comment No. 20 (2009) Non Discrimination in Economic, Social and Cultural Rights (art. 2) E/C/GC/20, para 8.

12 The human right to water and sanitation and the right to equality and protection against direct, indirect, structural and intersectional discrimination are elaborated in Chapter 2.

13 'Women's Rights and the Right to Food'. Report submitted by the Special Rapporteur on the right to food, 24 December 2013, A/HRC/22/50, para. 39.

advantages for others.¹⁴ CEDAW Article 5(a) and the Maputo Protocol Article 2(2) require that States Parties commit themselves take measures to modify the social and cultural patterns of the conduct of women and men which are based on the idea of the inferiority or the superiority of either of the sexes, or on stereotyped roles for women and men, so-called gender stereotypes.

In the light of increasing social and economic differences among Zimbabwean women both in urban and rural areas, a related question is how intersecting vulnerabilities related to gender, class, health, disability and displacement have been addressed by different actors in different phases of Zimbabwean water reform. The CESCR Committee in GC 15 emphasizes poor women's vulnerabilities:

*States parties should give special attention to those individuals and groups who have traditionally faced difficulties in exercising this right, including women, children, minority groups, indigenous peoples, refugees, asylum seekers, internally displaced people, migrant workers, prisoners and detainees.*¹⁵

We ask if the CESCR Committee and the CEDAW Committee's emphasis on the need to protect vulnerable groups of women against intersectional discrimination defined as 'The discrimination of women based on sex and gender is inextricably linked with other factors that affect women, such as race, ethnicity, religion or belief, health, status, age, class, caste, and sexual orientation and gender identity...'¹⁶ has been given adequate attention?

2.2 Water governance and water rights in a pluralist legal and institutional landscape

Water governance consists of the exercise of authority through institutions, laws, policies and procedures in order to provide access to water.¹⁷ It has vertical and horizontal dimensions. Vertically it is exercised at

14 CESCR GC 20, para. 12.

15 CESCR GC No. 15 (2002) The Human Right to Water. E/C.12/2002/11, para. 16.

16 CEDAW (2010) General Recommendation No.28 on the Core Obligations of States Parties under Article 2 of the Convention on the Elimination of All Forms of Discrimination against Women CEDAW/C/2010/47/GC.2.

17 'Governance then roughly points at situations where decision-making and implementing takes place in complex actor systems of public, private and semi-private actors. In these systems governments increasingly use horizontal forms of steering to achieve results within these actor systems.' (Teisman et al., 2013: 2).

different levels i.e. national and local government and community. At a horizontal level it involves the exercise of authority among and between different water sectors such as domestic, agricultural, environmental and industrial. Good governance is the effective exercise of authority by the State in making laws and policies, enforcing them and providing services in response to the citizens' needs. The goal is, in accordance with human rights and good governance theory, to have it done in an accountable, efficient, participatory, transparent and equitable manner. The observance of human rights, including socio-economic rights, participation rights and non-discrimination rights, is critical to good governance particularly giving priority to water for vulnerable groups including the very poor, disabled and elderly, and women and children within all these groups. Acknowledging human rights as critical to good governance, a key question is whether and to what extent Zimbabwe's Water Policy of 2012 along with constitutional and national legislation lays a foundation for a rights based, accountable, efficient, participatory, transparent and equitable water governance system.

Acknowledging the multiplicity of State and non-state actors that have been involved in the governance of water at the intersection of the international, national and local levels in Zimbabwe, we approach water governance as 'the system of actors, resources, mechanisms and processes which mediate society's access to water' (Franks and Cleaver, 2007). Since statutory law is not the sole regulatory mechanism, socio-legal research methods have been applied to uncover the multiplicity of formal and informal norms and institutions that different groups of women's access, use and control of water rely on (Bruns and Meinzen-Dick, 2000; Van Koppen et al., 2007).

Within this broad framework we explore the interaction among a plurality of formal and informal transnational, national and local actors, norms, practices, policies and institutions from Zimbabwe's independence in 1980 to date. To study continuity and change in water governance we focus on three phases: the early independence period from 1980-93, the water reform that begun in 1993 and lasted, if greatly weakened by the political and economic crises until 2012. The year 2013 marks the beginning of a new water policy, which we analyse in Section 6. It is important to note that the genesis of the new water policy was created by the cholera outbreaks in 2008 and the re-entry of international actors and donors into the water sector. The period from 2008-13 and the accession by the Government of Zimbabwe to the UNGA resolution 64/292 on the hu-

man right to water¹⁸ is analysed in its own right. In each of these time periods we note the international context in which they are taking place showing how Zimbabwe's water governance has from colonial times and through the present been responsive to changes in international policies and frameworks.

2.3 Methods and sources

We have been involved in the study of water reform in Zimbabwe since 1997 and through the first half of 2014.¹⁹ Since 2010 we have, through the research project 'Gender, Human Rights and Water Governance', examined water governance at both national and local level. To study the latter, we carried out studies in Harare's high-density areas: Dombosha-wa Communal Area and on four A1 resettlement farms in Mazowe.²⁰ We have interviewed different categories of women, local government officials, members of catchment and sub-catchment councils, chiefs and headmen, local councillors, water committee members and leadership and membership of resident organizations.

To study national water governance in the post-cholera era, since 2008, we have examined policy and project documents and interviewed a wide range of State, international and national non-state actors who have been part of the process. Main government institutions are the former Ministry of Water Resources Development and Management²¹ and the parastatal Zimbabwe National Water Authority. A key international actor is UNICEF, which after the cholera outbreak, became the co-ordinator of all humanitarian water sector assistance to Zimbabwe. Despite the diplomatic isolation of Zimbabwe and the suspension of government to government development aid due to the scale of human rights violations, the Australian Aid Agency, the German Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the Norwegian Agency for Development Co-operation (NORAD), the African Development Bank and the World Bank²² have agreed to assist in the reconstruction of Zimbabwe's

18 UN General Assembly (2010).

19 Part of CASS (Centre for Applied Social Sciences, University of Zimbabwe) water research led by Francis Gonese and Bill Derman, and carried out under the USAID project, Broadening Access and Strengthening Input Market Systems.

20 See Chapters 11,12 and 13.

21 Its mandate has now been assumed by the Ministry of Environment, Water and Climate, which was created in September, 2013.

22 While the World Bank claimed not to be using its own funds for projects,

water and sanitation infrastructure. We have examined the background papers that these donors through the Multi-Donor Analytic Trust Fund, co-ordinated by the World Bank,²³ have contributed to develop the basis for a new water policy. We have observed the work of women's organizations, with a focus on how they, in the Constitution-making process and the CEDAW reporting process, have addressed the right to water, the right to participation and the right to gender equality. Through cases dealt with by civic organizations like Zimbabwe Lawyers for Human Rights (ZLHR) and Harare Residents' Trust and Combined Harare Residents Association (CHRA), who are offering legal support to vulnerable citizens who are not provided with water or have had their connection cut off because they cannot pay, we have been able to study how existing laws and regulations are implemented.²⁴

3. 1980–1993: THE CHALLENGE OF UNMAKING OF WATER AND GENDER INEQUALITY'S COLONIAL LEGACY

Coming into power in 1980, after an armed struggle against the white minority rule in Rhodesia the ZANU-PF government, led by Robert Mugabe, sought to unmake the racially skewed distribution of power and resources deriving from the white minority government's persistent violation of the civil, political, social and economic rights of the black majority. The new government was partly limited by the 1980 Constitution,²⁵ which was a transitional Constitution with parliamentary seats reserved for whites and restrictive provisions limiting land acquisition for redistribution for the first decade of independence. The Lancaster House Constitution, privileged civil and political rights and did not address social and economic rights. It provided protection against racial and ethnic discrimination but not gender and sex. Section 23 of the Lancaster House Constitution continued to legitimize discrimination against women in matters regulated by customary law, and in relation to marriage, divorce,

it maintained a high profile office and staff in Harare.

23 This was the mechanism created to provide policy support to the water and sanitation sector in Zimbabwe.

24 The conflict between cities and ratepayers and water users was altered in July 2013 when the Minister of Local Government, Urban and Rural Development, Dr Ignatius Chombo, ordered local authorities to cancel residents' debts, in direct response to residents' demands according to him. The timing, however, was just before the combined parliamentary and presidential election in August 2013.

25 Known as the Lancaster House Constitution.

adoption, inheritance and other matters of personal law. The Supreme Court, however, improved women's rights through a number of rulings which on the basis of the Legal Age of Majority Act of 1982²⁶ struck down discriminatory customary laws that were developed by the colonial courts. The Supreme Court in these landmark cases confirmed that women as full adults and citizens had equal rights to men in national law.²⁷

A closely related aspect of the colonial heritage was the dual property structure with commercial farm land (formerly known as European land) that was privately held and communal land (formerly known as Tribal Trust Land)²⁸ that was subject to customary tenure in which land could not be bought and sold. The European areas were constructed to be market-based while what was called Tribal Trust Lands (now termed communal lands) were designated for subsistence farming within an economy where black men were expected to be migrant workers in South Africa and Southern Rhodesia. Women were expected to stay in the Tribal Trust Land to cater for children and the elderly (Van Onselen, 1976). A third category, the African purchase areas,²⁹ were intended to develop a more commercially oriented small-scale African farmer.

The unjust land distribution in which Africans were forced off the best land also meant they lost access to wetlands and rivers. This alienation was reinforced through a water law regime, stemming from Roman-Dutch law, based on a division between commercial and primary water. Within this dual system, water rights could be obtained by land-owners through application to a water court which then granted rights in perpetuity. Tribal area residents under common property systems could not apply for water permits in their own name but had to go through the colonial authorities. The right to primary water,³⁰ however,

26 Now section 15 of the General Law Amendment Act, Chapter 8:07.

27 See *Katekwe v Muchabaiwa* 1984 (1)ZLR 117 G-H and *Chibowa v Mangwende* 1987 (1) ZLR 228(S).

28 What was termed Tribal Trust Land in the former Rhodesia was held on behalf of rural black Africans by the colonial State.

29 These came to be known as small-scale commercial farming areas in which private ownership of land by black Zimbabweans was permitted.

30 Primary water is defined in the Water Act as '... water used for: (a) domestic human needs in or about the area of residential premises; (b) animal life; (c) making of bricks for private use, and d) dip tanks.' What is meant by 'domestic human needs in and about the area of residential premises' is, however, not clear. In sum, it is not restricted to drinking water, but is seen as an integrated part of livelihood necessities, such as food and housing in communal areas. The state is

implied that they could not be denied access to water that was necessary for livelihood. Throughout the colonial period the Water Acts of 1927, 1964 and 1976 required the colonial authorities to respect the primary use rights of Tribal Trust Land inhabitants (Hoffmann, 1964; Derman and Hellum, 2002: 35-36). Primary water appeared to recognize everyone's right to use water as a necessity for life. The first regulation of water was by Order in Council, 1898, section 81, requiring the British South Africa Company to ensure that native tribes had a fair and equitable portion of springs of permanent water. There was, within the colonial water laws, no explicit concern with customary law, unlike other areas of colonial regulation such as land, marriage and inheritance. Thus there is hardly any recording of the customary norms and practices that guided water use in this period. The Shona literature though indicates that water was seen as a common good that could not be denied anyone and that good rains or poor rains were understood as indicators of social well-being or social conflict, of attending to the ancestral spirits or neglecting them (Bourdillon, 1987; Lan, 1985; Maxwell, 1999).

The colonial period saw little or no public investment in water, water supply or water management institutions in the Tribal Trust Lands while investing in dams for European farming and drinking supplies. In the early post-independence period there was a focus on improving rural water supply and sanitation. This was done initially through the construction of new boreholes funded by a wide range of international donors and the Department of Water Development, District Development Fund, Rural District Councils and private organizations. In the resettlement areas formed during the 1980s and into the 1990s, the government provided and paid for boreholes and when possible irrigation schemes. It also emphasized Blair toilets³¹ for sanitation and had programmes to pay for the needed cement for wells and toilets while villagers provided labour. Local institutions to manage these new water sources were mainly absent since government wanted the credit for introducing development. In this

obliged to respect and protect the right to primary water as embedded in the Act. Thus, the 1998 Water Act (section 51(1)) asserts the importance of primary water:

No permits granted by a catchment council, other than permits for the use of water granted to a local authority for primary purposes, shall have the effect of depriving persons of the use of water for primary purposes.

31 The Blair Latrine is a pit latrine that uses a screened vent pipe to control odours and flies.

period 1980-91, the UN's development decade on water, 'clean drinking water and sanitation for all by 1990' was the overall goal (Wallace and Coles, 2005: 2-3). In donor funded water development programmes in Zimbabwe, as elsewhere in the world, the involvement of women's participation was expected to increase the efficiency of water projects, because of their interests in receiving reliable domestic water supplies (Clever, 1998). An integrated aim of the internationally funded water and sanitation programmes in this era was to ensure that women were represented on the local borehole committees.

4. 1993-2000: ADOPTION OF THE INTEGRATED WATER RESOURCE MANAGEMENT STRATEGY

In the early 1990s the World Bank initiated proposals for water reform in southern Africa based upon its own manual, *Water Resources Management* (1993). It had been written at the same time as the Dublin Principles were formulated and referred to them. However, the Bank placed most emphasis upon the pricing of water and its management as an economic good. In the context of Zimbabwe, however, the inequitable division of land and water had to be addressed. Thus the government of Zimbabwe initiated a Water Act Review Board to review the existing water act and to reconsider its principles of allocation.³² In addition, water issues figured importantly in the Zimbabwe Land Tenure Commission (Rukuni, 1994). It observed that water distribution and use had the same inequitable allocation patterns as land. With the promise of donor funding the Gov-

32 The terms of reference for the Water Act Review Board (chaired by Dr. S.S. Mlambo from the then Ministry of Lands, Agriculture and Water Development in June of 1993), were as follows:

1. Review the existing Water Act, its subsequent amendment and any relevant background information.
2. Examine the principle and basis for granting water rights.
3. Examine and determine the extent of efficient and effective usage of water rights by those holding them.
4. Review the principle of riparian use.
5. Determine principle of priority dates.
6. Determine pricing policy.
7. Solicit people's, farmers' and ordinary citizens' views on the subject of water rights.
8. Determine the principle to be adopted in allocation of water in the light of the existing one.
9. Determine the necessity for the formation of river boards.
10. Produce report and recommendations.

ernment of Zimbabwe in 1995 decided upon a restructuring of the water sector. The Ministry of Lands and Water Resources (as the ministry was known at that time) embarked on the 'Programme for the Development of a National Water Resources Management Strategy'. Its major goals were: to broaden access to water, democratize water management, shift from a supply focus to a demand focus and enhance a more effective use of water, and recognize the environment as a legitimate user of water. The policy and legal outcomes of this process were 'Towards Integrated Water Resources Management: Water Resources Management Strategy for Zimbabwe' (GoZ, 2000) and the two new acts, the Water Act No. 31/98 and the Zimbabwe National Water Authority Act No.11/98.

4.1 Commercial water uses: new laws and institutions

The Water Resources Management Strategy aimed at greater racial justice in the productive water sector: to erase the colonial land and water legacy, where the bulk of agricultural water was controlled by white commercial farmers.³³ At this point, large-scale commercial farms took up 157,000 km² that were owned by approximately 4,500 commercial farmers. These commercial farms used 84% of Zimbabwe's total available water. The majority of these farmers were white but there were a rapidly increasing number of black commercial farmers. The communal land areas constitute 163,500 km² or approximately 50% of Zimbabwe's total land area. These areas were home to 4,500,000 people who were mainly small-scale farmers. The small-scale farmers in the communal areas utilized only 7% of the available water (GoZ, 2000):

In line with the aim of greater racial justice and in order to bring black commercial farmers on board the new water laws continued and expanded State ownership of all Zimbabwe's waters, ended holding water rights in perpetuity and created new institutions (catchment and sub-catchment councils) and the Zimbabwe National Water Authority.

ZINWA (temporarily) came to be the most important actor in the water sector. As a parastatal agency responsible for water planning and bulk supply, ZINWA was to manage water resources on a catchment basis with involvement of stakeholders in each catchment area. Other responsibilities included the management of the water permit system, the pricing of water, operating and maintaining existing infrastructure, and executing development projects. ZINWA was to devolve responsibility for managing river systems and enforcing laws and regulations at the lo-

33 GoZ (2000).

cal level. And while water supply management remained with cities and many towns, ZINWA was instructed to take over Harare's water supply system in 2005 (see Chapter 11 for details). In general ZINWA took a business perspective since they were supposed to fund themselves through the sale of water and the services they provided. A rights perspective was not included nor were they tasked to provide rural water supply since that fell under the inter-ministerial National Action Committee. While the Catchment Manager sat with catchment and sub-catchment councils they were accountable to ZINWA and not to water users and had no mandate to focus on the poor or disadvantaged sectors of the population. In neither the Ministry of Water nor in ZINWA was there an interest or policy toward communal area waters.³⁴

Addressing the first reading of the draft Water Bill, Attorney General Patrick Chinamasa in 1998 explained to Parliament: 'What the existing legislation has done is that the water is the President's water but the President then put in legislation to give permission to people to exploit it and that is what is peculiarly known as the water right.'³⁵ However, despite Chinamasa's populist message the new water management system placed emphasis upon the 'user pay' principle. Most of the technical staff in the Ministry of Water Development and Resources shifted to ZINWA, which was to be funded through the sale of raw water to industries, government and agriculture, and purified water to small towns and government institutions in communal areas. In presenting the second reading of the Zimbabwe National Authority Bill, the Minister of Water Development and Rural Resources (as the Ministry was then known) Joice Mujuru captured the tensions between the two elements of water reform, the economic and the social: 'The proposal for the formation of ZINWA is in line with objective of the economic structural adjustment programme (ESAP) to streamline civil service operations and promote economic efficiency. The proposal is also in line with the new economic strategy of decentralization, commercialization and privatization.'³⁶

34 There is substantial research on how the new institutions of water governance functioned (Latham, 2002; Mtisi and Nicol, 2003; Manzungu, 2002; Derman and Manzungu, 2015; Manzungu and Derman, 2015; Sithole, B., 2001 among others).

35 Zimbabwe Parliamentary Debates. Vol. 25, No. 26, 3, November 1998, p.1566.

36 Zimbabwe Parliamentary Debates. Vol. 23. No. 8, 15 September 1998, p. 207. Her statement also points to the importance of international thinking and the shift from the previous international water decade to the commercialization of water.

In concert with global water policies, water was to be considered a social and economic good while the environment was to be recognized as a water user. The overall aim was to promote economic development through encouraging business activities. Commercial water was defined as the use of water for commercial purposes, which must, in accordance with the Water Act of 1998, be obtained by permit and paid for. With regard to rural water, the duty to respect the right to primary water, embedded in earlier water legislation, was upheld.³⁷ Section 2 of the Water Act of 1998, in line with earlier colonial legislation, define primary water as water for household needs, animals, and bricks to build houses. In the context of an escalating economic and social crisis, the lack of conceptual clarity regarding the distinction between primary and commercial water research investigating different catchment councils demonstrates that the intention 'to ensure the availability of water to all citizens for primary purposes' was not realized (Derman et al., 2007: 258). Attempts to impose levies on communal farmers in order to secure income for catchment councils regardless of whether the uses were commercial or primary were made (Sithole, M. 2001).

4.2 Between commercial and primary water uses: community based water uses in the communal lands and the establishment of hydraulic property rights

In most communal areas small-scale family created and managed irrigation systems were formed. They involve capturing water, operating water use systems, and establishing the means to move the water from water sources onto gardens and fields. In turn, these irrigation systems create relations among water users and construct the norms that govern the ways in which water is shared. These systems involve conflict, co-operation and negotiation. Over time, these patterns of behaviour define water rights. Such rights, often termed hydraulic property rights, are not stable but can change as rainfall patterns change, flows of water are altered, as water is put to different uses and outside authorities attempt to manage water in new ways. Van Koppen (2010: 11), based on Coward (1986), defines hydraulic property rights as follows:

as the process of establishing recognized claims to water of certain quantity and quality on a particular site at certain timings. Mak-

37 In Zimbabwe, water is divided into three types: commercial, primary and urban, industrial and mining with, until recently, the emphasis upon commercial water.

ing investments in the physical infrastructure to abstract, store, and/or convey water and, thus, create such use value of water in terms of quantity, quality, site and timing, is the single most important ground for vesting claims to water conveyed.

In terms of local governance hydraulic property rights are recognized and subject to local norms. However, these systems tend to be invisible to national authorities and are not recognized by existing legislation despite their importance for the livelihoods and survival of rural communities. The WRMS programme saw communal areas as underdeveloped due to the lack of water rights/permits, low use of commercial water and low storage capacity. There was no recognition of the hydraulic property rights that small-scale rural farmers, through investment in local water infrastructure, operation and maintenance in terms of the digging of canals, small dams and wells, had achieved (see Chapter 12).

The Water Act's requirement to show beneficial use of water, where the user had to demonstrate that he or she will use the water productively, excluded communal farmers who lacked the finance to install water infrastructure aimed at large-scale production. Thus only a few smallholders successfully applied for water permits under the Water Act (Manzungu, 2002: 96-97) Furthermore, the stakeholder meetings³⁸ where white commercial, black small-scale and communal farmers for the first time came together at the catchment and sub-catchment council meetings did not address the type of water supply that was needed to enhance small-holder agriculture and improved drinking water. Community based water management systems and primary water, while central to development and food security in the communal areas, were seen as peripheral to the catchment councils that claimed this was the domain of 'development institutions.'³⁹

The WRMS programme overlooked the fact that most Zimbabwean small-scale farmers rely on water sources that cannot unequivocally be termed commercial or primary (Derman and Hellum, 2002; Derman et al., 2007: 259-61). Within the irrigation sector small-scale and sub-

38 The new water institutions – catchment and sub-catchment councils were to be made up of stakeholders selected from the following: rural district councils, farmers (communal, resettlement, small-scale, large-scale commercial, indigenous commercial), urban authorities, large-scale miners, small-scale miners and any other stakeholder group catchment or sub-catchment councils may identify (GoZ, 2000a; GoZ, 2000b).

39 CASS study. Catchment Council Minutes for the Mazowe, Manyame and Sanyati, 2000.

sistence farmers in the communal areas at this point in time accounted for 7% of water use although this figure has not been documented. The water for agriculture was primarily from wetlands/dambos, small-scale irrigation systems based on gravity or diesel pumps and hand-irrigated gardens. The rural primary water supply in the communal lands was also based on ground water through deep wells and boreholes. Some 29,000 wells and boreholes had been developed under the National Rural Water Supply and Sanitation Programme funded by international donors. Rural water supply either on commercial farms or in communal areas was not considered to be relevant for catchment or sub-catchment councils.

The WRMS programme and the Water Act overlooked the local norms and institutions, most importantly the hydraulic property rights that framed new and innovative forms of commercial cropping in the communal areas and the role women through home gardens, dry season gardens, all season gardens and domestic use played with regard to food security, health and education. It did not pay attention to the socially and spiritually sanctioned norms that views access to clean drinking water and land with accessible water to grow food as a livelihood right in Zimbabwe's rural areas (Derman and Hellum, 2002; 39-45; Hellum, 2007a; Derman et al., 2007). These norms, often termed 'living customary law', like the human right to water, see the right to water as deriving from the right to life, livelihood and dignity as critical for women's access and use of water as providers of food and care and as such for food security (Hellum, 2007a). Most importantly, these local norms recognize the rights that derive from investment in water infrastructure.

The WRMS programme in other words failed to set out a strategy to develop existing primary and customary water uses in the communal areas. There was no explicit recognition of the community based norms and institution that that have guided the use of water for domestic and productive in the communal areas for generations in the WRMS programme or the Water Act of 1998. In the name of decentralization a single system of water management was to be implemented. Thus local norms and practices are ignored and deemed irrelevant to the implementation of the Water and ZINWA Acts. The Water Act, however, in line with earlier legislation recognizes the right to water for primary purposes. The government minister's functions include ensuring availability of water for primary sources to all citizens.⁴⁰

The right to water for primary use thus coincides with informal cus-

40 Water Act, Section 6(1)(b).

tomary norms establishing that no one can be denied clean drinking water or land with available water sources to grow food. The right to water for primary uses implies that abstraction of water for primary purposes without storage does not require a permit. Where there is storage a permit is only required if the storage facility has a capacity of more than 5,000 cubic meters.⁴¹ It is, however, within the power of catchment councils to limit abstraction of water for primary purposes if it is in the public interest and for purposes of ensuring equitable distribution.⁴² catchment councils, however, cannot interfere with the primary water available to communal land residents without the relevant minister's approval.⁴³

The weakness of this protection is its dependence on the minister i.e. it is assumed that he or she will always act in the interest of residents of communal land. A key question is whether rural communities' access, use and control over water sources will be respected and protected in a situation when powerful local as well as large-scale national and international development and industrialization initiatives are granted permits to use land and water in the communal lands which is owned by the State (see Chapter 12).

4.3 The stakeholder model: democratization without women's participation

In the Water Act of 1998 Zimbabwe was divided into seven catchments,⁴⁴ each with a catchment council and divided into sub-catchments led by a sub-catchment council. The catchment and sub-catchment councils would be made up by elected representatives from different stakeholder groups. The idea underlying the stakeholder-based water management model was that community involvement would lead to a more efficient, democratic and sustainable water management system. Water catchment regulations defined which water users in the river system would have representation on the sub-catchment councils.⁴⁵

41 Ibid., Section 32(2) and (4).

42 Ibid., Section 33(1).

43 Ibid., Section 48.

44 These are the Save, Mazowe, Sanyati, Mzingwane, Manyame, Runde and Gwayi.

45 GoZ (2000b) Statutory Instrument 47, Water (Sub-Catchment Councils) Regulations of 2000, Section 20, Section 20). There was a stipulation of which groups would be represented on every sub-catchment council, namely two representatives from large-scale commercial farmers, indigenous large-scale commercial farmers, small-scale commercial farmers, communal farmers, Rural District Councils, large-scale miners, small-scale miners, industry and

One would think that the stakeholder model would enhance women's participation and empowerment.⁴⁶ The Dublin Principles, which guided the new water governance structure, emphasized the close relationship between water, gender and development. According to Principle 3: 'Women play a central part in the provision, management, and safeguarding of water'. While women were formally eligible the new Water Resources Management Strategy, the Water Act and the statutory instruments regulating elections to catchment and sub-catchment were all silent about the ways and means of enhancing women's participation. One would also have thought that an equal rights strategy, involving female quotas in line with the CEDAW, which had been ratified by Zimbabwe and the donors that funded the reform, would have been adopted. An equal rights strategy was, however, flatly rejected by male water experts and ZANU-PF politicians arguing that a rights based approach was a western imposition and contrary to African consultative democracy (Hellum, 2001). In addition, the woman who was hired to focus on gender also functioned as an economist for WRMS. She had little support within the organization and was not connected to the wider Women's Coalition to argue for representation of women at all levels of water governance. Rather than a rights based approach, embedded in the CEDAW, a gender mainstreaming strategy aiming at gender sensitization of water managers was adopted. The inadequacy of this approach is reflected in the low number of female representatives that were elected to the catchment and sub-catchment councils and a broader disregard of the importance of gender.

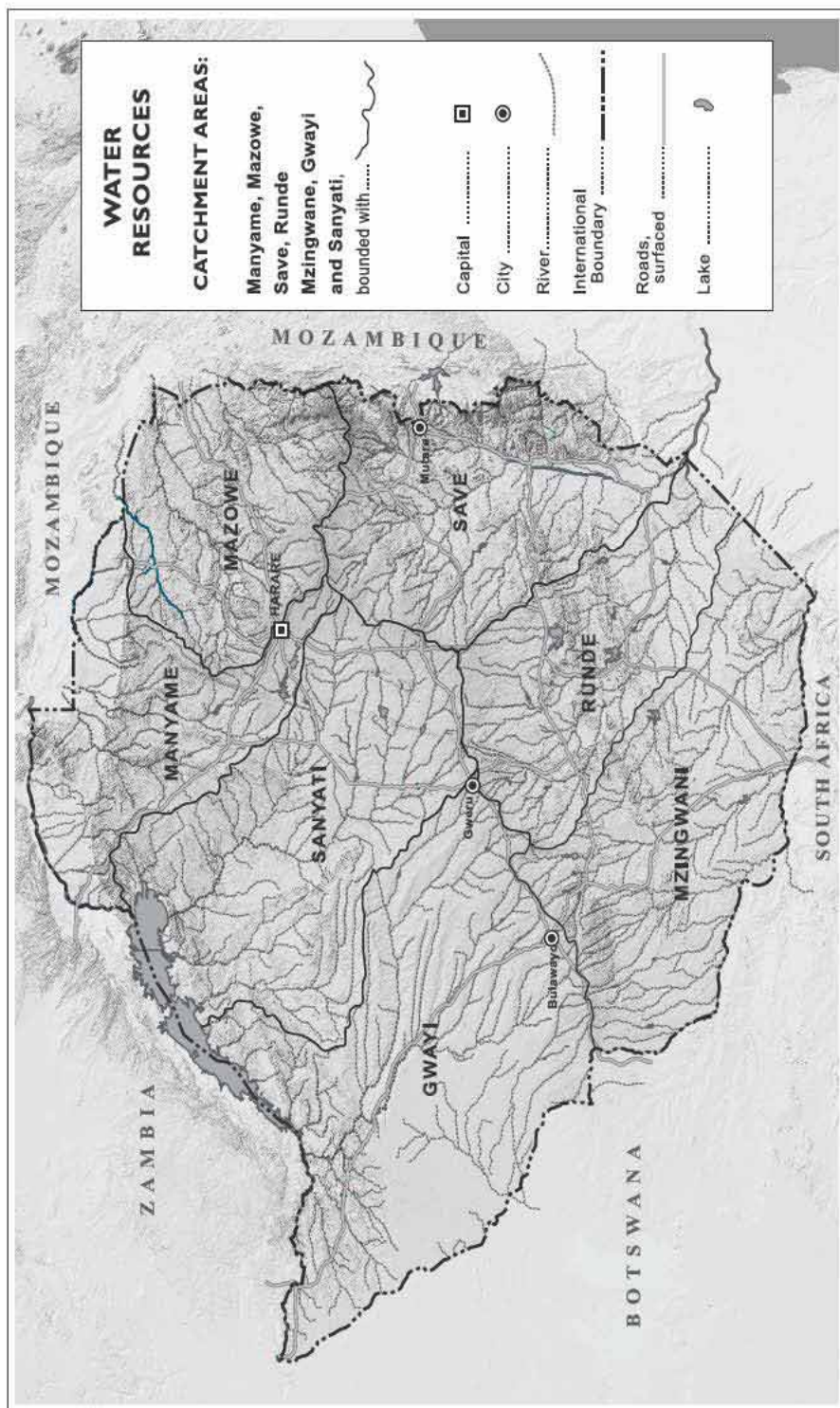
4.4 Domestic rural and urban water and sanitation supply

Rural and urban district councils are subject to the Rural District Councils Act and the Urban Councils Act which holds them responsible for the provision of water and sanitation within their locality.

The Public Health Act, section 64 (1) puts the responsibility on the local authority to provide sufficient water for drinking and domestic purposes to residents within its locality. Section 66 of the same Act further requires the local authority to maintain existing water supplies in good order for effective distribution of a supply of pure water for drinking and domestic purposes. Section 6 (2)(d) of the Water Act, obliges the minister to take into account the access needs of poor consumers by im-

commerce, and resettlement farmers. Two members of the SCC were to become members of the catchment council. In practice the chair and vice-chair elected by the SCC became members of the catchment council.

46 GoZ (1998) Section 21; GoZ (2000a); GoZ (2000b).



posing a duty to 'secure the provision of affordable water to consumers in under-privileged communities' but lacks a definition of 'under-privileged communities'. Responsibility for implementing the Water Act has, since 1998, been shared between those responsible, as designated by the President,⁴⁷ the Zimbabwe National Water Authority, catchment and sub-catchment councils and local authorities (urban councils and rural district councils).⁴⁸

The Urban Councils Act, Chapter 29, empowers urban local authorities to provide treated potable water services in their areas of jurisdiction. As a result of the water reform, aiming at more effective uses of water, Zimbabwe's cities and towns have to buy bulk raw water from ZINWA through permits issued by sub-catchment councils.⁴⁹ This means that cities and towns have to recover their economic costs through revenues. The cost recovery principle, which was at the core of the water reform, does not sit well with the duty under the Water Act to 'secure the provision of affordable water to consumers in under-privileged communities'. Thus, the water reform did not translate into concrete policy and legislative directives to water authorities and water service providers such as urban councils and rural district councils obliging them to 'secure the provision of affordable water to consumers in under-privileged communities' as required by the Water Act.

Responsibility for provision of water in rural areas is with Rural District Council while maintenance is with the District Development Fund. In the early post-independence period there was a focus on improving rural water supply and sanitation. Through the National Rural Water Supply and Sanitation Programme construction of new boreholes and Blair toilets were funded by a wide range of international donors, the Department of Water Development District Development Fund, Rural District Councils and private organizations took place.

47 The President assigns responsibility for administering specific Acts (statutes) to Ministers from time to time. The title of the Ministers' portfolios may also be changed in accordance with the main subject of the assigned responsibilities; e.g. between February 2009 and July 2013, water was under the Minister of Water Resources Development and Management, but the title has since changed to Minister of Environment, Water and Climate with the merger of the water and environment portfolios.

48 GoZ (1998).

49 Prior to the formation of ZINWA, cities owned the water supply infrastructure and charged urban residents monthly for water use. The infrastructure had, for the most part, been funded by the national government.

Because of the numerous ministries and departments involved in rural water and sanitation the sector was to be co-ordinated by the National Action Committee and the National Co-ordinating Unit. However, during the decade from 2000-10 these inter-ministerial groups met infrequently and in any event and had little or no resources to do much. In general most progress in this sector was made from 1980-2000.

According to Peter Morgan, the inventor of the Blair Toilet:

Yet, even with large amounts of donor money and skilled manpower available, only about one third of the rural population ever gained access to improved sanitation over a 20-year period. This left two thirds un-served by the programme, using unimproved pit latrines or no latrines at all. During the period 2000 – 2005, the percentage coverage had been reduced from a third (33%) to a quarter (24%). This was the result of a much slower rate of implementation, population increases and the abandonment of latrines with pits filled to capacity. The programme also revealed the considerable dependency on donor assistance – very few Blair Latrines were built without the foreign support. (Morgan, 2010: 16)

In sum, the reforms did not succeed in maintaining or preventing the break down in rural water supply and sanitation. Despite Zimbabwe's rhetoric of national sovereignty, it was highly dependent for the provision of fundamental services upon international development assistance.

4.5 Rights gaps

The water reform, which aimed at greater racial justice, democratization, decentralization and efficiency of water management, did not adopt a rights based approach. A rights based approach to water governance would have required the government to take measures to respect, protect and fulfill the right to water for basic needs and the right to participate in water governance without discrimination on the basis of race, gender, political conviction, etc. While recognizing the right to primary water the Water Act did not set out a corresponding duty for the State to respect, protect and fulfill such a right. Rather than a rights based approach, safeguarding the rights of marginalized water users, the Water Act placed the power to take measures to ensure the provision of primary water to underprivileged communities and balance the concerns of poor and marginalized water users against other public interests in the hands of the minister.

5. 2000-2008: BREAKDOWN OF THE ECONOMY, THE RULE OF LAW AND THE

WATER AND SANITATION INFRASTRUCTURE

The water policy prior to 2000 did not include civil society in the stakeholder based consultation process that guided the water reform with the major exception of the Commercial Farmers' Union which saw the major implications of the proposed Acts for the farming sector. The reform was given little if any attention by women's organizations and human rights organizations since they focused upon civil, political and women's rights rather than on socio-economic human rights. In addition, rural women did not have strong organizations and the connections among urban and rural women were problematic. It was not until in the late 1990s that Zimbabwean civil society started addressing the relationship between development and the whole array of citizens' civil, political social and economic rights, including the right to water and sanitation (Hellum et al., 2013). According to Raftopoulos (2000: 29) the low profile of NGOs in the 1990s was due to the powerful message communicated through atrocities in Matabeleland, which was that NGOs should keep out of politics and not to adopt an oppositional stance. However, the increasing poverty levels triggered by economic structural adjustment programmes and increasing corruption in the mid 1990s gave rise to a series of advocacy related NGO initiatives and the formation of a national political opposition party, the Movement for Democratic Change (MDC).

5.1 The right to water and gender equality in the Constitution-making process

Under the broad umbrella of constitutional reform the National Constitutional Assembly (NCA) built coalitions among trade unionists, church organizations, women's organizations and human rights organizations. In reaction to the ZANU-PF government's abuse of executive and legislative power, civil society organizations promoted the idea that a new Constitution was essential to improve governance and democracy (Sithole, M., 2001: 161-69). This initiative fuelled a wide range of rights claims from civic organizations ranging from women's rights, social and economic rights to civil and political rights related to the rule of law and checks and balances on executive power. As the NCA became increasingly important on the political scene and the ZANU-PF government responded in early 1999 by setting up its own 400-member Constitutional Commission.

Both the NCA Constitution and the Final Draft Constitution of the Government of Zimbabwe included a right to sufficient food and water, the right to participation and protection against discrimination on the

basis of gender and sex.⁵⁰ Members of the women's movement participated in the struggle for women's rights in both of the two male dominated parallel constitutional processes underway, neither of them an ideal space from a women's rights perspective. The breakthrough for the claims voiced by women's rights supporters on both sides must be understood in the light of the work of the Women's Coalition, which was launched in 1999 (Essof, 2012: 54). The coalition, which was launched in June 1999 comprised a network of representatives from 30 women's and human rights organizations and aimed to:

*Unite women around the Constitution, provide information to women on the Constitution reform process and gender issues therein which would constitute a critical mass for lobby and advocacy to engender the Constitution-making process and ensure the adoption of a Constitution which protects women's political, social, economic and cultural rights.*⁵¹

The Women's Coalition set out a nation-wide process of consultation with women which resulted in the production of a Women's Charter in 1999. The Women's Charter contains Zimbabwean women's constitutional, legislative and policy demands. It called for constitutional protection against sex and gender discrimination as a non-derogable principle applying in all areas, equal participation of women in decision-making and governance at all levels of political, civic and community life and access to clean water, adequate and safe sanitation provision to all citizens regardless of where they lived in Zimbabwe. In a polarized political environment constituted by two male dominated political organizations, ZANU-PF and the MDC, the Women's Coalition, according to Essof (2012: 80):

Placed women in a powerful political 'space', one that traversed organizational boundaries, and one that until then they had always been reluctant to occupy and claim. This resulted in a realization of the primacy of gendered political positioning within the movement in strategizing for change. It resulted in strategic alliances with broader civil

50 Section 40 of the 2000 NCA draft Constitution included the human right to water, stating that 'Everyone has the right to have access to: a) Health care services, including reproductive health care, and b) Sufficient food and water.' The government's draft (2000 Draft Constitution) also addressed water in section 18(d) 'to ensure that people have access to adequate water supplies of clean potable water'.

51 Essof (2012) p. 54.

society and ruptured old ways of understanding the state.

5.2 Politicization of land and water governance

In the ensuing referendum in February 2000 the Government Commission's Draft Constitution was rejected by a majority of the Zimbabwean people. To salvage popular support in the parliamentary elections in June 2000 ZANU-PF turned to what it claimed was the unfinished business of the liberation era – the land issue and colonialism (Hammar et al., 2003). White farm owners and farm workers were driven from their farms and deprived of their right to vote while a wave of violence was directed against those suspected of being MDC members or sympathizers.⁵² The land occupations were legitimized by the ZANU-PF government as the political sequel to the 1896 rebellion against colonial rule (the First Chimurenga), and the war for national independence (the Second Chimurenga). It is often referred to as the Third Chimurenga, the taking back of the land from the colonialists (Knox, 2003).

This brutal crackdown on opposition and dissent was legitimized through a series of repressive laws such as the Public Order and Security Act (POSA) and the Access to Information and Protection of Privacy Act. The police applied POSA to prevent most of the public demonstrations organized by civic organizations and to block many political meetings and rallies organized by the MDC. To counter the numerous legal and other challenges from the opposition and civil society, ZANU-PF revised laws and transformed the law enforcement agencies (Gubbay, 2009).⁵³ There was a purge of civil servants considered to be sympathetic to the MDC, who were replaced by loyal party members, war veterans and youth militia. Independent judges, such as Chief Justice Gubbay, were forced out of the judiciary and replaced by judges who were assumed to be sympathetic to ZANU-PF. In addition many professionals

52 There are different understandings of the post-referendum land invasions. One strand of scholarship sees the invasions as part of a racialized discourse of citizenship and belonging constituted around the land question and ZANU-PF's contribution to the liberation struggle (Hammar et al., 2003; Derman and Hellum, 2007a; Alexander, 2006; Raftopoulos, 2009). The other strand, represented by Sam Moyo, emphasizes the continuities with the popular occupations taking place in the 1980s and 1990s (Moyo, 2001)

53 The results of the violent elections in 2002 and 2005 were contested by MDC through numerous court cases. Tsvangirai's court application claiming that Mugabe's victory in the presidential election of 2002 was invalid because of irregularities was rejected *Tsvangirai v Registrar General*, High Court Harare case no. 29 of 2002.

left Zimbabwe which stripped government of much of its expertise.

The economic decline following the Fast-Track Land Reform Programme led to a crisis in commercial agriculture and related industries, including the undermining of Zimbabwe's rural and urban water infrastructure. Zimbabwe, before the crisis, had a well-developed water infrastructure including dams, irrigation pumps and pipes, lakes, reticulated pipes, purification stations, pumping stations, sewage pipes, and sewage systems in general. The failings of Zimbabwe's water infrastructure became critical with the high rates of inflation from 2000 until 2009 with the plummeting value of the Zimbabwe national currency, the Zimbabwe dollar. ZINWA lost its sources of revenues from commercial water because of the collapse of commercial farming and related industries. ZINWA did not have the resources, the political commitment or the competence to maintain the infrastructure required to provide agriculture, industries cities and towns with water. There is not a single part of the water management system in Zimbabwe that was not affected by the economic meltdown including: irrigation of large-scale agriculture, urban water supply, urban sanitation, rural water supply, rural sanitation, and a crisis in the institutions that manage and deliver water.

The period from 2000-08 saw the politicization of water. In 2005 it was recognized that ZINWA needed new sources of money. In part to increase ZINWA's revenues the running of Harare's water and sewage system was transferred from Harare water to ZINWA. Since the water revenues funded much of Harare city's operations, a take-over of Harare's water supply would punish Harare's MDC's government as well. The ZANU-PF government without consultation appointed ZINWA to take over the bulk water supply system of Harare Metropolitan Province and '...to extend the takeover of the water distribution and sanitation services including billing and revenue collection in 2006.'⁵⁴ ZINWA, in turn, faced a storm of initial protest and then over the next three years criticism from rate payers, civic leaders and some politicians for failing to deliver. Even though ZINWA received new and substantial funding from the Reserve Bank, there was no or little evidence to show any improvements. The legal basis for giving the water supply to ZINWA can be questioned in light of the Water Act and the Urban Councils Act.⁵⁵

Civil society, according to Musemwa (2008: 27), interpreted ZINWA's

54 *The Herald*, 14 February 2007, quoted in Musemwa (2008: 16).

55 Unlike Harare, Bulawayo resisted the proposed take-over and ultimately the central government gave in.

takeover 'as a political move by the State meant to control the urban areas'. Musemwa argues that because cities voted for the opposition party, MDC, the politics of urban water was changed. When, in 2002, Elias Mudzuri of the MDC became the executive mayor of Harare he tried to change the neglect of 20 years of ZANU-PF dominated councils. Mudzuri was arrested for addressing gatherings or meetings without the permission of police (Musemwa, 2008: 14). And in April 2003 he was fired by the Minister of Local Government. The effort to repair and replace the water infrastructure was blocked. Urban water had now become a major political issue.⁵⁶

5.3 Social and economic rights, power and civic action

In spite of the breakdown of rule of law and the brutal crackdown on opposition and dissent this time period saw increasing civil society mobilization around social and economic rights. Organizations like the Combined Harare Residents Association, Harare Resident Trust the Crisis in Zimbabwe Coalition, the Zimbabwe Coalition for Debt and Development and Women of Zimbabwe Arise (WOZA). WOZA, which is a membership organization with approximately 70,000 mainly black, poor women and also men from urban and rural areas, link socio-economic rights with democratic governance. To develop a People's Charter WOZA in 2006 in 284 meetings met with around 10,000 people, canvassing their views on their concerns over the state of the nation, and the basic demands that they had in the making of a new Zimbabwe. The Charter⁵⁷ is a direct distillation of the respondent's grievances and the sources of those grievances; it lays out the basic needs of the nation in order to begin a process of rebuilding. The Charter states that that: 'All areas, both urban and rural, shall have affordable access to the services necessary for safe, healthy living – clean water, proper sewerage and sanitation systems and refuse collection'. To give voice to poor women's quest for clean water, affordable education for their children and basic health services, WOZA regularly arranged public demonstrations based on civil disobedience and non-violence. Because these demonstrations were often disrupted or blocked by the police with reference to laws that restrict freedom of speech and freedom of organization, WOZA trained its members in civil disobedience and non-violent strategies. While giving voice to claims concerning clean water, sanitation, health and education,

56 Urban water issues are taken up in detail in Chapter 11.

57 See Appendix 1 for a copy of the Charter.

WOZA has also continued to draw into attention a governance system that made itself unaccountable to ordinary citizens through undemocratic interference with legal rights and legal institutions.

Due to a political atmosphere of intimidation and fear, the lack of independent courts and the absence of clear constitutional and legislative protection of the right to clean and affordable water and other socio-economic human rights, there are only a few court cases where citizens have taken legal action against authorities in this time period.⁵⁸ Section 6 (2) (d) of the Water Act which obliges the minister to take into account the access needs of poor consumers by imposing a duty to 'secure the provision of affordable water to consumers in under-privileged communities' lacks a definition of 'under-privileged communities'. The Urban Councils Act, which empowers urban local authorities to provide treated potable water services in their areas of jurisdiction, does not impose a duty on urban councils to provide water for basic needs free to residents who cannot afford to pay. Thus, the content of the right to water under existing legislation is, as already stated, unclear and contested. With the assistance of ZLHR, CHRA in 2005 assisted Tracey Maponde, who was a ward co-ordinator in Hatcliffe, in filing a case to the High Court of Harare for reconnection of her water supply, which had been cut off by the City of Harare on the premise that she did not pay her bills. The case came before Justice Gowora in Harare High Court and the judgment, which was a consent order, stated that the City of Harare had no right to disconnect Tracy Maponde's water supply as a way of forcing her to pay bills. The court directed the municipality to: 'reconnect Applicant's water supply without charging any reconnection fee and shall be barred from disconnecting such water supply without any cause other than that Applicant has failed to pay charges for such service'.⁵⁹

6. 2008-2013: THE HUMAN RIGHT TO WATER AND SANITATION IN THE TIME OF CHOLERA

With unprecedented levels of inflation rendering the Zimbabwe dollar valueless against other international currencies; the shrinking of the national economy, and the initial loss of revenues from tobacco, tourism, and manufacturing; there was little money to invest in water infrastructure. Because the Government of Zimbabwe was in debt to the World Bank,

58 Combined Harare Residents Association v City of Harare, HH 73/04, and Tracy Maponde v City of Harare, HH 5948/05.

59 Harare High Court, 18 November 2005.

borrowing money to maintain urban water supply and sanitation systems became far more expensive. This, combined with the political conflict between MDC cities and the national ZANU-PF government, led to a rapid decline in the water sector. It took a major event to render visible what had been a growing crisis and to draw international attention to Zimbabwe.

The political and economic crisis culminated in the cholera outbreaks in 2008. This gave rise to a series of rights based programmes and policies, which were carried out in co-operation with the Government of National Unity, which was brokered with the assistance of SADC after the violent 2008 elections, human rights and humanitarian organizations, national donor agencies like NORAD and GIZ and international economic actors like the World Bank and the African Development Bank.⁶⁰

6.1 The exploding water and sanitation crisis

The water crisis exploded in 2008 with severe outbreaks of cholera with surprisingly high level of deaths from the disease. The cholera spread from Harare via the Manyame River to other rivers systems and to 55 of Zimbabwe's 62 districts.⁶¹ By 28 January 2009, the cholera death toll in Zimbabwe was 3,028.⁶² By 30 May 2009 there were 98,424 suspected cases, including 4,276 deaths (which is a high case fatality rate of 4.3 per cent) reported by the Ministry of Health and Child Welfare of Zimbabwe. The breakdown of the City of Harare's water and sewage system was closely related to hyperinflation when ZINWA was in charge of Harare water. ZINWA either wouldn't or couldn't pay to purchase the chemicals to treat the water. In addition, the electrical supply for the pumping station and sewage treatment plants was unreliable with major power cuts. The

60 The escalating social, political and economic crisis prompted SADC in March 2007 to convene an emergency summit in Dar es Salaam. The negotiations resulted in the harmonized parliamentary and presidential elections in 2008. MDC won both the parliamentary and presidential elections but after a five-week delay and a secret recount of the presidential ballots the Zimbabwe Electoral Commission announced that although Tsvangirai had received more votes than Mugabe he had not attained the stipulated majority of more than 50%. The violent re-run of the presidential election, in which Mugabe defeated Tsvangirai, produced a new crisis which led to the establishment of a Government of National Unity in 2009.

61 WHO, 'Cholera in Zimbabwe', WHO Epidemiological Bulletin no. 27 (2009), p. 2.

62 WHO, 'Cholera in Zimbabwe - update 4' (9 June 2009), accessed 8 February 2010 at http://www.who.int/csr/don/2009_06_09/en/

resurgence of cholera took place when ZINWA was in control of Harare's water while the majority of city councillors belonged to the MDC.⁶³

The nature of the crisis is demonstrated by the following figures from 2008 summarized in Zimbabwe's new Water Policy adopted in 2012:

- Access to urban water supply decreased from 97% to 60% in 2008. Access to urban sanitation decreased from 99% in 1990 to 40% in 2008.
- Hours of urban water supply have dropped from 24 hours supply to between 6 and 12 per day and often less.
- Costs exceeded tariffs in 50% of urban local authorities as of 2012.
- A dramatic decline in water use for irrigation with large amounts of water simply evaporating in dams rather than being utilized.
- 75% of rural hand pumps are non-functional and 48% of Zimbabwe's rural population does not have a toilet facility.
- Rural areas that had reached a water supply coverage of rate 50% by 1990 and moderately good coverage of sanitation witnessed a drop to 43% by 2008.

This is an optimistic picture given the lack of clean water supply in the A1 resettlement areas throughout Zimbabwe and the more general withdrawal of donors from the rural water sector. As noted by the consultancy on Zimbabwe, the African Ministers' Council on Water (AMCOW) found a significant imbalance between rural and urban water services: c. 98% of those without an improved drinking water source live in rural areas. In addition 42% of the rural population practices open defecation. And they conclude:

Hidden behind the coverage statistics, there has also been a significant decline in the quality of urban and rural services (poorer water quality, intermittent supplies, and longer walking distances). (AMCOW, 2010:8)

Unfortunately the situation has continued to decline since the AMCOW report was published.⁶⁴

63 This must be understood against the background of Zimbabwe's urban residents having, since 2000, voted against what had been the ruling party which has sabotaged efforts by the MDC to improve living conditions.

64 According to the African Ministers' Council on Water (AMCOW) the investment necessary to meet the national MDG targets was estimated to be

6.2 Human rights based humanitarian water assistance

Despite the diplomatic isolation of Zimbabwe and the suspension of government to government development aid (which was continued under the GNU), the humanitarian crisis of cholera (and typhoid) permitted the re-entry of international donors through extensive humanitarian assistance to the GNU. UNICEF took the lead and mobilized and co-ordinated the international humanitarian assistance during and after the cholera outbreak.⁶⁵ The basis for UNICEF's intervention was children's right to safe water under the United Nations Convention on the Rights of the Child (CRC).⁶⁶ UNICEF established the Emergency Rehabilitation and Risk Reduction (ER&RR) Programme in response to the 2008-09 cholera outbreaks specifically to address its underlying causes and prevent further outbreaks.⁶⁷ Through this programme UNICEF and Oxfam UK took on the role of co-ordinating emergency and urban sector agency activities, including bilateral and multilateral international assistance, NGOs and the Zimbabwe government.

The ER&RR programme, which included the sinking of boreholes, provision of water purification tablets to the public and provision of water treatment chemicals to urban councils, was guided by a rights based approach.⁶⁸ The programme documents, however, do not concretize what a rights based approach to water and sanitation implies.⁶⁹

USD365 million per year for water and USD336 million for sanitation ('Water Supply and Sanitation in Zimbabwe: Turning Finance into Services for 2015 and Beyond', AMCOW, 2010).

65 Interview with Mr Kiwe Sebunya, Chief, Water, Sanitation and Hygiene (WASH), 1 August 2011.

66 Ibid.

67 This was predominantly funded by the Australian Government Aid Programme, CERF, DFID, and ECHO (totalling approximately \$50 million in financial commitments). UNICEF took the lead in executing complementary activities by other sector agencies.

68 'A Situational Analysis on the Status of Women's and Children's Rights in Zimbabwe, 2005-2010: A call for Reducing Disparities and Improving Equity', UNICEF, CASS and GoZ (2011); 'A Human Rights Based Approach to Programming/Community Centered Capacity Development Trainers Manual', prepared for UNICEF and the Institute of Water and Sanitation by Rennie Chioreso, Noma Neseneni and Henrieta Zharare (2009).

69 This is surprising, since the draft National Domestic Water Supply and Sanitation (WATSAN) Policy, 2008, is filled with the details of how to implement a rights-based approach to water supply and sanitation. It appears that this policy document was never adopted by Cabinet although parts of it are included in the Water Policy.

In line with the increasing focus on ensuring basic water and sanitation for women and girls within vulnerable groups one would have expected the programme to address how access to water for poor, elderly, displaced and disabled women would be assured.⁷⁰ In a situation where the health of a high number of displaced farmworkers and their children, living in the A1 resettlement areas without access to clean drinking water and sanitation, was under threat, we were surprised to be informed that the programme, due to the political unwillingness of the international donors that funded the programme, was not operated on the A1 farms.⁷¹

Yet none of these dimensions feature in the documents that framed the ER&RR programme. In the light of the obligation in CEDAW Article 5a and Article 2.2 in the Maputo Protocol to take all appropriate measures to:

modify the social and cultural patterns of conduct of women and men through public education, information, education and communication strategies, with a view to achieving the elimination of harmful cultural and traditional practices and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes, or on stereotyped roles for women and men

One would also have expected measures addressing the widespread gender stereotype that women are primarily responsible for obtaining water and ensuring that the water used for household purposes is clean and environmentally sound were taken.

6.3 What happened to the rights based approach to development?

The Analytic Multi-Donor Trust Fund

While emergency interventions were carried out by UNICEF and funded by international donors, it became clear that there would need to be a new water policy to accommodate the new and different issues stemming from the emergency. Through two separate multi-donor funds for water policy reform and rehabilitation of water infrastructure, one co-ordinated by the World Bank and the other by the African Development Bank, international donors re-entered the water sector. The Analytic Multi-Donor Trust Fund (AMDTF), which was supported by eight donor coun-

70 See CESCR GC 15, para 16 and CEDAW General Recommendation No. 27 on older women and protection of their human rights. CEDAW/C/GC/27, para. 24.

71 The draft WATSAN policy makes explicit a discussion and analysis of the need to adjust policies for the land reform areas.

tries, provided technical assistance to the Government of Zimbabwe in formulating a new national water policy.⁷²

Given the Zimbabwean State's accession to a number of international and regional human rights instruments that embody the human right to water and sanitation, and the adoption of human rights based development policies by the donors which fund the AMDTF, one would think that the human right to water would feature in its activities. To our surprise neither the rights based approach to development nor the human right to water and sanitation are referred to in the AMDTF framework.⁷³ The donors' views, as explained to us, are based upon the need for reconstruction of Zimbabwe's water infrastructure and providing the background papers necessary for the revision of Zimbabwe's water policies and perhaps later amendments to water laws. They view their intervention as technical and economic and having little or nothing to do with water as a human rights issue.⁷⁴ The donors uniformly emphasize the urgent need to reconstruct the physical urban and rural water infrastructure along with strengthening the national and municipal institutional capacity to bill and collect water revenues.⁷⁵

A key concern of GIZ, which is one of the lead donors in water sector reform in Zimbabwe, is to strengthen the national and local institutional ability to manage water on the basis of what the real costs are. According to Australian Aid there is broad agreement (in the light of the adoption of the cost recovery approach) that no suggestion should be made that people don't have to pay for water.⁷⁶ Thus none of the papers commissioned by AMDTF to assist the Government of Zimbabwe in the formulation of a new water policy addressed the social and economic challenges, which the adoption of the human right to water and sanitation on a non-discriminatory basis represent. AMDTF is, in the light

72 African Development Bank, Australia, Denmark, Germany, Norway, Sweden, United Kingdom.

73 The AMDTF came to an end in 2014 and was replaced by the Zimbabwe Development Fund.

74 Interview with representatives of Australian AID, GIZ, DFID and the Norwegian Ministry of Foreign Affairs in the AMDTF in 2012.

75 GIZ promotes and is teaching PROMUN, a World Bank software package for billing. GIZ also uses training in this software package. Interview with Helmut Lang, GIZ, Harare, 2012.

76 Interviews with Fadzai Mukonoweshuro (Senior Programme Manager) and Dagobert Mureriwa (Programme Manager), Australian Aid, Harare, 22 October 2012.

of the over-riding concern for revenues, avoiding any direct engagement with the human right to affordable water. The capacity to recover cost is clearly key to a sound economic and institutional basis for the duty to provide water for basic human needs. Yet, in a situation with widespread poverty along with strong political disagreement and lack of empirical knowledge about what different groups of water users can afford to pay, one would have expected the AMDTF to commission a study that would assist the Zimbabwean government in dealing with this difficult issue in their new water policy. Given the controversial nature of the adoption of water meters to improve revenue collection, particularly with a view to ensure that poor users are not deprived of basic water and sanitation, one would at least have expected consultation with residents organizations in the cities where donor supported water meters were planned. The donor states, who have all adopted a rights based approach to development, are clearly under an obligation to ensure that the Zimbabwean government, as a basis for the adoption of law and policy reform, have the necessary legal and empirical information to form basis for a water reform policy, which is in consonance with its obligation under international and regional instruments to make water and sanitation adequate, accessible, available and affordable.

6.4 Adoption of the human right to water and sanitation and new water policies by the Government of National Unity

Apparently acknowledging the failure of ZINWA, the GNU, returned the management of water supply back to the City of Harare in February 2009. In the GNU, MDC was in charge of the Ministry of Water Resources Development and Management (hereinafter Ministry of Water), the Ministry of Health and Child Welfare, the Ministry of Constitutional and Parliamentary Affairs and the Ministry of Finance, among others, while ZANU-PF was in charge of the Ministry of Home Affairs, the Ministry of Justice and Legal Affairs and the Ministry of Defence among others. In light of the broad political agreement on the principle that water for basic human needs should be prioritized the GNU acceded to the UN Resolution on the Human Right to Water and Sanitation of 28 July 2010.⁷⁷

The human right to water was, according to the then Permanent Secretary of the Ministry of Water, seen as firmly embedded in existing Zimbabwean legislation:

77 UN General Assembly Resolution 64/292.

*As government we cannot deny anybody water for primary use. That is use of water for laundry, cooking, bathing, water for stock, etc. in the rural areas. Furthermore, section 6 of the Water Act provides that every citizen should have adequate water of acceptable quality for primary use.*⁷⁸

The high priority given to make water available by the GNU was clearly reflected in changes in the national budget where in 2009 the government allocated USD4 million to water, in 2010 USD50 million and in 2011 USD110 million. However, this upward trend has halted in the proposed national budget for 2015, which sees the total amount (not counting donor assistance) to USD43 million of which USD22,600,000 is for large dam construction.

It seems that the provision of water relies upon donor funding through the World Bank, UNICEF and the African Development Bank. Their contributions include water supply and sanitation in Harare, Masvingo, Kwekwe, Chegutu, Mutare, Chitungwiza, Norton and many rural areas (funded primarily by UNICEF).⁷⁹

To address the new social, economic and legal context and to provide a framework for government and donor actions and investment strategies in the water sector a new Water Policy of the GNU, which refers to the human right to water, was adopted by Cabinet in December of 2012 (and made public on World Water Day in March 2013). With the breakdown of Zimbabwe's urban and rural water infrastructure and the cholera outbreak in 2008 the context for water policy has changed dramatically from the Water Act of 1998. The new Water Policy commits the government to respect international and regional principles and its commitments of which the first item is the CESCRC Committee's General Comment No. 15 on the right to water and sanitation. The new policy also reflects the Zimbabwean government's commitment to the UN Millennium Development Goals followed by the AU summit on water and the SADC regional water policy of 2005 in which basic human needs are to take priority over any other uses of water. In line with these international commitments the overall goal and objective of the new national water policy states that:

Equality in access to water by all Zimbabweans is a right. Specific at-

78 Interview with the former Permanent Secretary, Ministry of Water, Mr Chitsiko, 26 October 2011, Ministry of Water, Harare.

79 The Chinese government has now entered the water sector with an apparent \$144 million loan to upgrade the water pumps in Harare's main reservoir. How this project articulates with the others is not yet clear.

*tention to equity, that takes into account the different needs of different communities and inclusion of disadvantaged communities are integral to realizing this right.*⁸⁰

Even though the new Water Policy acknowledges the human right to water and sanitation: there is no clear definition of these rights and their implications. According to the Water Policy:

*Water for primary needs is a right for all Zimbabweans. Access to WSS (Water and Sanitation services) services in sufficient quantity and adequate quality to sustain life is a human right which is accompanied with the responsibility of all to meet their obligations to other users and water service providers.*⁸¹

Furthermore the policy states:

*Water for purposes other than to meet basic human needs is not a right. Water required to meet basic human needs, termed 'Primary Water', shall be given the first and highest priority in the provision of WSS services. It includes water for direct personal consumption, personal household hygiene, food preparation and for household productive purposes such as gardening and household stock watering, not for commercial purposes.*⁸²

The new Water Policy appears less clear than the draft National Domestic Water Supply and Sanitation Policy (WATSAN) of the Government of Zimbabwe from 2008 which stated that:

*1. Every citizen has a right to an adequate and safe water supply and an environment that is safe from harmful substances (environmental sanitation). The state shall ensure progressive realisation of this through legislative, policy, institutional and resource allocation mechanisms.*⁸³

A key challenge in the context of the present economic crisis, where the majority of Zimbabweans live below the poverty line, is the consideration of a minimum level of income which the cost of water and sanitation should not surpass. In the new Water Policy an effort to set a minimum for all households for domestic water use (drinking, washing, cleaning, cooking, etc.) is made but none for sanitation:

80 National Water Policy, para. 6.7.

81 Ibid.

82 Ibid.

83 The National Domestic Water Supply and Sanitation Policy, 2008, pp. 18-19.

*In urban settings, because water treatment, transmission, storage and distribution through networks are expensive, primary water needs are based on lifeline tariffs and only in cases where people cannot afford to pay can free life saving water per household of 10m³ per month be supplied. (10m³ equals 10,000 liters) Given the administrative difficulty of determining who cannot pay, the option to provide 10m³/month of free or cheaper water to all, accompanied with a 2 or 3 stage rising block tariff regime will be examined.*⁸⁴

This option permits poorer consumers to manage their consumption so that they stay within an affordable allocation. The new Water Policy, however, makes no suggestion as to what criteria and process should be implemented in Zimbabwe's towns and cities regarding those who cannot pay. The Urban Councils Act, which empowers urban local authorities to provide treated potable water services in their areas of jurisdiction, does not impose a clear duty on urban councils to provide water for basic needs for free to residents who cannot afford to pay. There is, in the context of Zimbabwe's dire economic situation, a tension between the aims of the new water policy and existing legislation. This lack of clarity reflects the ambivalence of the government. As pointed out by the former Permanent Secretary of the Ministry of Water, the government does not want to send out signals that people don't have to pay for water:

*There are two groups of water users: Those who do not want to pay for water. Then there are those who are genuinely unable to pay. Most people who say they can't pay are those who can but don't want to. Those who are unable to pay have to get support from the social welfare system that exists in almost every township. Prepaid meters would be an excellent way of distinguishing between those who won't pay from those who can't pay. It would resolve the issue.*⁸⁵

The new policy addresses equity in the allocation of water and sanitation as a gender issue. As such it represents a great step forward in comparison to the draft Water Policy of 2002. According to the new Water Policy:

This policy recognizes and promotes gender equity in allocation, access and utilization of water as well as implementation of WASH [Water, sanitation and hygiene] activities. It acknowledges the disproportion-

84 National Water Policy, para. 6.7. However, there has been no further discussion and analysis to our knowledge on how to implement this.

85 Interview with the former Permanent Secretary, Ministry of Water, Mr Chitsiko, 26 October 2011, Ministry of Water, Harare.

*ate burden placed on women and the girl child when fetching water and taking care of the sick. Targeted programming and implementation of WASH activities shall be gender sensitive. Gender-based budgeting will be promoted and implemented.*⁸⁶

Zimbabwe's new Water Policy also recognizes women's right to participation at all levels of water governance. This is a step forward in comparison to the draft Water Policy of 2002, which disregarded the right to equal participation. According to the new Policy: 'At least 30% of the catchment and sub-catchment councils' positions will be reserved for women and the youth. At least three board members in the ZINWA board will be women, youth or worker representatives.'⁸⁷ The way in which the new Water Policy lumps women with youth and workers is problematic. However, the new ZINWA Board is composed of five women and five men.

Seeing women as a homogenous group the new Water Policy does not take notice of the fact that women's access to water and sanitation is not only affected by gender but also by age, social status, ethnicity, displacement and other identity markers that calls for attention. There is no consideration of the dire water and sanitation situation of elderly rural women looking after HIV/AIDS orphans, displaced farmworker women, displaced urban women, disabled women or poor rural and urban women living with HIV/Aids (Chapter 12; Kanyerere, 2012). In spite of the CEDAW Committee's call upon the Zimbabwean State to give particular attention to the needs of rural women in its concluding comments, there is no specific consideration of rural women's needs. The committee called upon the Zimbabwean government to:

*Pay special attention to the needs of rural women to ensure that they have access to health, education, clean water and sanitation services, fertile land and income-generation projects...*⁸⁸

While recognizing the disproportionate burden that women have borne during the long and sustained water crisis, the new Water Policy does not substantiate what gender sensitive WASH activities means. The need of concretization was demonstrated when the MDC-T leader Morgan Tsvangirai, launching the ZERO Litter and Water Conservative Strategies Campaign

86 National Water Policy, para. 7.1.3.

87 Ibid.

88 CEDAW Committee's concluding comments to Zimbabwe's periodic report in 2010. CEDAW/C/ZWE/CO/2-5, para. 36.

accused Harare's women of clogging up the water system by their 'dish-washing habits' involving the use of sand.⁸⁹ The former prime minister's speech demonstrates the need to ensure that policies and practices are not informed by gender stereotypes placing the blame and the burdens of the collapsing public water infrastructure on women. Both the CEDAW and the Maputo Protocol put an obligation on states parties to eliminate and modify gender stereotypes that undermine women's and girls' right to equality.

In spite of the recognition of the human right to water and sanitation much of the discussion about water in the new Water Policy, as we have seen, revolves not around water and rights but around money – the costs of water provision, the costs of treating water, and the cost of sewage works. The basis of the Water Policy is that users should pay and that the water sector becomes self-sustaining after the five-year recovery period. In terms of revenues from the sale of water there is the thorny issue of what to do with revenues? What will be the criteria and process for ensuring that those who because of poverty and loss of jobs cannot pay for these services are ensured access to clean water and sanitation?

6.5 Emerging issues: prepaid water meters and privatisation

Zimbabwe is at a crossroads in terms of how to balance its accession to the 'right to water' and its emphasis upon user pay and cost recovery. In the July 2013 elections ZANU-PF returned as the ruling party holding a large majority in the two houses of parliament and complete control of the executive.

One new contested issue is the installation of prepaid water meters which has been supported by the new ZANU-PF Minister of Environment, Water and Climate Saviour Kasukuwere, Bulawayo City Council and the Mayor of Harare. The minister has said that the government expects all local authorities to install the prepaid water meters in order to generate enough revenue to finance service delivery. 'We need to make payments. We cannot sustain a situation where services are provided and residents do not pay for them.' He went on to say that 'I think it's high time our City Fathers ensured that prepaid meters are installed. 'I am sure there will be a lot of noise on this one, but we are ready for that,' said Kasukuwere (Nyathi, 2014).

In installing the new ZINWA Board the minister in referring to their duties said:

89 *News Day*, 7 July 2012; *Daily News*, 11 July 2012.

People need water and are ready to pay for the service, at the right price. Without scaring you, let me hasten to say that at the moment the Authority finds itself failing to collect debts in excess of US\$100 million dollars owed by local authorities, private consumers, irrigating farmers and Government departments for a variety of reasons. This board is expected to come up with mechanisms that will ensure the User Pays Principle' applies.⁹⁰

We could add that the minister made no mention of the right to water and sanitation.

A large coalition of Bulawayo civic organizations including the Bulawayo Progressive Residents Association (BPRA) and WOZA held a large demonstration in November 2014 to protest. The organizations contend that that prepaid water meters are unworkable in poor communities due to the current economic situation. They would, in the eyes of the coalition, inevitably lead to residents consuming less water than they need for a healthy life, leading to outbreaks of diseases such as cholera. BPRA in association with several CSOs in Bulawayo is carrying out a Right to Water Campaign, which among other things seeks to compel the Bulawayo City Council to reverse its decision to install prepaid water meters.

In Harare, the Harare Residents Trust is opposing prepaid meters as an under-handed method of increasing rates and laying the grounds for the privatization of water supply. Citizens' organizations and human rights organizations are critical to the installation of water meters because it implies that all those who cannot afford to pay will be automatically cut off.⁹¹

The city of Harare (and other cities and towns) contend that since August 2013 during the national elections for president and parliament when the Minister of Local Government, Public Works and Urban Development, as a political move by ZANU-PF to buy votes and hamstringing the MDC run city of Harare, forgave all debts owed by rate payers have struggled to meet payrolls and provide essential services.⁹² Since then cit-

90 <<http://www.zinwa.co.zw/zinwa-board-announced/>>

91 See for example <https://www.newsday.co.zw/2014/12/19/harare-not-backing-prepaid-water-meters/>

92 The Directive to Write off Debts by all Local Authorities Water was used by ZANU-PF, including Robert Mugabe, as one of the key points in their election campaign. The directive, which included the debt of large-scale users like government and industries undermined the MDC-dominated council's attempt to strike a balance between the need for revenue to fund the city's water

ies have had a very difficult time and have resorted to water cut-offs and other actions to oblige city residents to pay for water. In the cities' view, prepaid meters would be a solution to collecting payments.

The Water Policy makes a distinction between Water Service Authorities and Water Service Providers. This opens the door to cities, Rural District Councils and other water service authorities to contract with private firms as water providers. President Mugabe certainly seems to indicate that this process is well under way in Zimbabwe's capital city. In practice multiple individuals and small companies are already selling water to urban residents who do not receive piped water from what were supposed to be residential boreholes. In addition, there have been several larger companies selling bottled water, so the elite have no difficulty in accessing clean drinking water, and privatization is well under way in terms of its supply in the absence of governmental provision.⁹³

The president himself has weighed in on the matter of privatization: In his opening speech to parliament on the 18 September 2014 he said:

Citizens in some of our urban centres, especially Harare and Bulawayo, have for quite some time endured unreliable water and sanitation services. This challenge stems mainly from the lack of capacity in some of the local authorities, the poor state of sanitation and water-related infrastructure, and excessive growth of our urban population. I am pleased to note that disbursement of a US\$144 million loan facility from China for the upgrading of Harare's water and sanitation infrastructure will commence soon. In addition, the city will, in collaboration with an identified partner, implement a revamped water service delivery plan.

According to a number of newspapers the City of Harare is planning on borrowing USD3 billion from a Singaporean company known as Neoparagon. According to *The Herald*, the government newspaper, the company will loan the money on the basis of a 30-year agreement whereby the company will take 70% of the profits leaving the remaining 30% to the City of Harare. The money will be used to build new reservoirs for

and sanitation system and specific measures directed at those citizens, who are totally unable to pay. See Chapter 11.

93 According to ZINWA, the sale of residential borehole water is illegal because that water then becomes commercial. Boreholes have to be registered and monitored and water paid for if it is for commercial or business purposes. <http://www.zinwa.co.zw/unpacking-the-ban-on-bulk-water-abstractions-in-residential-areas/> Accessed on December 30, 2014.

the city (*The Herald*, 4 August 2014). In a follow up article *The Herald* reported that the mayor and his deputy were not informed of the deal, it having been negotiated and signed by an interim caretaker committee⁹⁴ which was in charge of the city's affairs prior to the July 2013 harmonised election. As of January 2015 no further details have emerged as to the composition of the Board of Directors of a new company partnering the City of Harare with Neoparagon. The contract, if it exists, has not been made public, and how this new deal will interface with the ongoing work of the World Bank and the African Development Bank is not public. The idea of transferring a public water supply and sanitation system to a private company deserves sustained and public discussion. This has been absent. Any analysis of what such a privatisation scheme would mean for the range of human rights issues referred to in this book is startling and violates the citizens' rights of participation. The State has the obligation to protect citizens from acts of private actors (Chirwa 2004: 241). As the principal bearer of duties implicit in socio-economic rights, the State must not embark on privatization without ensuring that all its obligations arising from economic, social and cultural rights are fully taken into account when entering into contracts with private service deliverers. Given the history we have outlined in this chapter we see little reason to be optimistic about the current government's motivation and capacity to ensure the human rights of Harare (and the surrounding metropolitan) water users.

A related question is how will rural people's use of ground water, river water, water from dams, and wetlands for primary uses be protected when coming into conflict with water users who have the resources to attain permits for commercial uses? Given the current emphases upon user pay, the financial crises of cities and ZINWA, and the absence in the water policy of how to resolve conflicts between primary and commercial water users, it seems that the right to primary water uses are not sufficiently protected. Civil society through residential organizations is challenging the overwhelming emphasis upon user pay for urban users (see Chapter 11 on urban water in Harare's high density areas). However, there appears to be no rural counterparts to protect current rural water uses (see Chapter 12 on rural water in Domboshawa Communal Land). Whether catchment and sub-catchment councils will become fora for human

94 The committee was mainly composed of ZANU-PF members connected to the Minister of Local Government, Public Works and National Housing, Ignatius Chombo.

rights discussions and analyses are highly doubtful given their history (Manzungu and Derman 2015, Derman and Manzungu 2015).

6.6 Constitutional implications for the right to water and sanitation in Zimbabwean laws and policies

The new Water Policy was approved by cabinet in December 2012 and launched on International Water Day in March 2013 before parliament's approval of the new Constitution. Thus, there is no reference to Section 77 and other relevant provisions in the new Constitution, such as Section 73a, which obliges the government to take legislative and other measures to ensure the right to sanitation and clean, safe and potable water. Neither is there any reference to Section 56 which provides protection against gender and sex discrimination in all economic, social, cultural and political spheres or Section 17 that calls for proactive measures to promote the full participation of women to ensure that 'both genders are equally represented in all institutions and agencies of government'. The Zimbabwean government is obliged to amend its water laws and policies so as to be in consonance all with these provisions in the new Constitution.

Section 46 of the new Constitution, most importantly, requires Zimbabwean courts and other similar bodies to take into consideration Zimbabwe's obligations, which it has entered into through accession or ratification. Thus the Constitution, as understood in the light of Zimbabwe's international and regional obligations, should prevail in situations where it comes into conflict with other national laws and policies. It should also prevail in situations where Zimbabwean laws and policies are unclear, inconsistent or leave gaps. The right to water in Article 77 in the new Constitution should accordingly be interpreted in the light of the guidelines provided by the UN Committee on Economic, Social and Cultural Rights' regarding the duty to provide adequate, accessible and affordable water in General Comment No.15. These guidelines emphasise that water and sanitation services should be supplied at a price that everyone can afford.⁹⁵ According to the Committee 'The direct and indirect costs and charges associated with securing water must be affordable, and must not compromise or threaten the realization of other Covenant rights.'⁹⁶ Furthermore, 'poorer households should not be disproportionately burdened with water expenses as compared to richer households.'⁹⁷ Most impor-

95 CESCR GC 15, para. 26.

96 *Ibid.*, para .12 (c) (ii).

97 *Ibid.*, para. 27 (b).

tantly, General Comment No. 15 establishes an immediate obligation to 'ensure access to the minimum essential amount of water, that is sufficient and safe for personal and domestic uses to prevent disease';⁹⁸ Thus, under no circumstances shall an individual be deprived of the minimum essential level of water. These sources, which are applicable in Zimbabwean law, point towards an obligation for the State to provide for basic water needs in a situation where individuals for reasons beyond their control, such as poverty and discrimination, are unable to pay for water and sanitation. This has implications for the urban governance mandate found in the Urban Councils Act and the by-laws of the respective cities and towns.

The judiciary is, on the basis of Section 46, assuming an important role adjudicating cases involving claims based on the human right to water embedded in the new Constitution and related international and regional human rights instruments. In the case *Farai Mushoriwa versus City of Harare* the High Court of Zimbabwe stated that the by-laws, empowering the City to disconnect water users on 24 hours notice when not paying were unconstitutional.⁹⁹ The *Mushoriwa* case was concerned with unlawful arbitrary disconnection of water on the basis of a disputed bill by the City of Harare. The judge raised two key issues that can be applied to a situation where a resident cannot afford to pay for water. Firstly, he emphasized the human right to water as per Section 77 of the Constitution. Secondly, he emphasized the City of Harare's obligation to respect the right to water (and other human rights) as provided for in sections 44 and 45(1) of the Constitution.

Clearly, in the light of Zimbabwe's international obligations, Section 77 in the new Constitution implies that legal measures must be taken to ensure that those who cannot afford to pay are ensured access to a minimum essential amount of water. Installation of water meters thus require that measures ensuring that the poor are secured access to water without jeopardizing other basic rights such as education for children, health, electricity or food.

The dire economic situation of the municipalities does not hold great promise for the implementation of their obligation to ensure that those who because of poverty are unable to pay have access to water for sanitation, personal, domestic and livelihood uses. In defiance of the High Court ruling in *Mushoriwa* case, which questioned the legality of the by-laws empowering the City of Harare to cut off water from residents

98 CESCR GC 15, para 37 (a).

99 *Farai Mushoriwa v City of Harare*, HH. HC 4266/13.

arbitrarily without a court order, the City of Harare has in the course of September and October 2014 cut off the water supplies of more than 12,000 defaulters without a court order.¹⁰⁰ Furthermore, the City of Harare and other cities are, to facilitate cost recovery, installing prepaid water meters without due consideration of measures ensuring access to water for basic needs for those who cannot pay.

7. CONCLUSION: ZIMBABWEAN WATER LAWS AND POLICIES AT A CRITICAL JUNCTURE

The Zimbabwean case makes a powerful demonstration of the inextricable link between democracy, good governance, the rule of law, the right to water, the right to life, the right to health and the right to gender equality. It shows how the constitutional protection of the right to water, the right to participation and the right to gender equality has grown out of sustained civic and political action in a political and economic context where the violation of civil, political, social and economic rights has been the order of the day. Rather than an externally driven process, the adoption of the human right to water, the right to participation and the right to gender equality in the 2013 Constitution is a blend between two political parties and civil society. Within civil society and among women of both political parties, actors who want a way out of the crisis have, through the Constitution, been able to make space for their claims for democracy, good governance, protection of the right to livelihood, the right to water and the right to gender equality.

The GNU as it formulated Zimbabwe's new Water Policy was clearly caught between the right to water as a livelihood right embedded in local customary norms, the right to primary water, the new Constitution, a new international and regional context of a human right to water and sanitation and the continued World Bank and donor emphases upon privatization, commercialization and the diminishment of the State's role in water management. The human rights discourse, as it has been translated into the new Zimbabwean Water Policy assisted by the Multi-Donor Analytical Trust Fund provides continuity with the ideal of an economically self-sustaining water sector embedded in the Water Policy from 2000 (the WRMS programme) without any consideration of what it would take to formulate laws and policies that was in consonance with the human right to water and sanitation. The donors under the umbrella

100 'Harare City Council defies High Court ruling', *Sunday Mail*, 23 November 2014.

of the fund have, as shown above, failed to assist the Zimbabwean people in exploring and envisioning how Zimbabwe could meet a 'right to water and sanitation' for its citizens but focuses on mainly economic issues from a cost recovery perspective.

While the new water policy recognizes a right to primary water for all, a clearly defined statutory obligation of the State, local authorities such as City of Harare and other water service providers to provide free water for those who cannot afford to pay is still lacking.¹⁰¹ This is an urgent concern in Zimbabwe where water related diseases continue to be an unresolved major health issue on the rise along with increasing poverty. Failure by the government to put in place legislation that ensures the right to water for people who are unable to pay can be challenged in court as a violation of its obligation to take measures to achieve realization of the right to water as required by section 77 of the Constitution. As regards the need to prevent water-borne diseases General Comment No. 15 provides that the State should ensure that everyone has 'access to the minimum essential amount of water, that is sufficient and safe for personal and domestic uses to prevent disease'.¹⁰²

While the Constitution and the new Water Policy holds great promise the lack of implementation runs counter to their promise as demonstrated by the escalation of water disconnections and installation of water meters without due consideration of those who cannot pay. A related issue is the weak legal protection of the right to primary water of poor rural water users who rely on water from rivers, lakes, wetlands and wells for domestic and livelihood uses (see chapters 12 and 13). Furthermore, rural small-scale users' 'hydraulic property rights' deriving from investment in local water infrastructure lacks formal recognition. It is as we have pointed out within the power of catchment councils, with the approval of the minister, to limit abstraction of water for primary purposes if it is in the public interest and for purposes of ensuring equitable distribution. The GC 15, para 37 (a). new Ministry of Environment, Water and Climate headed by Saviour Kasukuwere, is, as discussed earlier, a strong proponent of prepaid water meters as well as far more aggressive measures by ZINWA to expand commercial water in rural areas including the communal

101 This is imperative because the State is obliged to ensure that the human right to water is enjoyed by all without discrimination, and section 56(3) of the Constitution specifically outlaws discrimination on the grounds of 'class' or 'economic social status'.

102 GC 15, para 37 (a).

lands. How the rights of rural water users who rely on water from rivers, lakes, wetlands and wells for domestic and livelihood uses in practice lack protection when they come into conflict with rich and powerful users is demonstrated by studies of the large-scale production of sugar cane in Chisumbanje and Nuanetsi Ranch and their accompanying water resources.¹⁰³

In this contested terrain the realization of the right to water and sanitation will not take place without the participation and empowerment of well-organized and represented urban and rural communities in terms of their composition in gender, class, disability, age and other significant social characteristics. This in turn requires democratic and transparent urban and rural water governance institutions at the national and local level whose decisions can be challenged by an independent judiciary on the basis of a clear and consistent legal framework. While civil society and the women's organizations successfully have appropriated space to defend the right to water in urban settings, there appears to be no rural counterparts to protect current rural water uses. Furthermore the struggle to defend the right to water also requires freedom of speech and freedom of assembly. As shown by the frequent arrest of peaceful WOZA members invoking the right to water and the right to housing, civil society is severely hampered in terms of taking action in the context of a violent State where national and local water and justice sector institutions are controlled by ZANU-PF loyalists.

103 Thondlana (2014); Zamchiya (2014); Mutopo and Chiweshe (2014a, 2014b); Scoones et al. (2012).

Chapter 11

Zimbabwe's Urban Water Crisis and its Implications for Different Women: Emerging Norms and Practices in Harare's High Density Suburbs

Anne Hellum, Ellen Sithole, Bill Derman, Lindiwe Mangwanya
and Elizabeth Rutsate

1. INTRODUCTION

In April 2013 Farai Mushoriwa approached Harare High Court challenging the legality of the City of Harare's disconnection of his water supply without a court order. This is the first court case where Section 77 of the new Zimbabwean Constitution, which recognizes the right to clean water, has been invoked. In a decision of April 2014 the High Court outlawed Section 8 of the Harare by-laws, which empowers the City Council to cut off water from residents arbitrarily without a court order, with reference to the Constitution. In defiance of this court order the City of Harare has in the course of October and November 2014 cut off the water supplies of more than 12,000 defaulters without a court order.¹

This development flies in the face of the promises in the 2013 Constitution and the new National Water Policy of 2012, both responses to the breakdown of Zimbabwe's water service provision system. With the fall in economic production, which followed the Fast Track Land Reform Programme, difficulties such as high rates of inflation and a failing electrical supply, which powered the water pumps and the sewage treatment plant, lead to breakdown of Harare's water and sanitation system and culminated in a cholera outbreak in 2008.²

1 <http://www.sundaymail.co.zw/?p=19919#.VHGudoj6ojI.gmail>.

2 By the 30 May 2009 there were 98,424 suspected cases, including 4,276 deaths (which is a high case fatality rate of 4.3%) reported by the Ministry of Health and Child Welfare (MoHCW) of Zimbabwe.

The failure of Harare's water and sanitation system affects everyone because of polluted drinking water and lack of delivery. However, comparatively wealthy families in the low density suburbs have been able to find solutions through water tanks, water delivery, bottled water, etc.³ This chapter addresses the consequences for poorer communities in Harare's high density suburbs. While affecting the whole of Harare, the water crisis places a disproportionate burden on women and girls in these areas who have assumed the responsibility for accessing water for household use. The new National Water Policy, which was adopted by the Government of National Unity in 2012 and launched just before the 2013 elections, acknowledges that women have borne the brunt of the water and sanitation crisis. With reference to Zimbabwe's accession of the human right to water through ratification of a series of international treaties it 'recognizes and promotes gender equity in allocation, access and utilization of water as well as implementation of WASH (water, sanitation and health) activities.'⁴ The new Water Policy also calls for gender sensitive, targeted programming and implementation and equal participation in water governance.⁵

This chapter explores how women from middle- and low-income households in Harare's high density areas negotiate their position as users of water for domestic, sanitary and livelihood uses in the family and in the local community. Harare's high density areas have seen, through the intervention of humanitarian water sector assistance co-ordinated by the United Nations Children's Fund (UNICEF), a 'rights-based' approach to water. Many of the citizens in these areas are active members of local residents' associations that, with the support of organizations such as Zimbabwe Lawyers for Human Rights (ZLHR), have challenged the legality of the City of Harare's water cuts through litigation. To ensure water on a day-to-day basis the inhabitants in these areas have dug wells next to

3 The low density suburbs have found private solutions. These include private boreholes, bottled drinking water and/or the purchase of water from private water vendors who bring a week's or monthly quantity of water to place in large elevated water containers. There are currently large numbers of water delivery trucks carrying water to those who can afford to pay (Mangwanya (2011) and personal observations).

4 National Water Policy, Government of Zimbabwe, 2012, para. 7.1.3

5 The most important instruments in this respect is the International Convention on Economic, Social and Cultural Rights (ICESCR) and the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW).

their houses or in surrounding wetlands. With the irregular supply of water from the municipality and public boreholes, they are increasingly turning to private water vendors.

Our study, which took place from 2011-13 (and updated to 31 December 2014), focuses on the situation in four different high density areas: Mabvuku, Glen Norah, Harare North and Hatcliffe Extension. Mabvuku and Glen Norah were established, respectively, by the colonial government in the 1950s and 1970s for domestic workers and low income earners on a rent-to-buy scheme. Harare North is a residential settlement in Hatcliffe which was built by housing co-operatives after independence in the 1980s. All these areas (except Hatcliffe Extension) were planned for piped water and flush toilets. Hatcliffe Extension is a largely informal area with no water or sanitation, which has been settled by people, most of whom were displaced from their homes, first by the farm invasions and then by Operation Murambatsvina.⁶ In these four areas, we interviewed employed, high- and low-income women, married women with employed and unemployed husbands, female-headed households, and female renters, as well as elderly and disabled women. Key informant interviews were conducted with officials in international humanitarian organizations, city councillors from the area, administrative staff in Mabvuku, Tafara, Glen Norah and Hatcliffe Municipal Office, borehole committee members and representatives of Mabvuku, Tafara and Glen Norah resident associations who form part of the civic organisation Harare Residents Trust (HRT).

From a legal, pluralist and multi-level governance perspective, we analyse the multiplicity of formal and informal norms and institutions that have emerged in response to the fragmentation and breakdown of the urban public water and sanitation supply.⁷ One aim is to establish what other water sources people in these areas are using to supplement municipal water and what the norms and institutions governing access, use and control of these sources are. A related aim is to explore how different categories of women – poor, middle class, married, single, elderly and disabled – are negotiating access to these different sources and whether or to what extent they are participating in different formal and informal water governance structures. Towards this end, we focus on women's coping strategies in relation to three forms of water provision for domestic,

6 Operation Murambatsvina was a highly controversial programme where the ZANU-PF government forcefully drove more than 100,000 urban citizens out of their homes ostensibly for zoning violations (Tibaijuka, 2005).

7 Elaborated in Chapter 1.

sanitary and livelihood purposes. These are: public provision of water by the City of Harare, provision of water through humanitarian assistance by UNICEF, and self-provision at the household and community level.

The chapter unfolds in seven sections. With focus on the City of Harare, Section 2 situates the legal and political urban water governance structures within the broader political struggle between ZANU-PF and the Movement for Democratic Change (MDC). In Section 3, we describe how in this polarized political environment, women negotiate their participation in the formal and informal structures that govern water and sanitation in Harare's high density suburbs. What measures are they taking to defend their right to available, safe and affordable water for domestic, sanitary and livelihood needs? Section 4 explores how the rights based approach to water, which guided the transnational humanitarian emergency interventions co-ordinated by UNICEF in these areas, has been implemented. Section 5 examines the range of means by which poor- and middle-income households have been able to find alternatives to the failed city water supply. Section 6 focuses on similarities and differences between different categories of women in terms of access to water. On the basis of the research findings, our concluding section recommends that the right to clean, available and affordable water, embedded in the new Constitution, is translated into binding legislation.

2. SETTING THE SCENE: HARARE'S WATER CRISIS IN ITS HISTORICAL, POLITICAL AND ECONOMIC CONTEXT

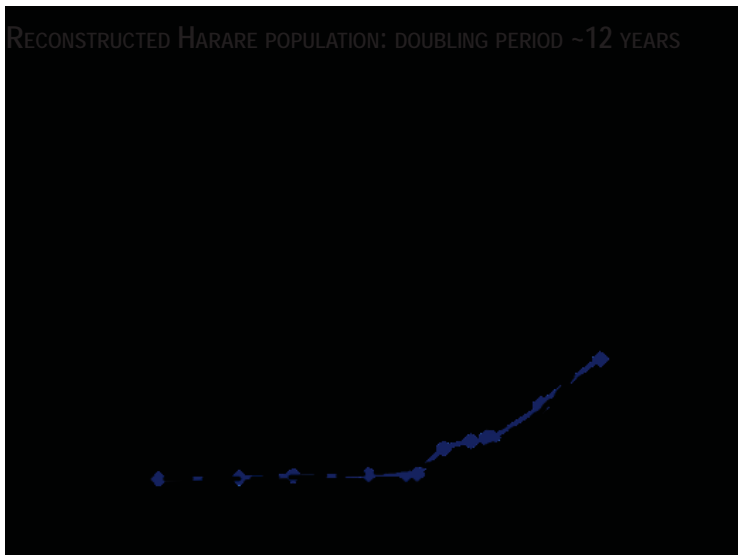
Zimbabwe, before the economic and political crisis of 2000-09, had a well-developed water infrastructure including reservoirs, water treatment plants, sewage treatment plants, and the pipes to deliver water to homes and businesses and a sewage system combined with a reliable electrical supply to power the system.

2.1 The City of Harare

The water supply system for Zimbabwe's cities and towns was largely a creation and construction of the Rhodesian state prior to Zimbabwe's independence in 1980. For example, the Southern Rhodesian government built a dam in 1952 to create Lake Chivero (McIlwaine) for water supply and recreation for the capital city Harare (Salisbury) (Magadza, 2003). They also constructed another dam on the Manyame River, now known as Lake Manyame (Lake Robertson). The high density suburbs (townships) that were built for black workers in the capital city had tap

water and flush toilets.

The City of Harare's water crisis is deeply embedded in the clay of the broader national economic and political crisis that has resulted in breakdown of public service delivery in areas such as electricity supply, health services and education in all parts of the country.⁸ Like everything else in contemporary Zimbabwe, water governance has been caught up in the politics of conflicts between ZANU-PF and the MDC. Due to the fact that the MDC has had majority representation in Harare and other cities since 2000, there was contestation for power and interference in local governance structures, including water, by the ZANU-PF controlled Ministry of Local Government, Rural and Urban Development (hereinafter referred to as the Ministry of Local Government). This included the dismissal of all the Harare city councillors and their replacement by a special commission appointed by the Minister of Local Government, and the transfer of the council's water service delivery mandate to a parastatal, the Zimbabwe National Water Authority (ZINWA).⁹



8 The water crisis also be understood in the light of the high population growth in Harare since independence. The estimated population of Harare, including high densities today, excluding the squatter camps, is 5 million while the official government figure of 2009 is of 1.6 million (Communication with Chris Magadza April 2014, see table above). He also cautions to be very wary of the government figure of 2009 of 1.6 million.

9 This is elaborated in Chapter 10.

A resurgence of cholera took place after ZINWA took over water supply from the city's Department of Water. Access to urban water supply declined from 97% coverage in 1990 to 60% by 2008. Access to urban sanitation decreased from a commendable 99% to 40% in the same period. Apparently acknowledging the failure of ZINWA, the GNU returned the management of water supply to the City of Harare in 2009.¹⁰

The city's duty to provide clean and affordable water to its citizens, particularly its poor living in high density areas such as Mabvuku, Tafara, Harare North and Hatcliffe Extension, is still embedded in the conflict between the State, the city and its citizens. During the campaign for the 2013 elections, control of Harare's water again moved to centre stage in the bitter conflict between ZANU-PF and MDC. The ZANU-PF Minister of Local Government, passed a Directive to Write off Debts by all Local Authorities.¹¹ The Directive which addressed all provincial administrators, town clerks and chief executive officers was used by ZANU-PF, including Robert Mugabe, as one of the key points in their election campaign. The directive, which undermined the MDC-dominated council's attempt to strike a balance between the need for revenue to fund the city's water and sanitation system and specific measures directed at those citizens, who are totally unable to pay, was challenged by Harare's outgoing mayor on legal grounds. The residents, however, besieged municipal offices demanding that the Harare City Council implement the ministerial directive to write-off their water bills.¹² The outgoing council ultimately complied with the directive before the newly elected councillors, where members of MDC are in majority, assumed office.

As we write, in order to increase its water revenue, the City of Harare

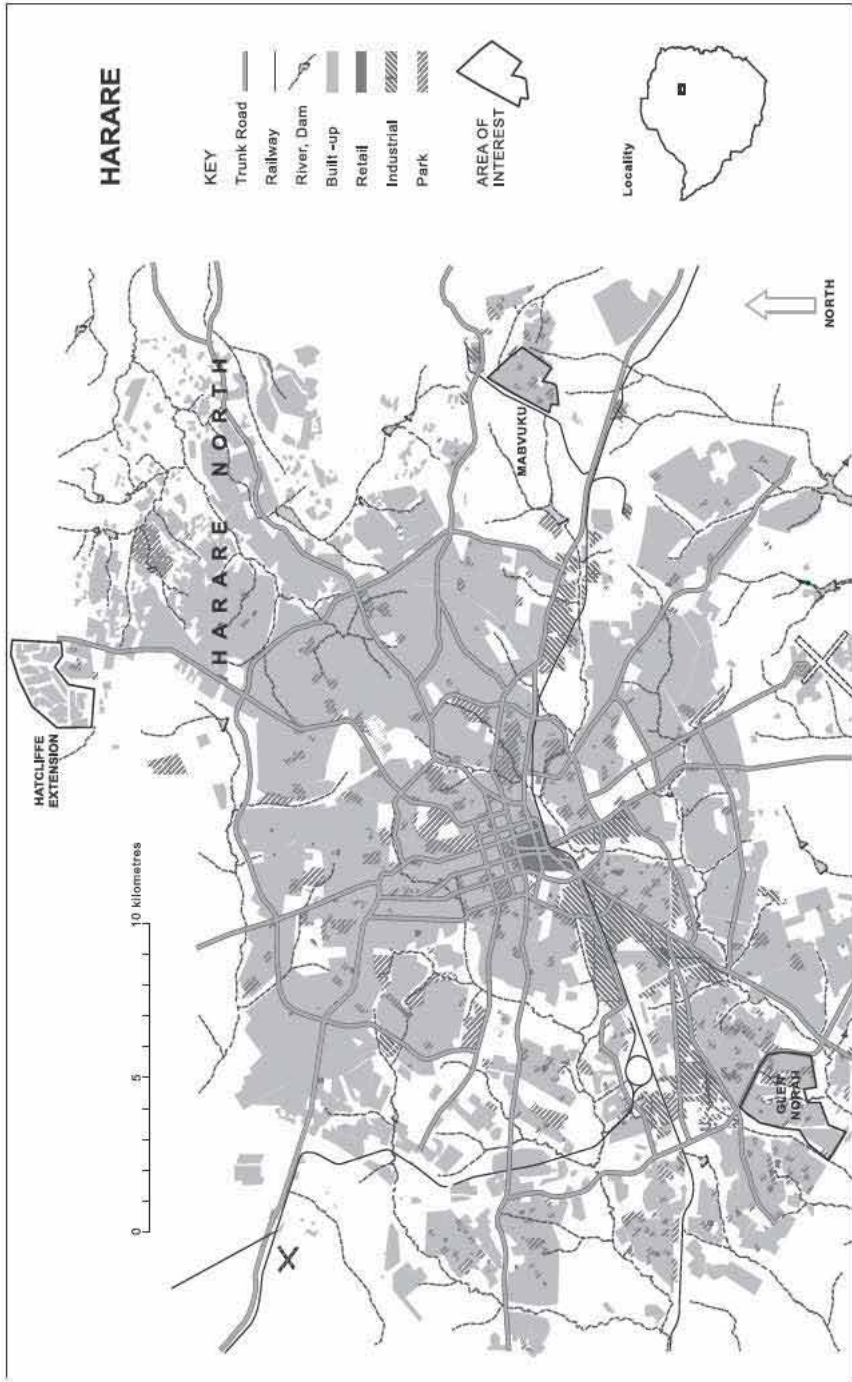
10 Elected councillors regained control of the Council after the 2008 elections.

11 Paragraphs 1 and 2 of the Directive read:

1. It has become apparent that the economy has not been operating optimally and in the process relentlessly unleashing severe hardships on the citizenry. Thus, from 2009, ratepayers have not been able to meet their obligations in terms of payment of taxes, rentals, levies and related charges resulting in an enormous and crippling debt burden frustrating the majority of the population.

2. Given the above circumstances, all Local Authorities are in terms of Section 133 of the Rural District Council Act (Chapter 29:13) as read with Section 303 of the Urban Councils Act (Chapter 29:15) directed to write off debts in respect of rentals, unit tax, development levies, licences and refuse charges owed by individuals ratepayers as at 30 June, 2013. In the same vein, money owed by residents for rates, stands prescribed in terms of the Prescription Act (Chapter 8:13) as from February, 2009 to 30 June, 2013.

12 *Daily News* 30 July 2013 <http://www.dailynews.co.zw/>



has stepped up the number of illegal water disconnections, introduced reconnection fees and is, in spite of resistance from civil rights organizations, planning to install water meters. Water and property revenues are, overwhelmingly, the largest income of Harare City Council.¹³ According to Harare Water, monthly water revenue brings USD4.5 million into Harare City Council.¹⁴ The money is, according to Human Rights Watch (2013, 45-50) poorly accounted for and is allegedly unlawfully allocated towards paying the high salaries and benefits of City Council members, including expensive new cars.¹⁵

2.2 The municipal water crisis in Harare's high density areas: women's perspectives

This section shows how married, widowed and single mothers from different social segments, many of them caring for sick, disabled and elderly family members, have been and still are affected by the water crisis.

2.2.1 The breakdown and cholera outbreak 2006-09

When the water crisis was at its peak, 2006-09, people in Mabvuku, Glen Norah, Harare North and Hatcliffe Extension were without Harare city water for drinking and sanitation.¹⁶ During this period, people dug wells in backyards and wetlands where they had vegetable gardens to supply the family with food and derive income through sale of vegetables. Those who did not have access to ground water fetched water from nearby rivers.

In parts of Glen Norah, Mabvuku and Harare North, where people had flush toilets, women would use other sources such as boreholes, protected and unprotected wells, streams and shallow wells to fetch water to flush the toilets. Due to shortage of water for sanitation several people would use the toilet, close the lid after use and only flush after a consider-

13 Interviews with Harare City Council Councillors, October 2013; 'Water: Council's Cash Cow Causes Concern', *The Zimbabwean*, May 12, 2012, <http://www.thezimbabwean.co/news/zimbabwe/62655/water-councils-cash-cow-causes.html> (accessed October 7, 2013). Quoted from Human Rights Watch (2013, 45).

14 The World Bank, 'Technical Assistance to the City of Harare for the Greater Harare Water and Sanitation Strategic Plan, October 2012-June 2013', Quoted from Human Rights Watch (2013, 45).

15 See <<http://www.herald.co.zw/19-city-council-executives-gobble-us500-000-every-month/>>, <<http://www.herald.co.zw/harare-city-council-bosses-still-earning-mega-perks/>>

16 Glen Norah had intermittent water supply and Hatcliffe Extension did not even have the requisite infrastructure.

able amount of waste had accumulated. During the most difficult times, people used the bush as an alternative for toilets. Women would make sure that they travelled in pairs to protect themselves against abuse. Some people dug latrines outside their homes leading to contamination of the water in close by wells.

Because there was no water to move human waste, blocked toilets became a common phenomenon. As a result, the sewage stations within the area would burst and sewage would flow freely into the streets and would, at times, end up contaminating unprotected water sources like shallow wells. A further threat to sanitation during this period arose from the fact that garbage was not being collected. In all these suburbs there were reported incidents of women grouping together to confront the local city council about the problems of water and sanitation. Because the local authority was unable to attend to the problems, women reported that they had to find individual ways of coping. In Mabvuku, a respondent indicated that they would group together as women from the same street and dig trenches to redirect the flow of the sewage on the streets:

Yes, there were (blockages). As women we would dig trenches to divert the sewage flow away from water sources so that the wells and streams that we were using would not get contaminated. Otherwise the city council did not do anything for a long time.¹⁷

The water and sanitation crisis in these and other areas culminated in outbreak of cholera in 2008. Of the 30 women we interviewed, seven indicated that a member of their household had suffered from either cholera or typhoid. Of these, there were three cases in Mabvuku and Glen Norah, and one in Hatcliffe.

For women taking care of children, the disabled and HIV-positive family members, this was one of the most difficult times of their lives. They had to constantly clean the toilet and wash the clothes of their charges as well as provide them with bathing water.

Two women in Mabvuku give an account of their children's illnesses.

My son was mentally disabled. He had a habit of picking food from the ground, even from the rubbish pits on the street sides. We think that is how he contracted typhoid because there was garbage everywhere and sewage was flowing all over the place. I had to watch him all the time but he must have picked something during the times that he used to

17 Group interview, Mabvuku, November 2013.

*sneak out of the home. The disease was cured at the clinic although the boy later died of a different cause.*¹⁸

*Yes, my daughter had HIV. She was very sick and because of the situation she contracted cholera. With my age I could not look after her or fetch water for her to clean herself. We took her to the clinic but she died. We are not sure if she died of cholera or other HIV-related complications.*¹⁹

The seriousness of the situation is demonstrated by the fact that all the interviewed women in the three suburbs knew someone within the community who had either suffered or died from the diseases.

2.2.2 The post-cholera period 2009-2014

The situation regarding provision of municipal water improved after 2009 when the GNU turned to the international community for water sector assistance and replaced the Zimbabwe dollar with international currencies (the Pula, the Rand and the U.S. dollar), thus immediately dispensing with hyperinflation. The situation in Glen Norah and Mabvuku in 2013 showed a great improvement from that of 2008-09 when there ceased to be a supply of piped water. However, although there is a supply, it is very erratic, and households can go without water for days and even weeks. Thus people living in these areas continue to rely on a multiplicity of alternative sources ranging from public borehole water to private backyard wells and wetlands, and buying water from private water vendors. According to a group of women in Mabvuku:

*When there is no water, we wake up at 3 a.m. to fetch water from boreholes and a well in the vlei which has clean water ... on average each of us carries between 60 litres and 100 litres of water per day for use in the home depending on the family size.*²⁰

In Harare North, the situation regarding municipal water was critical. According to the women interviewed, the majority of households in the suburb did not receive piped water, although the infrastructure was in place. As a result they had to get it from other people's houses. Some residents told us that they had never received piped water since moving into the area. As one respondent said:

Our stands are on higher ground, since I came here (2001), I have

18 Mother, Mabvuku, November, 2013.

19 Ibid.

20 Group interview, Mabvuku, 25 July 2011.

*never seen piped water coming out of my own taps.*²¹

The women we interviewed in Harare North, Mabvuku and Glen Norah were not satisfied with the quality of the municipal water which they suspected was contaminated. As a result, most households preferred borehole to tap water for drinking and cooking purposes, a situation which prevailed in all the suburbs. As one woman told us:

*We have big containers which we normally fill with water. If there is no water for a whole week, which usually happens; we use water from the wells for drinking and watering gardens. We also use tap water to water our gardens but the water usually comes out in a trickle. I woke up at 2 a.m. this morning to water this small garden portion. The City of Harare does not allow the use of hosepipes and if caught using a hosepipe to water vegetables, you will definitely be fined.*²²

In Hatcliffe Extension, at the time of writing, there is still no connection to piped water; residents depend on boreholes, shallow wells and pit latrines.

Despite reports of improvement, water supply was still seen as the greatest challenge to sanitation. The respondents in Mabvuku and Glen Norah indicated that because water was not constantly available meant that there were occasions when they could not adequately bathe, clean the toilets or their surroundings. The situation with blockages was also said to have improved after the dollarization of the economy but was now slowly deteriorating. In Mabvuku and Glen Norah, it was reported that the local authority had replaced some old sewage pipes with new ones in some areas. Where this was not done, sewage had once again begun to flow down the streets. Cleaning of toilets was, and still is, the responsibility of women. According to the women a typhoid case had been reported in November 2013.

Due to the continuous loss of jobs and ever increasing poverty,²³ a large number of people in these areas are, unable to pay their water bills and have had their connections cut off by the municipality. The women we spoke to in Harare North, Mabvuku and Glen Norah all bitterly complained about the water bills that they received from the municipality.

21 Harare North resident, November 2011.

22 Interview with female members of Mabvuku Residents Association, 25 July 2011.

23 'A July 2013 National Social Security Authority (NSSA) Harare Regional Employer Closures and Registrations Report for the period July 2011 to July 2013 shows 711 companies in Harare closed down, rendering 8,336 individuals jobless.' <<http://www.theindependent.co.zw/2013/10/18/700-harare-firms-close/>>

They indicated that the bills, which could go up to USD40 per month, were too high, and unjustified because the supply of water was so erratic. In addition, the water bill was combined with the rates for the house payment. This made it very difficult for them to default for fear of losing their homes. Lastly, the women were not happy with the fact that the city authorities had converted their bills due since the era of the Zimbabwe dollar to US dollar and added it to their current bills. As a result some of the residents had received bills of over USD1,000 and these were not being paid.

They also reported that the city council had disconnected supplies to several residents and they were now relying on public boreholes for all their water, a situation with which the municipality was not happy. When residents responded to the exorbitant and, in their view, unjustified bills, by refusing to pay or paying what they consider to be reasonable (which is also affordable to them), they were threatened with legal action.

According to a group of women in Mabvuku:

They are now charging interest and if the bill exceeds USD700, court summons are issued. Alternatively one can approach the city council officials and negotiate for staggered payments. However, the payment terms they impose are unfair on the debtor. For example, if the debt owed is around USD700, the council officials may order that one makes an initial payment of between USD200 and USD300 and if one does not comply they will attach movable property or repossess the house one lives in.²⁴

3. THE RIGHT TO ACCESS AND PARTICIPATION IN GOVERNANCE – THE CITY OF HARARE

The right to water and sanitation²⁵ and to gender equal participation in water governance is recognized in Zimbabwe's draft Water and Sanitation Policy (2009), Zimbabwe's National Water Policy (2012) and in the new Constitution. In practice, there is a disjuncture between 'the realm of rights' as contained in law and policy and the wider political and economic context in which women seek to realize their rights.

3.1 Women's participation and self-perception

Through observations and interviews, we have explored how women

24 Group interview with women in Mabvuku 25 July 2011.

25 The human right to adequate, accessible and affordable water and sanitation, is elaborated in Chapter 2.

participating in different forms of water governance perceive of themselves as citizens and right holders (Jones and Gaventa, 2002). A critical precondition to claiming rights is the extent to which women assume the right to have rights (Kabeer, 2002). Whether women are nominally included as carers, service providers and for their contribution of labour and other resources is a related question.

3.2 Urban water governance: the legal framework

We are first turning to the formal legal framework that guides water governance in the City of Harare. This legal framework, which is yet to be amended to be in consonance with the Constitution of Zimbabwe and the new Water Policy, has on a number of occasions been challenged through litigation by citizens.

As stated in Chapter 10 Section 6(2)(d) of the Water Act, it obliges the Minister to take into account the access needs of poor consumers by imposing a duty to 'secure the provision of affordable water to consumers in under-privileged communities' but lacks a definition of 'under-privileged communities'. This obligation, as required by the new 2013 Constitution, has not been translated by the minister into concrete policy and legislative directives to water authorities and water service providers such as urban councils.²⁶ The Urban Councils Act does not, as required by the right to water embedded in the Section 77 in the new Constitution, impose a duty on urban councils to provide water for basic needs free to residents who cannot afford to pay. Zimbabwe's cities and towns receive the bulk of their raw water from ZINWA through permits issued by sub-catchment councils e.g. Harare gets its bulk water from Lake Chivero through a permit issued by Upper Manyame Sub-Catchment Council. As a result of the need for permits, the City of Harare, owed ZINWA²⁷ more than USD1million (as of March, 2011), which it was seeking to recover through revenues. There are no guidelines on provision of services to those who are unable to pay.

The City of Harare's water governance mandate is found in the Urban Councils Act and the 'Bye-Laws for Regulating the Supply and Use of Water within the Municipality of Salisbury'.²⁸ These are applied in conjunction with the Water Act and any other relevant legislation. Section 187 of the Urban Councils Act empowers urban councils to compel

²⁶ *Combined Harare Residents Association v City of Harare* HH 73/04 and *Tracy Maponde v City of Harare* HH 5948/05.

²⁷ Through the Upper Manyame Sub-Catchment Council.

²⁸ Government Notice number 164 of 1913 (as amended from time to time).

owners of land within their areas who are not connected to their (i.e. the councils') water supply to do so for the purpose of taking water for drinking, domestic and sanitary purposes.

Furthermore, Harare City Council has its own water by-laws from 1913.²⁹

The by-laws require City of Harare to supply and maintain water meters at its own expense. The consumer is obliged to pay the amount due as per the council's record of the meter reading unless there is proof that the meter is faulty. The by-laws are accompanied by a standard contract between the council and the consumer. In terms of the standard contract:

The Council shall not be liable for any failure to supply water or for any defect in the quality of the water supplied, however caused.

The standard contract allows the council to disconnect a non-paying consumer on 24-hours' notice. With hyperinflation and the emerging crisis of provision (see Chapter 10) the city began disconnecting water for non-payment of rates and other non-water fees in order to force residents to pay their council bills. However, the High Court, in the Tracy Maponde case (2005), ruled that this practice was illegal.³⁰ In the Mushoriwa case (2014), and on the basis of Section 77 of the Zimbabwean Constitution, the Harare High Court outlawed Section 8 of the Harare by-laws, which empower the city council to arbitrarily cut off a defaulter's water without a court order.

3.3 Women's interaction with the political structure

Since 1998, responsibility for implementing the Water Act has been shared between the Minister of Water Resources, Development and Management,³¹ the Zimbabwe National Water Authority, catchment and sub-catchment councils and local authorities (urban councils and rural district councils).³² While based on the principle of stakeholder participation neither the acts nor the statutory instruments that frame these

29 'Bye-Laws for Regulating the Supply and Use of Water within the Municipality of Salisbury,' Government Notice number 164 of 1913 (as amended from time to time).

30 Case Number HH5948/05 and Case Number HH. HC 4266/13.

31 Between 2000 and 2008 water was under the 'Ministry of Rural Development and Water Resources'. From February 2009 and July 2013, water was under the 'Ministry of Water Resources Development and Management' but the title has since changed to 'Minister of Environment, Water and Climate' because of the merger of the water and environment portfolios.

32 The Zimbabwe National Authority Act (ZINWA) of 1998.

bodies entail measures to enhance women's right to participation (see Chapter 10). In our research we were interested in how women in these areas sought to make the City of Harare councillors and officials accountable for their right to accessible, safe and affordable water.

The Urban Councils Act empowers urban local authorities to provide treated potable water services in their areas of jurisdiction.³³ Urban Councils are composed of elected councillors and special interest councillors who are appointed by the Minister of Local Government.³⁴ The Act does not contain any provisions aimed at enhancing women's right to participation. Councils have committees to address various issues including water and sanitation. Zimbabwe's accession of regional and international instruments requiring equal participation at all political levels, has not led to adoption of measures aimed at increasing women's participation in local government. In the Harare City Council, where MDC is in majority, a minority of the councillors are women.

City of Harare manages water through two departments – Harare Water and the City Treasurer's department. They also have a legal department, which provides legal advice and assistance to all departments.³⁵ Harare Water is responsible for providing and maintaining water infrastructure and supplying metered tap water to users. The City Treasurer's department is responsible for billing for water services. In practice, the two departments do not seem to co-ordinate their activities. Whilst Harare Water lacks the resources to fulfill their obligations, they are very aware of their responsibility to provide a continuous supply of water to residents and the health risk resulting from a failure to do so. On the other hand, the City Treasurer's department appears to be unconcerned by the City's failure to fulfill its obligation. They insist on billing residents for metered tap water regardless of whether or not it is available and levying a fixed charge. In an interview conducted in 2011, the treasurer indicated that the fixed charge cannot be waived because it is for the maintenance of infrastructure which is done regardless of whether water is available or not.³⁶

33 The Urban Councils Act (Chapter 29:15).

34 According to Government of Zimbabwe website this is now under the Ministry of Local Government, Public Works and National Housing. <http://www.mlg.gov.zw/> Accessed 22 February 2015.

35 Interview City of Harare Water Department, 24 March 2011, Old Mutual House, Harare.

36 Interview with City Treasurer, 15 June 2012, City Treasurer's office, Rowan Martin Building, Harare.

In interviews held with Harare City Councillors for Glen Norah, Tafara and Mabvuku in 2011, they reported that they were meeting with residents in the high density areas to discuss cutting water rates by 30%.³⁷ Regarding payment, the councillors considered that the citizens should pay whether they received water or not:

Every Harare citizen has a collective responsibility to rehabilitate the infrastructure. If you don't pay, you also don't have water.

Although they were concerned about the outcry from residents about the city's practice of issuing Summons and Letters of Demand they were of the view that:

The problem is that residents do not respond to call-in letters sent to them by the Council and hence City of Harare has no option but to take the legal route.

Communication between the councillors and the citizens in the four suburbs was very poor. The four study areas were all characterized by violent political struggles between ZANU-PF and MDC in the run-up to the 2012 elections. The hostile climate clearly had a bearing on women's ability to negotiate their access to water or express their rights to water. In a situation where crackdown on opposition and dissent is legitimized through a series of repressive laws such as the Public Order and Security Act (POSA), people are afraid of convening public meetings. In a group interview with female members of Mabvuku Residents Association, the women emphasized the strong political control and the lack of clarity as to what constitutes an illegal political meeting under POSA:

When we have our meetings at committee level, which includes men, we have to seek police clearance first before holding a meeting. However, if we want to meet other women, we advise them through their churches or just move from door to door. However, there is a challenge in that women are afraid to attend meetings for fear of being suspected of having held political meetings. There are so many women here who wanted to attend this meeting but they are scared to.³⁸

One woman, a member of ZANU-PF, who wanted to participate in community work said:

I have been threatened of being stripped of my post in ZANU-PF due to my being a member of HRT [Harare Residents Trust] and

37 Interviews with four City of Harare Councillors, 27 June 2013, Town House, Harare.

38 Group interview, Mabvuku, 25 July 2011.

attending their meetings.

The women we interviewed reported that when the local political representatives in the City Council called residents' meetings, issues relating to service delivery were rarely discussed. As one resident put it, the political discussions were only about support for a political party and not about concrete problems related to water governance:

*They do not talk about water problems. They only talk politics.*³⁹

Women who were members of local resident associations in Mabvuku and Glen Norah said that they had attended meetings where legislators and representatives of the local authority had been invited to hear the residents' concerns. In Mabvuku women members of the Residents Association stated:

*We have formally invited him (the councillor from the area) to our meetings in the past but it is very difficult to get hold of him. He does not flatly refuse an invitation but simply does not turn up after having promised to come.*⁴⁰

These interviews speak to the more general situation, from 2000, where NGOs and CSOs have been faced with increased repression, and restriction of their activities (Hellum et al., 2013). Furthermore, as a result of the political polarization between ZANU-PF and MDC, mobilization of residents, for whatever reason, is left to political actors whose main concern is with party politics, i.e. essentially power and influence. Thus women are left with no forum to discuss practical issues such as their water related problems.

3.4 Women's participation in civic action on the right to water

The conflict over service delivery in general and water provision in particular between the residents in Harare's high density areas and the City of Harare has given rise to civic action on the right to water. Key actors are the Combined Harare Residents Association (CHRA) and Harare Residents Trust (HRT). The HRT is active in Mabvuku and Glen Norah where they mobilize people to organize themselves into residents associations for their respective suburbs and demand (or defend) their rights in respect of public service delivery including water and sanitation.⁴¹ Le-

39 Politics in this context meant party politics and not politics in a broader sense. Hatcliffe Extension Resident, December, 2011.

40 Group interview, Mabvuku 25 July 2011.

41 Mabvuku Residents Association, 28 January 2011, group interview with Mabvuku Residents Association Committee members.

gal proceedings instituted against members of both organizations are referred to Zimbabwe Lawyers for Human Rights.

A key question in our research was how women in these areas sought to make the City of Harare accountable for lack of delivery. How did they fight water cut offs and summons for lack of payment? What was the role of rights in their struggle for safe, available and affordable water? How did social, cultural, economic and political factors shape their strategies?

In all the suburbs women we interviewed emphasized their right to water that is safe, adequate and affordable:

*Yes, we have a right to clean water that is suitable for drinking...*⁴²

They all saw Harare City Council as being responsible for the provision of water that is safe, accessible and affordable without any political discrimination or distinction among citizens:

*The City Council should see that people get clean water because they are paying for it.*⁴³

Furthermore, there was consensus among the women we interviewed that the City Council should not disconnect water without first considering the socio-economic situation of those who fail to pay their bills.

Some women were aware of the Constitution-making process. They indicated that they would want a commitment from the State in the new Constitution to provide water that is clean, safe, affordable and readily available. They also indicated that in recognizing the right to water, the new Constitution should prohibit the sale of water, even by citizens who own private wells. But many of the women we spoke to were unaware of the Constitution-making process undertaken by COPAC.⁴⁴ According to one of the female tenants we spoke to in Mabvuku:

*I have not heard about COPAC. Meetings are called for those who own houses in the area. I have not heard of Mabvuku Residents Association. I assume that it is for those who own houses.*⁴⁵

It was mainly those women who were members of the local resident associations who were aware of the human right to water and the Constitution-making process. In a group interview with women in Mabvuku we were told:

42 Glen Norah resident, December 2011.

43 Ibid.

44 Government of National Unity (GNU) Constitution Parliamentary Select Committee (COPAC).

45 Group interview, Mabvuku, 25 July 2011.

Firstly, we were not aware we had a human right to water. HRT then educated us. We now depend on HRT to send our grievances to the City of Harare and publicize them in the press. It would be better if the human right to water is in the constitution.⁴⁶

Despite the awareness of their right to water, many women did nothing to make the authorities more accountable. The reasons given were that they were too busy to do so. They also considered it would be a futile exercise since, in their view, the authorities never listen. In Glen Norah and Mabvuku, issues of rights and service provision are handled by both HRT and CHRA. In a situation where information and education about a citizen's rights has not been provided by national and local government or its institutions, often a particular CSO will act as the residents' legal advisor and negotiate on behalf of the residents in cases where there are disputes, especially over high bills:

HRT members from all suburbs in Harare including Mabvuku who happen to receive summons for unpaid water bills have been advised to surrender the summons received to the co-ordinator at HRT, who in turn forwards the cases to the Zimbabwe Lawyers for Human Rights. So far, more than 30 Mabvuku residents who received summons have been referred to HRT. There is ongoing negotiation and dialogue on the issue between HRT and the City of Harare Mayor. Due to these 'behind closed doors' discussions, it appears as if City of Harare has stopped issuing summons.⁴⁷

Because, until recently, the human right to water was not expressly provided for in the Zimbabwean Constitution, and because there is the absence of a clear obligation to provide safe and affordable water in the Water Act and the Urban Councils Act, litigating the human right to water has had to rely on the right to life which enjoys constitutional protection.⁴⁸ In a case from 2005, the Harare High Court in its judgment, which was a consent order, stated that the City of Harare had no right to disconnect Tracy Maponde's water supply as a way of forcing her to pay bills (see Chapter 10).⁴⁹

Although the Maponde case was a consent order, the realization

46 Group Interview Mabvuku, 25 July 2011.

47 Interview with Vice Chairperson Mabvuku Resident Association 25 July 2011.

48 Seminar presentation by Ms Belinda Chinowawa Zimbabwe, Lawyers for Human Rights, University of Zimbabwe, 2012.

49 Harare High Court, 18 November, 2005.

that there is a judgment prohibiting the City of Harare from disconnecting water for unpaid services has, according to CHRA's director, made the former more willing to discuss and resolve issues out of court.⁵⁰ In recent years the City of Harare has regularly issued summons to quite a substantial number of non-paying residents. CHRA has represented a number of them in negotiations where the city, in most cases, has agreed to reduce the bill and give the debtors time to pay it off. For example between September and November 2012, the City of Harare disconnected about 910 houses in Kuwadzana and Dzivaresekwa. CHRA had meetings with the mayor, then Muchadeyi Masunda, and other officials. Due to the reference to the Maponde case and the risk associated with disconnection because Harare was facing an epidemic of typhoid and cholera, the municipality eventually agreed to reconnect the supply.

3.5 A bleak future for the human right to water and the right to participation

Overall, our study shows an increasing level of consciousness and mobilization around human rights among people in general and women in particular, as they formed the majority in the local residence associations in the areas we observed. Women's participation in struggles over water, and their ability to take legal and political action has, as we have seen, been severely constrained by a series of closely interrelated social, economic, political and legal factors. The fact that the City of Harare, in defiance of the court order in the Mushirowa case, which was based on the right to water in the new Constitution, has cut off the water supply to more than 12,000 defaulters, and without a court order, speaks to the limits of law in a context of economic decline, political conflict and increasing corruption.

4. THE HUMAN RIGHT TO WATER IN THE TIME OF CHOLERA: INTERNATIONAL HUMANITARIAN ASSISTANCE

The cholera epidemic in 2008, which spread from Harare's high density areas throughout the country, focused international attention on the human right to water and sanitation. In December 2008 Zimbabwe's Ministry of Health and Child Welfare requested international assistance as government funding for public health had declined, and the capacity

50 Interview with the Director of CHRA, 12 March 2013.

to provide intravenous drips for victims of diarrheal diseases was absent in most public hospitals and clinics. The official declaration of a cholera epidemic provided the international community with the green light to deploy resources and mobilize a co-ordinated response through extensive humanitarian assistance to national and local government.

4.1 UNICEF's rights based approach to water and sanitation in Zimbabwe

The basis for humanitarian intervention in Zimbabwe's water sector by UNICEF was children's right to safe water under the United Nations Convention on the Rights of the Child (CRC) which obliges states, if necessary with assistance of the international community, to provide children with clean drinking water.⁵¹ Addressing the humanitarian water sector assistance the Committee on Social, Economic and Cultural Rights in General Comment No. 15 on the human right to water states that:

[I]n relation to disaster relief and humanitarian assistance in times of emergencies. Priority in the provision of aid, distribution and management of water and water facilities should be given to the most vulnerable or marginalized groups of the population.⁵²

After a short emergency period,⁵³ UNICEF established the Emergency Rehabilitation and Risk Reduction (ER&RR) Programme in response to the 2008-09 cholera outbreak, specifically to address its underlying causes and prevent further outbreaks.⁵⁴ Through this programme, UNICEF, which had previously focused on Zimbabwe's rural water supply and sanitation, moved into urban water because of the emergency: children's lives were at stake because of unsafe water. Through this programme, UNICEF and Oxfam UK co-ordinated emergency and urban

51 Interview with Mr Kiwe Sebunya, Chief, Water, Sanitation and Hygiene (WASH) of UNICEF, Harare, 1 August 2011.

52 CESCR (2002) General Comment No. 15 The human right to water, E/C.12/2002/11, para 16.

53 The UNICEF Zimbabwe Country Office (ZCO) shifted to full emergency mode on 16 November 2008, adopting an initial 120-day emergency response plan, which was later increased to 180 days.

54 The programme was predominantly funded by the Australian Government Aid Programme, Central Emergency Response (CERF), Department for International Development, UK (DFID) and the European Commission (ECHO) (total of approximately \$50 million in financial commitments). UNICEF took the lead in executing complementary activities by other leading sector agencies.

sector agency activities, including donors, multilaterals, NGOs and the Government of Zimbabwe. The programme was guided by a rights based approach to development.⁵⁵

The main components of the programme, which initially focused on the high-density suburbs in urban areas, were:

- *Rapid Assessment* to identify emergency ‘quick-win’ solutions to improve safe water and sanitation services.
- *Emergency Rehabilitation* of infrastructure in urban and critical rural areas.
- *Provision of Water Treatment Chemicals* to 20 Urban Councils and ZINWA as a cholera mitigation intervention.
- *Emergency Borehole Drilling* in urban areas.

Given the high number of disabled women and children in Zimbabwe, one would have expected engagement with the Convention on the Rights of Persons with Disabilities (CRPD) as both the Child Rights Committee and the Committee on Economic, Social and Cultural Rights (CESCR) has called for affirmative action to redress the disadvantages of people living with disabilities. In line with the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) committee’s increasing focus on women within vulnerable groups, one might have expected the programme to address how access to water for poor, elderly and disabled women would be assured.⁵⁶ In the light of Article 5(a) of the CEDAW, which calls for measures to eliminate harmful gender stereotypes, one would also have expected measures countering the widespread gender stereotype that women are primarily responsible for obtaining water and ensuring that the water used for household purposes. Yet none of these important dimensions of women’s’ and girl-children’s right to water feature in the documents that framed the ER&RR programme.

4.2 The implementation of the programme in Harare’s high density areas

In response to the cholera outbreak of 2008-09 boreholes were constructed by UNICEF in all these areas for public benefit, meaning that anyone

55 UNICEF (2010); *Human Rights Based Approach to Programming/ Community Centred Capacity Development Trainers Manual, prepared by UNICEF and Institute of Water and Sanitation Development* (Chioreso, Neseneni and Zharare, 2009).

56 CEDAW (2007) General Recommendation No. 27 on older women and protection of their human rights. CEDAW/C/GC/27, para. 24.

could freely access the resource. To quickly identify areas with safe and available water was a major concern for UNICEF who in this regard worked closely with the national and local health authorities.⁵⁷ There was little if any time to consult directly with the residents in the area, for example through local branches of Harare Residents Trust. No efforts were, to our knowledge, made to ensure that engineering and planning designs took the needs of elderly, disabled and visually impaired into consideration.⁵⁸

It was assumed that rural models, involving community training for maintenance and organization, would not work in an urban setting where residents lacked a tradition of acting together.⁵⁹ Assuming that the high density area residents could not run and maintain boreholes because they lack the sense of community associated with their rural counterparts, it was decided that the City of Harare was to be responsible for maintenance.⁶⁰ Thus hardly any effort was made to empower local organisational structures and local regulations concerning use and maintenance. The lack of clarity concerning access, use and control resulted in different systems and practices across the suburbs. In practice, most of the boreholes were organized as public water sources with open access. There are also examples of boreholes that were organized as common property where there existed rules on who could use the resource, which was excluded from the resource and how it could be used.⁶¹ Our study shows how each community, depending on their history, social situation and existing power relations influenced how the boreholes were regulated in practice. The UNICEF boreholes serving co-operatives in Harare North were managed and maintained by a Borehole Committee (BC), initiated by UNICEF. The BC, where five out of seven members were women, had, together with the users, put in place some rules to ensure fair and sustainable use

57 We have not been able to access direct information about the role of local and national health authorities. The research team contacted several persons in the Ministry of Health who did not want to be interviewed.

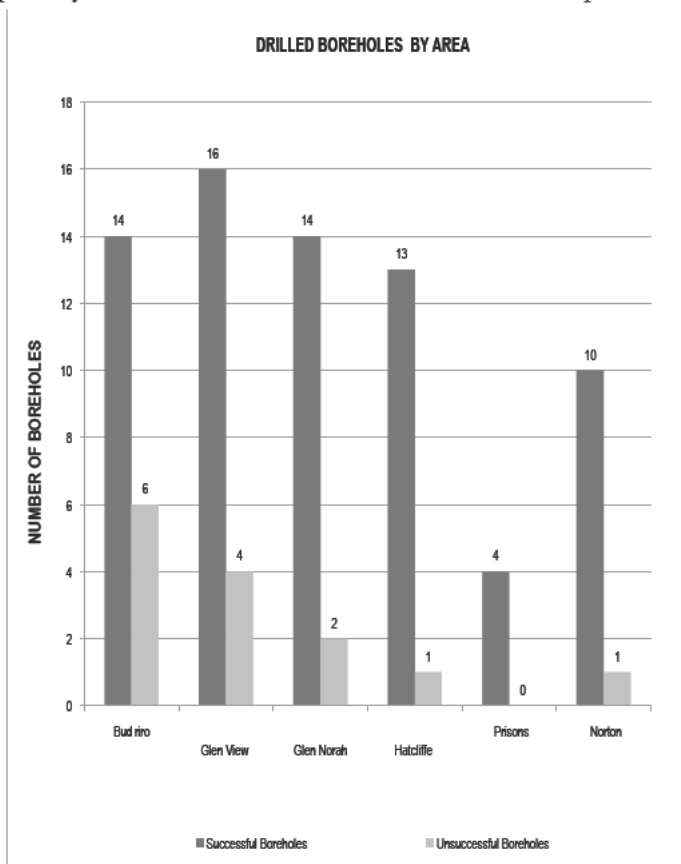
58 See Kanyerere (2012).

59 Interview with Mr Kiwe Sebunya, Chief, Water, Sanitation and Hygiene (WASH), 1 August 2011 by Bill Derman, Elizabeth Rutsate and Anne Hellum.

60 According to citizens in the high density areas the City Council failed to undertake repairs in an effort to make residents pay their outstanding water bills. This was confirmed by incidents where the Council would take the pump handles away in the name of repairing them and not returning them. There were allegations that the City Council did not want to provide free water as this reduced the Council's revenue base.

61 For a definition of common property see Murphree (1993).

of the resource. There is reason to believe that the co-operative organisational culture that exists in Harare North contributed this form of organisation. The rules, which were unwritten, required the users to join a queue if they wanted to draw water, to use the borehole with care, and not to do laundry near the borehole. Priority was given to certain groups of people depending who was in the queue at any particular time. Normally, the elderly, disabled and those who wished to fill just one container would be allowed to jump the queue, if the users present agreed. It was required that the water from the borehole was used for potable purposes, not for gardening and building. In the event of a borehole breakdown, the committee called for a meeting where the users were briefed on the problem and requested to contribute USD1 per household. To further keep out free riders, the borehole was locked at night. In Harare North, conflicts were usually caused by men who did not want to wait in the queue. The troublemakers were dealt with by the other users at the borehole or by the BC, especially the male members, if the misdemeanours persisted.



In Mabvuku and Glen Norah, where the housing is organised on a rent to buy basis, the boreholes were considered to be 'public', in that they belonged to everyone and that it was either the responsibility of the city council or UNICEF to repair them. Nevertheless, simple rules of borehole use applied, at least to a certain extent, in these two suburbs as well. Residents were required to wait in queues and draw water on a first come first served basis. In Mabvuku women informed us that to avoid conflict caused by men fighting over their places in the queue, they would rather fetch water themselves than leave it to their husbands:

*We stand in a queue at boreholes in order to avoid conflicts but there are some regular queue jumpers who fill up several containers and charge desperate people for the water. We normally leave these queue jumpers alone as they are violent.*⁶²

In Glen Norah conflicts related to use of public sources reached a peak when two men fought over a position in the queue resulting in one being stabbed in the forehead, and sustaining 15 stitches. The users in these areas have not been very active in the maintenance and repair of the boreholes except for occasional cleaning by women living nearby.

In Hatcliffe Extension, there were no specific committees for the boreholes but there existed some collective user initiatives aimed at maintaining the boreholes. These were largely spearheaded by a committee that oversees the political activities of the ruling ZANU-PF party in the area. Through these initiatives, the users contribute money towards the repairs in the event of a breakdown and also ensure that the area around the borehole is always clean. However, queue-jumping was also a major problem in this settlement. Men were normally the perpetrators as they did not want to wait in the queue. Conflict situations were generally avoided, when women told the recalcitrant men that before they filled their own container, they had to fill four or five others.

Our study revealed that each community constitutes a complex social field in which local norms and practices, power structures, and history form the context in which the regulation of boreholes take place. While conflicts over borehole water were a common phenomenon in all the areas, there were significant differences regarding resolution. At boreholes organised as common property the BC (generally its the male members) would intervene in the event of serious conflict. At boreholes with open access and without a committee, women adopted different strategies to

62 Interview with market women, Red Bull Market, Mabvuku, January 2011.

avoid conflict, ranging from keeping their husbands from fetching water to letting men go first in the queue. In areas where there were no borehole committees, women who lived near the borehole stated that they took informal initiatives regarding appropriate use, repair and cleaning.

4.3 Gendered and classed patterns of access and use of borehole water

A common trend in Mabvuku, Glen Norah, Harare North and Hatcliffe were the gendered and classed patterns of fetching, using and storing water. While women in all the areas reported that they would fetch water for household needs, they told us that men with access to larger containers would fetch borehole water to sell. A related observation was that girl children often assisted their mothers in carrying water for household needs while many boys fetched water for wealthier households for money. In all the areas there were significant differences between women in terms of class. Middle-class women invested in large containers and they had money to hire boys to fetch water. Poor women who could not afford to buy large containers were unable to store water and thus spent more time queuing for water than wealthier women.

All in all, these qualitative insights demonstrate the inherent tensions between the requirements of emergency interventions in terms of quick action to save lives and the requirements of a rights based approach. To achieve gender justice calls for organizational and normative interventions, which will change deep-seated gender stereotypes that put the burden of accessing clean drinking water, water for domestic use and water for hygiene and sanitation on women. In all four suburbs, women provided the critical co-ordination required for the management of the public boreholes. This has, however, put an additional burden on them as they have to attend to their own household duties as wives and mothers. In most cases, the time they invested is not recognized by the communities they serve. This form of participation is underpinned by unquestioned norms that put a duty to provide rather than a right to empowerment on women.

5. SELF-PROVISION AND SHARING ARRANGEMENTS: EMERGING PRACTICES AND NORMS

As a result of the humanitarian emergency intervention together with increasing international and national investments in Zimbabwe and the City of Harare's water infrastructure there have been some improvements

in public water provision. Yet, the various problems associated with municipal water provision in the high density areas, together with the breakdowns and lack of maintenance of the UNICEF boreholes (now taken over by the City of Harare), have forced residents in these suburbs to seek other water sources in order to fulfil their daily water needs. Thus people have dug wells and drilled boreholes (only in Harare North) in backyards and in wetlands. While this initially was a short term solution the ground water in these and other parts of Harare is, due to the lack of a long term solution, being increasingly depleted and wetlands eroded. This section addresses tensions and conflicts between the right to water, the right to health and the need to preserve natural resources like groundwater for future generations in the context of a dire economic context where interventions by the authorities, due to political and economic mismanagement, lack legitimacy.

5.1 Wells in private backyards and wetlands

A common trend across the suburbs is the reliance on the use of groundwater sources. In 2011 and 2012 when our study was conducted there were variations, depending on the availability of piped water and borehole water, ground water availability and the economic capacity of the people in the area. There was no reliable mechanism for checking the water quality of these alternative sources. The wells were dug by local drillers who sunk them at some distance from the sewage pipes.

In Harare North, residents relied on groundwater using boreholes and private wells as the main alternative to the erratic municipal supply. The water from the private wells was used for various domestic purposes, including drinking, gardening and building depending on the safety of the source. Shallow wells continued to be used to fetch water to flush toilets and to do laundry.

Because of the unavailability of piped water in Hatcliffe Extension, the residents in this area relied mainly on alternative water sources for their daily requirements i.e. public boreholes drilled by UNICEF. At the time of the research only one of these boreholes was working. Private wells, which ranged from one to ten meters, were thus important sources of water in areas where there was groundwater. In Hatcliffe Extension pits and gullies left by gold panners were also used by residents as a source of water, especially for washing and cleaning purposes and, sometimes, even for drinking if there was a crisis.

Due to erratic supply of public water the residents in Mabvuku relied on

a mixture of tap water, borehole water, private wells and wells in wetlands. Many of the boreholes that were sunk by UNICEF have broken down and have not been repaired by the municipality so people still rely to a large extent on private wells. Wells that were dug in the surrounding wetlands during the crisis still served as a source of drinking water for some.

The residents in Glen Norah relied mainly on tap water and the UNICEF boreholes. Public boreholes were reported to be the main source of drinking water as residents had lost confidence in the quality of municipal water. Those households whose piped water had been disconnected for non-payment relied solely on public boreholes for all their water requirements. Digging private wells was not as prevalent in this area when compared to Mabvuku, Hatcliffe Extension and Harare North.

We were surprised to find a widespread application of the customary principle, 'water is life', implying a duty to share clean drinking water.⁶³ As these customary norms have so far been associated with rural Zimbabwe, we did not expect to find that many owners of private wells in Mabvuku, Harare North and Hatcliffe freely shared water from private wells in backyards and family gardens in the surrounding wetlands with their neighbours. The duty to share in Harare's high density areas is as it is in the communal lands based on the belief that water is an essential, God-given, life itself – a resource which cannot be denied anyone. As a woman from Hatcliffe Extension stated:

*...water is something that you cannot deny another person. What if they cannot afford it? So it is better to let them get even two containers per day than deny them.*⁶⁴

In a neighbourhood in Mabvuku almost all the women we interviewed reported that when the taps ran dry they would fetch water in a well in a garden in the wetlands about one kilometre away. Inspecting the well *in loco* we met the owner of the garden, a member of a Zimbabwean traditional dynasty, who told us how she dug the well following instructions she received in dreams.⁶⁵ One of the women who regularly used this well reported:

63 Studies of local, national and international normative dimensions of water governance in Zimbabwe have emphasized the centrality of local norms and institutions for water for livelihoods and for daily living in rural Zimbabwe (Derman and Hellum, 2002; Hellum, 2007 and Derman et al., 2007). Similar findings were made in Domboshawa Communal Lands (see Chapter 12).

64 Harare North resident, December, 2011.

65 Group interview with members of Mabvuku Residents Association, 25 July 2011.

No she didn't sell the water even to people not known to her. The whole Mabvuku community used to fetch water from her well at no cost, except walking for long distances for those who lived far away. However when the area around the well became dirty or was full of weeds, she would ask users to clear up or clean the area, for hygienic purposes.

Water was also shared to secure future relationships as the owners believed that if they deny a person water today, they may be denied a similar or other resource in the future by that or another person.

*My neighbour shares with me because she feels that she might also need my help in future and.*⁶⁶

Religious beliefs also influence the way decisions about sharing are reached. For example another woman said,

*When you look at God's word, it says you should share with other people what you have...*⁶⁷

There was also a belief that those who do not share their water with those who need it will be punished:

*There is one man who did not want to share water from his well with others but he has since had his well filled up with earth. Some people say the well's walls were not reinforced with bricks and so the walls collapsed. But well, God is not a fool! God punishes you if you do things out of the expected. How can a person charge a fee for water which he did not create?*⁶⁸

The social, cultural and religious norms do not prevent users from charging for water. The charges, however, are utilitarian. One resident in Harare North explained:

*People should not sell water but they need money. If water is the resource they have, what can they do?*⁶⁹

In Harare North, the charges ranged from ZAR1-2 per 20-25 litre container or USD1 for three 20-25 litre buckets. The charges were similar in Hatcliffe Extension where residents paid USD1 for 2-4 buckets. The reason given for charging a fee was that the owner needed to recover the investment made in sinking the well. Where there were boreholes run by electricity, the charges were said to go towards the payment of the

66 Elderly widow in Mabvuku, January, 2011.

67 Hatcliffe Extension resident, December, 2011.

68 Elderly widow in Mabvuku, January 2011.

69 Harare North resident, December, 2011.

electricity bills. In Hatcliffe Extension, some well owners did not charge for the water, but users were expected to pay for the rope that was used to lower the bucket into the well.

5.3 Sharing tap water

In all the four suburbs, some norms developed around sharing municipal water.

In Harare North, residents shared municipal water where and when it was available. Because they had a bulk meter and all the residents paid a fixed amount towards the water charges, it was believed to be everyone's water. However, when the bulk water was released into the area, it only reached certain households due to topographical factors. Thus, those who received it were seen as obliged to share it with the rest of the residents. When the water flowed, the residents queued up for the resource at the house where it was available. In some instances, even the owner of the house was expected to queue for the resource. However, it was not all house owners who allowed other people to fetch water from their supply.

This practice was also found among the residents who lived in blocks of flats in Glen Norah. As in Harare North, all the residents pay a fixed amount for the water charges. However, occupiers of flats on the higher floors did not receive water during the day due to gravity problems. Because the charge was fixed, as all the residents shared one meter, those on the ground floor were obliged to share water during the day with those on higher levels.

In Hatcliffe Extension, there were few properties with access to municipal water and it normally became available up to three times a month and then only for only a short period. When this happened, neighbours were allowed to fetch water from the taps, which are normally located outside the house. The owner maintained a list of the households fetching water and when the bill came, it was shared equally among all the users.'

5.4 Sharing toilets

In cases where several families are sharing a property, which is very common, each family would take turns to clean the toilets and the yard. However, these duties only fell on families with female members because men were exempted. For example, if four families were sharing a property and three of them had male members, the female member in the fourth family would clean the toilet and the yard on a daily basis. From the women interviewed, two were in this situation. In one case, the woman was the landlady and she took it as her responsibility to do the cleaning. However,

the other three families were required to provide detergents and gloves. In the second case, the woman was a housewife and was normally the only one at home while her husband and the male members of the other three families were involved in various economic activities outside the home. As in the previous cases, she would be provided with detergents by the other families, and, in this case, she also received a monetary token of USD10 a month from each of the three families.

For wealthier families not sharing a property, women within the household cleaned the toilets and the yard. Some had domestic workers (also women) who do the cleaning.

5.5 Conflicting norms

This plurality of norms, are not recognized by municipal authorities and national government: they seek a centralized legal framework despite the notion of subsidiarity and participation that forms part of the water regulatory framework.

The widespread practice of sinking wells in backyards for water supply or drilling private boreholes has put residents in conflict with City of Harare by-laws on issues of environmental and health concerns. Section 186 (1) of the Urban Council Act allows the Council to prohibit the construction of buildings and the excavation of soil 'next to, under or near a water main'. By-law number 50 provides that: 'The Council may at any time limit the supply of water to such hours as it may decide, and prohibit water supplied by it to be used for any purpose other than domestic purposes'. The fine for violating this by-law is the anachronistic amount of £20, but there is an alternative penalty of imprisonment for up to one year.

According to an engineer in the Harare Water Department the City of Harare's position on wells dug on properties is as follows:⁷⁰

Shallow wells are common in Mabvuku and Tafara from the time of the acute water shortages but we don't encourage those on small stands. Residents had to dig them due to problems prevailing at that time. They indicated that the water was for general cleaning and other household purposes and not for drinking. The planning by-laws require that a well be dug 10 metres from the wall of the dwelling house and another 10 metres from any sewer line. Prior to digging any well or borehole, we expect residents to go to the nearest district office to advise them of their plans so that officials can give them the necessary advice.

70 Interview with engineer of Harare Water Department, 24 March 2010, Old Mutual House, Harare.

According to City of Harare officials at Mabvuku district offices:

We also have a policy against having wells at Mabvuku homesteads because the yards are too small to accommodate a well in addition to the dwelling house. During the water crisis era, residents with wells were selling water from these wells to other residents without wells. Some residents with wells are no longer paying for water supplied by the Harare City Council as they still rely on well water in the event of a tap water disconnection. There is going to be a penalty to be charged against anyone who has a well and uses water from the well.⁷¹

The citizens were of the view that the city was forcing them to resort to alternative water sources since it did not fulfill its duty to provide safe, available and affordable water for domestic, sanitary and livelihood needs. In their view, 'water' in the urban areas, as in the rural areas, 'is life' and the municipality should not deny their use of groundwater for such basic needs.

While the right to available and affordable water on the one hand is necessary for life and health, ground water, on the other hand, is a limited natural resource which needs to be managed and preserved for the benefit of future generations. The City of Harare by-laws are in principle addressing these conflicting concerns. Due to the inability of the City to actually deliver clean water, lack of planning for the increasing population and lack of transparency and accountability the way in which these regulations are implemented are not seen as legitimate by the citizens. Thus a regulatory regime that, on the basis of a democratic process, can strike a reasonable balance between the right to water, the right to health and the duty to preserve natural resources for future generations is urgently needed.

6. SIMILARITIES AND DIFFERENCES BETWEEN WOMEN

As public water delivery breaks down the duty to provide water for domestic, sanitary and livelihood use is placed on women. Yet the way in which different women negotiate access to water to networks that influence water governance and to law, are dependent on their socio-economic background, age, political affiliation and physical ability.

6.1 Middle-class women

Middle-class women, who either have professional employment or are married to men who do so, are in an economic position to pay their water

71 Interview with Mabvuku Municipal District Officer, December 2010.

bills. They also have more time to participate in public life, such as local resident associations, and as such well placed to defend their rights.

Furthermore, this group of women have less difficulty in accessing water compared to those who are unemployed or hold low paying jobs. In Harare North and Mabvuku, these women were among those who paid men and boys to fetch water for them and hence they did not have to spend long hours queueing. In addition, wealthier households often own a vehicle and this is used to ferry water from the source to their homes. A further advantage of middle-class women is that they have the ability to invest in several containers, even those which can hold 100-200 litres. One household in Harare North had a tank that could hold 4000 litres, two drums that held 200 litres each, two containers that held 80 litres each and several 20- and 25-litre containers. Finally, many middle-class women had employed domestic workers who clean the toilets.

6.2 Poorer women

The situation was different for women in families where neither the wife nor husband is in formal employment or have lowly paid jobs. These women, who often were single or widowed renters, were not called to public meetings. They were unaware of the work of the residents associations and as such unaware of their rights.

Women from poorer households told us how they often had to sacrifice other basic needs in order to pay the water bill. A woman from Glen Norah said:

I am afraid my water will be disconnected, so I wait to see if I can pay addition \$20 dollars a month on top of my regular bill. I don't have much money so I will eat two meals every day to pay that extra \$20.⁷²

For these women, enduring long hours in the borehole queue was part of their daily routine. They had to get up as early as 2 a.m. and queue for two to three hours before filling their containers. As one woman in Harare North told us:

You can come here at midnight and you will still find a queue at the borehole.⁷³

For these women it was the accepted norm that people would share water:

During the days water was scarce in Mabvuku, I used to fetch water

72 Human Rights Watch interview, Glen Norah, October 2012.

73 Harare North resident, December 2011.

from Mrs Maboreke's well. I would fetch water for my own use while my daughter-in-law would fetch her own but sometimes she would use my water without replacing it. When some residents started digging private wells at their homesteads, I then started to fetch water from my neighbour, who lives next door to me. When I took my daughter's baby I used water from my neighbour's well. As for the fourteen-year-old grandson, who has lived with me since his mother died, I used to supply him with a five litre container of water to take to school on a daily basis.⁷⁴

For those without any form of employment, nearly the entire day is spent at the borehole, leaving little time to do other chores or rest. Their situation is exacerbated by the fact that they cannot invest in many containers. The majority of these women relied solely on containers that they were given by humanitarian organizations such as UNICEF, Goal-Zimbabwe, Care, and Christian Care. In Hatcliffe Extension, the average number of containers per family was three, providing water that only lasted a day and sometimes not that. Each visit to the borehole required that they wait in the queue for their turn.

This situation also affected children as they had to get up as early as 2 a.m. to join the queue in order to get school on time. Some children went back to the borehole after school and because of the long hours they spent in the queue, homework was done very late or not done at all.

I have a son at Art School... Nearly every day when he comes from school, he goes to the borehole and he comes back at twelve midnight...⁷⁵

In other instances, it was indicated that children went to school without a proper bath or in dirty uniforms because of water problems. In times of severe crises, schools would be closed for fear of disease outbreak.

Several women mentioned that they struggled to afford both school fees for their children and water for drinking, bathing, cleaning and cooking:

My son is not going to school because we can't afford the school fees. The fees are 95 dollars per term, and the water bill is \$39 a month. We are really afraid our water will be disconnected. It was almost disconnected a few months ago because we had [an unpaid] balance of \$850.⁷⁶

Women who rent rooms were not able to dig wells as the property

74 Interview elderly widow in Mabvuku, August 2011.

75 Harare North resident, December 2011.

76 Human Rights Watch interview, Glen Norah, October 2012.

was not theirs, and because of limited space, they were unable to invest in many storage containers. At times, when all the local boreholes were dysfunctional, and they could not afford to pay for water, they would drink water from unprotected wells because they had no better alternative.

6.3 Disabled and elderly women

Disability severely affects women's ability to negotiate access to water (Kanyere, 2012). Disabled women were sometimes given priority at the public sources, so they did not have to queue. However, such access depended on who was in the queue at the time. Disabled women were not, of course, able to fetch water on their own and their access depended on the availability of other people in the household. One disabled woman in Harare North, who is confined to a wheelchair, explained her situation:

When the children are not there I cannot fetch water. I cannot even get water from the well when they are not here. The roads are very bad as well and I cannot move around in my wheelchair even if I wanted to look for water.

Women who had to look after the disabled were also affected. Some disabilities or illnesses require a lot of water for sanitary purposes. Thus the care givers had to make more frequent trips to the water sources. One respondent in Glen Norah, with two disabled members in her family, indicated that during the water crisis of 2008, she would leave the house at 2 a.m. to fetch water from the shallow wells in the wetlands; she said there was always a risk of sexual harassment, walking though the dark at this time.

The elderly also faced difficulties in negotiating access to water, especially when they lived on their own. In Harare North, one elderly woman, with poor eyesight, indicated that because she lived on her own, she had no one to fetch water for her. When she went to the borehole she often had to cope with dismissive remarks:

'If you cannot join the queue, you should go to Social Welfare.'

7. CONCLUSION

What, if any was the relationship between urban ecology and politics, between empowerment and disempowerment and the flow of water? What would an excavation of the flow of urban water tell me about the city, its people and the mechanisms of political, economic, and cultural domination? (Swyngedouw, 2004)

Following the flow of Harare's water we have seen how the City of Harare's unified water governance system is fragmenting in the context of an economic crisis situated in a highly polarized political climate. In a situation with unreliable public water there is an increasing use of alternative water sources, particularly shallow wells in backyards and wetlands. The customary norms that guide people's use of these sources are not recognized by municipal authorities and national government who seek a centralized legal framework. The increasing use of groundwater to fulfil basic human needs points to the lack of a legitimate regulatory regime that strikes a reasonable balance between the right to water, the right to health, the right to life and the duty to preserve natural water resources for future generations.

The right to safe, available and affordable water for domestic, sanitary and livelihood uses is, as shown by this study, not only a right in and of itself but also a condition for the realization of other rights, most importantly the rights to health, education, participation and gender equality. A deep-seated gender stereotype, that has remained unquestioned in both humanitarian and national interventions, is that women are primarily responsible for not just obtaining water but also a series of domestic and caring tasks that require water.

Those who have suffered most from the breakdown of public water and sanitation services are poor women nursing infants, caring for children or looking after the disabled, the sick and the chronically ill. The 'rights based' emergency interventions by humanitarian agencies have, as we have seen, not taken the necessary measure to ensure that elderly and disabled women have access to public water sources, such as borehole water. This points to an inherent tension between the requirements of emergency interventions in terms of quick action to save lives and the requirements of a rights based approach requiring participation, consultation and prioritization of women and children within the most vulnerable groups. Thus women's participation in water governance has to a large extent been of an informal character and is characterized by service provision and contribution of labour which is not recognized by the communities they serve.

As we have seen, women from poor families often have to sacrifice other basic needs in terms of food or payment of school fees to be able to pay the water bill. In spite of the high rate of water-borne diseases and the high number of people who are resorting to unsafe water because they cannot afford to pay the State's duty to provide water for an affordable

price is yet to be incorporated in the Water Act and the Urban Councils Act. This minimum obligation, which is key to the realization of the right to water and sanitation, follows from Zimbabwe's international human rights obligations, the 2013 Constitution and the 2012 Water Policy. The lack of implementation of court rulings referring to these legal standards runs counter to their promise as demonstrated by the escalation of water disconnections and installation of water meters.⁷⁷

Even though many women are aware of their rights, attempts to make the local and national government accountable are inhibited by the highly polarized and, often hostile, male-dominated political environment. Women have, under these difficult circumstances, provided the critical co-ordination required for the management of public boreholes and have stepped in to clean up sewage from burst pipes in their neighbourhoods. This has, however, put an additional burden on them as they still have to attend to their own household duties as wives and mothers. In addition, when women act together to demand a better water supply and sanitation, they are quickly viewed as political actors, which immediately threatens those in power and rendering the women vulnerable to different forms of intimidation. Women in the high density areas are, within these social and political limits, struggling to find ways of making space and giving voice to women's quest for available, safe and affordable water across political parties.

77 Elaborated in Chapter 10.

Chapter 12

Securing Rural Women's Land and Water Rights: Lessons from Domboshawa Communal Land

Anne Hellum, Bill Derman, Lindiwe Mangwanya and
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1. INTRODUCTION

In large parts of rural Zimbabwe the Shona proverb 'water is life' forms part of a broad right to water for livelihood, for humans, animals and nature (Sithole, 1999; Matondi, 2001; Derman and Hellum, 2002; Derman et al., 2007). The right to water for primary needs is also embedded in the Water Act of 1998 and in earlier legislation. As a part of our study of rural women's right to water for personal, domestic and livelihood uses, we interviewed the first female sub-chief in Domboshawa Communal Area 30 km outside Harare. The sub-chief, who had just returned from the UK, told us how she had learnt about the local norms that governed access to water in the area:

When I returned from the UK, I dug this well here in our compound for my mum. I was surprised when women from the surrounding area, when their wells dried up at the end of the dry season, started flocking here to fetch water. I said to myself, 'Look, no one assisted me in buying cement and bricks to build the well as well as pay for labour for its digging.' I used to become furious about the whole issue and sometimes I would not even greet some of the people who came here to fetch water. Some would come as early as 4 a.m. My mother then sat me down and said to me, 'Look here, you can't deny people access to water in your well because if you do that people are bound to get angry with you such that they may dump a dead dog

*into the well or even put poison into the well.*¹

This local norm, which derives from the Shona proverb *mvura hupenyu*, 'water is life', has much in common with the human right to water. International law's recognition of the right to water and its significance for a whole array of human rights, most importantly the right to life, to health and to food as elaborated by the Committee on Economic, Social and Economic Rights in General Comment No. 15 is, however, of newer origin.² The particular disadvantages experienced by rural women in accessing water, sanitation, food and land have in recent years been addressed in the light of Article 14 of the CEDAW and Article 15 of the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (the Maputo Protocol). The former calls for measures directed at factors that negatively affect rural women's access to water and sanitation on an equal basis with men. Addressing the multiple disadvantages experienced by rural women – particularly poor, elderly and disabled – Article 14 in the CEDAW sets out an intersectional approach to gender equality (Banda, 2012: 359).³ Another aspect of the provision of water and sanitation in rural areas is the need of measures to relieve women of the burden imposed on them by the water related duties they assume in the 'care' economy'.⁴ CEDAW Article 5a and Article 2, 2 in the Maputo Protocol require that States Parties to these instruments commit themselves to take measures to modify the gender specific social and cultural patterns of conduct i.e. those that are based on the assumption of the inferiority or the superiority of either of the sexes, or on stereotyped gender roles.⁵

Acknowledging that State law is not the sole regulatory mechanism of people's access to water, this chapter discusses the way in which rural women's right to water and participation in water governance is affected by legal pluralism i.e. the co-existing, overlapping, and sometimes conflicting, human rights and statutory law, as well as local norms and practices.⁶ We have explored the complex legal situation of women water users

1 Interview with the first female sub-chief in the Domboshawa area, July 2012.

2 CESCR (2002) General Comment No. 15 The human right to water. E/C.12/2002/11.

3 On intersectional discrimination related to water, see Chapter 2.

4 UN Human Rights Council (2012), para. 39.

5 See Chapter 2.

6 ICHRP (2009).

from different classes, with different marital status and different social networks in Domboshawa Communal Area. Almost half of Zimbabwe's population live in what are called communal areas.⁷ Domboshawa Communal Area is unusual because it is a fertile high rainfall area close to Harare, which has been home to multiple agricultural improvement schemes for blacks including the creation of an agricultural training centre.⁸ Most recently Domboshawa has become known for its market gardens with high production of vegetables and fruits to the greater Harare urban area (Matondi, 2013).

On a day to day basis rural women's access, use and control of common pool water resources in Domboshawa, as in other parts of Zimbabwe and southern and eastern Africa, rely heavily on local norms and practices that define their rights and duties as members of a family and of a local community. A key question for African feminist and social rights jurisprudence is where – in the plurality of co-existing national and local norms and institutions which govern rural water – can women's right to access, use and control of water be best promoted and protected. Using the human right to water (and to sanitation) as our criteria, we explore how Zimbabwean laws and policies respond to the problems rural women, of various categories, encounter at household and community levels. A related question is how women's right to water and to participation in water governance is protected through local norms and institutions in comparison to the new institutions created by the Water Act and the ZINWA Act.⁹ Our aim is to contribute to a grounded discussion about the means to secure rural women's right to water and land for basic personal, domestic and livelihood uses.

The chapter unfolds in seven sections. Section 2 describes the research methodology. Section 3 provides a brief historic overview of land and water uses in Domboshawa Communal Area. Section 4 addresses the formal and informal land and water governance structures currently practiced in Domboshawa Communal Area. This section provides an overview of the interwoven uses of land and water for domestic and productive purposes

7 The colonial terminology has changed from reserves, to tribal trust lands (TTLs), to communal areas. Yet their boundaries have remained remarkably stable since the Land Apportionment Act of 1930 divided land into European and African land.

8 The website for the training centre run by the Ministry of Public Service and Welfare is: <http://www.mpssw.gov.zw/index.php/training-institutes/24-domboshava-institute-of-training-and-development?showall=1&limitstart=>

9 See Chapter 10.

in three villages by different categories of women. It focuses on the formal and informal structures that govern access, use and control of water for market gardens and the nature of different kinds of women's participation and interaction with these structures. Section 5 addresses the governance of domestic water and sanitation with focus on how women in high, middle and low income families are affected by the local norms that inform the water related rights and duties that are at play in the family and in the local community. Section 6 shows how Zimbabwe's new Water Policy (2012) responds to different women's situation. By way of conclusion Section 7 points to the need of a reform strategy directed at local actors, norms and institutions.

2. METHODOLOGY: TAKING WOMEN AS GROUP MEMBERS AND INDIVIDUALS AS A STARTING POINT

This chapter addresses tensions between rural women's rights as equal individuals and their rights as members of a group whose access, use and control of water is embedded in local customs and practices. The analysis of the multiplicity of norms and institutions that have a bearing on rural Zimbabwean women's access to water and participation in water governance is based on a qualitative in depth study in Domboshawa Communal Area, which is a mixed rural and peri-urban area beginning at a distance of 30 km outside Harare, rich in market gardening.

Land in Domboshawa is classified as communal. Communal land, according to state law, is State-owned, held by local government and traditional authorities on behalf of the community and governed by a mixture of statutory law and formal and informal customary norms. While occupation of land for residential and agricultural purposes requires permission by traditional leaders, water from streams, rivers, pools and wells is, in practice, accessed without permission.

The majority of people living in Domboshawa Communal Land make at least part of their living through sale of vegetables grown on family land which they have been allocated by local chiefs and headmen. The Domboshawa area has, due to the growth in innovative forms of small-scale family based vegetable production, been termed Zimbabwe's 'horticultural corridor' (Matondi, 2013). With the economic crisis and loss of paid jobs in urban areas since 2000, there is an increasing pressure

on existing land and water sources in the area.¹⁰ The increased pressure on land and water along with women's central role in market gardening, combined with important adaptations to changing social and economic circumstances, make it a significant arena to study rural Zimbabwean women's access to different water sources and participation in different water governance structures.

The aim of this study is to explore how different categories of women in these villages are accessing, using and controlling water for drinking, domestic chores and gardening purposes. How women negotiate access to water for these multiple uses at the level of the household and in the local community is an overall question. Towards this end we pay attention to how different categories of women participate in decision making within and outside their homes about governance of common pool water resources such as public boreholes, wells, rivers and wetlands. The differences and similarities among women users from wealthy, middle class and poor classes, marital status (married, divorced, widowed), elderly and disabled women and women embedded in different networks are explored.

An in-depth study was conducted in three villages in Domboshawa, namely, Chipete, Matumbara and Makonde. Chipete village, which falls under Chief Masembura, is administered by the Goromonzi Rural District Council (RDC). Mutambara and Makonde villages fall under Chief Chinhamora and are administered by the Bindura Town Council.¹¹ Our entry point to the area is the community based organisation (CBO) Wadzanai Community Development Trust (WCDT) which started in 1980 and is a member of the Zimbabwe Women's Bureau (ZWB).¹² Its target group is the women, men and youth of Chinhamora. The Trust's work focuses on women to promote access to, and control of, natural resources with focus on market gardening. Women are encouraged to participate actively in political and economic activities, to assume leading positions in the local community and to be economically independent.¹³

In these three villages we have charted the different water sources that women and men make use of for productive and domestic purposes. We have visited family gardens and conducted group interviews with family

10 For example, 'Unlawful land deals threaten food security in Domboshawa', *The Standard*, 26 January 2014; 'Headman Fights Illegal Land Sales in Domboshawa', *The Standard*, 3 February 2014.

11 The names of the villages has been changed.

12 www.develop_community.org.

13 Wadzanai works in ten local communities covering an area of about 1,500 sq. km, and with a population of around 72,000 people.

members working in the gardens. In-depth interviews were carried out with a total of 36 women (12 in each village). In each village we tried to interview at least four women from each of the following categories: wealthy, middle income and poor households.¹⁴ In each category, efforts were made to include married, divorced, widowed, disabled and elderly women. Child-headed households were to be part of the study but these were not identified in any of the three villages. To gain insight into the formal and informal water governance structures in place in the selected areas we have interviewed Wadzanai staff, chiefs, sub-chiefs, headmen and councillors from the RDC (an elected position).

3. SETTING THE SCENE: LAND AND WATER USES IN THREE DOMBOSHAWA VILLAGES

Domboshawa Communal Land is a water rich area with a range of soils characteristic of Zimbabwe and substantial rock outcroppings.¹⁵ It is in natural region (NR) 2A which according to the Food and Agricultural Organization is found in the middle of the north of the country. The rainfall ranges from 750 to 1,000 mm/year. It is fairly reliable, falling from November to March/April. Because of the reliable rainfall and generally good soils, NR 2 is suitable for intensive cropping and livestock production.¹⁶ A number of large and small rivers flow through the area which, because of relatively high rainfall, has substantial ground water resources. Domboshawa has been the site of multiple studies on soil conservation, soil erosion, composting, conservation agriculture, and training of farmers. While agriculture remains an important component of livelihood strategies, it is balanced with non-farm employment especially in Harare. The growing and marketing of vegetables and fruits is very important and has led to economic growth among many families.

In a separate study, Prosper Matondi and his team surveyed 431 fruit and vegetable producers in Wards 1, 2, 3, and 4 in Domboshawa (Matondi, 2013). They also interviewed 65 marketers primarily from the Show-

14 The structures of the buildings at the homestead were the main indicator of a household's economic status. For instance, the wealthy had a modern brick house with at least three rooms while the middle had the same structure with at least two rooms. The poor had one or two round huts. Additional factors used to determine status included the type of building material used, the roofing, availability and type of toilet, and possessions such as vehicles.

15 The best known is Domboshawa National Heritage Site which features Bushman paintings.

16 <http://www.fao.org/docrep/009/a0395e/a0395e06.htm>

ground Market in Domboshawa. He demonstrated the importance of the garden production for the livelihoods of women and men in Domboshawa. A major issue for all producers is access to land, and especially land that can be irrigated. At least 80% of the farmers interviewed by the Matondi team allocated less than one hectare of their land to fruit and vegetable production per year.

Small-scale farmers in Domboshawa, as in other communal areas, have through the digging of canals, small dams and wells made investments in water infrastructure, operation and maintenance. Through these investments they have been creating hydraulic property rights. Van Koppen (2010: 11) based on Coward (1986) defines hydraulic property rights as follows:

*... as the process of establishing recognized claims to water of certain quantity and quality on a particular site at certain timings. Making investments in the physical infrastructure to abstract, store, and/or convey water and, thus, create such use value of water in terms of quantity, quality, site and timing, is the single most important ground for vesting claims to water conveyed.*¹⁷

These hydraulic property rights, which are embedded in local norms and practices, are not recognized by State law. According to the Water Act of 1998 water rights can only be granted by State authorities. As Patrick Chinamasa explained to parliament when addressing the first reading of the draft Water Bill: 'What the existing legislation has done is that the water is the President's water but the President then put in legislation to give permission to people to exploit it and that is what is peculiarly known as the water right.'¹⁷ To be granted a water right, the Water Act requires that the user demonstrates that he or she will use the water productively. This requirement has so far excluded communal farmers that lack finances to install water infrastructure to achieve formal water rights (Manzungu and Dzingirai, 2012: 96-97). The formal legal definition of water rights thus misses how user groups create and re-create hydraulic property at the local level (Boelens and Vos, 2014).

In Domboshawa, over time, there have been mainly, but not exclusively, family created and managed irrigation systems. They involve capturing water and operating water use systems, which then establish relations among water users and the norms that govern the ways in which water is shared. Such a system in Domboshawa involves conflict, co-operation and

¹⁷ Zimbabwe Parliamentary Debates. Vol. 25, No.26, 3 November 1998, p.1566.

negotiation. Over time, these patterns of behaviour define water rights. Such rights will change as rainfall patterns change, flows of water are altered, new people come to take water and outside authorities attempt to manage water in new ways. There are also variations regarding waters put to different uses. In terms of local governance, hydraulic property rights are recognized and subject to local norms. However, these systems tend to be invisible to national authorities and are not recognized by existing legislation despite their importance for local livelihoods.

3.1 Land and water shortages

Due to the longstanding agricultural extension services available in Domboshawa many farmers have experimented with a wide range of field and garden crops. However, many residents seek full-time employment in Harare while maintaining farms in the communal area. With the hardships of the 1990s, which intensified after 2000, Domboshawa residents have increased their reliance upon their garden production as employment possibilities fell away, and unemployment dramatically increased. This has increased the demand for water and land in the area. The demand for land has also been increased by wealthy people from Harare seeking to purchase land for homes. They tend to buy from those villagers who own large pieces of land and need cash to educate their children or pay lobola (bride price). One of the headmen in the area spoke about some of the new pressures:

We also have sons who when they reach marriageable age are allocated pieces of land to till by their fathers. However, because they are not gainfully employed, they are selling those pieces of land to people from outside the area, especially from Harare in order to raise money to pay lobola for their new wives. You know in our culture it is taboo to live with a woman for a very long time without paying any lobola for her. The newcomers use these pieces of land primarily for residential purposes. In these instances the father is obliged to give off another piece of his field to give to his son because he also understands the implications of not paying lobola.¹⁸

3.2 History of the area narrated by an elderly widow

Most of the families living in Domboshawa Communal Land settled before colonization. The boundaries were drawn by the white settlers on the basis of the Land Apportionment Act of 1930. To unearth the histori-

18 Interview with headman in Chipete, 12 July 2012

cal background we have interviewed elderly women in the three villages. Mary¹⁹ who is about 77 years old and grandmother of some of the more successful families in one of the villages provided this account of how her family became successful farmers:

I was born at a village in Chinhamora. I don't know when I was born and I don't even remember when I gave birth to my first child. I came to this village when I got married. I had 12 children i.e. seven sons and five daughters but four of my children are now late. My in-laws were living at this homestead where my huts are now. All the homesteads you see surrounding this area belong to my husband's clan. At that time a married male household head would simply approach the village head and tell him that he required land for a field or garden. The village head, in our case being Jingo, referred the matter to the chief, who assented to the request. The Agricultural Extension Officer pegged out the field and garden boundaries. The time I arrived here, there were not many people around and one could have a large field. In the fields we planted maize, mapfunde [sorghum], mhunga [millet], zviyo [rapoko], rice, groundnuts, round nuts, sweet cane and chicken peas. In the gardens we planted tomatoes, leaf vegetables such rape, covovo and tsunga [African spinach], cabbages, peas, sugar beans and onions. However, at that time, we worked in the gardens during the dry season after harvesting crops in the field until the start of the rainy season. During the rainy season, we abandoned the gardens and worked full time in the fields. The food we grew in the fields and in the gardens were both for consumption and sale. We used to sell maize, groundnuts, onions and vegetables in Harare and carry the produce on our heads and walk all the way to town. As regards the sale of proceeds my own situation was unique in that in a way I made all the decisions. The common scenario was that the man would make all the decisions since in our Shona custom, a man is viewed as a household's 'Government'. A wife cannot challenge her 'Government'. Some men could just spend all the money on beer and women and the wives would not say anything despite the fact that they would have done all the toiling in the fields and gardens. My husband who was a farm worker in Hartley [Chegututu] got injured at work and became disabled. His foot got crushed by a tractor and his employer, a white commercial farmer did not take him to hospital

19 Names have been changed.

until it was too late and his foot was amputated. He became redundant and hence came back home. So by default I became the household head and sole breadwinner for our children. By that time I had seven children. I would work in the fields and gardens alone and after selling the produce on my own; my husband would just leave me to make all the decisions on how the money was to be used. I had to struggle to send the children to school as well as feed them. That is why my children are not so highly educated. The best I could do for them was to teach them to use their hands in farming which has resulted in them succeeding at market gardening. One of my sons, who has taken over some of the family land, bought a car before he died and his wife is building a house in Greendale in Harare. However the current generations are fortunate in that gardening is being done on a full-time basis throughout the year. In the past, as soon as the first summer rains fell, we would abandon the gardens and concentrate on tilling the fields. If I am not mistaken, it was soon after Independence when there was this hype about being free and announcements were made to the effect that, 'You are now independent and free to do as you like in your fatherland. Do not sit on your hands! Be free to use your hands to till the land and produce food for the Nation.' People started to seriously work in their gardens and even after the onset of the rainy season they continued working in both the gardens and fields. The returns they were getting from the garden produce acted as an incentive for their perseverance. My children are using water for market gardening from the river and the mountain spring, which are upstream. They have acquired diesel pumps to divert the water to the vegetable gardens. Downstream users complained to the chief but the case came to naught. It came to a stage whereby they would put threatening letters on trees with death threats if we continued damming the water but then we said if they want to kill us let them do so since the alternative is death as well since it would rob our families of their livelihoods. My children now have papers from higher offices which permit them to use the water in the river at their will.²⁰

20 Interview held at Mutambara village, 25 October 2012. We have been confused by the claim that they acquired a 'right' to use water. Under the new Water Act it is only the Catchment Council (on the basis of a request by Sub-Catchment Council) that can issue a water permit. We do not know of any permits issued in this part of the Mazowe Catchment. Prior to the Water Act a water right could have been requested by the Rural District Council on behalf of a farmer. We were not able to verify if this right was acquired.

3.3 Governance of land and water in Domboshawa and the three villages

Today the governance of land and water in Domboshawa, as in other communal land areas, is embedded in a complex structure of formal and informal institutions guided by a mixture of statutory and formal and informal customary norms operating at household, local, district and even national government level.

Communal land in Zimbabwe, in accordance with the Communal Land Act 'shall be vested in the President, who shall permit it to be occupied and used in accordance with this Act'.²¹

People can occupy communal land for residential and agricultural purposes. While tenure is relatively secure, individuals and families do not have the right to buy and sell their land although it certainly occurs. The RDC is empowered to allocate land for these purposes in consultation with the chief who presides over the area concerned.²² In issues concerning occupation, allocation and use regard shall be had to customary law.

In the three villages we studied, local leaders claimed that residential land and land for gardens is allocated by the headman in consonance with the chief.²³ Given the inferior status of women under customary law, which until 2013 has enjoyed constitutional protection, communal land has been allocated to married men as head of families. According to the headman in Chipetei:

*We are the ones who allocate gardens. We allocate gardens to male household heads but the wives are the ones in control. Women are the managers. The people we are really concerned about are widows and we allocate them gardens for their families. If a man dies and leaves a wife with young children, we usually are not worried because we know a woman will simply continue with her role of cooking and taking care of the children.*²⁴

21 Part II Section 4 of the Communal Land Act.

22 Section 8 of the Communal Land Act; the Traditional Leaders Act [Chapter 29:17].

23 This is a highly contentious issue, since under the Communal Land Tenure Act and the Rural District Councils Act, Rural District Councils were given the authority to allocate land. However, in recent years the President has re-empowered traditional leaders (chiefs and headmen). Many scholars have addressed the ambiguities in governing communal area lands, including O'Flaherty (1998), Sithole (1999) and Ncube (2011).

24 Interview with headman in Chipetei.

Like Matondi we found that while chiefs and village heads allocate land to families, and usually to the male head, it was in turn the male head who allocated gardens for fruit and vegetable production. The access to land for production was through marriage which means that women can only sustain production activities at the discretion of men. 'Men retain the power over the land and therefore on women, with usufruct rights for the gardens. Yet, despite this key constraint, women try to manoeuvre or produce based on hope that the marriage circumstances do not change. (Matondi, 2013: 32)

In terms of national water governance Domboshawa Communal Land is situated within the boundaries of the Mazowe Catchment Council. Chipete, Mutambara and Makonde villages are found within the Upper Mazowe Sub-Catchment Council. The catchment and sub-catchment councils are supposed to be made up of elected representatives from different stakeholder groups.²⁵ Mazowe Catchment Council is, in accordance with the Water Act of 1998, in charge of the overall planning of water use in the catchment and issues water permits required for commercial use. The sub-catchment councils make recommendations to the catchment council as to whether a permit to use water commercially should be granted. Water for commercial uses, according to the Water Act, requires a water permit while water for primary use is free. Section 2 of the Water Act, in line with earlier legislation, defines primary water as water for household needs, animals, and bricks to build houses. So far Zimbabwe National Water Authority (ZINWA) and the catchment and sub-catchment councils in Mazowe have not taken any initiatives to levy people in communal areas who use water for commercial purposes. But this, as we shall see, is changing and is likely to include communal areas (see section 7).

The Water Act, the ZINWA Act of 1998 and the statutory instruments regulating membership and elections to catchment and sub-catchment councils are all silent about the ways and means of enhancing wom-

25 According to Statutory Instrument 47/2000b, stakeholders to be represented on every Sub-Catchment Council were the following: two representatives from large scale commercial farmers, indigenous large-scale commercial farmers, small-scale commercial farmers, communal farmers, Rural District Councils, large-scale miners, small-scale miners, industry and commerce, and resettlement farmers. Two members of the SCC were to become members of the Catchment Council. In practice the chair and vice-chair elected by the SCC became members of the Catchment Council.

en's participation.²⁶ Thus the great majority of the members of Mazowe Catchment Council and Upper Mazowe Sub-Catchment Council are men. Communal area residents are represented by members of the Rural District Council. Chiefs sit *ex officio* on the latter and very often don't attend meetings.

The present situation, where residents are left to utilize existing water resources without asking permission from local or central authorities, must be understood in the light of the colonial water governance system where few government investments were made to improve the water infrastructure in the tribal areas which were assigned for black subsistence agriculture. Communal area residents under common property systems in the Domboshawa area, as elsewhere in Rhodesia, could not apply for water rights.²⁷ The right to primary water, however, implied that they could not be denied access to water that was necessary for livelihood. Throughout the colonial period the Water Acts of 1927, 1964 and 1976 required the colonial authorities to respect the primary use rights of TTL inhabitants (Hoffmann, 1964; Derman and Hellum, 2002: 35-36). Primary water appeared to recognize everyone's right to use water as necessity of life.²⁸ There was, within the colonial water laws, no explicit concern with customary law, unlike other areas of colonial regulation such as land, marriage and inheritance. Thus, there is hardly any recording of the customary norms and practices that guided water use in the tribal areas in this period. Yet the residents in these areas have, from the colonial era up to date, invested in different forms of water infrastructure and developed norms and institutions that govern their uses.

In the communal areas the headmen, village heads and chiefs, in collaboration with district authorities, Agritex,²⁹ and potentially the Village

26 See Chapter 10.

27 Communal Area residents could not apply for water rights in their own name until 1998 but could in theory make an application through the colonial authorities.

28 The first regulation of water was by Order in Council, 1898, section 81, requiring the British South Africa Company to ensure that native tribes had a fair and equitable portion of springs of permanent water.

29 The Agricultural and Extension Services Department that used to operate under the Ministry of Lands and Rural Resettlement, is now housed under the Ministry of Agriculture, Mechanisation and Irrigation Development. The enforcement of environmental regulations, including those related to water, has been moved to the Environmental Management Agency (EMA) created in 2002.

Development Committees (VIDCOs)³⁰ are the de facto responsible authorities for water governance at local level.³¹ In the three villages we studied, the governance of water for domestic and productive purposes lay with the people and traditional leadership and not with the catchment or sub-catchment councils. Once allocated land or holding land, in practice the onus falls on the villagers to access water for gardens and different domestic uses. However, for those who have gardens near the river, the village heads or members of the VIDCO intervene to solve any water or land related conflicts. If the conflicts don't find an amicable solution, they will be referred to the chief. Apart from one female sub-chief, the traditional authorities in the area were male. The VIDCO committees, which are elected, often have female members.

As local authorities of natural resource governance, the traditional leaders are involved ensuring that by-laws and regulations monitored by the Environmental Management Agency (EMA)³² who are tasked with identifying and reducing water pollution and preventing cultivation within 30 metres of a stream or wetland (Statutory Instrument 7 of 2007). According to the first female sub-chief in the area, Sub-Chief Mutambara:

We ensure that people are not cutting down trees unnecessarily and we also try our best to stop veld fires which destroy the trees, vegetation and other creatures. We work with the villagers and EMA is actively involved. We ensure that gardens are not too close to the river bank but should be at least 30 metres away. We also seek to prevent people from digging sand from river beds, as well as gravel.

30 Village Development Committees were created under the Rural District Councils Act and were part of efforts to prioritize the economic and social development of communal areas. Members of the VIDCO are elected by the Village Assembly, which is headed by the village Headman, appointed by the chief. This is an attempt by the national government and the Ministry of Local Government to reconcile traditional leadership with the Rural District Councils Act and local democratic representation in contrast to appointed positions.

31 Traditional authorities which had been disempowered by the combination of the Rural District Councils Act and the Communal Areas Act are now meant to play a key role in natural resource management, especially after the 1998 Traditional Authorities Act re-empowered them. Their degree of independence from the ruling party has, however, been a source of controversy (Mandondo, 2001).

32 The EMA is now part of a new combined ministry – the Ministry of Environment, Water and Climate. The sub-chief was not aware of the full meaning of the term. Agritex advises residents not to plant close to rivers and streams, but it was the Natural Resources Board officers who enforced the ban in the past. They have now been transferred to the EMA.

3.4 Access, production and control of garden land by different groups of women

Gardening, marketing, small-scale business (like brick-making) and work in Harare are the cornerstones for the economy of Domboshawa. Because of the importance of gardening, availability of land and water and their control is critical to support rural livelihoods. Three types of cultivated areas are common in all the three villages. The garden/bindu is found outside the home and most often close to water sources. In these gardens, often referred to as market gardens, irrigated vegetables are produced for sale but also for consumption from November to August/September and, if water is available, throughout the year. Large rainfed fields called munda at varying distances from the homesteads are found in all the villages. Kitchen gardens are very small gardens found within the yard and used for growing vegetables (mainly leafy vegetables, onions and tomatoes) for use within the home but sometimes for sale in order to buy food, medicines or pay school fees. Common crops that were grown in the gardens included potatoes, tomatoes, maize, peas, and leafy vegetables such as rape, covo and spinach. Since land and water use is closely interwoven we have looked closely into women's access, use and control of land for gardens.

3.4.1 Different categories of women's access to land for gardens

In the three villages residential land is allocated by the headman to a family in the name of the male family head. Land for gardens outside the residential area is typically allocated to a man as family head when he gets married. The size of gardens outside the residential areas ranges from a quarter acre to two acres. Although families are allocated land for housing and for farming, no arrangements are made for them to access water for domestic and productive uses. The villagers therefore take it upon themselves to ensure that water is available for these purposes. This involves investment in water in terms of digging wells or boreholes at the homesteads and in the gardens and some means to bring water to the site.

In order to pursue their family responsibilities and livelihoods, married women negotiate access to both land and water, although not without complications. All the women interviewed, with the exception of two, had managed to negotiate access to land for gardening through formal or self-allocation, inheritance or social networks.

For the married women, the allocation of land was done at initial settlement in the village usually through marriage. Land, which was under

the man's name, was allocated for building a home in the first instance and then later for a garden. Even in cases where there was no more land for gardening, women could use part of the land allocated for the homestead in this way. In the event of the death of the husband, land allocated to the man was usually inherited by the wife/widow and later by their children. Some women had taken over the gardens of their in-laws, either because the latter were too old/sick to work the garden or were deceased.

There were some women who indicated that when they married and settled in the village there was no more land remaining for gardens. As a result, their families found areas which they considered suitable and pegged their gardens there. In some cases this land fell within the 30 meter boundary from the river or stream, an area where farming is not permitted. However, the families resisted efforts by the village head and Agritex officials to move them as they had nowhere else to grow food. There were also instances where some women had negotiated to use other people's gardens, in part or in full. These belonged to their neighbours, friends or relatives. The owners of these gardens were either sick or too old to work in the gardens, lived elsewhere or had more than one garden. Although no money was involved in these arrangements, there was a complex network of transactions and exchange involved that benefitted both parties. For instance, in some cases where the owners were old or sick, the garden user would, occasionally, give some of the produce to the owner or help with the watering of the owner's beds (in cases where the garden is being shared). In other cases, the owners wanted to embark on a different project but still keep the garden for future use. Thus, they temporarily permitted its use in order to keep it active and also avoid encroachment by new land seekers.

3.4.2 Division of labour and decision-making

The division of labour and decision-making patterns in the gardens depended on a variety of factors, most importantly gender, class, physical ability and age. There were considerable differences between well-to-do women who were able to hire labour in the gardens and poor women who were working both in their own small gardens and as part-time workers for the wealthier families in the area.

The contribution of the garden to household income was determined in part by who worked in the large gardens. In large and relatively well-off households some male members worked in Harare while others worked in the gardens. The same was true for women. Decision-making

around these large gardens tended to be joint among household members. Households had to respond to market conditions and which crops would bring a reasonable return. Crops would be marketed by larger producers in Harare and smaller producers would market in Domboshawa. The main activities in these gardens, which, as the women indicated, were shared equally by both men and women, included watering, weeding and guarding the garden from livestock or any other animals that might destroy the crops. Most of the produce in these households was for sale and the money realized was used in the home to buy food, seeds and fertilizers for the garden, pay school fees and other ordinary household expenses. The women indicated that they often consulted with their husbands and made joint decisions about how to use the money.³³

In cases where the husband was employed, or self-employed in a non-gardening activity (such as building), the garden was often a secondary source of income or was used for the production of vegetables mostly for domestic use. Here women and children did most of the work and the husbands would usually assist. Decisions on who worked in the garden and when, what was grown, when, and how it was used, as well as the use of the money recognized from the sale of the produce lay more with the woman than her husband. Most of the produce was for domestic consumption but whenever it was sold, some women viewed the proceeds as belonging to them alone. However, the money was often used to pay school fees or buy domestic items such as plates and cups that would, in the end, benefit all members.

In cases where the women were employed, work was done mostly by other household members and the women would help when they could. The wealthier women often hired labour to work in their gardens, especially during the rainy season, when farming was at its peak. For the poor, this was an opportunity to engage in wage labour to raise money to pay fees and purchase seeds, fertilizers and chemicals for their own gardens or where payment was in kind, they would get maize for grinding to make sadza (mealie-meal) or other domestic items such as laundry soap.

Children, including those at primary school, also worked in the garden, but we found no cases where children failed to attend school because they had to do so. The only limiting factor in school attendance was lack of money for fees or levies.

33 It is likely that there were conflicts over the use or control of money realized from the garden but this information could have been deliberately suppressed, perhaps because the interviews were recorded.

3.4.3 Overlapping domestic and productive land and water uses

The crops produced in the gardens outside the residential area were for domestic consumption in the first instance and then for sale. The produce was sold within the villages, at the local market (showground), by the roadside or in Harare. The produce from the rainfed fields and kitchen gardens within the residential areas was mainly for consumption but would, depending on the size of the crop and the need for cash to pay school fees or medicines, be sold. Thus the boundaries between domestic and productive as well as primary and commercial water uses were blurred.

4. WOMEN'S ACCESS TO WATER FOR GARDENS IN THE THREE VILLAGES

The main sources of water for gardens in the three villages are rivers, pools or springs, and ground water usually made accessible by shallow wells. The maize and vegetables in the home field are rain fed. The kitchen gardens are watered by water from nearby wells. The market gardens are irrigated by water from the rivers, springs, pools and shallow wells.

4.2 Local water uses: neither primary nor commercial

While, for generations, communal area residents have been free to access, use and control water from rivers, ground water and open sources for livelihood purposes, the Water Act of 1998 introduced a water permit system. The Act, which applies to all forms of commercial farming whether it takes place in areas so designated, resettlement areas or communal lands, distinguishes between primary and commercial water use. According to traditional authorities and women we have interviewed, ZINWA has so far not had any presence in the area.³⁴ Yet earlier attempts to bill people for water that is used to irrigate vegetable gardens has, according to the ward co-ordinator for the Ministry of Gender in Makonde, been resisted by the villagers:

ZINWA has not yet featured but long back they came and asked whether those who were diverting water from the river into their market gardens were paying for water... We approached Council and told them that for children to go to school, it was due to income raised from the sale of vegetables from these gardens. If their activities (women's sale

34 Although the oldest and best known civil service training centre in Zimbabwe is located in Domboshawa (the Dombashawa Training Centre); ZINWA is responsible for providing it with clean drinking water, but has failed to do in recent years.

*of vegetables) were to be stopped or if they were told to move then their children were going to suffer.*³⁵

4.3 Differences regarding access to water for market gardens in the villages

While in practice people in the three villages are free to access water from available sources for the market and their home gardens there were significant differences among the different families in the area and women within them.

In Chipete village, many families relied heavily on ground water. Once allocated land, it is a common practice to dig a well to irrigate the garden without asking for permission from anyone. Wealthy families are investing in pipes and/or engines to bring water from the wells to their market gardens. In less wealthy families watering is done by bucket hand irrigation from the river.

In Makonde village, water from the Nyamarikiti River is a main source for market gardens. The water is transported from the river using buckets or by digging trenches that take water from the river to their gardens. Wealthy farmers have purchased diesel or petrol engines for pumping water from the river. Shallow wells are also used to water the gardens and are particularly useful when there is not enough water in the river.

In Mutambara village, the Mau and Ponje rivers are the main sources of water for the gardens. However the Mau River often runs dry early in the year because upstream farmers regularly block the water from flowing downstream. When this happens, the downstream farmers either stop farming altogether or dig shallow wells in their gardens which they use until they also run dry.

4.4 Who digs wells and carries water?

As with land, the division of labour associated with transporting water from the different sources and watering the gardens depend on a number of factors, most importantly the economic situation of the household. There were significant differences between women in wealthier households who could afford water pumps or hire labour and women in poor families who were assigned the duty to ferry water for domestic uses. Elderly widows whose children were distant, dead or ill were particularly vulnerable.

In families where market gardening is the main source of income, it

³⁵ This is a significant issue throughout Zimbabwe, in that gardens are often located less than 30 metres from the stream or river.

is mostly the men who ferry the water.³⁶ Married women, or those with grown up male members of the households, had an advantage in that men can provide the labour either to place barriers in the river or to deepen the well. According to the headman in the area:

*You will definitely be surprised, were you to see us. It's hard work and a prison is better. One might think I am joking but I am coming from the garden right now. I want to tell you the truth. For those women whose husbands are working in town, those labour hard here alone in the village. But when it comes to us men who permanently live in the village, we labour really hard.*³⁷

The wealthiest families in the area have invested in diesel pumps to move water from the river to their gardens. These families have also hired workers to water and weed their vegetable gardens. According to Mrs Mujuru (a successful farmer married to a professional husband):

*I went to school up to Form 4. I am not formally employed but rather I run several projects namely keeping broiler chickens for poultry and those for eggs. I also have a garden. I am married and my husband is a building contractor who draws up housing plans for people. He commutes every day to and from Harare since he drives a car, a Mazda. We are eight people living here namely, me, my husband, my two children, step-daughter, Clara, a nephew, a niece and a male worker. The male worker does both house and garden duties. The relatives I have mentioned earlier assist the male worker in feeding chickens and fetching firewood. They no longer go to fetch water because we have a borehole here.*³⁸

Elderly widows in poor households without male members struggle to access clean water from nearby sources and make a living from small vegetable gardens at their homestead. We interviewed one struggling elderly woman who told us:

I am a widow. My husband died in 2007. My daughter, Mary whom you see here is mentally retarded; so is my other son, who has gone to water our vegetables in the garden. So currently I am living with these mentally challenged children of mine and four grandchildren. The Catholic priests at Makumbi give me half of the school fees while I have to raise the other half. I have neither cattle nor goats but only eight

36 According to the headman in Chipete approximately 17 men work in town while the rest of the men of the 170+ households are based in the village.

37 Interview with headman in Chipete, July 2012.

38 Interview in Chipete, 30 July 2012.

chickens. I am asthmatic, which limits my productiveness in farming or gardening. I have a garden close to the foot of the mountain but generally we don't have sufficient water. In the past we used to grow a lot of rice in the gardens but currently we are concentrating mainly on tomatoes and vegetables. I have a well in my garden. My daughter dug it up when she was not yet married. My husband (when he was still alive) and I divided the field in half so that our two sons and their wives use the field between them and one of them has built his homestead there. We get our drinking water from a deep well, which we as a community dug before independence. It is only 150 metres from my house. Everyone is allowed to fetch drinking water there – we cannot deny anyone. My granddaughter who is in Form 2 fetches water for me. I am no longer capable of carrying buckets of water since I am asthmatic and also due to my advanced age. Once in a while, the little boy in primary school also fetches water. However, my disabled son is not capable of carrying water on his head although he can water the garden. The mentally challenged daughter is capable of cleaning house and doing laundry. The boy is the one who is a problem though, since he doesn't want to bath we have a toilet here but it's full. We just use the bush.

4.5 Conflicts between large and small water users

Water is a critical factor to any farming activity and the fact that it is becoming scarcer makes it a source of conflict in the area. In all the three villages water conflicts were referred to the village heads for resolution. If an amicable solution was not found the conflict would proceed to the chief's court.

In Chipete village, many farmers rely on shallow wells to water their market gardens thereby reducing the number of water conflicts. There is also, according to the headman in the area, a practice of sharing water for irrigation when the wells dry up:

Almost everyone has their own well but in the case of those garden wells which dry up in winter, they share with neighbours whose wells do not dry up. What happens is this, the one whose well dries up has to agree with the one with a prolific well so that he or she cultivates a few beds of vegetables in that other person's garden so that they simply have a water source which is close by. During the rainy season they simply relocate back to their own gardens. They simply agree on the terms of sharing a well.³⁹

39 Interview with headman in Chipete, July 2012.

But for those who rely on the river, conflicts are experienced when some farmers based upstream block water from flowing downstream to other farmers.

... These [conflicts] are very common. They normally occur when water in the dam [more like a pool that they have created by blocking the river] is drying up. Some people fear that the water may run out before their crops have ripened. So they block the water from getting to other users. Mine is actually at the bottom and I am affected especially around September to November. I can't grow anything.⁴⁰

In Makonde village, where there is a regular flow throughout the season, some women interviewed indicated that some farmers put barriers in the river to stop the water from flowing downstream. The barriers are made with sacks filled with sand and stones, which form a dam, which is then used to water the garden. Only a little water seeps through to the downstream farmers and this is obviously not acceptable to them, thereby causing conflicts. For those that block the water, survival is a motivating factor:

We will be thinking about them [downstream users] but in Shona there is a saying that you can't stop eating just because someone you know has a problem. So I understand their situation but I have a family to feed and that comes first.⁴¹

In Makonde the VIDCO, which has two female members, monitors those who blocks the river. According to the VIDCO chair:

No one owns the river because it supplies water even to animals. No, we only allow them to temporarily block the river while watering their vegetables, and at the end of the day after using the water as per requirement, they are supposed to unblock it and allow it to flow freely downstream. It is part of the VIDCO members' duties that they carry out daily patrols along the river to check on those who do not remove blockages from the river after watering. What happens is that you find a VIDCO member who lives upstream and another who lives downstream and usually at sunset they go out in search of their cattle near the river. As they look for their cattle, they take the opportunity to check for blockages on the river which they remove immediately upon sighting them. The VIDCO members do not have to look for the person

40 Chipete villager, September 2012.

41 Makonde villager, September 2012; however, it isn't just about feeding a family but continuing to provide more income for a range of purposes.

blocking but they just remove the blockages quietly.

In Makonde many villagers have invested in small canals to divert water from the river to their gardens. Conflicts arise as a result of shortage of water for those without irrigation channels. According to the local headman measures has been taken to ensure water equity:

To avoid such selfishness, we allocate watering days. Each person is entitled to irrigate twice a week. This initiative came about after realising the shortage of water for gardening. The villagers have turns in watering their vegetable gardens, emanating from discussions between friendly families.

In Matumbara village, about seven households who all belong to the same family regularly block the water on the Mau River from flowing downstream to the rest of the villagers. The conflicts are pronounced as these farmers, who are engaged in large-scale vegetable production, are blocking water in order to produce enough to meet the demands of their markets. According to the mother of the brothers farming the area:

They [the downstream neighbours] complain bitterly but this is due to jealousy. They do not want to work. The river is there, they should also just utilize the water in the river for gardening. They reported to the chief but the case came to naught. It came to a stage whereby they would put threatening letters on trees with death threats if we continued damming the water but then we said if they want to kill us let them do so since the alternative is death as well since it would rob our families of their livelihoods. My children now have papers from higher offices which permit them to use the water in the river at their will. This year however, they haven't complained because there is a lot of water in the river.⁴²

According to the ward co-ordinator in the area:

The VIDCO in Mutambara village enforces the unblocking of the river elsewhere but when it comes to where water rights are said to be in existence, they do not venture anywhere close to it.⁴³

According to Sub-Chief Mutambara the conflict between the wealthy upstream farming family and the downstream users remained unresolved:

42 Interview with Sub-Chief Mutambara.

43 People in this area had almost no interaction with the sub-catchment and catchment councils and thus could not have obtained water permits. The notion that a chief or sub-chief can give water rights seems to be based on a combination of old water law and customary authority.

Now there is this family of big farmers; they are blocking the river such that no meaningful river water goes downstream. Honestly, I have never seen such selfishness. I got this complaint about two weeks back. I called the respective village head and asked for the true position. He told me the people concerned had water rights which they got. I said, 'But that is a public river, how can they get water rights?' I don't think they have water rights. 'Even if one has water rights that does not give you the right to block the whole width of a river to create a dam. They should leave a gap allowing water to flow freely downstream.' The truth of the matter is that this village head, I asked, has a son who is also blocking the river upstream and so he is also protecting his own. I then told this village head to call EMA and go with them to investigate what's going on but they haven't come back to me.⁴⁴

The conflicts between large- and small-scale farmers often remain unresolved: the offenders don't adhere to the agreed resolutions because they come from more powerful families and are strategically located in terms of water resources. They also accumulate wealth on a scale difficult for others to achieve. In some instances the local leaders, who come from the wealthiest families in the area, are also protecting their own interests as large-scale water users. The victims are small-scale farmers, often women from poor families or elderly women, producing merely for subsistence and/or sale of surplus, just to make a living. The traditional authorities are, as illustrated by the interview with the sub-chief, seeking the support of national water governance institutions. EMA is well known by the traditional authorities since it is supposed to regulate both pollution and the 30-metre stream bank law. Catchment and sub-catchment councils, who are the legal entities charged with regulating and allocating water are, however, not known by traditional water authorities. To date, as we have shown, they have not been interested in communal areas nor do they have procedures for protecting peoples' rights to primary water.

4.6 Challenges regarding sustainability and gender equality

Although in practice the villagers are free to avail themselves with water for gardening there are increasing differences between richer and poorer families and their womenfolk. The burden of women's work with regard to carrying water and watering vegetable gardens depends on whether the family is wealthy enough to invest in pumps, hire labour, and the number of male household members involved in gardening. The existing situation,

44 Interview with Sub-Chief Mutambara.

where poor families and their women are gradually pushed to the margins by the larger and more powerful users, raises complex questions regarding the sustainable and equitable governance of water as a common property resource.

5. DOMESTIC WATER AND SANITATION GOVERNANCE AT VILLAGE LEVEL

The economic crisis has clearly made its mark on public water governance in Domboshawa Communal Area as elsewhere in Zimbabwe. The 1980s and early 1990s saw considerable investment by national government with the support of international donors in public water sources, particularly boreholes and Blair toilets (improved latrines). Due to lack of maintenance some of these boreholes have become dysfunctional and many of the toilets that were dug are full. Many elderly widows informed us that they went to the bush for this reason. Another major problem is that with an increasing population, increasing poverty there are simply not enough boreholes or latrines. Furthermore, there is not an infinite supply of ground water. In a situation where the responsibility of fetching water lies more with the women and children than with the men, they bear the brunt of this deficiency. Given their other responsibilities of caring for the elderly, the sick and children, such a burden falls heavily on women.

5.1 Formal institutions: the role of Rural District Council and District Development Fund

Responsibility for provision of water and sanitation in the rural areas lies with the RDC while maintenance is with the DDF. Clearly, rural water and sanitation, as a public service provision has been hard hit by Zimbabwe's political and economic crisis. According to one of the councillors in the Goromonzi Rural District Council, a committee has mooted the provision of deep wells and boreholes but nothing can be done due to lack of funding:

The committee indeed makes resolutions and adopts them but the resolutions are not implemented at grassroots level. There is no money. DDF is supposed to liaise with council for money since the council generates revenue from rates, while DDF itself is supposed to get a government grant because it is a government department but nothing like that is happening on the ground. You find that if a community borehole breaks down and a report is made to DDF, the usual response is that, 'We have no transport for the technicians to come and do repairs.'

Clearly, the crisis in water governance is being countered by increased

participation by women. In Domboshawa Communal Land, rural NGOs – such as WADZANAI, which in addition to provide training and support for women involved in market gardening also seeks to promote female leadership – hold workshops for local councillors and village heads. According to a female village head we had met at such a workshop:

Most people now realize that women offer better leadership than men. Women are being recognized in leadership. Wadzanai has sensitized people about the advantages of having women leaders in churches, parliament, ministries, etc. In my ward people admire female village heads as opposed to male village heads. This is because women village heads are in touch with the people because they attend funerals and as a result hear first-hand what people want from discussions at funerals e.g. on issues to do with inheritance. In Chinhamora we have two female village heads.

We have also observed how an increasing number of female traditional leaders have started to put water and sanitation on the agenda.

5.3 Governance of domestic water sources in the three villages

In the three villages we studied there was just one operational borehole in each. Since many homes are more than 1000 meters from the borehole, usage thereof has not provided a solution to their domestic water needs. People thus use springs and wells.

Of the 36 women interviewed, 16 used private protected wells as their major source of drinking water, 11 used public boreholes and nine used unprotected shallow wells. However, the sources were often used interchangeably. The most affected village in terms of drinking water was Makonde village where seven of the 12 women interviewed indicated that they relied on shallow wells for drinking water.

In all the villages, the women said that no one had ever checked if the villagers had adequate water and sanitation. We further inquired about their knowledge of their right to water: most indicated that they were aware of it, but implied that it was something that only existed on paper, and of no help to them. As one villager put it: ‘... But what is a right if there is no one to claim it from.’⁴⁵

5. 3 Governance of public boreholes in the three villages

The boreholes in the three villages are governed by borehole committees. In one committee five of the six members are women. In two other villag-

45 Matumbara villager, September 2012.

es, there are no female members but women are responsible for cleaning the borehole area.

In Chipete village, there are two public boreholes but only one is functional and it is available to everyone in the village. The headman is the leader of the borehole committee and the only male member of the six-member committee. The latter holds meetings with the villagers and seeks contributions for repairs. When the borehole broke down in 2011, the villagers were requested to contribute USD1 per household to raise the USD50 required. However, only 25 households paid. It was agreed that the deficit be paid later (although it had not been paid by the time of this study in September 2012). The households that did not contribute to the repair are, however, still allowed to access water. The borehole committee also ensures that people from outside the village are excluded from using the borehole unless they first seek permission from the village head. However, there are some outsiders allowed to use the borehole on the basis of reciprocity. For example, a man from a nearby village is allowed to use the borehole in return for oil with which to lubricate the pump. The nearby Makumbi School and hospital are also allowed to fetch water whenever they need to. In return, the hospital occasionally tests the quality of the water and provides chemicals for water treatment. One of the committee members, who lives near the borehole, monitors it regularly and makes sure that no one uses it who is not authorized to do so. People from other villages are turned away; if they are insistent, the village head is called in to intervene.

In Makonde village, there is only one borehole serving 109 households; it belongs to Matumbara Primary School and is available to all villagers without restriction. The borehole committee, made up of two teachers and two young male villagers, was appointed by the village head. The men were selected according to the village head because: 'it needs a lot of energy and labour to repair the borehole'.⁴⁶ The teachers often request all the borehole users to contribute USD1-2 per household for the borehole's repair and maintenance.

In Matumbara village, there is one public borehole, which was installed by the Bindura Town Council in the 1980s. At the time of the interview there was no borehole committee. Initially, the council was said to have serviced the borehole but no longer does so. As a result, the pipes are rusty, and the water a reddish colour. However, the villagers are still using the water for drinking. This was because they did not have a better alter-

46 Village head in Makonde.

native. At its instalment, one villager (a man) had been put in charge of the borehole to ensure that it was not abused.

5.4 Governance of private wells: the right to drinking water

In all three villages private wells exist on individual plots, particularly those owned by villagers considered wealthy or of medium wealth since they require some form of investment in the form of labour and building material.⁴⁷ In some instances, several households within the same family, normally in the same neighbourhood, jointly establish a well.

Many private wells are protected and the water is used for drinking and other domestic uses. Some women indicated that the wells dried up in September/October when it was very hot while others indicated that their wells did not dry up. For those whose wells dried up, public boreholes or neighbours' wells became an alternate source.

Although these wells are dug by family members on family land, the water is made available to other villagers outside the 'family' without any restrictions. Permission may be sought in the first instance, but thereafter, neighbours are allowed to fetch as much water as they want. The obligation to share, according to the women we interviewed and local leaders, arose from good neighbourliness and the fact that water is a basic need that can be denied no one.

According to the headman in Chipete village:

Those with privately dug wells share with neighbours who don't have with the exception of this new guy called Tsatsa. He locks up his well so that neighbours cannot access it. He is a civil servant working in Harare but his wife lives here all the time. He is a newcomer who settled here recently. I will have to go and talk to him about it because it's not acceptable in our community for an African to deny others access to drinking water which belongs to God.

There was also a belief that a water source cannot be used solely by one family, perhaps for fear of witchcraft. As one well owner put it:

*... you cannot deny anyone water if it is there. If you do, something bad may come your way.*⁴⁸

The use of private wells is not bound by any written rules but there is a general understanding that people should exercise cleanliness. It is also believed that most people who use private wells also have their own and

47 See also footnote 13.

48 Matumbara villager, September 2012.

therefore the way they maintain their own well would be the same way they maintain their neighbour's well. Users also exercise some self-restraint where the neighbour's well is concerned and by finding alternative sources during the hot months when the water level is low.

Women with private wells told us that they had never had their water tested. In Chipete village, the women said that they often had their water treated with chemicals provided by the local health worker. This was normally done during the rainy season when there was fear of seepage from human waste, or from agricultural pesticides, fertilizers, etc. In the absence of chemicals, water tablets were thrown into the well or into the containers of stored water. In Matumbara village, one woman said that she would throw a piece of washing soap or bicarbonate of soda in the well, and close it for at least two days before using the water. The major concern among women who use water from private wells was that tins used for fetching water often fell into the wells and were never retrieved, or at least not on time, raising fears of water contamination through rust and degradation.

5.5 Customary rights and duties a gender and class issue

Women are differently affected by the local norms that inform the water related rights and duties in the family and as such by the seasonal variability in water availability.

In the wealthiest households ground water for drinking and household needs is provided by diesel pumps while domestic servants are employed to clean and cook. To access water for domestic needs women in middle- and low-income families rely heavily on the customary norms that guide distribution of both private and public water resources. In Domboshawa, as in other communal land areas, the norm is that people cannot be denied clean drinking water; hence in one way or another poorer women do access water for their families and for productive and sanitary purposes (Sithole, 1999; Matondi, 2001; Derman and Hellum, 2002).

It is mainly women from poor and low-income groups who are charged with water related duties such as fetching, cooking and cleaning. It is they who bear the brunt of the growing water shortages having to walk long distances to boreholes or private wells where safe water can be accessed. This together with the extra duties assumed by poorer women with regard to caring for children, or the elderly and ill, serve to reinforce the water related duties imposed on women. Under these circumstances the lack of water and sanitation provision and the intra-household division of labour

assigning women responsibilities that men do not share, interact to reinforce deep gender inequalities.

6. NATIONAL POLICY RESPONSES TO THE BREAKDOWN OF RURAL WATER AND SANITATION PROVISION

The national water governance institutions in charge of sanitation, productive and domestic water supply, such as the catchment and sub-catchment councils, the RDC and the DDF are, as we have seen, absent in the three villages in Domboshawa communal lands. Villagers are, in their absence, expected to access river water, ground water and open sources for both domestic and productive uses. As one of the councillors in Goromonzi council said:

We have no time within council to discuss about water related issues. DDF merely gives its report on where they are repairing boreholes but sometimes no report comes. To tell the truth, we are not serious about water. The committee deals with deep wells and yet people in the community have dug their own wells. When people are desperate they will look for a solution. They either boil the water or put in purification tablets. They dig the wells on their own land. The water is for free use even if it is used for watering vegetables. Some have dug wells in their gardens which gardens are allocated by the village heads. However, most people are drinking water from the rivers simply because you can have land which is situated in a rocky area where one cannot dig a well.

In response to the multiple failings of rural domestic water supply and sanitation, Zimbabwe's National Water Policy from 2012 issued by the Ministry of Environment, Water and Climate proposes to make RDCs responsible for the provision of domestic water and sanitation services in rural areas.⁴⁹ The new policy does not suggest any concrete measures to ensure gender equal participation in water governance. As regards gender, the policy states that 'Target programming and implementation, shall be gender sensitive. At least 20% of the National WASH (water, sanitation and hygiene) budget will be dedicated to gender, and HIV/AIDS.' (p. 30). Gender budgeting, however, is not clearly specified since HIV/AIDS could supplant funding for women. This continues the longstand-

49 There are numerous legal issues to be resolved in the Water Policy. In this instance, policy implementation will require amendments to the Rural District Councils Act, the Regional Town and Country Planning Act, the Water Act, and the ZINWA Act.

ing Zimbabwean pattern of not articulating women's needs for water in many different situations, nor the measures to achieve such an objective. Moreover, we wonder how RDCs will acquire the interest, competence, capacity, and the finance to become functional water authorities who interact with water service providers?

The 2012 Water Policy proposes to make RDCs accountable to government and communities for water, sanitation and hygiene services. RDCs will also own communal (public) rural WASH assets and carry out major maintenance that is beyond the scope of communities from their own annual budgets. Government will, according to the Policy, provide grants to rehabilitate water points during the recovery period (to last very optimistically five years p.23) after which this responsibility will be undertaken by RDCs and communities. In terms of sanitation the government, according to this Policy, will make households financially responsible for all aspects of WASH programming. The government will undertake education programmes to generate demand for Blair Ventilated Improved Pit Latrines (BVIPs). A small amount of financing will, according to the Policy be available for very poor households with a suggested contribution of 15% of costs (p.30)

RDC's are designated as Rural Water Services Authorities who have a duty to ensure efficient, affordable and sustainable access to water services to all communities under their jurisdiction. And they will have the legal authority to enter into contractual agreements with Service Providers if they do not supply the services themselves. Potential providers include ZINWA/NWSSU,⁵⁰ DDF, community level committees, the private sector or specialized local entities that include owners of mines and private townships. All relevant government departments and ministries can be service providers.

Most importantly Zimbabwe's 2012 Water Policy states that water for primary needs is a right for all Zimbabweans and should be given first priority. Primary water includes:

... water for direct personal consumption, personal and household hygiene, food preparation and for household productive purposes such as gardening and household stock watering, but not for commercial purposes.⁵¹

This broad definition of primary water, which includes water for domestic, personal and livelihood uses, responds to the needs of rural

50 The water policy seeks to turn ZINWA into the National Water Supply and Sanitation Services Utility, restricting its functions.

51 National Water Policy, Government of Zimbabwe, August 2012, p. 17.

women in a holistic way.

Zimbabwe's Water Policy, however, does not set out a process to distinguish between primary and commercial water or suggest measures ensuring that the right to primary water is respected, protected and fulfilled when in conflict with commercial usage.⁵² Given the bias of powerful actors in ZINWA and the Ministry of Environment, Water and Climate toward commercial water, it remains unclear what governmental commitment there will be toward communal areas, and the obvious need for measures to respect, protect and fulfil the right to primary water. In terms of the long halting water reform process neither attention nor resources have been given to the communal areas. Studies of catchment and sub-catchment councils show that primary water supplies in the communal areas, while central to development and food security, have been seen as peripheral and the domain of 'development institutions' (Derman et.al., 2007: 258; Derman and Manzungu, 2015).

A key question from a gender perspective is whether the Water Policy's suggestion that '...at least 30 % of the Catchment and Sub-Catchment Councils positions will be reserved for women and the youth and that least 3 board members in the ZINWA board will be women, youth or worker representatives...' will be sufficient to ensure the right to sanitation and water for domestic and livelihood uses for the most vulnerable groups of users including women.⁵³ While we have shown that women are the ones who manage water and sanitation at the household level, their presence in water governance at local community level is marginal. The collapse of public water provision has, as we have seen, been detrimental for women from poor as well as low- and middle-income groups who spend more time on household duties than women from wealthier households or men within their own group. Seeing women as a homogeneous group, the Water Policy ignores the fact that women's access to water and sanitation and their participation in water governance is not only affected by gender but also by age, social and marital status and other identity markers that call for attention.⁵⁴

7. RECOGNITION OF INTERSECTIONAL DISADVANTAGE AND SMALL-SCALE INVESTMENT

This qualitative study has shown how the breakdown of rural water and

52 See Chapter 10.

53 National Water Policy. Government of Zimbabwe August 2012, p. 24.

54 See Chapter 10.

sanitation infrastructure and the increasing pressure on common pool water sources has led to a situation where poor users, particularly poor and elderly women, are pushed to the margins both with regard to sanitation, safe drinking water and water to grow food for subsistence. This raises critical issues regarding sustainable, democratic and equitable governance of water.

An important measure to safeguard the right to sanitation and water for domestic and livelihood uses is to ensure that vulnerable water users, particularly women from middle income and poor households, are included in local governance of water and sanitation. Given the current political and economic structures for governance of water and sanitation, rural district councils and catchment and sub-catchment councils are, as we have seen, removed from the needs and interests of poor women struggling to access land and water to feed their families. During the water reform process in the late 1990s, two pilot projects – the Mupfure (now the Sanyati) and the Mazowe – both created and tried to maintain a third tier of water user associations whose purpose was to insure that all water users had access to the water governing institutions.⁵⁵ Sub-catchment councils were considered too large and too distant from many rural populations. This third tier of water user associations are not, however, a part part of the current legislation. To enhance the inclusion of women in water governance, they should in our view be added with an amendment to the Water Act.

As regards gender equal participation it is, as we have shown, important to remember that women from the wealthier households do not necessarily represent the interests of poor female water users. There is, as we have seen increasing competition over land and water, and small downstream users' right to primary water is often overridden by wealthy upstream users who have invested in diesel pumps. To ensure that the basic rights of poor and low-income women are respected and promoted, a mobilization and training strategy is needed. Women experience marginalization and rights violations linked not only to gender, but also to social and economic class. There is a disjuncture between the abstract 'realm of rights' and the unequal social and personal relations in the local context in which rights are to be realized. The gaps between these different realms

55 'Project Formulation: Mupfure Catchment Integrated Water Management', Royal Netherlands Embassy, Harare, 1986, mimeo.; 'History and Lessons Learned from the Formation of the Mazowe Catchment Council, Zimbabwe', GTZ Harare, March 2000, mimeo.

need to be addressed to build water governance institutions capable of ensuring that equal rights, not only between women and men but also among women from different classes, have traction at the local level.

Essentially, it should be recognized that the common pool water resources, on which local communities and women within them rely for their livelihood, are under threat because of the existing water governance structure. This is based on a permit system, which, in principle, favours large-scale users, and provides little protection for those who use small amounts of water. In spite of the rhetoric of the new Water Policy, the former Permanent Secretary in the Ministry of Water within the Government of National Unity, advocates commercial water use in the communal lands as the key to more effective use of land and water.⁵⁶ In an interview in 2012 he argued that people in the communal lands should be charged on the basis of how many hectares of land they had – regardless of how they used the land or how much water they used. This would, in his view, punish underutilization of land and would be less complicated for the sub-catchment councils when levying than calculating water use based upon crop requirements. This approach clearly does not sit well with the right to primary water or the human right's obligation⁵⁷ to ensure that the basic water needs of the poor and vulnerable users are met.⁵⁸

In practice, the existing water governance system provides space for commercial, national and international development and industrialization initiatives to use national water permit systems to garner water without regard for smaller users. That the rights of poor rural water users – who rely on water from rivers, dams, lakes, wetlands and wells for domestic and livelihood uses – lack protection when in conflict with rich and powerful users is demonstrated by studies of the large-scale production of sugar cane in Chisumbanje and Nuanetsi Ranch and their accompanying water resources.⁵⁹ These studies unravel how new national and international investors, through complex deals between the Agricultural Rural Development Authority (a parastatal that owns land in these areas), new indigenous companies, the businessman and landowner, Billy Rautenbach, have gained access to land and water resources without any consid-

56 Interview with the former Permanent Secretary, Ministry of Water, Mr. Chitsiko, 26 October 2011, Ministry of Water, Harare

57 Article 14 of the CEDAW.

58 See Chapter 2.

59 Thondhlana (2014); Zamchiya (2014); Mutopo and Chiweshe (2014a, 2014b); Scoones, et al. (2012).

eration of the right to primary water of the nearby communities. Clearly, the right to primary water is not sufficiently protected when the interests of larger commercial actors take precedence over poor local users.

Permitting commercial water use in the communal lands without better protection of the primary water rights of small-scale water users is, as shown by this study, not the way forward. The most likely effect of such an approach is that the government – to simplify registration procedures and reduce registration costs – will adopt a uniform framework, unsuited to the right to primary water of poor small-scale users. In effect, poor users will likely pay a disproportionately high price and will face exclusion from the system because of inability to pay or register.

Furthermore, the existing permit system does not recognize the hydraulic property rights deriving from investments in water infrastructure, operation and maintenance made by small-scale communal water users. A basic question is how community based water norms and institutions, which constitute the lifeline for poor rural and peri-urban families and women within them, should be recognized and protected in national water laws and policies. With the exception of the duty to respect and protect the right to primary water local community based water norms and management systems are, as we have seen, not integrated and protected by the laws and policies that frame the national water governance systems. To ensure that these rights, which constitute key elements in local livelihood and poverty prevention strategies, there is need of a water governance model that protects and promotes rural and peri-urban local communities right to water for livelihood.

Towards this end, we suggest that the transformative legal tool of priority General Authorizations for black female and male small-scale users, which is currently being considered in South Africa and described by Van Koppen and Schreiner in Chapter 15 in this book, should be seriously considered in Zimbabwe. The principle of this model is that every citizen is entitled to equal access to minimum quantities of water needed to progressively achieve rights to water, food, and domestic uses respecting the principles of equality and non-discrimination. The large remaining water resources are to be allocated to high-impact users through licenses with strict and enforceable conditions. As they write:

Instead of aiming at regulation of small-scale users, both women and men, small-scale users should be protected and supported in taking up water as a basic minimum for all. At the same time, the smaller number of large-scale and highest-impact users should be rigorously

regulated. Regulation through licensing and especially enforcement of conditions should start with them. (Quote from Chapter 15)

This proposal could be adapted to Zimbabwean circumstances. It allows for well-established hydraulic property rights and local systems of water management while progressively insuring that the rights to water for livelihood purposes are expanded. Zimbabwe remains highly rural and rural citizens need water for livelihood, water for development and their human rights protected. Relying on privatisation, centralised water control and agro-industrial enterprises for development will bypass most Zimbabweans.

Chapter 13

A Hidden Presence: Women Farm Workers Right to Water and Sanitation in the Aftermath of the Fast Track Land Reform

Elizabeth Rutsate, Bill Derman and Anne Hellum

By reducing rural Zimbabwe to commercial farmers and Communal Land farmers, current formulations of the Land Question at best neglect the lives and demands of commercial farm workers. At worst, they view farm workers as a threat to future policy. If democracy and development really are to be pursued in rural Zimbabwe, the situation of nearly a fifth of the national population needs to be addressed.¹

1. INTRODUCTION

Zimbabwe has undergone a radical land reform forcing almost all white farmers off their farms and resettling them with large and small-scale black farmers and settlers. Prior to the Fast Track Land Reform (FTLRP), an estimated 320,000 to 350,000 farm workers were employed on commercial farms owned by approximately 4,500 white farmers. Their dependents numbered between 1.8 and 2 million; nearly 20% of the country's population (Sachikonye, 2003: 5).² Caught in this land reform

1 Blair Rutherford, 'The Forgotten Fifth: Farm Workers In Zimbabwe', *Southern Africa Report*, 9(4), p. 28, March 1994.

2 The actual number of full-time and seasonal farm workers remains in dispute since there was no clear census of them before Fast Track Land Reform. Sam Moyo indicates that there were about 175,000 full-time farm workers prior to the FTLRP, and an equal number of part-time workers. This provides a total of approximately 350,000 workers without reference to their families. Chambati and Magaramombe (2008: 207) estimate that there were 325,000 full- and

programme were farm workers who were not included as land recipients. A keen supporter of the reform, Sam Moyo (2007: 31), observes that ‘farm workers lost the most from land redistribution due to their loss of homes, employment and the compensation of severance benefits.’³ At least 150,000 former commercial farm workers (ibid) have been left without secure housing, land or jobs and their receipt of wages has become precarious.’

According to the National Land Audit from 2006 (as quoted in Matondi, 2012: 221), only 3% of farm workers received land through the FTRLRP. As a result of the reform most of them lost their formal employment.⁴ They were evicted from their homes by the new farmers and found themselves without housing, access to clean water and sanitation facilities and without the small gardening plots allocated to them to grow food by their former employers. The schools and clinics that were established by the farmers were closed. In addition, any discussion of farm workers requires acknowledgment of their broad vulnerabilities due to their association with farm owners (Rutherford 2001; 2011) and their lack of citizenship. The difficulties in obtaining citizenship were intensified in 2001 when an amendment to the Citizenship Act of 1984 specified that all those who potentially or actually had the right to citizenship to another

part-time farm workers when FTRLRP began. Ian Scoones writes in his blog *Zimbabwe*: ‘Our best estimates (based on Commercial Farmers’ Union (CFU), General Agricultural and Plantations Workers Union of Zimbabwe (GAPWUZ), Central Statistical Office (CSO), Zimstat and other sources) were that before land reform in the late 1990s, there were between 300,000 and 350,000 permanent and temporary farm workers working on large-scale farms and estates. Of these, 150,000-175,000 (169,000 in 1999 according to the CSO) were permanent workers, making up a total population of around one million, including any dependents. In the new settlements established after 2000, around 10,000 households were established by those who were formerly permanent farm workers, along with others who were temporary farm workers and joined the land invasions. A further 70,000 permanent worker households remained in work on estates, state farms and other large-scale farms. There were also substantial numbers of in situ displaced people still on farms living in compounds, seeking work on the new farms and perhaps with access to a small plot – perhaps around 25,000 households.’ <https://zimbabwe.wordpress.com/tag/gapwuz/>

3 The government demanded that severance payment for the farmworkers was provided even when the white farmer had been forced off his land and had little or nothing left.

4 Few new farmers could afford the official government pay rates that had been set for farm workers, (Chambati, 2013a; Murisa, 2009).

er country had to renounce that foreign citizenship. Farm workers who were born in Zimbabwe should have automatically become Zimbabwe citizens but did not.⁵ With the farm occupations beginning in 2000 the farms came under the leadership of war veterans supported by the ruling party with farm workers subject to intense violence in many parts of the country. As non-citizens they had little or no legal or political recourse to the violations of their rights.⁶

Following the implementation of FTLRP large, if unknown, numbers of farm workers and their families continue to live on the farms, either in their old housing or in houses built when their homes were occupied.⁷ Because of the change in 'ownership' farm worker residence on the farms, and their access to livelihood resources, has become more insecure. When exploring the new women farmers' access to water and participation in water governance in resettlement villages in the Mazowe Catchment, research fellow Elizabeth Rutsate observed how former farm workers maintained a large, if often overlooked, presence in the area.⁸ As an important part of the rural population this chapter addresses farm worker women's access to water and sanitation as part of their broader struggle for livelihood.

In the following we describe the situation of farm workers on the remaining white owned commercial farms, evicted farmworkers who sell their labour to the new A1 farmers and former farmworkers. We seek an understanding of farm worker women's experiences as part of a marginalized and disadvantaged group with focus on how they access livelihood resources, most importantly water and sanitation, but also housing and work. The term women farm workers include four categories: women who work on an annual contract almost always with a large-scale com-

5 Zimbabwe Citizenship Act came into force on 31 December 1984 and was amended on 6 July, 2001 and 2003 (Citizenship of Zimbabwe Amendment Act No. 12 of 2003).

6 For a comprehensive survey of the sources available on internal displacement in Zimbabwe from 2000–2008 including farm workers see 'ZIMBABWE: The Many Faces of Displacement: IDPs in Zimbabwe. A profile of the internal displacement situation', Geneva, Internal Displacement Monitoring Centre, 21 August 2008. This volume provides an indication of how Zimbabwean and international NGOs documented the violence carried out by the ruling party, war veterans, youth militia and others during the farm occupations and elections from 2000–2008

7 In this paper we use pseudonyms for all the individuals and the three farms to protect their anonymity.

8 Rutsate (2015).

mercial farmer; women who work on a piece work or a seasonal basis but are no longer formally employed on a contractual basis; the wives of men working for white commercial farmers or the new A1 farmers and those women who live, but no longer work, on the former commercial farm but engage in economic activities to support themselves and their families.

The chapter unfolds in eight sections. The research questions are presented in the introduction in Section 1 and further elaborated on in Section 2. To set the scene, Section 3 briefly describes the FTLRP and how it was carried out in the Mazowe Valley where the local case studies presented in this chapter are located. The context and place of farm workers in the broader agricultural rural economy is addressed in Section 4. In Section 5 we turn to three resettled farms in Mazowe Valley. We explore how farm worker women obtain access to water and sanitation and whether they participate in water management and governance on the farms. How issues of identity, citizenship, and gender influence farm worker women's access to water, participation in water governance and ability to claim their livelihood rights is discussed in Section 6. In Section 7 we examine the chains of responsibility for realizing farm workers' right to water and sanitation under international and constitutional law. We conclude in Section 8 by reflecting on the human rights issues raised by the continued presence of farm workers on A1 farms.

2. HOW FARM WORKER WOMEN NEGOTIATE ACCESS TO WATER AND SANITATION IN A CHANGING SOCIAL, ECONOMIC AND LEGAL LANDSCAPE

Due to the breakdown of water infrastructure on the former commercial farms, the lack of clean drinking water and sanitation is a problem for all women living in the FTLRP resettlement areas. Women farm workers are, however, disproportionately burdened due to the loss of housing, paid work and gardens to grow family food. A recent study of farm workers in Mazowe (Chiweshe, 2011: 221-22) observes that:

Female farm workers face the double barrel [sic] of class and gender exclusion which intersect to leave them vulnerable to many forms of abuse and violence. Their social position excludes them from important networks which can improve their livelihoods. In other words they do not possess the necessary social, political or economic capital to ensure access to land or services.

In this chapter we address tensions between farm worker women's rights as individual citizens and their rights as members of a vulnerable and stigmatized group. Farm workers have not been considered full cit-

izens of Zimbabwe⁹ and were as a group excluded from FTLRP. Farm worker women's access to water and sanitation is not only affected by their gender, but also by social membership, nationality and ascribed political belonging. To explore how farm worker women negotiate access to water and sanitation in the shadow of international, national and local customary norms we rely on Elizabeth Rutsate's fieldwork observations on three former commercial farms in the Mazowe Catchment. These farms have all been divided and resettled by Zimbabweans belonging to those ethnic groups that the authorities define as Zimbabwean. The fieldwork, which was part of Elizabeth Rutsate's doctoral study, initially focused on women resettlement farmers. Due, however, to the strong presence of farm worker women on all the farms she decided to include them as well.

In the following, we describe how women farm workers, and their families, source water for drinking, domestic and livelihood purposes on three resettled farms in the Mazowe Valley. The different norms and institutions, which govern access to water and sanitation, are national and local government agencies, donor funded humanitarian assistance, traditional leaders, local water committees, the white commercial farmers and the new A1 farmers. Whether and to what extent the human right to water, the right to primary water in the Water Act and the customary right to clean drinking water and land with water for livelihood has a bearing on farm worker women's access to water and sanitation is a key question. Starting out with women farm workers' experiences we seek insight into decisions regarding access, use and control of water and sanitation with a view to who were included and who were excluded. We also look into farm worker women's concerns about the quality, adequacy, availability and affordability of the water sources that were available to them.

The farm worker perspective adds new and significant dimensions to our research findings from Domboshawa communal land and Harare's high density area, presented in chapters 11 and 12. On the resettled farms, unlike Harare's high density areas and the communal land areas, international donors were unwilling to provide humanitarian assistance. The reason given is that the farms were taken illegally and without compensation from their former owners. Furthermore, the Shona customary norm providing a duty to share drinking water and land with water to grow food becomes highly problematic in the context of resettled farms where access to resources are decided on the basis of identity, group membership and citizenship. As pointed out by Chiweshe (2011: 218):

9 This is discussed in Section 6 of this chapter.

Identity is at the heart of belonging and an important marker of who 'is' and who 'is not' a farmer, Zimbabwean or ZANU-PF supporter on the fast track farms. As such, restructuring of gender and class configurations are important in understanding how various social actors relate and interact at farm level. Everyday interaction on fast track farms is shaped by identities which are always under negotiation. Such identities define inclusivity and exclusivity when it comes to group formation and definition of a 'farmer.' For example, former farm workers resident in most farm compounds in Mazowe are seen as non-citizens with no rights and are thus excluded from most forms of associational life.

In the light of fieldwork data describing the multiple forms of inclusion, exclusion and marginalization experienced by farm worker women in relation to citizenship, housing, water and sanitation, we will address the complex issues that the customary, national and international obligations of the different actors involved in the governance of resources such as housing, land and water on the A1 farms, give rise to.

3. LAND REFORM

The government of Zimbabwe undertook a radical land reform beginning in 2000. It resulted in the transfer of most white owned commercial farms into two models of resettlement. The commercial farms were initially taken through a process of occupation and accompanying violence. The occupations were then formalized, into two general models. A1 model farms are defined as smallholder farmers living in a villagised or self-contained manner. In the Mazowe area, where this study is located, A1 farmers were allocated five hectares of land for their household agriculture. The main purposes of the A1 scheme were to decrease land pressure in the communal areas,¹⁰ to provide assets to the poor, and to reward followers of the ruling party (Zamchiya, 2011; Marongwe, 2011; Matondi, 2012). For alternate views see Scoones et al. (2010) and Moyo (2013). Whilst the tenure arrangements in the A1 farms are construed in social terms to follow the customary systems of land allocation, adjudication and administration, they largely remain under State administration. The formal offer letter that gives an A1 farmer the right to hold land explicitly states that the offer can be withdrawn at any time with the government having no obligation to compensate for any improvements

10 Although most A1 farmers also kept their communal area land (Matondi, 2012: 114-18).

that the settler might have made (Matondi and Dekker, 2013). This provision has made some A1 settlers insecure and limited some investment. However, the mass character of the model – in terms of the number of people who took up the land and who supported government actions of reclaiming the land – provides them with a fair degree of tenure security (Moyo and Nyoni, 2013).

The A2 farms were designed to be given to Zimbabweans who had the means to invest in farming and would carry out commercial farming. These settlers were expected to finance themselves and received land from 50 to 1,000 hectares. In terms of numbers of settlers and numbers of farms the A1 type dominates.

The Mazowe area was one of the most agriculturally productive in Zimbabwe and with large numbers of farm workers. However, the farm workers were largely excluded from benefiting in the land reform programme. Their lack of citizenship and relationship with commercial farmers led to their marginalization from the whole process. Matondi and Dekker (2011: 30) estimate that less than 5% of farm workers received land on A1 farms in Mazowe. Workers who applied for land had Zimbabwean citizenship documents, which were required when applying for land, but most farm workers did not have them. Farm workers tended to be descendants of foreign migrant workers and most did not participate in the land occupations (Matondi and Dekker, 2011: 30). According to them it is only a few farmers who have offered skilled farm workers small pieces of land that were left out during the demarcation exercises as a way to attract or keep important workers (*ibid.*).

4. FARM WORKERS IN THE AGRARIAN ECONOMY

Pre-land reform large-scale commercial farms relied upon the cheap labour of farm workers from Malawi, Mozambique and Zambia. Farm workers remained outside the normal governance structures available to other Zimbabwean communities largely because they have traditionally been viewed as ‘aliens’, even though many of them are Zimbabweans. They also lacked political representation and even informal power hence most of them did not get land in the land reform programme.

Prior to FLTRP farm labour, however, was very unevenly distributed across the country. Farm labour was concentrated in the Mashonaland Provinces (East, Central and West) with about 65% of the total farm labour force, followed by Manicaland (16%), Masvingo (10%), and Matabeleland North and South and Midlands (6%). Historically, before

independence, workers were recruited from the neighbouring countries of Zambia, Mozambique and Malawi (Van Onselen 1976; Rutherford 2001) while Zimbabwean workers sought higher paying employment in the cities and in the mines of South Africa.

Because farms were located in exclusively white areas and the workers were from outside Zimbabwe, the pattern emerged whereby farm workers were housed on the farms. These residential areas came to be known as farm worker villages or compounds where farm workers were able to live with the spouses and families. Some of the compounds were close to the main farm buildings while others not. They were socially and politically distant from the owner and farm management. The great majority of permanent farm workers were men in contrast to seasonal workers who tended to be women. It was not until the 1990s that major improvements were made to the living conditions of farm workers (Rutherford, 2001).

One of the reasons why commercial farmers claimed that they could pay relatively low wages was that they supplied housing, water and often electricity and food to their permanent workers. Since the farms were far from schools, the government required that farms establish primary schools on their premises. In addition, farmers often built clinics or provided transport for their workers (and families) to access health facilities after accidents or during illness. When the farms were occupied and resettled the A1 farmers and families took over what had been the homes of the farm workers.

One of the major issues that has arisen in the wake of land reform has been farm worker wages. The minimum wage for permanent farm workers has been increased from USD59 to USD65 in 2013 and now it is USD72 per month for an annual income of \$864. Skilled workers earn more. The Food Poverty Line (FPL) for an average of five persons per household in January 2014 was USD159.¹¹ This means that the minimum wage is set below the FPL. The Total Consumption Poverty Line (TCPL) for an average of five persons per household stood at USD500 in January 2015.¹²

However, there is no accurate number currently available for either the number of permanent farm workers or their income. Most A1 farmers

11 <http://www.zimtreasury.gov.zw/189-poverty-datum-lines-january-2014>.

12 The PDL represents the cost of a given standard of living that must be attained if a person is deemed not to be poor. The FPL represents the minimum consumption expenditure necessary to ensure that each household member can (if all expenditures were devoted to food) consume a minimum food basket representing 2,100 calories.

do not employ permanent workers, only seasonal ones, while A2 farmers have tended to reduce their work force (Scoones et al., 2010; Matondi, 2011; Chambati, 2013b). In general only a small (and unknown) percentage of farmers pay the official government wage. As pointed out by Sachikonye (2003: 46, 53):

The loss of permanent and seasonal jobs arising from the decline in commercial farming meant that farm workers no longer received regular incomes. This is perhaps the largest single factor affecting their present capacity to sustain their livelihoods. Not that the incomes were very substantial in the first place. Farm workers have historically received some of the lowest wages in the economy (see Chapter 2). Together with domestic service workers and those in the sprawling informal sector, they form the lowest tier of income earners. Nevertheless, the incomes made all the difference between starvation and survival, between extreme poverty and access to the basic things of life. According to the authoritative Poverty Assessment Study Survey (PASS) of the mid-1990s, the incomes that farm workers received enabled them to escape becoming the 'poorest of the poor' (PASS, 1997) ... For most farm workers, the main resource with which to obtain food is cash income. The other resources basically supplement this one. Such is the case with small pieces of land allocated by a commercial farmer to workers to grow vegetables and maize.

On the three A1 farms discussed in this chapter there were no permanent farm workers with the exception on the adjoining rose farm belonging to a white commercial farmer. Prior to the FTLRP there were substantial differences among the commercial farms depending upon the crop produced and whether or not there was a dry season crop. In general, the Mazowe valley farms utilized relatively high numbers of permanent and seasonal workers due to the crops and the scale of winter agriculture.

5. ACCESS TO WATER AND SANITATION ON THREE A1 FARMS IN MAZOWE BY FARM WORKERS

We now turn to the situation on three farms in the Mazowe catchment that lies in the north-eastern part of Zimbabwe. This area includes parts of three provinces namely Mashonaland Central, Mashonaland East and Manicaland, stretching across the border into Mozambique and covering a total area of 38,900 square kilometres. The catchment is further divided into ten sub-catchments, which include Upper Mazowe and Nyagui sub-catchments, where the resettlement farms, subject of this study are

located. The land is well watered with many rivers as well as dams sited along these rivers. Three A1 resettlement farms in Mazowe catchment were selected for this chapter i.e. two farms in Upper Mazowe sub-catchment and one from Nyagui sub-catchment. Two of the farms are located in Mazowe District, Mashonaland Central Province, which also falls within Upper Mazowe sub-catchment. The other farm is located approximately 50 km north east of Harare, in Goromonzi District, Mashonaland East Province, which also falls under Nyagui sub-catchment.

The broader study carried out by Elizabeth Rutsate examined how all women on the selected A1 farms gained access to water for productive and domestic purposes and how they participated in decision-making and governance of water and sanitation. The farm worker women were included in the study as they continued to live in significant numbers under very trying circumstances and were subject to other norms imposed by the new farmers. In this section we describe the water context on each of the three farms, how farm worker women accessed water, what they thought of the waters' quality, and if and how they participated in water governance.

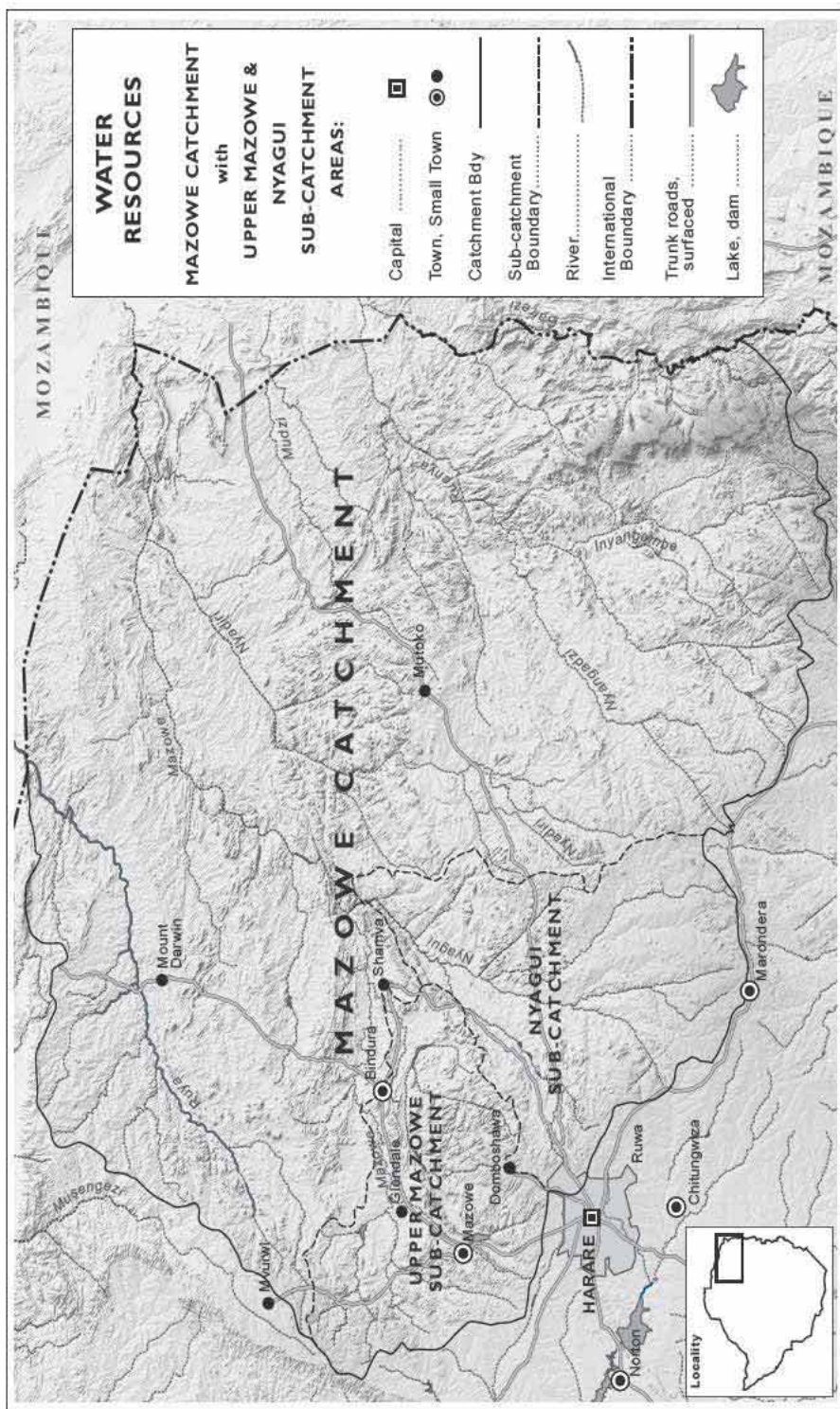
5.1 Kara Farm

The original Kara commercial farm was occupied and resettled during the period 2001-02. The farm belonged to the Sellers' family, was sub-divided as a result of the invasions. Kara Farm was occupied by people from all over Zimbabwe from a wide range of backgrounds. By virtue of his successful rose-growing project, which fell within the Export Processing Zone, Jack Sellers managed to retain a part of the farm where he continues to grow roses in greenhouses for export.

The new A1 farmers forced the farm workers out of their three-roomed brick- and corrugated-iron-roofed houses, provided by the white commercial farmers, and gained occupancy of them. The farm workers with nowhere else to go remained on the land where they built mud and thatch huts. Faced with the dilemma of having a workforce with no proper accommodation after the land invasion in 2001, the white farmer built new dormitory type blocks of one-roomed accommodation for his workers. Communal toilets and shower rooms as well as laundry tubs, using the existing water system, were also built to cater for those inhabiting the blocks of workers' flats.

5.1.1 Water and housing before FTLRP

Before the occupations, Jack Sellers had installed electric driven boreholes



to supply water to the approximately 200 workers, the majority of whom were women.¹³ Electric pumps provided clean water to taps located within 100 metres from the workers' homes. Blair pit toilets were constructed next to them. Next to each farm worker's house was a small kitchen garden where women would plant leafy green vegetables, tomatoes and onions and other vegetables for the family's nutritional needs. The commercial farmer paid the electricity bills for the pumps. The groundwater supplied was deemed to be clean and not treated. The farm workers did not pay anything towards electricity, as this formed part of their benefits package. Irrigation water for the farm came from Mudzi dam constructed prior to 1980 by a cluster of white commercial farmers, which included Jack Sellers.

The water pump attendant at the farm, who is of Mozambican origin and has worked at the farm since 1981, reminisced on the past:

*There has never been a problem with irrigation water on this farm since the supply dam, Mudzi, never runs dry. Currently it is almost full... When Carl Harvey left for Mozambique, he left eight irrigation lines which irrigated the farm fields... When I arrived in this area in 1981, it was green throughout the year. The major crops on this farm were wheat, cotton and roses.*¹⁴

5.1.2 Water after the subdivision

After the occupation and resettlement of Kara Farm, electricity continued to be supplied to the borehole constructed by Jack Sellers. Both the farm workers and the new A1 farmers had free access to this water. However, in December 2010 the transformer supplying electricity to the borehole at Kara Farm was struck by lightning. Zimbabwe Electrical Supply Authority could not repair it citing the non-availability of spare parts. Hence for more than two years, between January 2011 and May 2013, Jack Sellers drew raw water from the nearby Mudzi River dam and pumped it directly into pipes, which fed tanks supplying the water taps on the farm. Many of the women farm workers drank this unsafe raw water from the river. Some, however, went in search of alternative water sources such as open shallow wells in the fields and unprotected springs on the banks of the same local river.

13 The figure of 350 workers referred to earlier was provided by Allen Botha, a farm manager at Kara Farm. It includes those workers based at Harvest Farm, another rose farm owned by Jack Sellers.

14 Interview held at Kara Farm, 3 November 2011.

In interviews held at Kara Farm in November 2011 the women expressed their dissatisfaction with the quality of the water. Julia Jackson, a widowed farm worker of foreign descent with six children and four grandchildren¹⁵ commented that:

Yes, drinking water is a problem sometimes. We drink tap water which is being pumped direct from Mudzi Dam. This water is dirty especially after the rains when it has a brownish colour. If available we also use the same tap water to do laundry at the sinks located at the dormitories' ablution blocks. If unavailable we do our laundry at Mudzi River although the water is muddy. Apart from being dirty, the water supply has since become irregular. When the taps in the compound run dry I often get drinking water from my workplace in the green houses which is also raw water. Sometimes Mr Sellers restricts the use of that water too since there won't be enough to water the roses. In such a scenario I then get water from a shallow well in the fields dug by one Seke called 'Tsime raSeke'.¹⁶

The majority of interviewees referred to the drinking water sources as dirty, a health hazard and unsafe for human consumption. Another related issue they spoke about, which was close to their hearts, was the increase in diarrhoeal diseases among the children. In interviews held with 14 farm worker women six of them spoke of problems of diarrhoea on the farm.

Epina Bhotosek is a 28-year-old farm worker married to a 38-year-old farm worker. Having been born on the farm of parents of foreign descent, both work for Jack Sellers, like their parents before them. While her husband had worked in the rose greenhouses at Kara Farm for 21 years (at the time of interview), Epina, being younger, had worked for 11 years. Epina who had four children explained the water situation at Kara Farm as follows:

As for drinking water, we are drinking dirty river water which comes via taps but it's unclean. I don't boil the water as it would take a lot of my time for me to ensure there is always boiled water even when I am at work. The same water is for laundry and bathing as well. There are a lot of diarrhoea cases but we don't know if it's the water. As mothers we do fear for our children but what is the option?¹⁷

15 Interview held at Kara Farm, 21 November 2011.

16 Literally translated to mean 'Seke's Well'.

17 Interview held at Kara Farm, 4 November 2011.

During the same interview, Pilate Bhotosek, Epina's husband added:

We have always had clean drinking water until the transformer was struck by lightning last year this time. My wife fetches water from the taps and it is raw water from Mudzi River which often has some foreign objects floating in it. Alternatively, she draws it from Seke's pond which looks clean viewed from the naked eye. I bath in the showers or at Mudzi River. The water coming from the taps and which we drink is unclean and a health hazard to us and our children. I really fear for my children's health with this dirty water we drink.

In May 2013 the commercial farmer constructed a water filtration and purification plant at the farm which feeds treated water into tanks which in turn feed into pipes supplying the farm compound with water. Despite this apparent improvement of water facilities at Kara Farm, a ZINWA official resident on the same farm still expressed some reservations about the quality of the supposedly treated water accessed by workers from the rose green houses.¹⁸

5.1.3 Water and land for livelihood

After having been dispossessed of their kitchen gardens located beside their brick houses, the displaced farm workers at Kara Farm,¹⁹ created new family gardens along the banks of Mudzi River. They started using the river water to hand irrigate these newly staked out vegetable gardens. An interesting development at Kara Farm emanated from the manner in which farm workers were allowed by the woman village head to construct new riverine gardens to replace those taken from them by the A1 settlers. The village head was not concerned by the fact that the farm workers did not consult her prior to creating gardens for themselves close to the nearby river. With reference to Shona customary norms, she explained how everyone had a right to have a garden by the river to meet families' nutritional needs. She had thus looked the other way when her authority as traditional leader was apparently flouted by farm workers carving out gardens for themselves without so much as a cursory 'May I?' The common practice in communal lands is that one routinely asks or informs the village head prior to making a family vegetable garden in the *dambos* or next to local streams and rivers. In an interview, the woman village head had this to say:²⁰

18 Interview held at Kara Farm, 4 January 2014.

19 Now occupying dormitory-like accommodation with no space for family gardens.

20 Interview held at Kara Farm, 13 October 2011.

Some settlers and farm workers here have gardens at the river. In our tradition, practised even now in the communal lands, land adjacent to rivers has always been considered communal property whereby anyone in the community can have a piece allocated for a family garden after asking the village head. However, on this farm, I was not strict on requiring to be asked first as village head and so anyone could just go and stake out a piece of land for gardening. As a result, the land close to Mudzi River here is mainly used for family gardens belonging mostly to farm workers who largely were not allocated land for farming under the Fast Track Land Reform Programme. We are not allowed by the Environmental Management Agency in conjunction with the Forestry Commission and ZINWA (who carry out patrols) to have gardens too close to the river due to soil erosion and siltation. Gardens are supposed to be at least 30 metres from the river bank. However, on this farm we have the predicament of having some homesteads in the compound falling within that 30-metre radius from the Mudzi River bank so it ends up being close to impossible to garden within the stipulated distances.

Nevertheless, for Julia Jackson, the 47-year-old widowed farm worker from Kara Farm, the process of staking out land for herself at the river for use as a garden was too competitive, despite the gendered classification of vegetable gardening as a feminine occupation. With her full-time job within the greenhouses, her domestic parenting roles and chores at home (for which she was solely responsible), she had no time to fully engage in the riparian land grab. Hence, while on the face of it, all farm workers at Kara Farm had unfettered access to riparian land for cultivation through self-allocation, the terrain was not level. Julia explained:

As a farm worker, I don't have access to any land on which I could irrigate. I don't even have a vegetable garden on which I could, like everyone else, use free water from Mudzi River. This is because I have no husband and it was mostly men (including farm workers) who staked out land near Mudzi River for their wives to garden. However most of those women who settled here earlier than me have gardens. There is no more land to have gardens. Chero pokuisa muboora handina!²¹ Others are fortunate enough to still have their husbands, who ensured that they got these self-allocated gardens. With no one having the

21 This is translated to mean that she has no gardening space even for purposes of planting 'muboora', an African spinach normally planted in the backyard and commonly used as relish by poor rural women during the rainy season.

mandate to allocate gardens by the riverside one simply went into the forest bordering the river and cleared a piece of land. They would then fence it off with the branches of the felled trees and bushes. I am talking about a small area near the river but there is no longer any such land for gardens. We, like many people here, buy vegetables from others. If you don't have USD1 that's it! When vegetables are plenty, a bundle of vegetables usually costs five South African rand or fifty US cents but in times of scarcity a bundle costs on average, USD1.²²

5.1.4 Access to sanitary facilities

From the interviews with young and elderly women farm workers at Kara Farm, they all agreed that the sanitary facilities were adequate. This was a combination of Blair pit toilets next to the older, singly built workers' brick houses and communal shower; laundry and toilet blocks at the workers' 'dormitories', which used piped water; and the water-based flushing toilet system. These communal water taps, toilets, shower rooms and laundry tubs situated within a 100 metre radius from each block of workers' flats were also easily and freely accessible to casual labourers, seasonal workers and the new settlers' workers. The latter lived in self-provided grass thatched pole and dagga huts, in a squatter-workers compound named 'KwaSisk'.²³ None of these casual labourers, as well as the A1 farmers' own workers, had ever dared to ask the A1 farmers to share the Blair toilets located at single family occupied homesteads.

5.2 Creek Farm

Creek Farm was formerly owned by a white commercial farmer named Benny McCray.²⁴ After invading the farm, the new A1 farmers settled at Creek Farm in 2001. Most of them originated from the surrounding local areas. Many of them were, at the time of occupation, living in the high-density areas of Harare. The current village head, for example, was residing in Chitungwiza (a city just south of Harare). He was a rela-

22 Interview held at Kara Farm, 21 November 2011.

23 This literally means 'at Sisk houses' in a euphemistic reference to an international construction company of Irish origin, John Sisk & Son, which was popular during the Rhodesian colonial era and after independence. The company had built the first decent four-roomed houses for officially married African couples in Rhodesia's African townships. In the colonial Fort Victoria (now Masvingo) these houses built in a separate section in Mucheke Township were referred to as *dzimba dzekwaSis*, meaning 'Sisk houses'.

24 Some new farmers, who originate locally, also refer to Creek Farm by its vernacular name, whose literal translation would be 'small virgin land'.

tive of the chief of the area, Chief Chiweshe. At this farm most of the farm workers were evicted by the new A1 farmers who moved into their electrified brick houses and took over their kitchen gardens. A few farm workers kept their housing while some of the evicted farm workers remained on the farm and built for themselves grass-thatched pole and dagga huts as well as makeshift grass-walled pit toilets. Current farm residents include approximately 75 A1 farming households and 350 former farm-worker households.

5.2.1 Water before the subdivision

Creek Farm was, before the occupation, a fairly successful farm engaged in winter cropping with a focus on food crops including wheat, maize, potatoes and cotton. These were irrigated in winter through electric powered boreholes as well as pipes that drew water from Mudzi River and its dam. In a situation similar to that obtaining at Kara Farm, the white commercial farmer and his workers at Creek Farm shared clean drinking water supplied by electric boreholes. The water was obtained by the farm workers from taps situated in the farm compound and available within 200 metres of each house. There were toilets in the farm compound built by the former farmer and some of the farm workers' three-roomed houses were electrified. Situated close to the farm workers' compound was an area reserved for gardening for the workers. Hence the majority of women as farm workers, and as spouses of farm workers, had kitchen gardens where, like their neighbours at Kara Farm, they also grew leafy green vegetables, tomatoes, onions and green maize for their families' nutritional needs. The water was free and there was no limit as to how much a household could use for these domestic purposes.

5.2.2 Drinking water after resettlement: negotiations between A1 farmers and farm workers

In the first years after the subdivision the new A1 farmers and the workers shared the drinking water supplied by the electric borehole. With the farm owner forced from the farm no one paid the electricity bills arising from their use. Within the first eight years of the farm's occupation and conversion to an A1 settlement the electric boreholes broke down. The A1 farmers in 2011²⁵ contributed money to repair one of these electrified boreholes and to convert it to a manually operated bush pump, which was

25 The contributions were collected from A1 farmers only, thus excluding the farm workers who were asked or allowed to contribute.

much cheaper to maintain. While the electric powered boreholes were working the A1 farmers had shared the water with the farm workers staying on and around the farm. After the conversion of the borehole the A1 farmers started to charge farm workers money prior to accessing the clean borehole water on the pretext that it covered general maintenance and repair costs for the borehole.

The charges fixed by the farmers were generally unaffordable to the farm workers who were resorting to unsafe water from rivers and other open sources. An interview held with Fatima Phiri, a 23-year-old married farm worker from Creek Farm who has two minor children below the age of five years illustrates this:

At Creek Farm, we have a borehole whose operation is very unreliable. Mostly I fetch water from Kara Farm or I go directly to Mudzi River. It makes no difference since the water is of the same quality. Whenever the borehole at Creek Farm is working, the borehole committee asks for USD4.00 per person if one wants to fetch water from the borehole and so if you don't pay, you get no water from that source. A member of the borehole committee sits next to the borehole, vetting people who are entitled to fetch water after having paid the dues. So to avoid any embarrassment, indigent residents who mostly are farm worker families at Creek Farm simply trek to Mudzi River and back to fetch drinking water. We can't afford to pay the USD4.00 because on average we get paid USD7.00 after having worked in the fields for three days. For example; to weed a 400-metre long and 30-cm wide row between these beans, one is paid USD1.00 and so I can only weed seven rows in three days at two to two and half rows per day.²⁶

The decision by A1 farmers to charge former women farm workers for water accessed from the converted borehole was generally viewed by the workers as their way of hitting back at them for withdrawing their labour from the Creek farmers in favour of neighbouring A1 farmers, who offered higher wages. A1 farmers hire workers on the basis of seasonal need because they are relatively poor and cannot afford to pay formal wages or provide housing and water. From the perspective of the farm workers, the withdrawal of labour was a survival tactic to improve their bargaining position. Very often, the farm workers, especially women, were paid in kind whereby they would be coerced into some form of barter trade deal under which they would offer their labour for a whole day in return for half a

26 Interview held on 5 November 2011.

bucket of maize (10 kg), or a 2 kg packet of beans, sugar or rice.²⁷ The better option for such workers was to antagonize those paying low wages by working for those offering better wages, which would enable them to feed their families. Pauline Chimera who is 25 years old, married and living in a pole and dagga hut with her husband and three children said:

We usually fetch drinking water from Kara Farm but since their borehole broke down, the water is now being directly pumped from Mudzi River with no treatment and so it is not clean. We do our laundry at Mudzi River from where the drinking water at Kara Farm is being drawn. The borehole at Creek Farm was repaired only yesterday but for one to get water from there the borehole committee requires USD2.00 per family. When I have the money I pay because clean drinking water is precious. They say the money is for repairs. Some irrigation by a women farmers' club is going on at Creek Farm though at a very small scale. I prefer working here at Kara Farm as the wages they offer are better. We do often work for the A1 farmers at Creek Farm but they are very difficult when it comes to paying up.²⁸

However, the farm workers' bargaining position depended on the degree of their dependency on resources provided by the A1 farmers such as housing or water. Farm workers who were staying in self-made huts outside the farm were in a stronger bargaining position than farm workers who had not been evicted. This is illustrated by the situation of Amai Ishmael Ruzawi, who has a Shona husband, 12 children and 11 grandchildren. She has lived at Creek Farm since she was married, where her employer, the farmer, provided a three-roomed brick house. She was not evicted during FTLLRP though she lost her job. Amai Ishmael now works as a part-time labourer on the A1 farmers' fields, mostly weeding crops and harvesting. For farm workers like Amai Ishmael, still occupying brick houses on the A1 farm, the threat of eviction held consequences ominous enough to keep her chained to her employers despite their unfair labour practices and measly wages in cash or kind. So, although she receives better wages on the surrounding farms, she feels she has to offer her services

27 In the farming areas under research, a 20kg bucket of maize costs anything between USD3 and USD5 depending on the time of the year. During the harvest season, maize is cheaper, but prices rise between October and March. A half bucket would relate to a monetary cost of between USD1.50 and USD2.50 depending on the season, for a full day's toiling in the fields. A 2 kg packet of beans, sugar or rice was worth USD2.00.

28 In an interview with her as she weeded rows of a bean crop at Kara Farm on 5 November 2011.

to some of the A1 farmers at Creek Farm to guarantee her accommodation. Emphasizing the total value of the work package provided by the former commercial farmers, she states that she and her family were far better off before FLTRP:

While in monetary terms there isn't much difference between what we get now and what we used to be paid by white commercial farmers but then in real value the package we got from white farmers was far much better. This is because besides the monetary wage we used to receive a lot of employment benefits from white farmers such as decent housing, gardens next to our houses where we grew vegetables for relish and on most farms one would also receive a packet of mealie meal, a bottle of cooking oil and beans every month. Now we spent all the meagre earnings we receive from A1 farmers on basic food which we received as fringe benefits and the A1 farmers have also taken away our gardens from us. So in actual fact we are in a far much worse position than when working under white farmers.²⁹

This case demonstrates how housing, work and water enter into the complex negotiations about access to resources between the new A1 farmers and the farm workers. From this perspective, the farm workers' ability to freely negotiate their wages as a consequence of FTLRP varies. The power relations are far more complex than those described by Chiveshe (2011: 220):

The programme [FTLRP] however empowered them to negotiate for the price of their labour unlike when they still worked for white farmers. Under the governance of the white farmer and his wife, workers suffered from low pay and poor conditions without representation of complaints. With the new farmers, workers now can decide not to work and withhold their labour if the price is not right. They can choose who to work for and when to work. This is the source of conflict with new farmers who feel that if the farm labourers are not willing to work for them, then they should leave the compounds so that the farmers can find their own workers. Farmers complain that labour has become prohibitively expensive.

Furthermore, former farm workers living at Creek Farm were not treated in the same way as A1 farmers on other farms in the area who needed clean drinking water. A1 farmers from Kara Farm were allowed access to free clean drinking water from the borehole at Creek Farm while others,

29 Interview held in the fields at Kara Farm, 5 November 2011.

especially workers from Kara and Creek farms, were asked to pay between USD2 and USD4. As explained by Amai Ishmael Ruzawi:³⁰

... there are some people here who don't pay anything but still they access some privileged services. That includes electricity, because if a farm worker wants to be connected to the electricity grid to get electricity supplies in the home, the Committee which deals with that [is] dominated by A1 farmers' demands that they pay USD100 connection fee. Can we afford that? I may not be educated but by the way, are these not bulk meter points for which we should share costs, be they connection fees or monthly bills.

The A1 farmers from the neighbouring Kara Farm were generally exempted from paying the borehole maintenance fee despite their being more economically endowed than the very poor former farm workers. The woman village head at Kara Farm classified her exemption from payment as an act of reciprocity since for 3 years the A1 farmers and farm workers from Creek Farm had fetched clean drinking water supplied by an the electrified borehole at Kara Farm at no cost. During interviews at Creek Farm with the male A1 farmers on the village Borehole Committee, they took pains to justify charging tariffs to the farm workers, who sought to fetch clean drinking water from the converted borehole. They argued that they had to cater for any eventualities such as routine borehole maintenance and repair in the event of breakdown, which would require spares. Nevertheless, farm workers currently employed by A1 farmers at Creek Farm, the majority of who were of local Shona origin, were allowed free access to clean water from the borehole.

Clearly the Shona customary norm entailing a duty to share clean drinking water with those in need was not extended to the former farm workers. Research in communal land areas in different parts of Mashonaland (Derman and Hellum, 2002; Matondi, 2001; Nemarundwe, 2003) point to the existence of a customary norm among the Shona, expressed in the term 'water is life'. In practice this means that clean drinking water is a 'God given' natural resource, which should be freely shared among all. It is expressed in terms like '*one can't deny drinking water to anyone*'³¹ and '*drinking water should be for everyone*'.³² The non-observance of this custom at Creek Farm could partly be explained by the urban background of most of the A1 farmers who settled there from Chitungwiza and partly

30 Interview held at Kara Farm, 5 November 2011.

31 Literally translated from the Shona: 'mvura hainyimwi munhu'.

32 Literally translated from the Shona: 'mvura ndeyemunhu wese'.

by the perception that former farm workers are of foreign origin, and outsiders to the group.

5.2.3 Access to water for livelihood

The situation at Creek Farm is different from that obtaining at Kara Farm. After taking the land where the farm workers had their gardens, the new A1 farmers did not allow the former women farm workers to have new family gardens along Mudzi River. Only women A1 farmers were allowed by the village head, who was a war veteran, to have vegetable gardens close to Mudzi River. In the words of Arufonzo Zhuwakinyu, a male farm worker aged 33 with four minor children:

The village head here at Creek Farm has been very explicit about the fact that he doesn't allow any gardens near the river. In any event gardening in the farm compound is out of question because settlers' goats, cattle and chickens roam all over the place and hence destroy any cultivated crops.

In an interview,³³ Pepukai Matambo, who is a casual labourer competing for the scarce piece jobs in the surrounding farming areas, had this to say:

Prior to invasion, we had vegetable gardens, which we no longer have. The new settlers occupied every piece of land. There is no water since the water engine broke down. Previously we used to have tapped water in the compound. When we used to have gardens in the compound at Creek Farm, we would grow vegetables, tomatoes, onions and green maize. We led a self-sustainable life. As farm workers, the current situation is that we have neither gardens nor farm plots. We sometimes do barter trade to get maize from the new settlers e.g. working in the settlers' fields so as to be paid in kind i.e. given maize. We buy vegetables from those with gardens. Often as relish, we eat traditional vegetables found in the fields and in the wild but this is only during the rainy season.

Amai Ishmael Ruzawi also suffers from a lack of garden land:

Currently I have no vegetable garden. If I were to be allocated a garden, I would use it successfully since I have been a farm worker for years. Further when the white man, was still around we as workers had our own family vegetable gardens in our compound and so we had no problem with relish. I haven't asked for a piece of land to garden

33 Interview held on 5 November 2011

from the village head since there is a lot of politics involved. Our life at Creek Farm is hard. Some people don't pay anything but still they access some privileged services.³⁴

5.2.4 Access to sanitation

Another pertinent issue at Creek Farm was that despite the former white commercial farmer having built Blair toilets for farm workers, these were no longer accessible to most of the farm workers evicted from the accommodation provided by the employer. The new A1 farmers were not sharing the toilets they acquired; farm workers have had to build grass walled shallow pit toilets with rough wooden floors. While women farmers did their laundry at the borehole, most former farm workers, evicted from their former accommodation in the compound, had no proper laundry facilities forcing them to bath and do laundry at Mudzi River approximately two kilometres away, which was also their source of drinking water. Meanwhile, there were no toilets in the fields forcing women farm workers to relieve themselves in nearby bushes since their makeshift toilets in the compound were too far away and they feared losing work time going to and fro.

In an interview on 17 November 2011, Chimwemwe Masauso, a female casual labourer who is a former farm worker from Creek Farm, drew a vivid picture of a farm worker's experience when she told us:

That morning when I first heard the beating drums, war songs and chants from the marching group of land invaders, I had no idea that my life was going to be dramatically changed. I had always taken for granted everyday basics like clean drinking water, good housing and toilets. But the new farmers unceremoniously evicted us from the houses the white farmer had built for us. Now as farm workers we view brick houses and clean water as a luxury which we can only dream of having maybe in the distant future with future generations.

5.3 Saga Farm

Prior to the 2001 land invasion Saga Farm was owned by Mr Stodart. This former small game park and tobacco farm was located in an area renowned for its tourist values since the Mwaanga Lodge and Game Park is located in the same area. This is a forested area with beautiful kopjes as well as abundant water sources, namely a dam called Dombotaura, 'the rock that speaks'. Together with the other water source Makomuke

34 In an interview with her on 5 November 2011.

dam on the Mubvunzi River, the two dams stand in stark contrast to the neighbouring deforested Musana Communal Lands. However, the soils at Saga Farm are sandy, which explains the land use pattern prior to FTLRP. Commercial water at Saga Farm was primarily used for watering game animals and for winter irrigation of tobacco crops. The former farmer engaged in very successful tobacco farming as evidenced by the several big barns he built on this farm for curing tobacco.

Saga A1 Farm was created out of a subdivision of a larger farm holding which was a game park. The farm's real name translates as '*we have been left behind, abandoned or deserted*'. It is named after the local sacred hill with the same name though in the singular: '*I have been left alone or deserted.*' On this farm a considerable number of farm workers were not evicted from their houses. This is in contrast to the common trend in the locality whereby soon after invading a commercial farm most of the A1 farmers on neighbouring farms evicted all farm workers, forcing most of them to settle en-masse at Chizanza and Gamanya farm compounds since they had no rural homes to go to being of foreign descent. One factor, which may explain why the farm workers experience at Saga Farm was different, is that most of the invaders were from the immediately surrounding communal areas: Goromonzi, Shamva, Murehwa and Mutoko. The village head, who attended a school in the area had known the farm workers since he was a child and passed through Saga Farm every day on his way to school. Some of the new A1 farmers, inclusive of the village head, thus built temporary makeshift homes for themselves rather than evict the former farm workers. Unlike the situation at Kara and Creek farms, there was good rapport between the new A1 farmers and the former farm workers on Saga Farm.

5.3.1 Water before and after the subdivision

The commercial farmer had built his workers, two to four-roomed houses whose size depended on the seniority of the occupant employee. Some of these houses had running water while external water points for the other junior workers were within 200 metres of their houses. Once again this water was supplied through electric boreholes, whose bills were solely met by Mr Stodart. Located close to workers houses were both single and communal toilets. Access to either depended on seniority.

Situated in front of the workers' houses was land reserved for their use as kitchen gardens to meet the dietary needs of each family. The workers or their spouses were free to use borehole water to irrigate these gardens.

The employer and employees were thus sharing clean drinking water from taps located indoors for some or within very short walking distance for others who accessed their water from outdoor water points.

Through lack of maintenance of the electric boreholes, non-payment of electricity bills, as well as theft of borehole equipment and irrigation pipes³⁵ no functional system existed for either drinking or irrigation water at the time this study was commenced. Consequently, neither the new A1 farmers nor the female farm workers had access to clean drinking water on the farm. Most of them resorted to unsafe and unprotected shallow wells located in family vegetable gardens or got water from the rivers. Water from these open water sources was, however, freely shared among women farm workers and women farmers with the exception of a few A1 women farmers who had dug deep covered wells at their homesteads. The village head's wife who owned a deep well shared clean drinking water with only a few other farmers immediately neighbouring her home, but not with women farm workers.

In 2013, through the assistance of a local donor, clean, safe borehole water became available to both women farm workers, and workers' wives at Saga Farm after Goromonzi District Development Fund personnel converted a former windmill driven borehole on the farm to a hand operated one at little cost i.e. cheap spares and fuel for the DDF truck. At the time of research this water source was shared amicably among A1 women farmers and women farmworkers.

5.3.2 Water and land for livelihood

The new A1 farmers encroached on the workers' homesteads and were growing crops on the land where the farm worker women had their vegetable gardens. A method used in displacing farm workers from the land they previously used for gardening was to inform the workers that water from the taps and boreholes was no longer adequate to allow for the irrigation of vegetables after which the new A1 farmers' livestock would be let loose on the mostly unfenced backyard kitchen gardens. With no water available to regularly irrigate them as well as continuous trampling and grazing by farm animals, those gardens next to houses slowly receded back into either the now dry and dusty communal courtyards or communal grazing lands. Further, in the absence of any form of fencing, any

35 It is alleged that some members of the former irrigation committee stole the pipes and equipment; the case has been reported to the police but no arrests have been made.

vegetables which happened to thrive in such relatively arid circumstances faced a persistent threat from the A1 farmers' livestock such as goats.

The women farm workers on Saga Farm, however, lodged a complaint to the local traditional chief about the new A1 farmers' encroachment onto their compound vegetable gardens. In early 2011, he ordered the village head at Saga Farm to re-allocate land to former farm workers for them to grow family food. However, that order remained unheeded and in 2014 the 20 farm worker households living in the farm compound remained practically landless and without the means to enjoy an adequate standard of living.

A middle-aged woman in her fifties who is a former farm worker at Saga Farm revealed the pent-up frustrations bottled up inside most women farm workers when she burst out:

The issue you talk about on drinking water is a good issue and we don't have much of a problem with that. We are happy on this farm; we all share drinking water from the same unprotected sources without considering who is who. The issue bothering us is lack of land for us to have vegetable gardens for family consumption. Like me, I have grandchildren, who are orphans, left by my children who died of the pandemic disease. Where am I expected to find money to buy both mealie-meal and vegetable relish? If only they could also give us land to till.³⁶

This has had serious ramifications for women farm workers who have always grown vegetables in small gardening plots allocated to them by their former white employers.

5.3.3 Sanitation before and after the subdivision

Prior to FTLRP, the white commercial farmer at Saga Farm had constructed single Blair pit toilets at senior farm workers' homesteads as well as communally shared pit toilets for the rest of the junior workers. Nevertheless, at the time this study was conducted, the communally shared pit toilets mostly used by farm workers were almost full and overflowing. Up to four farm worker families shared one communal pit toilet. The same toilets were also used as bathrooms but most women farm workers preferred to bath at the river. Most A1 farmers have built their own Blair toilets next to their homes, which they do not share with farm workers. This also applied to those A1 farmers who evicted senior farm workers from single unit brick houses, which had Blair pit toilets next to the hous-

36 Group interview held at Saga Farm on 14 December 2010 for the pilot study.

es. They also do not share these single family use toilets with farm workers (although these toilets now need replacement).

Due to the filthy condition of the toilets, children were resorting to open defecation and during the rainy season, this faecal waste would be washed into local streams, rivers and unprotected wells which were also their source of drinking water. As a result cases of diarrhoea were common on the farm especially among infants and children below the age of five. In group interviews held with women A1 farmers and women farm workers at Saga Farm on 17 March, 2013, they were asked why, as women, they were not co-operating by contributing money to buy cement for new pit toilets. It was suggested to them that as women they were expected to be at the forefront in addressing this issue considering that they were the ones encumbered with nursing children suffering from diarrhoea due to the unhygienic sanitary conditions. The village head's wife, who had privately constructed her own family toilet at her privately built homestead, shot down the idea of such co-operation among the two social groups when she responded thus:

Working as a co-operative for communal toilets is impractical because as farmers each of us has our own stand or plot which needs to be developed.

Meanwhile, Mphepo Zhuwao, a female farm worker, had this to say:

In the workers' compound, houses are too close together and hence there is no space to put up communal toilets. After all an attempt was once made in the past among farm worker families to co-operate and contribute money to this project, but accessing enough water for the toilet construction was a headache. The building project's members also largely failed to regularly pay the set monthly contributions due to widespread poverty among former and current farm workers.

The discussion on that particular aspect thus reached a dead end as continued discussion would have entailed delving into the touchy issue that A1 farmers were farming right up to the workers' doorsteps leaving no space for them even to build new toilets.

5.4 Negotiating access to water and land at the margins of international, national and local norms

Both national water governance institutions and international humanitarian organizations are, as we have noted, conspicuous by their absence in the resettlement areas. There was, with the exception of intervention by the local health officials, no state intervention to ensure clean drinking water. Village heads are generally viewed as community leaders with

everyone's interests at heart, and both women A1 farmers and women farm workers made complaints to them about dirty drinking water on the farms. As a result, on each of the three farms, the village heads sought help from their local DDF offices with mixed results. While DDF offices for Mazowe and Goromonzi districts responded positively to the requests for help from the two male village heads (who are both war veterans) at Creek and Saga farms by converting their electrified and windmill driven boreholes; the request from the woman village head at Kara Farm did not get any response from the DDF office for Mazowe Rural District.

In practice, the farm workers' access to basic resources, such as housing, land, water and sanitation, relied on their ability to negotiate with the few remaining commercial farmers and the new A1 farmers. However, as has been documented by academics such as Matondi (2012:183), in the wake of the FTLRP, farm workers lack bargaining power:

The new farmers on these farms are questioning why a worker who is not willing to work for them should be allowed to continue living in the compound. There were two incidences in 2007 of conditional use of houses in farm compounds: on an A2 farm called Dunberry Park, the farm compound was burned down because the new owner said the ex-farm workers were refusing to provide their services. On Chigudu Farm, the A2 farmer removed farm workers from their houses and replaced them with his own workers. In addition, the new settlers allege that farm workers do not contribute to water bills (or to the repair of boreholes), while they randomly cut firewood, defeating the settlers' efforts to invest in conservation and to halt the wanton destruction of trees. Such conflicts have led to the forced eviction of a number of farm workers, who in some cases are replaced by new workers brought in by the farmers. Government policy with regards to farm workers has not been helpful, as there are no coherent guidelines as to what should happen to farm workers on acquired farms who continue living in the compounds. This has left farm workers in a precarious situation where they can be exploited or victimised. Farm workers may access schools and clinics, but they find it difficult to pay fees. In an interview at Mapere School, the school head indicated that the school has had to allow the children of farm workers to learn without paying because most are dropping out due to lack of money.

Generally farm workers felt insecure about voicing their complaints over unclean drinking water to the commercial farmers. They were afraid

any complaints could endanger their job security since the farms were full of unemployed former farm workers eager to take their jobs in the event that the white farmer was dissatisfied with their conduct. Furthermore, they were grateful of the fact that they still had their jobs, accommodation and good sanitary facilities and hence wouldn't do anything to disturb that good rapport with their employer. They were also reluctant to approach the A1 irrigation committees as they feared being regarded as rebellious elements of the worker community, which could lead to their eviction from the farms as traitors who were against land reform.

Common pool water sources like river water or water from shallow wells in the wetlands was generally shared between the new A1 farmers and the farm workers. In most instances, however, the new A1 farmers did not see themselves as obliged to share clean drinking water and land with available water to grow food with the farm workers. Whether water from boreholes organized as common property would be shared depended on factors such as the background of the new farmers and their relationship to the farm workers. A1 settlers coming from urban areas did not seem to be familiar with the customary duty to share livelihood resources. There were also variations regarding access to land to grow vegetables along the rivers. One village head let both A1 women farmers and farm worker women grow vegetables in gardens close to the river. Other village heads did not allow such a concession arguing that the statutory requirement that no cultivation should be done within 30 metre distance from a river bank. Despite denying women farm workers the opportunity to have riparian gardens these village heads allowed women A1 farmers to have such gardens. The farm workers, due to the identity of their forebears, were subject to discrimination under both state law and customary norms.

6. CITIZENSHIP, GENDER AND ETHNICITY: PARTICIPATION AND RIGHTS CLAIMING

The farm workers' identity, as demonstrated above, had serious ramifications on women farm workers capacity to participate in water governance and fully claim their rights to water and sanitation.

Having an identity is a universal right embedded in the Universal Declaration of Human Rights (UDHR). Article 6 states that 'Everyone has the right to recognition everywhere as a person before the law'; Article 7 states that 'All are equal before the law and are entitled without any discrimination to equal protection of the law.' As observed by Merry (2013: 2): 'Law defines identities such as citizen or alien, allocates who can use which spaces, provides belonging through mechanisms such as birth reg-

istration, offers security of ownership to land and houses, and serves as an authoritative source for creating knowledge and history.' Unlike the Lancaster House Constitution, the 2013 Zimbabwe Constitution Section 36 (1) recognizes a person as a citizen by birth if '...they were born in Zimbabwe and, when they were born, (a) either their mother or their father was a Zimbabwean citizen; or (b) any of their grandparents was a Zimbabwean citizen by birth or descent.' Section 43 proceeds to outline the grounds upon which the 'continuation and restoration of previous citizenship' is recognized. In practice, citizenship by registration is acquired by way of application under section 38, upon marriage to a Zimbabwean citizen for five years or more, or alternatively if one has been permanently resident in Zimbabwe for at least ten years. Permanent resident, according to the Home Affairs Office, means with the 'appropriate legal permission' i.e. those who didn't obtain that permission can never become citizens. This includes, many, if not most, farm workers.

The Home Affairs office has made no effort to register either farm workers or their children as citizens. In the aftermath of the land occupations and in an effort to reduce the number of people voting, people with non-Zimbabwean parents or grand-parents had to renounce their citizenship rights in the other country.³⁷ Prior to the new Constitution this meant effectively that farm workers were not considered Zimbabwe citizens as they were unable to renounce their possible foreign citizenship.

According to the new Constitution, which has not been implemented, every person who was born in Zimbabwe before the publication of the constitution is a Zimbabwean citizen by birth if one or both of his or her

37 They were in practice deprived of their citizenship and officially treated as aliens, on the ground that they were citizens of SADC countries and had not renounced this foreign citizenship in terms of the law of those countries, as envisaged under section 9 of the Citizenship of Zimbabwe Act passed in 1984. 'Section 9 banned dual citizenship generally, and in 2001 was amended to require submission of proof to the Registrar-General of renunciation of foreign citizenship under the foreign law. In 2003, there was an amendment to the Citizenship Act which allowed some people in the 'SADC origins category' – namely descendants of migrant unskilled workers – to approach the Registrar-General to complete Zimbabwean forms to renounce their foreign citizenship and 'confirm' their Zimbabwean citizenship. Many people in this category, especially agricultural workers who had been displaced, were unable to 'confirm' their Zimbabwean citizenship by reason of not having the correct papers or sufficient resources to travel to registration centres, and for practical purposes they continued to be treated as aliens. Under the new Constitution, however, these people are now citizens by birth.' ('Clarifying new Constitution, citizenship', *The Standard*, 30 June 2013.)

parents was a citizen of a country which became a member of the South African Development Community 35(2). In effect since most farm workers were born in Zimbabwe and of parents or grandparents who came from a SADC country (Zambia, Malawi, Mozambique), they are now all Zimbabwean citizens. Unfortunately there has been no supporting legislation to implement the new Constitution.

The lack of legal citizenship meant that very few farm workers were able to apply to land committees to obtain 'offer letters' for land under fast track. Land occupiers used violent tactics against farm owners and farm workers to secure their occupation.³⁸ The use of violence and force also diminished the chance of farm workers obtaining land unless they joined the occupiers but even that might not overcome the lack of citizenship.

Having acquired no land in their own right women farm workers and farm workers' wives did not sit on irrigation committees. Irrigation committee members were made up of plot (land) holders. For those farm workers and former farm workers having no rural homes where they could claim access to land or family gardens, this section of the Zimbabwean population, remains without citizenship rights.

7. THE RIGHT TO WATER, SANITATION AND HOUSING WITHOUT DISCRIMINATION

The invasion of former white owned, large-scale commercial farms resulted in a dramatic change of circumstances for farm workers and their families. While accommodated in brick houses with adjoining kitchen gardens they had also enjoyed access to free and clean drinking water and sanitary facilities. Their forced eviction from these houses by the A1 farmers had a spiralling effect on all their rights.

7.1 International and constitutional protection

For those women farm workers who were evicted from employer provided accommodation, there was notable regression in the quality of their homes. They were forced out of roofed brick houses with nearby clean piped water and had to build pole and dagga huts with earthen floors located a considerable distance away from the nearest unprotected water source. Article 25 of the UDHR is pertinent in this regard when it states:

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing,

38 See, for example, GAPWUZ and JAG (2008); RAU and JAG (2010).

housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

Article 11(1) of ICESCR recognizes the right to housing, food, water and sanitation as part of the right to an adequate standard of living. It states:

The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international co-operation based on free consent.

The right to housing, water and sanitation is fully recognized under several other international human rights conventions, the most relevant being CEDAW (Art. 14) which addresses the particular disadvantages faced by rural women (Banda, 2012: 357). In General Comment No. 4 of 1991 on 'adequate housing', the CESCR authoritatively interpreted the right to housing in legal terms under international law:

...the right to housing, should not be interpreted in a narrower restrictive sense which equates it with, for example, the shelter provided by merely having a roof over one's head... Rather it should be seen as the right to live somewhere in security, peace and dignity... (Paragraph 7)

The human right to water implies that water for vulnerable and marginalized groups should be given priority. According to the CESCR:

[I]n relation to disaster relief and humanitarian assistance in times of emergencies, priority in the provision of aid, distribution and management of water and water facilities should be given to the most vulnerable or marginalized groups of the population.³⁹

The Zimbabwe government has an obligation to respect, protect and fulfil internally displaced former women farm workers' human right to housing, water and sanitation as elaborated in Principle 18 of Guiding Principles on Internal Displacement (GPID) which states:

1. All internally displaced persons have the right to an ade-

39 CESCR General Comment No. 15 The right to water E/C.12/2002/11, para. 16.

quate standard of living.

2. At the minimum, regardless of the circumstances, and without discrimination, competent authorities shall provide internally displaced persons with and ensure safe access to:
 - (a) Essential food and potable water;
 - (b) Basic shelter and housing;
 - (c) Appropriate clothing; and
 - (d) Essential medical services and sanitation.
3. Special efforts should be made to ensure the full participation of women in the planning and distribution of these basic supplies.

These human rights principles are incorporated in the 2013 Constitution. This, according to Section 46, requires Zimbabwean courts and other similar bodies to take into consideration Zimbabwe's obligations in accordance with international agreements to which it is a party.⁴⁰ According to Section 74 of the 2013 Zimbabwe Constitution on 'freedom from arbitrary eviction,' 'no person may be evicted from their home, or have their home demolished, without an order of court made after considering all the relevant circumstances.' This Constitutional provision has, however, been enacted more than a decade after the farm worker evictions of 2000 to 2003. Under 'National Objectives' in sections 19(2) (b) and 28, provision is also made for a social right to adequate shelter for all persons, adults and children dependant on the availability of resources. Section 51 on the 'right to dignity' and section 57 on the 'right to privacy' which are both within Chapter 4 on the 'Declaration of Rights', are also relevant to the right to housing.

Zimbabwe has ratified the ICESCR and has also signed the UN resolution on the Human Right to Water and Sanitation, which was adopted by the General Assembly 28 July 2010.⁴¹ The 2013 Constitution includes the right to water in Section 77. The right to sanitation is not directly addressed but is implicit in the right 'to an environment that is not harmful

40 This would include the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (The Maputo Protocol) and all other treaties and conventions to which Zimbabwe is a party.

41 UN General Assembly Resolution 64/292, 'The Human Right to Water and Sanitation'.

to their health or well-being;’ in Section 73 (1) (a). Section 56 provides protection against gender and sex discrimination in all economic, social, cultural and political spheres. Defining gender balance as a national value, Section 17 calls for proactive measures to ‘promote the full participation of women in all spheres of Zimbabwean society on the basis of equality with men’ and to ‘take all measures necessary’ to ensure that ‘both genders are equally represented in all institutions and agencies of government’.

The Zimbabwean State is thus under an obligation to respect, protect and fulfil displaced farm workers right to housing, food water and sanitation and their right to participate in water governance without discrimination. This also involves an obligation to protect farm workers’ enjoyment of housing, water and sanitation against third parties, such as the A1 farmers.

7.2 Human rights mobilization

The lack of citizenship along with social, political and economic marginalization has made it extremely difficult for farm workers to assert their rights at the local, national and international levels. There is a strong sense of a division on the A1 farms between the A1 farmers who have a relatively secure legal status in comparison to the former farm workers who, in practice, are without protection under both State law and customary law.

There was documentation of the situation of farm workers by Refugees International (2004), Manby and Miller (2002), and GAPWUZ and JAG (2008). In its 2002 report on ‘Human Rights Violations,’ Human Rights Watch reported that;

In June 2000, the National Employment Council for the agricultural industry (a tripartite body of government, employers, and unions) published a report noting that, as a result of the farm occupations, at least 3,000 farm workers had been displaced from their homes, twenty-six killed, 1,600 assaulted, and eleven raped. The majority (47.2 percent) were supporters of the MDC; nearly as many (43.6 percent) had no political affiliation; a few (4.7 percent) were Zanu-PF supporters. Farm workers have continued to be the victims of violence during farm occupations: the Zimbabwe Human Rights NGO Forum documented the deaths of four farm workers (including security guards and game scouts) and numerous assaults during 2001. The CFU reported twenty farm workers killed as of May 2001.

So far there has been no meaningful response from the State. We do not know of any court action having been instituted against anyone who

committed crimes or violated farm workers' rights to socio-economic entitlements during and after the FTLRP. There has not been any civil action by the aggrieved parties as represented by their trade unions let alone any payment made as compensation for injury suffered through the loss of livelihood and basic amenities such as housing, clean drinking water and sanitation.

As noted earlier the farm workers had been represented by GAPWUZ through 2000. Prior to FTLRP, farm workers had become militant labour activists as observed by Sachikonye (2003: 46) who states:

In the 1990s, the farm workers made considerable strides in organising for higher wages (Kanyenze, 2001; Tandon, 2001). The role of the GAPWUZ labour union was central in this process, but so too was that of the National Employment Council (NEC) for Agriculture in negotiating collective bargaining agreements. A series of unprecedented nation-wide strikes in 1997 highlighted the grievances of farm workers over their wages and working conditions. Shaken by the newly found militancy among the workers, commercial farmers awarded them a 40% wage increase (Sachikonye, 1998). Nevertheless, against the background of spiralling inflation, between 2000 and 2002 in particular, the real wages of farm workers have shrunk in real terms.

However, as the International Labour Organization reported in their Commission of Inquiry in 2009, GAPWUZ members and leaders had been subject to beatings, torture and imprisonment during FTLRP. The government formed competing unions and their membership dramatically diminished as well as their ability to support farm workers. In terms of the range of human rights addressed above, international organizations have been unusually unwilling to provide assistance to those living on former commercial farms. One reason for this is that western nations' view the farms as having been taken illegally and without compensation for their former owners (see Chapter 2 and 10). It is also the case that the responsible States Party has given no public indication or evidence that it is concerned about farm workers and what has happened to them during and after FTLRP. It was, after all, the national government that excluded farm workers as a category of people who could receive land.

8. CONCLUSIONS

The indivisibility of civil, political, social and economic rights is especially important for farm worker women who are experiencing disadvantage and discrimination on the basis of a combination of gender, nationality,

political exclusion and social class. At the bottom of the water hierarchy on the resettlement farms are – contrary to international and national constitutional priority principles – farm worker women. The lack of concern for the basic civil, political, social, economic and cultural rights of displaced farm workers in the resettlement areas flies in the face of Zimbabwe’s human rights obligations as contained within the 2013 Constitution.

The situation of a human right to housing, food, health, water and sanitation on resettled farms remains, as we have seen, highly insecure and troubled. It is not just farm workers who suffer from insufficient access to clean drinking water and lack of sanitation but also most of the A1 settlers (Rutsate, 2015). Both groups have been ignored by the national government and by international donors. The latter might have stepped in if it were a communal land but will not do so in resettlement farms due to the contested nature of how the farms were acquired (Chapter 2). Farm worker women’s lack of access to clean water, sanitation and land with water to grow vegetables as well as exclusion from participation in farm level institutions that govern water is related to their lack of citizenship and loss of housing. A major finding has been that the customary norms regarding the sharing of clean drinking water and land with water to grow food, that is found in communal areas and also in the high density suburbs in Harare, in most instances does not apply to farm workers. Due to their lack of recognized citizenship, the claims that they have ‘foreign’ backgrounds, and the hierarchical leadership pattern on the farms they have not felt free or empowered to assert their right under either State⁴² or customary law.

While having been essential to the viability and maintenance of commercial farms, the farm workers now find themselves vulnerable and marginalized. Even though the new Constitution may provide them with citizenship and socio-economic rights; these rights remain only on paper. The legislation and court decisions necessary to begin the implementation of the 2013 Constitution have not begun but are essential if women farm workers are to obtain their rights to water and sanitation.

42 Namely under section 77 of the 2013 Zimbabwe Constitution, the right to free primary water for rural households provisions under the Water Act Chapter 20:24 and the 2012 National Water Policy.

Part V

SOUTH AFRICA

Chapter 14

Fixing the Leaks in Women's Human Rights to Water: Lessons from South Africa

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1. AIM, CONCEPTS, AND STRUCTURE

1.1 Introduction

South Africa is widely hailed for its rights-based Constitution of 1996,¹ which places race and gender equality, non-discrimination and overcoming the injustices of the apartheid era at centre stage. The Constitution further recognizes socio-economic and cultural rights, including 'the right of access to sufficient water and food' (Article 27b), and 'to an environment that is not harmful to health or well-being' (Article 25a). The

1 Republic of South Africa (RSA) (1996). Constitution of South Africa Act (no. 108). Statutes of the South Africa Constitutional Law. Cape Town, Office of the President.

first Minister of Water and Sanitation,² Kader Asmal, was a professor of international law with a strong interest in human rights law. Under his leadership, the Water Services Act of 1997³ and the Free Basic Water policy of 2000 were promulgated, which launched the country's major efforts to remove the backlog in water services for domestic uses for 'Historically Disadvantaged Individuals'.⁴ The National Water Act (1998),⁵ which governs water resource management, received attention worldwide and inspired drafters of new water legislation elsewhere in Africa and in the world.

The expectations about post-apartheid rights and entitlements that were raised during the relatively peaceful transition of 1994 and the euphoric 1990s were high indeed. Certain expectations have been met,⁶ but others have not. Twenty years into democracy, the gap between rights-based policy and legal frameworks and policy outcomes remains wide,

2 From 1994-2010, the department with the mandate of water resources, water services and sanitation was the Department of Water Affairs and Forestry. Then the name changed to the Department of Water Affairs and the national government portion of the sanitation function was moved to the Department of Human Settlements. In 2014, government returned the sanitation mandate to the department of Water Affairs, changing the name to the Department of Water and Sanitation (DWS). In this chapter we use the current name of DWS.

3 Republic of South Africa (1997) Water Services Act. Act 108 of 1997. Government Gazette No. 18522. Cape Town, Office of the President.

4 This is the formal legal definition for the procurement of goods and services (Preferential Procurement Regulations, 2001, Government of South Africa). Historically Disadvantaged Individuals means a South African citizen -

i) who, due to the apartheid policy that had been in place, had no franchise in national elections, prior to the introduction of the Constitution of the Republic of South Africa, 1983 (Act No 110 of 1983) or the Constitution of the Republic of South Africa, 1993 (Act No 200 of 1993) ('the Interim Constitution'); and/or

ii) who is a female; and/or

iii) who has a disability:

Provided that a person who obtained South African citizenship on or after the coming to effect of the Interim Constitution, is deemed not to be an HDI;

The definition of 'black people' includes the same, except white women.

5 Republic of South Africa (RSA) (1998). National Water Act. Act 36. Government Gazette Vol. 398. 26 August 1998. Cape Town, Office of the President.

6 For example, by 2011, approximately 15 million people of South Africa's 53 million people benefited from USD12 billion of social grants, including pensions, child-support grant, or disability grants, compared to 4 million people in 2000.

and this includes the water sector. Above all, economic growth has largely continued to be heavily biased towards a formalized urban-focused economy, albeit now one with a considerably more racially mixed middle class. Official figures report that the Gini coefficient for income distribution in 1990 was 0.63⁷ while in 2006 it increased to 0.72 (in 2006). It dropped a little to 0.69 (in 2011) ⁸and has remained one of the highest in the world (Statistics South Africa 2014). Capital-intensive and labour-saving economic growth in mining, manufacturing, industrialization, tourism, and services has generated few new jobs. Large-scale agriculture has even shed many jobs. Structural unemployment of the black majority persists. Official unemployment rates are at 25%, and for the youth at 36%.

Poverty rates remain high and have declined only slowly from 57.2% (in 2006) to 45.5% (in 2011). They retain their gender and racial disparities. Among men, 43.8% are classified as poor, but among women this rate is 47.1%. Estimates indicate that 54% of Africans are poor, compared to 27.6% of Coloureds, 3.4% of Indians and 0.8% of Whites. South Africa has about 13.8 million individuals who experience inadequate access to food (Statistics South Africa, 2011). Maternal mortality rates have remained alarmingly high. On top of this, HIV and AIDS have hit the country hard: the country's HIV prevalence rate while stabilizing at 12.2% according to United Nations Population Fund⁹ (10.9 %, remains one of the highest in the world, affecting young women most seriously. Nationally , 38% of households are female-headed, up to 49% in Limpopo Province (Statistics South Africa, 2011).

As the many expectations from the end of apartheid remain unmet, an increasingly dissatisfied citizenry engages in service delivery protests and wage strikes, which have included acts of violence by police but also by protestors. Violent attacks upon other Africans by people who blame immigrants for lack of jobs, crime, and other ills have intensified in 2015. Theft and vandalism of public goods are rife.¹⁰ A strong civil society and a free media continue to expose failures in government performance. The South African Human Rights Commission and other independent constitutional bodies also keep holding government, and to a lesser extent the

7 www.economist.com/node/103700 *The Economist* Oct 23, 1997 (accessed on June 30, 2015).

8 <http://data.worldbank.org/indicator/SI.POV.GINI>

9 <http://countryoffice.unfpa.org/southafrica/2013/05/03/6675/hiv/> Accessed on July 1, 2015

10 For example, in the Taung irrigation scheme, North West Province, a dozen newly installed pumps were stolen the next day.

corporate sector, accountable. Opposition parties, including the Democratic Alliance and the Economic Freedom Fighters, maintain pressure on the ruling party.

In the water sector, major government efforts were deployed to deliver basic water services for domestic uses and sanitation. However, there are still many cases in which the quality, sustainability and, often, the affordability of services are disappointing. Poor water quality continues to lead to children's deaths. Pollution by acid mine drainage continues. The distribution of water resources for productive uses has remained as skewed as it was under apartheid: out of the total volume of water licensed since 1998, 98.4% went to white men.¹¹ Many smallholder schemes in the former homelands have partially or fully collapsed.¹² Unlike elsewhere in Africa, South Africa has developed almost all its water resources. The recently allocated water resources were the last that were still uncommitted and exploitable through infrastructure at cost-effective sites. So any redress of the inequitable distribution of water uses requires the much more contested distributive re-allocation from the 'haves' to the 'have-nots'.

Poor women in rural areas continue to bear the brunt of these policies, with the least public support. In South Africa alone, women collectively walk the equivalent distance of 16 times to the moon and back per day gathering water for their families.¹³ Their jobs remain grossly underpaid. Although exemplary policies on gender-based violence exist, they have little relation to reality.¹⁴

These mixed results in the water sector render it even more important to examine the past and potential importance of women's constitutional rights, which this chapter seeks to address.

11 Department of Water Affairs (2013). Water Allocation Reform. Portfolio Committee on Water and Environmental Affairs. Powerpoint presentation 16 April 2013.

12 The system of homelands was the apartheid government's effort to create independent ethnically-based nations to maintain white domination over most of South Africa. Initially these areas were termed African 'reserves', then 'Bantustans' (numbering 10), and then 'homelands.' The former homelands are now partly ruled by kings, chiefs and headmen.

13 Maude Barlow and Tony Clark, 'Water Apartheid', *The Nation*, 15 August 2002.

14 See <http://www.genderlinks.org.za/> for figures for gender based violence by Province.

1.2 Aim and conceptualization

This chapter seeks to analyse water developments in the past 20 years from a constitutional rights perspective. The central questions are whether and how women's constitutional water-related rights have either been realized or 'leaked away', and how the leaks should be fixed. We distinguish different steps in these processes: first, the Constitution itself; second, the interpretation of the Constitution into policies, legal frameworks and regulations, including the ways in which duty bearers are defined in the administrative set-up; and third, factual implementation of the duties, either by State agencies or by private service providers to which implementation has been outsourced.

As the South African Human Rights Commission (2014) has underlined, there are many domains of structural injustices where constitutional water-related rights apply. These include public service delivery through infrastructure development to bring 'sufficient' water for domestic uses and sanitation close to homes. The right to sanitation has also been acknowledged and will be discussed briefly below. However, there are many more water-related issues where constitutional rights hold and need to be addressed.

As recognized globally, water plays an irreplaceable role in multiple dimensions of health and wealth, while posing multi-faceted risks of pollution, droughts, floods, and disasters. Water is also an intrinsic part of environmental rights. This underscores the indivisibility of human rights in the sense that the realization of one right requires other rights to be realized, and in turn enables the realization of further rights. Certainly for women, reproductive and productive spheres are intimately linked and rights in the care economy are closely intertwined with rights in the productive economy. Small-scale productive water uses are essential to realize the right to sufficient food and other socio-economic rights. Water-dependent gardening, cropping, livestock, brick-making, crafts and small-scale enterprises are the mainstays of diversified livelihoods of poor women in peri-urban and rural areas in South Africa and elsewhere.

The State, the focus of this chapter, is important as duty bearer of constitutional rights, but it also plays a central role in water management. As elsewhere, it has two roles. First, the State invests in public infrastructure to deliver 'water services' in the sense of constructing, operating and maintaining water infrastructure to store and convey water in the agreed quantity and quality, at the agreed time to the agreed sites of use. This costly affair is financed through combinations of taxes, tariffs, and/or

subsidy transfers. Second, the State is the regulator of the nation's water resources, for both water quantity and quality. Through statutory law, the State allocates water use rights or entitlements and obligations to citizens who invest in infrastructure to have their own access to water.¹⁵ The statutory law is the licensing (or permit) system, in which the State as owner of the water resources *authorizes* water uses. Through these authorizations, the State can allocate water resources to users, set caps to such use, safeguard water quality and environmental requirements, and, since the 1990s, use (or abuse?) this legal system as a taxation tool to finance water resource management tasks. South Africa, like most other countries, does *not* recognize legal pluralism and the lived local customary or informal water laws.

This chapter focuses mainly on the first role of the State, as investor and operator of infrastructure. Chapter xx in this book elaborates an important aspect of the second role and argues for water allocation that prioritizes small volumes of water for domestic and small-scale productive water uses by all women and men, while tightening the regulation of the relatively few high-impact users and polluters. This is possible in South Africa's National Water Act through so-called Priority General Authorizations (It is important to note that water use authorization does not obligate the State to provide the water infrastructure for the services for these productive uses).

1.3 Structure of the chapter

In the next section, Section 2, we describe accountability and contend that it is essential for the realization of water services. We propose using the accountability triangle to distinguish two paths for its accomplishment. The following section, Section 3, describes the structural inequalities inherited from the apartheid past that the Constitution seeks to redress: the segregated spatial geography of water wealth and water poverty, embedded in the white-dominated apartheid economy which leads to the erosion of women's constitutional rights.

Section 4 starts with the highest-level Bill of Rights and 1996 Constitution, promulgated by the new government in response to the victory of the anti-apartheid struggle in the first leg of the long route to accountability. The Constitution also structures the new State apparatus designed for service delivery in the second leg of the long route to accountability.

15 Another option is water sale and speculation. However, the Minister of DWS currently prohibits water sale under a 'use it or lose it' principle.

This section also discusses the role of international human rights bodies and instruments.

Section 5 moves to the next step and discusses how women's broad constitutional rights were operationalized into national-level water policies, laws and regulations, and how they were further fine-tuned and changed over time. These are primarily the Water Services Act (1997), which concerns DWS and the department of Co-operative Government and Traditional Affairs (CoGTA), and the National Water Act (1998) of DWS.

The last three sections (6-8) analyse how a different and stronger implementation of the constitution over the past 20 years could have strengthened the human rights foundations of the constitution, and the processes of accountability by the state towards its citizens. Section 6 focuses on the right to water for domestic uses and identifies considerable achievements but also systematic neglect of women's access to water. It includes the Mazibuko litigation case, in which citizens and civil society tried in vain to negotiate stronger government commitments to provide water. Section 7 demonstrates how the constitutional rights could be applied to the provision of water infrastructure services for productive uses. It discusses the absence of a duty bearer to ensure water access to realize the right to food, especially for women. For irrigation, services are even weaker than for domestic water supplies (see also Chapter 16). At the same time, the middle-class corporate 'commercial' users still benefit from past infrastructure investments and continued subsidies. Section 8 discusses how to improve accountability. In conclusion, Section 9 has some recommendations on how to fix leaks to women's access to water for domestic and productive purposes.

2. ACCOUNTABILITY

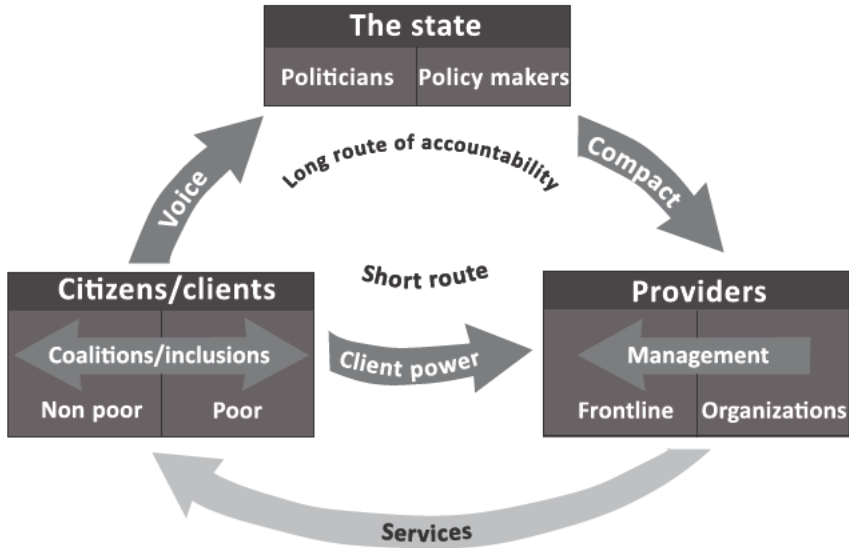
Accountability is not only a core value of rights-based approaches to recognizing people's dignity and rights to participation and non-discrimination but also leads to better service delivery in terms of meeting intended outcomes and livelihood impacts, especially for the poor (World Bank, 2004). The following 'accountability triangle' is a useful analytical tool to capture both accountability and the different steps where women's rights are realized or leaked away in constitutional rights formulation, interpretation and implementation. This framework also structures the different sections of this chapter.

The accountability triangle in Figure 1 represents the accountability

relationships among the three key parties (World Bank, 2011).

- Citizens: female and male, poor and non-poor;
- The State: politicians (from political parties) and policy makers (civil servants allocating and monitoring public resources, centralized and decentralized); and
- Service provider organizations: either State or outsourced to private providers, and encompassing both the managers and the ‘frontline’ staff who interact with citizens on a day-to-day basis.

FIGURE 1: TRIANGLE OF SERVICE DELIVERY AND KEY RELATIONSHIPS OF POWER AND ACCOUNTABILITY (WORLD BANK, 2004).



Mutual relationships are defined as accountable if: 1) there is a delegation of, or request for, an expected service; 2) there are financial or other rewards for delivering that service (which includes the State’s meeting its duty to realize constitutional rights); 3) the service is actually delivered; and 4) the ability exists to enforce the expectation, which supposes that 5) there is sufficient information about the service performance.

A long and a short route to accountability are distinguished from each other. In the first leg of the long route, citizens hold politicians accountable, for example by elections or public protests. Moving to the second leg, politicians and policy makers formulate laws and policies, interpret those and allocate resources to service provider organizations to deliver

the service on the ground. Commonly, the accountability relationships that clarify performance agreements and rewards between policy makers and service providers are called a 'compact' for State entities, and a 'contract' for private entities (World Bank, 2011). The compact is usually a broad long-term agreement. It may specify the rewards (and possibly the penalties) for the service provider's actions and outputs, but this is not always as specific and legally enforceable as a contract. Policy makers can enforce the compacts and contracts by maintaining or changing the service provider depending on its performance, provided information on performance is available. The frontline staff of service provision organizations have to make the compact or contract work on the ground. They usually have some level of discretion depending on the service in question. They are accountable upwards to their superiors, but their accountability to citizens is also shaped in the short route to accountability.

In this short route, citizens as clients directly hold their service providers to account, for example through payment of services. For the poor, who often lack client power through payment, constitutional rights that protect their dignity and participation in decisions that affect their lives are vital. Client power in the short route to accountability is especially strong when clients become 'co-producers' of the service through participatory planning and implementation. In that case, authorities at decentralized levels have the power to approve, fund, implement and monitor the action plans of clients' prioritized activities, provided they align with certain process standards and guidelines. Experiences worldwide suggest that addressing both routes simultaneously is the most effective, although there are no silver bullets (World Bank, 2011).

3. INEQUITIES FROM THE PAST: THE APARTHEID GEOGRAPHY OF WATER WEALTH AND POVERTY

3.1 Race and gender discrimination in land, water and public support

When South Africa became a democratic country in 1994, deep structural class-, race- and gender-based divides cut through every sphere of life. While these divides have been partly reduced, many of the following structural economic inequalities in control over water, and their legitimization, have been consolidated, in spite of the constitutional commitment to redress inequities from the past.

The Land Acts of 1913 and 1936 and forced removals from the 1950s

onwards dispossessed Africans both from most of their land and from any tenancy rights on white farms. The Land Settlement Act of 1912 and subsequent amendments fostered the acquisition, exchange and disposal of state lands for white settlement. The newly formed Land Board could allot public land and buy private land for white farmers (Thirtle et al., 2000: 12-13). The Irrigation and Water Conservation Act of 1912, based on the riparian principle, implied that the loss of their land also stripped Africans of their water rights. Thus 87% of the land and its related water, mineral and other resources were directly ruled by a white minority, while it indirectly ruled the remaining 13% of homelands' natural resources and people through perverted ethnic-based 'homelands'. As a result, virtually no African man, let alone an African woman, had any formal water rights in 1994. This legacy of inequality in water entitlements has not been addressed.

Based on this resource grab, the century's colonial territorial and institutional segregation, after 1948 called 'apartheid' 'whites came to own the land, water and other resources while blacks would supply the manual labour.' (Feinstein, 2005: 2) Focusing on Black women in the 'homelands', their agriculture became the pillar of the care economy, which was delegated, without pay, to women in the 'home'-lands who raised the new generation of workers, cared for the sick, and provided old-age homes for pensioners. This discriminatory organization of the reproduction of the labour force 'justified' 'individual' instead of 'family' wages to the largely male migratory work force in the mining, urbanizing and industrializing areas. Men, while suffering from apartheid, did receive some privileges: stronger control over land in the homelands, and hence, over the labour power of their female kin. While land is generally inherited via the male line in the former homelands, inequalities were further widened by formalizing women's status as minors. Women were forbidden to have the codified customary title of a 'Permission to Occupy' in their names.

African agriculture was further undermined by competition from the State-supported (male) white farmers. Without any intention to strive for 'economic viability', abundant State support and cheap labour rendered white agriculture a vibrant sector, ensuring territorial control by the minority even in remote rural areas while forcing black South Africans off white farms into the homelands. They were relocated based upon ethnicity (Platzky and Walker, 1985). The support from Pretoria for some domestic water supplies and few public irrigation schemes in the homelands from the 1960s onwards was highly politicized as part

and parcel of the 'state' building of 'African-ruled' homelands through homeland governments that reinforced the powers of co-operating tribal authorities, who benefited disproportionately. Some smallholder irrigation schemes were the result of the demarcation of homeland boundaries by rivers. This required a re-allocation of the riparian land that used to be irrigated by white farmers, to inhabitants of the new homelands or to groups of people forcibly removed from 'white' South Africa. Pretoria's support for these irrigation schemes was hierarchical and all-encompassing. It benefited white irrigation engineers, who got a proportion of the capital costs of the schemes they designed as their remuneration, and provided employment to the white scheme managers. However, it deepened women's discrimination. The white irrigation engineers favoured men by allocating the new irrigated State land and the new water technologies, inputs and income gained exclusively to men (Houghton, 1956). Again, this reinforced the divide-and-rule tactics in which men, as assumed 'household heads', were somewhat privileged by Pretoria by being given stronger control over the labour of their female kin with lesser assets. In reality, to this day, women constitute the majority of black farmers, up to 90%, even in the irrigation schemes (Van Koppen et al., 2006).

The irrigated production lessened the food deficits in the former homelands and the risks of food insurgencies, and probably somewhat slowed down the feared 'black inundation' of Africans joining the urbanizing economy. Thus, a top-down and high-tech centralized infrastructure held together by apartheid's political institutions marked the homelands' geography of female water poverty.

In the former white South Africa, women's jobs, typically in the informal sector, were much lower paid than men's jobs. Tenants and workers on white farms fully depended on the good will of the white landowners for access to water, some land to cultivate, and social services. In black townships, State-supported water services were so mediocre that payment boycotts became a common anti-apartheid protest.

3.2 White male privilege in the water economy

A geography of white water wealth emerged when the white settlers embarked on their hydraulic mission. They established an extensive network of water infrastructure shortly after the creation of the white-dominated Union of South Africa in 1910. The irrigation engineers of the early 1920s determined the total irrigable area of the Union on the basis of the percentage of run-off that could reasonably be captured for storage:

1,212,592 hectares (Kanthak, 1922, cited in Backeberg, 1994). Almost a century later, the estimate appeared fairly accurate – and almost fully exploited. By 2003, the total area under irrigation was estimated at 1,290,132 hectares. Only 50,000 hectares of this lie in the former homelands (Backeberg, 2003).

An important endeavour of the colonial state of the Afrikaner-British ‘alliance of maize and gold’ was to solve the problem of the ‘poor whites’ by promoting a large wage differential between white and black workers and by promoting white farming and irrigation to enable the settling and control of remote territories. The attention was upon white, not black, poverty and offering farming opportunities for ‘poor whites’ on what had been black lands. In urban areas, education and training was made available to poor whites, while residential segregation was intensified to separate ‘poor whites’ from black Africans. To support white farmers, the government stabilized prices, provided short- and long-term low interest loans, assisted in the purchase of seeds and fertilizers, and given grants for drought relief and rural unemployment. In short, they took much of the risk out for white farmers (Giliomee, 2003: 436; Feinstein, 2005: 143–44). The justification was (and still is) that white farmers brought tax income, food security, and foreign exchange from exports. From the 1950s onwards, the State started accommodating the upcoming urbanizing, manufacturing and industrializing white economy. In 1956, a new Water Act was promulgated to intensify State control in order to accommodate growing urbanization and manufacturing and industrial sectors.

By the 1970s, the white minority economy was going through its agrarian transition. White farms became larger-scale and more capital-intensive, while white labour was absorbed in the emerging secondary and tertiary sectors. However, for black South Africans this agrarian transition was ‘premature’ (Lipton, 1996) in the sense that black labour was barely absorbed in this increasingly capital-intensive minority economy. This created ever-growing structural unemployment of black people so that by 1970 more than 20% of the potential labour force was unemployed. This rose to 46% in 1995 (Terreblanche, 2002: 373). Inequalities among Africans also widened. From 1975 to 1991, the income of the top 20% of African households increased by 38%, while the income of the poorest 40% declined by 42% (Terreblanche, 2002: 388).

During this urbanization and industrialization of the white minority economy, high assurance water supplies were required for the economic heartland, today’s Gauteng Province, which happens to be on a plateau.

A Presidential Commission of Enquiry into Water Matters was established in 1970,¹⁶ which set the tune for the country's highly centralized and increasingly larger-scale water development and management across any administrative homeland or country boundary, till today. It is striking how some arguments that justified these changes under apartheid have remained the same today.

*The solution of our water problems will in future entail the conveyance of more and more water over longer and longer distances. To provide for our larger metropolitan regions, and some of our new industrial nodes and irrigation projects, the linking of neighbouring catchments will be an essential requirement. [...] The provision of adequate water will in future be not only a national problem, but to an even greater extent also a regional problem. The planning of catchments as geographic units will be demanded as well as the appropriate linkages to the resources of contiguous basins.*¹⁷

The Department of Water Affairs became a relatively autonomous and centralized institution of one national office with regional offices, to plan, design, construct and manage an ever-expanding net of large-scale water infrastructure of pumping houses, dams, reservoirs, canals, and tunnels, with a current estimated replacement value of USD20 billion (Department of Water Affairs 2011).¹⁸ This water resource infrastructure reticulated water to white municipalities, mines, farms, coal-fired power plants, and industries. Today, in seven of South Africa's nine provinces more than 50% of water is provided by inter-basin transfers (Basson et al., 1994). This infrastructure 'grid' was further expanded when the Department started the Lesotho Highland Project channelling water from the region's highest water tower in Lesotho to Gauteng. With rising infrastructure costs, the 1970 Commission started flagging the second generation issues of water re-use, demand management and pollution prevention. Waste discharge charges were proposed because the past practice of diluting pollution and limiting releases to periods of high-flow had already 'reached a breaking point' by 1970 (DWA, 1970 p.6).

Well before the Dublin Principles (1992) put forward 'water as an economic good' (Dublin Principle 4), the 1970 Commission had already pro-

16 Department of Water Affairs (1970) Report of the Commission of Enquiry into Water Matters. R.P. 34/1970. Pretoria.

17 Ibid. p. 9.

18 Approximate average conversion rate throughout the chapter: 1 USD=10 ZAR.

moted this principle, legitimizing gross economic inequalities till today. Above all, this 'rational' principle signalled to white farmers that public funds and technical resources were increasingly needed for investments in large-scale infrastructure to supply water to the Gauteng Highveld to generate the high values of industrial and middle-class municipal uses. The high subsidies to white irrigation needed to be reduced, so no new irrigation schemes were built; irrigation management was transferred to Irrigation Boards (as successful win-win); and volume-based irrigation water pricing was proposed (but resisted by commercial farmers who still benefit from public subsidies). The Department also established a 'Trading Account' to finally start cost-recovery from water sold through the large-scale grids. A depletion of State coffers because of the economic boycotts and the costs to suppress the anti-apartheid movement during the 70s and 80s added to the pressure to reduce water spending.

From the 1970s onwards, a private sector of white firms of hydrologists, engineers and contractors was 'rapidly increasing in extent and sophistication'. Concentrating technical know-how for business purposes, they started negotiating a new division of roles, in which, in their view, 'the detailed design, construction and maintenance activities should be undertaken by the private sector', while the department should handle 'those functions that are not economically viable or that achieve greater public benefits in the absence of commercial interests'.¹⁹ This trend has only been strengthened ever since.

The Commission further declared 'the environment', as defined by white hydrologists, as a user in its own right. The Commission itself referred to just two nature reserves, estimating their water needs at about 1% or 2% of total volumes. However, by 1986, this new water user had become considerably thirstier, requiring a roughly estimated 13% of water volumes and more work by white hydrologists to establish the precise volume.

Water planners also extended the new notion of 'water as an economic good' to irrigation in the former homelands. There as well: 'Irrigation development is only one, and not necessarily the most effective, means of achieving socio-economic objectives'. 'Since economic advantage is the decisive criterion for successful irrigation, the [...] proposed projects must be tested against strict efficiency norms'.²⁰

To conclude, the white hydraulic mission was the life-line of the apart-

19 Department of Water Affairs (1986) *Management of the Water Resources of the Republic of South Africa*. Pretoria, Department of Water Affairs.

20 *Ibid.* p. 2.16.

heid minority economy, and resulted in the apartheid spatial geography of water wealth on the one hand: pipes bypassing poor black communities to serve white farms, distant white towns or mines, while technical expertise for the minority white water economy became a commodity for profit-seeking firms. On the other side was the geography of water poverty: mediocre or no water services for domestic uses in townships and on white farms, and in the homelands mediocre irrigation services to appease conservative tribal authorities and privilege men over women in order to reduce men's labour migration.

While in other Sub-Saharan African countries, only 6% of water resources have been developed as yet (Bahri et al., 2011) the colonial settlers in South Africa took up most of the naturally available water resources on the most cost-effective sites of infrastructure development. Second-generation issues were flagged but hardly implemented: higher and volume-based pricing for better cost-recovery to replace State subsidies; more intensive re-use of water; water demand management; waste water treatment; and stricter water resource allocation that favoured the highest profits.

The result was an extremely skewed distribution of water use in rural areas. Here, 1.2% of the people use 95% of the water, largely for white farms and mines. The other 98.8% of the rural population, who mostly depend on agriculture-based livelihoods, only access 5%. This equals a Gini coefficient of the distribution of water use of 0.99 (Cullis and Van Koppen, 2007; 2008). This inequality in the distribution of land and certainly water resources for a minority economy of 'haves', with a majority of 'have-nots', continues to be the core structural inequality for rights-based water service delivery.

Political powers finally shifted as a result of the massive anti-apartheid movement, with women's strong engagement in the first leg of the long route to accountability. While the apartheid government justified its water policies in the name of economic efficiency in the national interest, the country was on the brink of civil war. While water planners argued for the highest assurance of supply to electricity generation, these and other symbols of the apartheid economy became targets for the armed wing of the ANC. In 1994, the ANC came to power. The challenges for the new government were enormous, having to transform from a male-dominated racist security apparatus to a service provider for a deprived population ten times the size of the white minority. The African National Congress had to undo an economic system that was

shaped ‘by political, economic, and ideological forces aimed at serving the interests of the white core by exploiting the black periphery’ (Terreblanche, 2002: 379).

4. POST-1994 POLICIES AND LEGISLATION

4.1 The Constitution

The first steps for the democratically elected politicians, policy makers and citizens alike were, first, to translate the victory into the policies and laws to reshape the political landscape; second, to reshape an economy which had served the interests of the white minority in order to meet the needs of the broad majority. Race and gender equality and non-discrimination, as well as participatory democracy, became the cornerstones of the country’s new Bill of Rights and Constitution. Equality is contextualized by taking into account historical inequalities and disadvantages with respect to access to, for example, education, property, and health care. Hence, the notion of equality is expansive, and goes beyond merely prohibiting arbitrary grounds for discrimination. The ultimate aim is to secure *substantive equality*. This includes economic factors and social factors, since these may prevent equitable outcomes. Section 9(2) of the Constitution requires Parliament to adopt measures to implement equality and also mandates affirmative action. In 2000, an Act on the Promotion of Equality and Prevention of Unfair Discrimination was promulgated.²¹

The South African Constitution contains justiciable socio-economic human rights (as well as civil and political ones). The Constitution in section 7 (1) & (2) obliges the State to respect, protect, promote and fulfil the rights in the Bill of Rights. Sections 26 and 27 are the main social economic rights provisions covering the rights to housing, health care, food, water and social security. The provision of Social Economic Rights in the Constitution renders them enforceable in a court of law when they are threatened or violated.

For water in particular, the important part of the Constitution is Section 27, on the adequate standard of living, which states as follows:

(1) Everyone has the right to have access to-

[...]

(b) sufficient food and water

[...]

21 Act on the Promotion of Equality and Prevention of Unfair Discrimination Act No. 4 of 2000.

- (2) The state must take reasonable legislative and other measures, within the available resources, to achieve the progressive realization of each of these rights.

Further, Section 24 of Constitution provides:

‘Everyone has the right:

- (a) to an environment that is not harmful to their health or well-being; and
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-
 - i. prevent pollution and ecological degradation;
 - ii. promote conservation; and
 - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development’

The Constitution emphasizes the State’s obligation for the ‘progressive realization’ of these socio-economic rights. Rights guaranteed in the Constitution can only be limited lawfully according to Section 36, which requires that the limitation be provided in law, be reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom, and take into account several listed factors, such as the nature of the right and the importance and purpose of the limitation.

For the implementation of the Constitution, an independent Constitutional Court was established, as well as various independent ‘Chapter 9’ institutions. They include: (a) the Public Protector; (b) the South African Human Rights Commission; (c) the Commission for the Promotion and Protection of the Rights of Cultural, Religious and Linguistic Communities; (d) the Commission for Gender Equality; (f) the Auditor-General; and (g) the Electoral Commission. For example, Section 184(3) mandates the Human Rights Commission to report yearly on what the organs of State have done to realize those rights. [note from Murray: should (f) and (g) be (e) and (f)?]

4.2 Administrative set up

4.2.1 Sectors and mandates

The constitution defines the different State organs and their mandates, which implicitly become the duty bearers for the realisation of consti-

tutional rights. State organs have precise responsibilities to define sector-specific policies. To change their policies and the provision of State services either delivered by the State or outsourced to the private sector would be the second leg of the long route to accountability.

The new government abolished the former homeland governments and redesigned the administrative boundaries and structures. By 2000, 284 municipalities were demarcated, merging wealthier with poorer municipalities across the former homeland boundaries where possible. In decentralizing State power to districts, there is a potentially closer connection between citizens and government in the long route to accountability. (Local governments' Integrated Development Plans are the formal instruments designed for citizens to set their priorities in order to influence and guide the allocation of funding.

The mandate of water remained vested in DWS, partly continuing as before 1994: a national mandate for the management and expansion of the large-scale infrastructure with its many inter-basin transfers. In addition to the national office, DWS's regional offices were re-configured into nine offices named after the provinces, and following provincial boundaries for municipal water services, partly basin boundaries and partly the apartheid geography of the large-scale infrastructure crossing the basin boundaries.

The Constitution vested the responsibility for water services provision for municipal uses in the newly created municipalities. These water services authorities became responsible for municipal water supplies for domestic uses, and commercial and industrial uses and for sanitation services, and domestic waste water and sewage disposal systems (schedule 4 Part B).²² In the absence of municipalities in the former homelands in 1994, but with zeal to fill the enormous backlog in water services for all, DWS temporarily took up the responsibility to fill the backlog. In 2006, DWS formally handed its mandate for municipal water supplies over, but the Water Services Act still stipulates that, where the water service authorities continue to fail to perform effectively, the minister can intervene and assume the responsibility of the authority to the extent necessary.

The Constitution includes sanitation among municipal responsibilities. Basic sanitation was defined as 'the prescribed minimum standard of services necessary for the safe, hygienic and adequate collection removal, disposal or purification of human excreta domestic waste-water and sewage from households, including informal households'.²³ The min-

22 See also Municipal Systems Act 32 of 2000.

23 Ibid. Section 1 (ii).

imum standard is the provision of health and hygiene education and an appropriate toilet.²⁴ Oversight and support was housed in DWS up till 2009, with a small team operating from within the department. In 2009, the mandate moved to the Department of Human Settlement. However, it became increasingly apparent that performance was weak and that even the Millennium Development Goals would not be achieved. Hearings by the Human Rights Commission (2014) and service protests drove the issue further home to the politicians. Hence, in the reorganization of government after the elections in 2014, the mandate of sanitation came back to DWS. On that occasion, it changed its name into the Department of Water and Sanitation. In the Water Summit of 2014 the minister clarified that DWS recognizes sanitation as a human right derived from the human right to dignity.²⁵

In the new State structures, the responsibility for some smallholder irrigation schemes under DWS in the former homelands shifted to the Department of Agriculture, while the DWS became responsible for a few other schemes. With the partial or full collapse of many of these schemes as a result of the instant dismantling of the apartheid management structures in the 1990s, a new policy of Revitalization of Small-scale Irrigation Schemes (RESIS) was launched in 2003.

The country's flagship for redress of profound land inequalities is land reform comprising three components; 'the restitution of land to people who were dispossessed after 1913; the redistribution of land to redress the skewed ownership of land along racial lines: and tenure reform, which aims to secure the land rights of people whose tenure is insecure as a result of discriminatory laws and practices (Cousins, 2008: 2).' Land Reform, was initially vested in the Department of Agriculture, Forestry, and Fisheries (DAFF),²⁶ but is now vested in a new separate ministry of Rural Development and Land Reform. Controversies surround every element of land reform from no legislation to protect women's rights to land in communal areas (former Homelands) to the very slow pace of land redistribution and the commercial models used for land restitution (Derman and Hellum, 2013). Most relevant for this chapter however is the lack of co-ordination between land and water in the relevant ministries.

24 Ibid. Regulations 13.

25 DWS 2014. Declaration of the National Water And Sanitation Summit 2014. Unpublished document.

26 The Department's names have slightly changed over the years.

4.2.2 National planning

As water cuts across many sectors, overall planning and inter-departmental co-ordination are important. Several of the highest-level planning organs recognize this, but implementation appears difficult. The early principle of 'Batho Pele' (people first) called for people-driven, holistic service delivery. Later acts dealt with Co-operative Governance and Inter-governmental Relations. The national development plans of the Presidency also instruct co-ordination among ministries and departments. This was the case in the pro-poor Reconstruction and Development Programme (RDP) of 1995, the pro-corporate sector Growth, Equity and Redistribution plan (GEAR) of 1999, and the pro-job creation National Development Plan (NDP) of 2010. Implementation Forums including all relevant departments are to implement the various envisaged outcomes of the NDP. The 2010 plan aims at expanding irrigation by 500,000 hectares and establishing 300,000 smallholder irrigators both for food security for the poorest, for (self-) employment generation, and for profitable business. The need for women's equal land rights is increasingly recognized as well.²⁷

In sum, at the highest levels, the Constitution recognizes socio-economic rights, including various water-related rights. The implementation is allocated to State planning and line departments. Because water policy is spread over different departments there is the high risk that no State organ takes responsibility so that constitutional rights leak away through the cracks of the fragmented administration.

4.3 The role of international human rights

South Africa's Bill of Rights and Constitution are in many respects a best practice for global international law. They protect human rights generally as strongly as international instruments. Moreover, a South African Human Rights Commission fulfils a critical home-grown monitoring role. International law plays some role in South Africa in the texts of legislation but a weaker role in monitoring. The South African Constitution recognizes international law when interpreting the Bill of Rights.

27 Republic of South Africa. National Planning Commission (2011). National Development Plan: Our future make it work. 2030 Vision. Pretoria, National Planning Commission. https://nationalplanningcommission.files.wordpress.com/2015/02/ndp-2030-our-future-make-it-work_0.pdf

TABLE 1: OVERVIEW OF SOUTH AFRICA'S RATIFICATION OF INTERNATIONAL HUMAN RIGHTS INSTRUMENTS		
Human Rights Instruments	Ratification	Status of Reporting to Monitoring Bodies
International Covenant on Civil and Political Rights (ICCPR)	1998 (binding)	No reporting to the UN Human Rights Committee
International Covenant on Economic, Social and Cultural Rights (ICESCR)	2015 (binding)	The first report will be due in April 2017 to Committee on Economic, Social and Cultural Rights.
Convention on Elimination of All Forms of Discrimination against Women (CEDAW)	1995 (binding)	Delayed and combined reporting up till 2009 to the CEDAW Committee Five shadow reports
Convention on the Rights of the Child (CRC)	1995 (binding)	Only initial report to the Committee on Rights of the Child in 1997 One shadow report
Convention on the Rights of Persons with Disabilities	2007 (binding)	None
African Charter on Human and Peoples' Rights	1996 (binding)	Initial report in 1998 and combined report in 2005 to the African Commission on Human and Peoples' Rights One shadow report
African Charter on the Rights and Welfare of the Child	2000 (binding)	First ever report covering 2000-2013 submitted in November of 2013 to the African Committee of Experts on the Rights and Welfare of the Child.
Protocol to the African Charter on the Rights of Women ('Maputo protocol')	2005 (binding)	None to the African Commission on Human and People's Rights
2010 UN General Assembly Resolution 64/292 'The human right to water and sanitation'.	Acceded	Not applicable

Section 233 of the Constitution provides that when interpreting the Bill of Rights, a court, tribunal or forum must 'prefer any reasonable interpretation of the legislation that is consistent with international law over any alternative interpretation that is inconsistent with international law'. This includes both binding and non-binding law, as later interpreted by the Constitutional Court. International law can also become binding in South Africa and therefore part of the domestic law, if it is enacted into

national law after signing and ratification. Once domesticated, international law becomes law in South Africa.

Table 1 provides an overview of South Africa's signing (non-binding) and ratification (binding) and reporting on international human rights instruments. It shows that reporting is limited, certainly on broader rights than water for domestic uses.

Although water is mentioned in the original instruments, none of the reports mentions water, other than for domestic uses, conforming to the UN resolution in 2010, which also focused on domestic uses and sanitation. Exchange with international bodies remains limited.

We will elaborate the influence of these international instruments further below in the Mazibuko case. We now turn to the next level: the operationalization of the Constitution in policies and legal frameworks with regard to water.

5. WATER POLICIES AND LEGAL AND INSTITUTIONAL FRAMEWORKS

5.1 DWS and CoGTA: Water Services Act (1997)

The operationalization of the Constitution for water issues occurred primarily through a White Paper on Water Policy in 1997²⁸ and two acts: the Water Services Act (1997)²⁹ and National Water Act (1998)³⁰. The new DWS swiftly promulgated a Water Services Act (1997) to operationalize the Constitution and temporarily provide water services in order to fill the backlog. In line with global discourse at the time, the Water Services Act (1997) interpreted this right as a right to services for domestic uses only. According to the Regulations of the Water Services Act, the minimum standard of water supply was set at 25 litres per capita per day (lpcd) within 200 metres.³¹ The Act also stipulates that non-payment of basic water services must not be a ground for limitation or discontinuance where a person proves that he or she is unable to pay.³² Indeed, any limitation or discontinuation must be fair and equitable, and reasonable

28 White Paper on Water Policy in South Africa. April 1997. Minister of Water Affairs. http://www.polity.org.za/polity/govdocs/white_papers/water.html

29 Water Services Act [Act No. 108 of 1997].

30 National Water Act. Act 36. Government Gazette Vol. 398. 26 August 1998. Cape Town, Office of the President.

31 See 'Regulations under Section 9 of the Water Services Act [Act No. 108 of 1997]: Norms & Standards' (Regulations) 14 for Quality Water Services. See also Section 2 Compulsory National Standards and Measures to Conserve Water Regulations, GG 22355 8 June 2001.

32 Water Services Act (1997) Section (4)(3)(c).

notice of intention must be provided, with the opportunity to make representations, unless this will prejudice other consumers, or unless it is an emergency situation, or unless the consumer has interfered with a limited or discontinued service.³³

In 2000, during a municipal election campaign, the government promised free basic water. In 2001, DWA's National Free Basic Water Strategy³⁴ was launched, in which six kilolitres per month (40 litres per person per day for a family of five or 25 litres per person per day for a family of eight)³⁵ was to be provided for free. The other side of the coin was the strict obligation to pay for any additional water. The then minister clarified that this strategy was launched in recognition of the public health, equity and gender concerns to ensure that the poorest households could access basic level of water supply.³⁶ As the primary beneficiaries are poor households, some municipalities have interpreted this policy by only targeting poor households. Other municipalities initially applied this policy to all clients, though many gradually shifted to targeted approaches. In 2003, the Strategic Framework for Water Services³⁷ was issued to prepare for the hand-over of domestic water services and sanitation to municipalities. This framework emphasized progressive realization of improved access to water for both domestic and productive uses, for 'climbing the water ladder'.

When DWS handed over the oversight role for water services provision to the Department of Co-operative Governance and Traditional Affairs³⁸ (CoGTA) in 2006, CoGTA appointed an own technical Municipal Infrastructure Support Agency (MISA).

Gender is mentioned in the policies and regulations for water supplies for domestic uses and their implementation by referring to women's and girls' disproportionate responsibility for domestic chores and stating that affordable water services will alleviate these burdens. However,

33 Ibid Section 4(3)(b).

34 DWAF, Free Basic Water Implementation Strategy - Version 2 (2002).

35 The amount of 6 kilolitres per household has been criticised as inadequate for most poor households which have relatively high average numbers of occupants and require water for small gardens and to meet special needs for the sick.

36 Ibid. p. 7.

37 Strategic framework for water services. Water is life, sanitation is dignity (2003). Department of Water Affairs and Forestry. <https://www.dwa.gov.za/Documents/Policies/Strategic%20Framework%20Approved.pdf>

38 This is the current name. Earlier names of this Department slightly differed.

men's roles in water provision for domestic uses, including payment for the services, and the gender discrimination behind these disproportionate burdens receive little attention. This reinforces the stereotype that unpaid domestic chores are women's tasks.

5.2 DWS: The National Water Act (1998)

The National Water Act of 1998 is the sole mandate of DWS. The Act partially continues the pre-1994 national mandate. However, it now formally covers the entire country, without homeland boundaries. The main task, certainly budget-wise, remains funding for new infrastructure (dams, pipes, pumps, etc.) and the , operation, maintenance and rehabilitation of the existing large-scale infrastructure and their expansion. New construction plans have to be gazetted and made available for two months public comments.³⁹ In line with the recommendations of the 1970 Commission that were hardly implemented, the Act puts more emphasis on implementing cost-recovery for bulk water supplies ('the user pays'). There is also more emphasis on finally enforcing the second-generation issues of water re-use, demand management, water quality protection, waste water treatment, pollution prevention ('the polluter pays', especially through envisaged waste discharge charges), and demand management.

Environmental Impact Assessments of infrastructure projects are prescribed. An effective lobby of environmentalists and aquatic ecologists carried forward the pre-1994 notion of 'the environment' as a user in its own right. They convinced the drafters of the Act, first, to maintain the highest priority for environmental water uses and, second, to considerably expand the definition of the environment to include all environmental surface water flows and groundwater base flows. The desired quantity and quality of the flow were to be set in consultation with stakeholders. This resulted in the concept of an Ecological Reserve. 'Reserve' refers to the obligation of the minister to ensure that out of the total of the nation's renewable water resources (this is the Mean Annual Run-off as the difference between precipitation and evaporation), the volumes of the Ecological Reserve to be kept in the rivers and aquifers. As the drafters of the law also wanted to underline a human component, a 'Basic Human Needs Reserve' was added. This committed the minister to ensure that there would always be enough water left in rivers and aquifers to meet the 25 lpcd defined in the Water Services Act for people who still lack water

³⁹ National Water Act (1998). Chapter 11 Government Water Works. Although it is one of the last chapters, the share in the budget is by far the largest.

services and for population growth. The Basic Human Needs volumes typically constitute just 1% or 2% of total volumes of mean annual run-off, so this component is typically regarded as 'negligible'. (Note that the Basic Human Needs Reserve does not refer to any duty to deliver the water service). Both components together constitute 'The Reserve'. It took several years before a desk-top method was developed to determine the volumes of the Reserve, which was on average about one fifth (or 20%) of the Mean Annual Run-off. With a stroke of the pen, many basins became defined as water-stressed and therefore were immediately considered as containing little or no available waters.

While these aspects of the National Water Act continued the pre-1994 mandate, but with a stronger focus on the implementation of the regulatory measures already proposed by the 1970 Commission, there were also important differences. A most important discontinuity of the past from a constitutional rights perspective is that the National Water Act stipulates the goal 'to redress the results of past racial and gender discrimination'. This is specified in the Act's water pricing and financial assistance, representativeness in water institutions, and also as a criterion for water allocation and re-allocation under Section 27 (2) of the Act. For the latter, water entitlements of existing lawful users can be reduced without compensation if this re-allocation is to provide for the Reserve, to rectify an over-allocation of water use from the resource in question, or to rectify an unfair or disproportionate water use (RSA 1998, Section 27 (2)). In 2008, the Water Allocation Reform Strategy set as targets that 60% of allocable water should be in Black hands by 2024, equally divided between women and men.⁴⁰ This strategy mainly focuses on equity and Broad Based Black Economic Empowerment.

The second change sought to provide stronger State power over water resources both to implement the constitutional imperative of redressing inequities from the past and to implement the Reserve. In line with the neo-liberal global promotion of license systems, the Act also adopted this regime. It declared itself the owner of the nation's water resources and prescribed licenses for most water uptake after 1998, with exceptions for very small water uses. However, Existing Lawful Uses before 1998, and the gross inequalities in those, continued to be recognized as lawful.

The third discontinuity in the National Water Act regards three new institutions with users' equitable participation. First, the National Water

40 Water Allocation Reform Strategy (2008). Pretoria, Department of Water Affairs and Forestry.

Act requires DWS to compile and regularly revise a National Water Resource Strategy. Public participation in its formulation is obligatory. Second, the Act proposes representative Catchment Management Agencies (CMAs) as a new governance layer accountable upward to DWS (and its many inter-basin transfers) and downward to users. The governing board is appointed by the minister, and should reflect 'sufficient' gender and demographic representation. The initial functions of CMAs are light and a matter of 'co-ordinating and advising', until CMAs mature to take over more functions from DWS. Until CMAs are established, DWS acts as the CMA. Catchment Management Strategies of the Catchment Management Agencies should not be 'in contradiction with' the National Water Resource Strategy. Third, the National Water Act offers the option of Water User Associations. This is a voluntary institution for local water management, but requires race and gender representation. The existing white Irrigation Boards were to convert to such transformative Water User Association. The WUA would also enable smallholders in former homeland irrigation schemes to finally formally organize.

Thus, the constitutional rights to 'sufficient' water and a clean environment and to non-discrimination along gender and race lines, and the constitutional imperative to redress inequities of the past, were operationalized in the highest-level policies and legal frameworks in the water sector. While these frameworks are widely seen as exemplary and replicated accordingly, the implementation efforts show that there are still leaks in this interpretation of women's constitutional rights in the application in policies, legal frameworks and regulations. Moreover, the same holds for their implementation in the second leg of the long route to accountability and in the short route to accountability. Before that analysis, we note perhaps the most tangible change: the composition of the DWS.

5.3 The changing composition of DWS

Within DWS, political power and affirmative action for race and gender equality in staffing had led by 2005 to a considerably more mixed staff than the almost exclusively white male composition just a decade earlier, as shown in Table 2. Since 1994, there have been two male ministers of water, and four female ministers. The Deputy Ministers were always women. However, staff turn-over and vacancy rates across all levels have been consistently high, affecting the department's performance.

Many of the former staff retired or they joined consultancy firms and kept providing their services to DWS in this way, accelerating the pre-

1994 emergence of corporate private sector companies in which much of the technical expertise is concentrated. These South African companies increasingly merge with the international corporate water business. DWS often outsources service provision to these private companies and firms, and rarely to community-based organizations, NGOs, or faith-based groups.

While demographic race- and gender- representation in middle-class jobs is a legitimate goal on its own, there is obviously no simple direct relationship between such representation in government or the corporate sector on the one hand and structural inequalities and public service delivery performance on the other. We now turn to the latter, first for the constitutional right to water in the widely accepted, but narrow sense of domestic uses and sanitation. After that we explore broader aspects of rights-based water development and management.

6. IMPLEMENTING THE CONSTITUTIONAL RIGHT TO WATER FOR DOMESTIC USES

6.1 Weaknesses in implementation

From 1994 onwards, the DWS and the Department of Co-operative Governance and Traditional Affairs (CoGTA) have made considerable efforts to address the backlog in access to water for domestic uses. By 1994, 15 million people, or 59%, had no access to improved drinking water sources. By 2013, 85.1% have access to water that is of a level acceptable to the Reconstruction and Development Programme (as set 20 years ago, at 200 m distance); 5.1% have access to water below those standards. And 9.8%, so 1,458,000 households, have no access to water supply. However, water access is worse in poor areas: for example, in Limpopo Province, only 68.1% of the population has access of acceptable standards, 9.4% has access to water of unacceptable standards, and a high proportion of 22.4% has no access at all (Statistics South Africa, 2013).

The outcome-oriented definitions of the WHO/UNICEF for the Millennium Development Goals, South Africa indicate a similar but unevenly distributed progress. By 2011, the proportion of the urban population using an enhanced drinking water source improved from 98% in 1994 to 99% in 2012. However, the rural population with access to improved water supplies for drinking, which was only 63% in 1994, increased to 88% in 2012.⁴¹

41 United Nations Statistics Division. Millennium Development Goals Indicators. <http://mdgs.un.org/unsd/mdg/Data.aspx> .

TABLE 2. RACE AND GENDER COMPOSITION OF THE DEPARTMENT OF WATER AFFAIRS AND FORESTRY BY 2005

Race	Gender	%					Total		Total population in South Africa in 1996
		Political office bearer (Minister)	Top management	Professional qualified/specialist	Skilled technical workers	Lower level/production	Number	%	
Black*	Female	100.0	8.0	17.4	19.8	31.1	4,782	29.3	
	Male	0.0	27.2	34.5	46.4	66.3	10,250	62.8	
	Total	100.0	35.2	51.9	66.2	97.4	15,032	92.1	87.0
White	Female	0.0	4.8	9.8	12.0	1.5	457	2.8	
	Male	0.0	60.0	38.3	21.8	1.1	843	5.2	
	Total	1.0	64.8	48.1	33.8	2.6	1,300	8.0	13.0
All	Female	100.0	12.8	27.2	31.8	32.6	5,239	32.0	52.0
	Male	0.0	87.2	72.8	68.2	67.4	11,093	68.0	48.0
	Total	100.0	100.0	100.0	100.0	100.0	16,332	100.0	100.0

*Black includes African, Coloured, and Indian

Source: Prepared with information from DWAF June 2005 (Garduño and Hinsch, 2005)

However, as exposed by the South African Human Rights Commission, NGOs, and service delivery protesters, in the rush of government to tender and issue contracts to private service providers for new infrastructure in the second leg of the long route to accountability, water service delivery became 'a commodity instead of a human right' (SAHRC, 2014). Many municipal authorities, let alone users, had little choice in deciding about the technology. This was the domain of engineering firms who were more familiar with water provision to the middle class. In this highly technical domain, budgets often lack transparency, which can often lead to money leaking away from providing more water to those who lacked it. Moreover, municipal politicians could dominate appointment and procurement procedures. As a result, breakdowns were frequent and it often took months for repairs to be made. In addition to the bureaucracy, there was a serious lack of technicians at municipal level with the necessary skills. DWS's recruitment of Cuban engineers in 2015 challenged the relatively expensive solutions advanced by the technical fraternity. The latter fiercely protested. The Department of Water and Sanitation also took the initiative to train 15,000 artisans to repair leaking taps and other plumbing issues in their local communities.⁴²

These problems have been most acute in the former homelands, where the apartheid service provision structures, which were based on the tribal authorities who were allies with the apartheid government, were dismantled and replaced by an entirely new local government. This frequently led to a deterioration in service provision. For the poorest municipalities without cross-subsidizing partners, water services are primarily seen, like electricity provision, as a means of generating municipal revenue rather than meeting the human rights to water. To allocate monies to construct water infrastructure (which is expensive) is not their priority. Staff from DWS were supposed to move to local government, but the latter was often reluctant to make the necessary changes, prioritizing their budgets over other needs.

Many new water services appeared unaffordable, reinforcing the trend that poor households pay even more for a unit of water than the non-poor. This contributed to a large number of disconnections in areas that are served by very poor municipalities, and many women and girls have reverted to unimproved and often distant sources. The impacts of the Free Basic Water policy have been limited. Many rural and township dwellers

42 <http://www.gov.za/president-jacob-zuma-state-nation-address-2015>
President Jacob Zuma: State of The Nation Address, 12 February 2015.

typically collect water from communal taps, which is generally free, as Free Basic Water, but the volumes that can be carried restrict access. The Human Rights Commission further exposed how the Free Basic Water policy had excluded the large numbers of farm dwellers, wage workers and labour tenants on the white farms or elsewhere in rural areas of the former white South Africa. They proposed that the policy should be changed to include them (SAHRC, 2014).

Last, but not least, interactions between citizens and service providers in the short route to accountability have been weak. Public protests became a major way for citizens to make their voices heard. Communities are supposed to be consulted through the Integrated Development Plans, and also sign off on contracts. Such consultation is mostly absent, with only few exceptions. These problems are compounded by vandalism wherever expensive security guards are unaffordable. Yet SAHRC notes that communities visited 'were adamant that they have solutions to many of the problems facing local government, if only they were engaged at a more meaningful level' (SAHRC 2014).

6.2 The Mazibuko Litigation case: Weaknesses in service delivery policies

The litigation case of Lindiwe Mazibuko and other residents of Phiri, Soweto, against the City of Johannesburg in 2007 invoked constitutional and international human rights and documented narrow policy interpretations and service provision⁴³. The case addressed the interpretation of the constitutional right to access to sufficient water and the Free Basic Water Policy based on that interpretation. They challenged the installation of pre-paid water meters as being a violation of the right to water. They also wanted the monthly free water allocation increased from 25 to 50 lpcd and progressively thereafter. This, they argued, was a valid interpretation of the Constitution's Section 27 on the right to 'sufficient' water. They invoked the notion of the 'core minimum', as espoused by United Nations Committee on Economic, Social and Cultural Rights, which requires states to fulfil the minimum requirements of each right regardless of resources.⁴⁴ Further, they cited the World Health Organization's recommendations on service levels for domestic uses. These, and other global practices, indicate that 50-100 litres of water per person

43 *Lindiwe Mazibuko & Others v City of Johannesburg & Others*, Case CCT 39/09, [2009] ZACC 28.

44 General Comment No 3 (1990) 'The nature of State Parties' obligations' (Art 2, para. 1, of the Covenant, UN Doc E/1991/23)).

per day are necessary to meet all basic human needs; 20 litres per day is the absolute minimum (Howard and Bartram, 2003; Gleick, 1996).

Initially, their claim appeared successful: in 2008, the South African High Court declared that the prepaid meters, which had been installed, were unconstitutional. It ordered the City of Johannesburg to increase the quantity of free basic water to 42 litres per person per day, with the option of having a regular water meter installed. However, the City of Johannesburg appealed against this ruling to the Constitutional Court. To the unpleasant surprise of many, the Constitutional Court refused to determine an amount that would constitute sufficient water in terms of Section 27. Instead, the Constitutional Court maintained the reasonableness approach, which leaves space for government to seek various options in fulfilling the constitutional rights without defining the content of the rights or attributing any positive obligations to the State. As argued, legislative and other measures should be reasonable in order to progressively – rather than immediately – achieve the right of access to sufficient water, given the available resources. It would be difficult to determine a ‘core’, as rights vary considerably and needs are diverse. The reasonableness argument allows for consideration of context and time, while a quantified content could be rigid and counter-productive. The Constitutional Court also found it inappropriate for a court to determine precisely what the achievement of any particular social and economic right entails, or what steps government should take to ensure the progressive realisation of such a right. As they argued: ‘This is a matter, in the first place, for the legislature and executive, the institutions of government best placed to investigate social conditions in the light of available budgets and to determine what targets are achievable in relation to social and economic rights.’ The court claimed that it was assured of a ‘progressive realisation’ of policies by the City of Johannesburg because the latter regularly reviewed and revised its policies towards the realization of the social and economic rights.

In its critique of this narrow interpretation of the role of the Constitutional Court, the South African Human Rights Commission regretted the court’s failure to determine the content of individual rights and obligations, in the form of a ‘core minimum’ of standards to measure compliance. According to the commission (SAHRC, 2009),

... failing to give content to economic and social rights ignores the explicit prioritisation of socio-economic interests abundantly evident from a purposive reading of the constitutional text. The claim that

resources are lacking only reinforces the continuing disproportionate favours to privileged groups at the expense of disadvantaged groups. The government's first priority should be to ensure that vulnerable and disadvantaged groups have access to at least a basic level of socio-economic rights, for example, shelter, primary health care, basic education and nutrition. The apparent attitude of the state that business will continue as usual until rights are contested (either through protest or litigation), is not a sustainable pathway to development and to strengthening a constitutional democracy.

In sum, while for many access to water for domestic uses did improve, for others it deteriorated. Major challenges remain in the operationalization of the rights into policies and in their implementation. After 20 years of democracy, the service level committed is still the barest minimum at 25 lpcd within 200 metres distance, while the middle class and elite continue to enjoy world-class water services. Even this minimum interpretation of constitutional rights has not yet been realized. Moreover, beyond this minimum, services are often unaffordable. The corporate water business is biased towards the expensive technologies of the minority middle class. For these profit-seeking private service providers, infrastructure construction and water services are their commodity. Local government, as the formal owner responsible for post-construction problems, still lacks engineering capacity and requires cost-recovery to support many other pressing needs. Through protests, citizens continue to attempt to make local governments specifically and the national government more generally, accountable for providing water

7. IMPLEMENTING CONSTITUTIONAL RIGHTS RELATED TO WATER FOR PRODUCTIVE USES

7.1 Widening structural inequalities

The gap between constitutional rights and post-1994 management of the large bulk of water resources for productive use is considerably wider than that for domestic usage. Despite the constitutional imperative to redress inequities from the past into a Water Allocation Reform (WAR) Strategy (DWA, 2008) with the goal of having 60% of allocable water in black hands by 2024, the reality has fallen far short. Of the 4,284 water use licenses for new water uptake issued from 1998 to 2012, only 1,518 were for historically disadvantaged individuals (HDIs) (and of these, 76% were for small-scale afforestation). The total volume allocated to HDIs was

even lower: just 1.6% of total water allocated through all licenses (DWA, 2013). The percentage of women licence holders is probably less than 10% (Anderson, personal communication 2013). The new licenses issued perpetuate the gross inequalities but, under growing competition for water resources, has meant the loss of what should have been access to water resources at cost-effective sites for black South Africans. In many areas, any allocation of water to HDIs now implies a re-allocation from the 'haves' to the 'have-nots'. Such distributive reform is considerably more complex because current water use title holders are bound to claim their entitlements and to try to negotiate for compensation, even though this is not always required according to the National Water Act (1998).⁴⁵ This contrasts sharply with the land reform, where re-allocation has always been at the core of the reform.

The above raises three questions. First, have constitutional rights been ignored in the translation of the constitution into sectoral policies and administrative bureaucracies, and if so, how (see 7.2)? Second, which weaknesses have existed in the service provision in the second leg of the long route to accountability (see 7.3)? And, third, which weaknesses have existed in the short route to accountability (see 7.4)?

7.2 A Constitutional right to water for productive uses?

The constitutional right to 'sufficient' water has only been operationalized in terms of water for domestic uses, both in regulations and in implementation by the State and by civil society. No efforts have been undertaken to further define what the constitutional right to 'sufficient' water implies for public service delivery for productive uses. The envisaged increase of 500,000 ha irrigated area in the National Development Plan (2010)⁴⁶ does not refer to the Constitution or to any implicit or explicit priority to targeting HDIs, let alone the poor. Yet access to water for productive uses is often an irreplaceable asset for people with diversified, agriculture-based livelihoods to meet their constitutional right to food through improved food production, income sustainability and resilience against seasonal weather and climate variability. Moreover, for people themselves,

45 The WAR Strategy of 2008 is not available on the DWS website. In the mainstream discourse on water resource management, the issue of redistributive water re-allocation is silenced behind a strong message, which seems to blame nature, that 'no more water is available'.

46 See footnote 27.

productive uses have a high priority, well over ‘luxury’ domestic uses⁴⁷. Global research has shown that even with very low service levels of 20 lpcd, three quarters of the rural population directly uses water for productive uses as well (Hall et al., 2013).

One of the reasons for water services’ contribution to meeting the right to food not having received attention, is the compartmentalized nature of administrative departments (known as silos) and the lack of co-ordination between them. While the need for collaboration for realizing the right to food has gradually been acknowledged at the highest policy levels, the role of water has been ignored. Little attention was paid to the finding in a 2004 policy review on urban food security that ‘the second almost universal resource constraint is access to sufficient water, after access to sufficient land with secure tenure’. The review further noted (Human Sciences Research Council, 2004):

Institutional shortcomings at a local level are mirrored at a national level, where the span of Departments involved – Agriculture, Provincial and Local Government, Environment and Tourism, Health, Housing and Water Affairs and Forestry, to name only the most obvious ones – has made policy co-ordination a substantial challenge at national level, with none having prioritised it highly enough to want to drive a joint initiative.

An Integrated Food Security Strategy (IFSS) was intended to integrate the different food security programmes. However, during his visit in 2011, the Special Rapporteur on the Human Right to Food noted the piecemeal, scattered implementation of the constitutional right to food. This criticism triggered government, led by the Department of Agriculture, Forestry and Fisheries and the Department of Social Development, to compile the National Integrated Food and Nutrition Security Policy (IFNSP) of 2013.⁴⁸ Another initiative, the Fetsa Tlala Integrated Food Production Initiative, calls for one home – one garden.⁴⁹ However, the right to water to enable more productive and year-round cultivation, livestock keeping and other activities remains unaddressed. The right to

47 For example, wasting water, watering lawns, swimming pools, golf courses, hot tubs, etc.

48 National policy on food and nutrition security (2013). Department of Agriculture, Forestry and Fisheries and Department of Social Development. <http://www.nda.agric.za/docs/media/NATIONAL%20POLICYon%20food%20and%20nutrition%20security.pdf>

49 <http://www.thepresidency.gov.za/pebble.asp?relid=16329&t=79>

water should be everywhere but because of the silo approach it is not claimed by the relevant departments..

Similarly, in the design of the major poverty-alleviation programmes that include cash transfers, employment generation and food hand-outs, the contribution of water services for productive uses has never been seen as an irreplaceable component, which could complement and strengthen, if not replace, such programmes. Producing one's own food is more dignified than waiting for cash transfers and certainly better for the fiscus.

The leaks would be fixed if the Constitution's rights to water and food were manifested and transformed into a core minimum of water services for productive uses in addition to domestic uses, and by appointing a clear duty bearer for co-ordinated implementation. This right could be implemented through various poverty alleviation programmes. Such a core minimum would operationalize the constitutional right 'to access to sufficient water', which in turn enables the indivisible rights to food, an adequate standard of living, and dignity. An objection could be that productive activities and related water needs are more diverse than domestic water uses, because productive uses depend on livelihood strategies. However, there is also diversity in water for domestic uses: some people might be unwilling or unable to take up a full allocation of rights to water services, or they may be very difficult and costly to reach. Both nationally and internationally, local diversity and the challenge of reaching the unserved have not prevented duty bearers from adopting the principle of a core minimum for domestic uses for everybody. So the same would hold for productive uses. An even more important argument is that a definition of 'core minimum' at service levels for *both* domestic and productive water uses reflects poor people's own priorities.,

7.3 Weaknesses in implementation

7.3.1 Water for livelihoods

There have been some government efforts to improve access to water for basic productive uses for, in principle, all poor women and men. DWS, the Department of Agriculture, Forestry and Fisheries, and more recently, the Department of Rural Development and Land Reform engaged in promoting rainwater harvesting at homesteads. They mainly target poor women in former homelands or townships, though again often overlooking farm workers and tenants living on the large-scale farms.

For example, in 2004, DWS established a policy for 'resource-poor

farmers'.⁵⁰ This small fund was mainly used for rainwater harvesting innovation for food security and, to a lesser extent, to subsidize irrigation fees for five years (recently extended to ten years). However, the initiative remained very small. Some officials repeatedly asked 'whether this falls under DWS's mandate', emphasizing a gradual shift of DWS towards a regulatory mandate for all citizens (while continuing its major role in bulk water services to the middle-class, as below), instead of seeking collaboration with other departments engaging in similar activities and searching for complementarities. The argument that this is 'not our mandate' was seen by some as sufficient grounds to stop the activity. However, the water-harvesting team continued, and reached out to include other technologies, such as mechanized pumps. The initiative has recently been revived into broader support for 'water-based livelihoods', recognizing that water is needed for the range of domestic and non-irrigation productive water uses. Such a flexible fund for multiple uses overcomes the sectoral divides and, in principle, enables decentralized and community-driven water development. However, resources remain very limited. New local-level partnerships need to be forged, with service providers who can facilitate inclusive community-driven development.

7.3.2 Weakening water services for irrigation

In the apartheid era, a minority of HDIs had access to smallholder irrigation schemes in the former homelands. Tribal authorities and development corporations managed these schemes, delivering mediocre but integrated services. However, with the dismantling of these corporations and the partial erosion of chiefs' roles in service delivery, schemes partly or fully collapsed. Unlike the expansion of water services for domestic uses, residents of the former homelands, especially women, even lost access to water and land. In the three provinces with 93% of the smallholder irrigation schemes (Limpopo, KwaZulu Natal and Eastern Cape), only 65% of their schemes are still operated, but only just over half (55%) of the pre-1994 areas of the irrigation schemes are still irrigated (Denison and Manona, 2006: 11).⁵¹

50 DWAF 2004 Policy on financial assistance to resource-poor irrigation farmers in terms of sections 61 and 62 of the National Water Act, 1998. <https://www.dwa.gov.za/Documents/Policies/rpf/RPFAssistanceSep04.pdf>

51 Chapter 16 analyses this collapse and the subsequent government programme for revitalization, which largely failed.

7.3.3 Water entitlements leaking away in land reform

Another example of the lack of co-ordination and leadership relates to the continued lack of vision in terms of agrarian reform. Different departments continue working in isolation and lack of co-ordination. In DWS' Water Allocation Reform, a significant part of the water redistribution to the have-nots was expected to be transferred with redistributed land. In some cases, land owners whose land was under claim sold their water entitlements, and thus land claimants received land, but without water. In other cases, the new land owners did not have the resources or skills to maintain the irrigation infrastructure and insufficient assistance was provided by the responsible government departments and/or the private sector.

7.3.4 Lack of appropriate technologies and engineering expertise

As a result of the apartheid legacy of ever-more sophisticated and large-scale infrastructure, South Africa lacks the appropriate and affordable technologies, supply chains, and engineering expertise that some other African and many Asian countries have. Moreover, in spite of the general interest in indigenous knowledge, there is still little research on the water technologies and infrastructure that communities already use for self-supply, which could be further improved (Denison and Wotshela, 2009). Informally constructed weirs or modern groundwater pumps, which are profoundly changing the rural landscape in other low- and middle-income countries, receive only little attention.

Technical knowledge remains concentrated in the corporate sector, which looks for profits and economies of scale, for well-developed and marketable productive activities by well-paying clients. For them, there is no market incentive to look for more cost-effective technologies for small-scale uses on one to two hectare plots that characterise the former homelands.

To conclude, the large majority of rural and peri-urban black South Africans still lack access to water for both domestic and productive uses, while a few have minimal access, and others have *lost* access, jeopardizing the realization of the individual's right to food and an adequate standard of living. Without clear mechanisms to realize these indivisible constitutional rights and without appointed duty bearers and effective co-ordination mechanisms, civil servants can keep saying that the provision of adequate water is somebody else's job.

This paralysis is strengthened by the interests of the corporate sector,

the middle-class and the elite to safeguard and expand their own water supplies, widening structural inequalities. Poor women's and men's needs to direct access to water for basic productive requirements keep being ignored, even though the quantities of water are small, if not negligible. The pre-1994 legacy of privilege appeared difficult to transform, as follows.

7.4 Lack of transformation

Infrastructure construction, operation and maintenance constitute over three quarters of the DWS budget. Out of DWS's total 2014 budget of USD 1.25 billion, allocation for the first-tier bulk water resources infrastructure management is 23%. The largest proportion of the budget, 62%, is largely used for regional infrastructural development.⁵² This budget is mainly publicly funded for the purpose of new investments and the operation and maintenance of the bulk infrastructure, which serves the minority economy in the demography of water wealth. Part of the new investments was to meet the constitutional right to water for domestic uses; part was invested in new coal-fired power plants. Other investments were for municipal infrastructure, mining and industries of the formalized industrialized economy.

By 2008, the combined inherited public infrastructure and the new public infrastructure had a total replacement value of at least USD20 billion (DWA, 2011). With allegedly limited maintenance over the last several decades, the costs for outstanding maintenance of the old infrastructure have reached an estimated USD 1.4 billion (DWA, 2013). In 2014 DWS reserved at least 7% of the capital budget for maintenance. Infrastructure construction, maintenance and service delivery are mostly outsourced to the private sector, which is increasingly comprised of international engineering firms. These priorities imply the increasing commodification of water in profit-making businesses.

After 1994, DWS pursued various policies and strategies to transform these continued public subsidies to those who can pay. Above all, DWS tried to reduce these subsidies by finally applying and enforcing the recommendation of the 1970s Commission of the 'user pay' principle for those who can pay. DWS continued the separate Trading Entity for the sale of water from its bulk infrastructure to second-tier service providers.

52 Address by the Minister of Water and Sanitation, Ms Nomvula Mokonyane, on the occasion of budget vote number 38. New Assembly Chamber, Parliament, Cape Town.

These bulk water sales bring in over USD200 million annually.⁵³ However, in 2012, only 43% of amounts due were collected. This was partly due to water wastage, partly to weak collection logistics and partly to an unwillingness to pay.

DWS again tried to implement the 1970 commission's recommendation to start charging the real costs of water services to large-scale agriculture.⁵⁴ Until now, water provision to large-scale agriculture has been subsidized by about USD30 million per year. In the debate around the new raw water pricing strategy, some participants proposed that DWS stop receiving this amount from the Treasury, and that, instead, the Treasury channel the subsidy to the Department of Agriculture, Forestry and Fisheries so that they can themselves decide whether to continue allocating water subsidies to large-scale farmers, or to use it otherwise. However, during the public consultation process of the draft, the Department of Agriculture realized that it should first have a policy for such transfer. Moreover, the large-scale agricultural sector was, as might be expected, unhappy. It is unclear whether and if so, when, this measure will be adopted. Thus, the by now more racially mixed middle class in the urbanizing minority economy and the large-scale farmers remain the main beneficiaries of past infrastructure investments and the Treasury's continued subsidies for their water services.

In addition to tightening cost-recovery, DWS also promotes 'off-budget' capital-raising for new infrastructure or major rehabilitation for middle-class or commercial and industrial users who can repay the loan through tariffs. Commercial capital markets are tapped; the State only provides guarantees. Thus, the Trans-Caledon Tunnel Authority, established in the 1980s, obtained a loan of USD1.4 billion at 2000 prices for the Lesotho Highlands Water Project. This model is being replicated for other new construction.

Cost recovery from these users who can pay for what is termed commercial infrastructure (as opposed to social infrastructure) not only includes payment of the full costs of the infrastructure – capital, operation and maintenance – but also anticipates replacement and investments in future infrastructure (except for the irrigation sector). In internal discus-

53 Buyelwa Sonjica, 2005. Statement by Minister of Water Affairs and Forestry, Ms Buyelwa Sonjica on the approval for the establishment of a National Water Resource Infrastructure Agency. <http://www.polity.org.za/article/sonjica-establishment-of-national-water-resource-infrastructure-agency-03082005-2005-08-03>

54 Ibid.

sions regarding the revision and updating of the raw water pricing strategy, one option considered was the introduction of a charge on historically State-funded schemes to contribute to the costs of future infrastructure to serve those who were excluded from the hydraulic mission of apartheid South Africa, as a 'Future Infrastructure Build Charge'. This charge would compensate for the highly skewed benefits of the past and the fact that the most favourable sites for water development have already been occupied, so that only the more expensive sites are left.

The capital costs of social infrastructure, on the other hand, or that portion of infrastructure providing water for basic human needs or for the economic development of poor communities, is funded by the Treasury. Infrastructure often serves both social and commercial purposes. DWS's recent policy review, for example, responded to the geography of water wealth and poverty, in which bulk and medium-scale infrastructure was built over large areas. Pipes to mines or distant (formerly white) towns simply bypassed communities that also need water. Communities were forbidden to take water for their cattle from the long canals that ran through their communities to serve large-scale farmers. DWS now promotes a multiple-use approach to ensure that many more people, especially those adjacent to infrastructure, benefit from it (DWS, 2014)

Infrastructural costs (dams, pipes, pumps, labor, machinery, etc.) remain with government. The government bears the risks of meeting the social and commercial goals for these infrastructural investments and also the risks of not recapturing the costs of construction and maintenance. An example of such risk is the De Hoop Dam in Limpopo Province, which was designed both for surrounding commercial (paying) mines and for (subsidized) social municipal supplies to the Nebo Plateau in the neighbouring former homeland. However, after construction, mines expanded less rapidly than anticipated. Moreover, the costs of the dam, and hence the price of water, had become so high that the mines started opting out and developing cheaper self-supply. Without means to force them to buy water from the dam, DWS now has to bear extremely high costs of providing water to the adjacent Nebo Plateau in the former homeland. It is unclear as yet how that will affect the price for the customers in the former homelands.

Defining 'commercial' and 'social' goals is not straightforward. Strong claims are often made regarding the indirect benefits of infrastructure for HDIs in trickle down 'employment generation' and 'economic growth'. However, those claims are rarely concretized into clear goals, indicators

and factual monitoring. Without indicating *which* economy, the investments in infrastructure serve, 'the economy' can remain as deceptive as in the apartheid era. More importantly, the benefits of these investments are never compared in advance with those of other possible investments in programmes that will realize the constitutional right to sufficient water for domestic and productive uses and other constitutional rights.

The new investments in infrastructure continue to underpin the highly skewed distribution of water resources. The naturally available water resources and most cost-effective infrastructure sites are being rapidly depleted by the corporate sector, middle-class, and elite rushing to tap into these resources, with continued public subsidization in name of 'the' economy. While these elites take the bulk of water, the majority receives some trickles. This continued maldistribution of water defeats the constitutional commitment to redress past inequities.

Moreover, blanket regulation that targets 'everybody' not only risks blaming the victim but also diverts scarce public resources from effective regulation of the few high-impact users that over-use water resources or cause pollution such as acid mine drainage or, as now envisaged, large-scale shale gas fracking. Poor communities suffer the most from this pollution, sometimes even losing their homes. The South African Human Rights Commission and civil society organizations, such as the Legal Resources Centre, and even some conservative white farmers are increasingly holding DWS to account on water quality issues.⁵⁵

7.5 Conclusion

In sum, in the government's management of water for productive uses since the 1990s, women's constitutional rights have leaked away. The siloed administration has continued to ignore the constitutional right to access sufficient water for both domestic and productive use. Moving to the second leg of the long route to accountability, water service delivery for irrigation and other agricultural water management for the poor remains piecemeal, or their access has deteriorated. The constitutional commitment to redress inequities from the past by transforming the privileges of the 'haves' has been operationalized in goals of Water Allocation Reform and pricing strategy. However, implementation is still weak, perpetuating the sense of entitlement of the now more racially mixed corporate sector, middle-class, and elite. The constitutional right to a clean environment

⁵⁵ Chapter 15 on Priority General Authorizations discusses the need to differentiate among water users in the licensing systems for the allocation of volumes of water in order to meet constitutional rights.

remains unmet, causing mainly the poor to suffer, while regulatory efforts are insufficiently targeted. Can relationships in the short route to accountability contribute to the participatory democracy envisaged in the Constitution, and hold government to account?

8. LEAKS IN THE SHORT ROUTE TO ACCOUNTABILITY

8.1 The disconnect between water management institutions and local government

The Constitution, the Water Services Act, and the National Water Act enshrine the notion of participatory democracy by requiring public participation. The Integrated Development Plans are to enable municipalities to offer an effective citizens' voice and decentralized planning for fund allocation and 'co-production of the service'. Line agencies with expertise and funding for improved cropping, livestock, fisheries, local economic development, soil conservation, waste management, and other environmental care or disaster management are supposed to be co-ordinated by local government. As we saw in our discussion of domestic water uses, active citizen participation still needs to be realized. Unlike the well-organized corporate lobbies and a vocal middle class, other citizens have comparatively weak voices, especially rural ones, regarding productive water uses. DWS and other line agencies still often largely bypass local government, jeopardizing their co-ordinating role.

This is partly due to the DWS's national mandate, by which they are required to manage national and regional bulk water supplies. In fact, DWS has made considerable efforts towards implementing public participation for water resource management. Extensive nation-wide consultations on the first National Water Resource Strategy were conducted from 2002-04. Whereas 57% of the participants were whites, only 15% of all whites were women. Among the 43% of blacks who participated, 25% were women (Schreiner and Van Koppen, 2003). Public consultations, although less extensive, were also held for the second National Water Resources Strategy launched in 2013, for gazetted draft regulations, and for the Policy Review of 2013, which will lead to the combination of the Water Services Act and National Water Act within one document. No data on gender and race representation are available for these later processes

Moreover, Catchment Management Agencies (CMAs) were widely seen as the flagships of public participation and decentralization. Howev-

er, their establishment has been slow. There was some internal resistance related to job security and labour laws. Further, concerns were raised about costs and the appropriateness of delegating functions to CMAs. By 2012, only two CMAs were functional. The then minister ended the paralysis by deciding to establish nine CMAs linked to the nine regional offices, instead of the 19 previously envisaged, with tight timeframes for their establishment.

The composition of the two CMAs redresses inequities of the past. In the first CMA, the Inkomati, 34 of the 37 employees are HDIs, and 40% of all staff are female.⁵⁶ In the Breede Overberg CMA, 23 of the 26 staff are HDIs; 62% of all staff are female.⁵⁷ However, nine CMAs are unable to serve as an effective short route to accountability for the millions of rural and peri-urban small-scale water users in the Water Management Area. Those joining the CMA and Forums are a tiny minority, who, moreover, have no structure whatsoever to reach any constituency.

Currently, the only way to move farther down the chain is through Water User Associations (WUAs). They cover an even smaller minority. Their primary aim is water management in their own schemes. The demographic composition of new WUAs that were former Irrigation Boards continues to be largely dominated by white men. Only 15% of those WUAs have more than 30% female representation. In most of the transformed Irrigation Boards, the percentage of women is less than 10% (Mjoli and Njiro, 2009). While most Irrigation Boards have now changed into a Water User Associations, this change has hardly been transformative. Faysse et al (2004) found that Irrigation Boards only voluntarily initiated such transformation, and then only if black water users lived upstream or had to pay fees. Faysse (2004) also found in seven of the transformed Irrigation Boards that five have no unmarried women on their boards. In the remaining two, there is only 10% and 12% female representation. Issues such as women's participation, farm workers' tenure and access to water, and spouses' joint titling of membership have not been raised. Indeed, in 2013, the dismal performance in transformation led the minister to propose the de-establishment of WUAs altogether, an issue heavily debated thereafter.

56 Inkomati Catchment Management Agency. Annual Report 2011-2012. http://www.inkomaticma.co.za/images/ANNUAL_REPORT11-12-printers_V2.pdf

57 Breede Overberg Catchment Management Agency Annual Report 2013. <http://breedegouritzcma.co.za/docs/2013/bocma-annual-report-2013.pdf>

This leaves a major disconnect between DWS, moving down from central to catchment level, and the majority of HDI water users in former homelands and townships or on large-scale farms, for whom local government is the main channel for representation. Yet local government is currently just one of the members of the CMA Boards. An exclusive focus on CMAs, catchment forums and WUAs as the main short routes to accountability would exclude this majority. Even with administrative boundaries instead of catchment boundaries or boundaries of large-scale infrastructure, local and district government can, and must, address and co-ordinate higher-level water issues, up to the much higher level of CMAs and DWS Head Office.

The effectiveness of local and district government in dealing with higher level water issues became clear when DWS organized Provincial Water Summits in 2005, which were then synthesized in a National Water Summit in 2006. These summits brought together rich and relevant information on integrated water development and management including information and perspectives from the many small-scale users who are *not* organized in a WUA. Key problems were identified (for example, lack of technical expertise). The National Water Resource Strategy Second edition (2013) promotes a new approach that seeks to fill the gap, as discussed in the next section.

8.2 Community-driven water services

The potential appropriateness of local government planning, not only for domestic uses but also for productive uses through Integrated Development Plans, especially in poor areas, has been pilot-tested on the ground. By the mid-2000s, an NGO called Association for Water and Rural Development (AWARD) in the communal are of Bushbuckridge in the Province of Mpulumanga had identified communities' water knowledge: people prefer multi-purpose infrastructure in order to meet multiple water needs, and they use and re-use multiple water sources, whether infrastructure was designed for multiple uses or not. Water supplies designed for domestic uses at and around homesteads are invariably also used for gardening, cropping, livestock and small-scale enterprise. Perez de Mendiguren Castresana (2004) and the Water Research Commission (Naidoo et al., 2009) quantified the factual productive uses of water supply schemes designed for single use. They found considerable livelihood benefits generated. Perez de Mendiguren Castresana's study also found that these productive uses and livelihood benefits were higher if the water

provision was more reliable. Moreover, homestead-based productive water uses appeared especially important for women, child-headed households, the landless, sick and disabled, for whom the homestead is often the only site of production.

Based on these findings, AWARD decided to plan for such multiple uses, in collaboration with local government and relevant line agencies. It appeared very possible to link the outcomes of the planning phase to the Integrated Development Plans. Various stakeholder groups participated, including traditional leaders as resource persons for their knowledge on past services and, as far as it still exists, for their capacity to mobilize social collective action. The communities' priorities for the next incremental improvements in the water situation in their villages were based on a thorough diagnosis of all existing water resources and technologies, and their multiple uses. This diagnosis included the communities' own investments in infrastructure for self-supply. Based on this diagnosis and insight into diverse technical options for improvements, the communities in Bushbuckridge identified and prioritized new actions. These were included in the municipality's Integrated Development Plan. However, the pilot test ended there. No funding was made available for the implementation of the priorities, because all funding was already earmarked for the goals of top-down determined programmes and political superiors, to which the local level officials were upwardly accountable (Maluleke et al., 2005).

The key lesson of this and similar efforts is that top-down financing streams need to be flexible so that they can be linked to the outcomes of participatory planning processes, instead of being supply-driven budgets for pre-fixed technologies for single uses (Van Koppen et al., 2014). Global experience has also shown that co-production of services through participatory planning requires long-term action around five pillars. The first of these is the empowerment of people in the sense of an expansion of assets and capabilities of poor people to participate in, negotiate with, and hold accountable institutions that affect their lives. The other four pillars are empowerment of local government, re-alignment of central government, accountability downward, and capacity building (Binswanger-Mkhize et al., 2009).

9. CONCLUSION: FIXING THE LEAKS IN WOMEN'S CONSTITUTIONAL WATER-RELATED RIGHTS

9.1 Re-interpreting the Constitution: the right to access a core minimum of water for domestic and productive uses

This chapter examined various leaks at various levels in women's constitutional rights to water. How can they be fixed? In the process of interpreting the Constitution, the most important leak of the constitutional right to access to sufficient water and food is government's and service providers' focus on water services for domestic uses (and sanitation), to the exclusion of water services for small-scale productive uses that contribute to the realization of the right to food. Poor, rural and peri-urban women certainly need water for both uses. Moreover, in reality, women already prioritize productive purposes for even minimum supplies designed only for domestic uses, improving food security and income in their fragile diversified livelihoods. Yet, 20 years into democracy, the core minimum in the regulations of the Water Services Act and Free Basic Water policy is still limited to 25 lpcd, supposedly for domestic uses only. The promise by DWS since 2003 to support 'climbing the water ladder' has had hardly had any follow-up, except for some municipalities' initiatives to increase the levels – but again, supposedly, only for domestic uses.

This leak can be fixed by interpreting the indivisible constitutional rights to access to sufficient water and food through services for indivisible domestic *and* productive uses. Concretely, this means a core minimum of Free Basic Water services for all at 50 – 100 lpcd or higher, near or at homesteads. Out of these volumes, 5 lpcd has to be safe for drinking and cooking. There is no need, and it is often a waste, to spend considerable resources to provide all water supplies for domestic uses at highest quality drinking water. Obviously, where possible, service delivery should go beyond a core minimum, especially for emerging small-scale and medium-scale HDI farmers. While this requires a higher share in Treasury funding, the share of HDIs in total water volumes will still remain highly unequal. Even if the share was doubled, it would only change from 1.6 to 3.2%, far below the envisaged ideal that 60% of allocable water should be in black hands by 2024.

9.2 Implementation: strengthening accountability to poor women

For effective delivery of constitutional rights, the leaks in the accountability relationships in the decentralized planning cycle of water interven-

tions, as co-ordinated by local government, need to be fixed. This should start in the short route to accountability. Citizens should co-produce services through choice of providers and inclusive participatory planning according to their own priorities. The latter includes technology choice, including siting; support to self-supply; upfront clarification of obligations; and signing off on service delivery. It is very likely that communities will propose more cost-effective ways to meet their multiple needs, especially through multi-purpose infrastructure and by using and re-using multiple sources from the household level upward.

The current relationships of DWS with Co-operative Governance and Traditional Affairs around domestic water supplies need to be extended to include productive water uses in the Integrated Development Planning (IDP) processes. Collaboration around these plans should also be strengthened with the Department of Agriculture, Forestry and Fisheries, the Department of Rural Development and Land Reform, and other departments, but also with poverty alleviation programmes, such as the Community Work Programme and the River Health programme, which have hardly yet considered the importance of improved water services. Yet such improved access to sufficient water would significantly enhance the programme's overall performance in meeting indivisible constitutional rights. Widening strict mandates to meet other water needs often requires a slightly more expensive incremental investment but generates high incremental benefits. As water is relevant in many sectors, there cannot be just one mandated department. Local government's role is to co-ordinate, identify and tap such synergies. Starting with the IDPs also fixes the leak of the institutional disconnect between the many, scattered, poor, small-scale users in the geography of water poverty and the nine regional offices and high-level CMAs and the few localized WUAs.

The leaks in the second leg of the long route to accountability should be fixed by better enabling service providers to facilitate participatory planning with budgets earmarked for the outcomes of that planning. Monitoring should focus on the functionality of infrastructure, for example on the resulting water *uses* by class, race and gender, instead of budgets spent or infrastructure constructed. A water 'use' can then be further unpacked and reported in terms of water's and other factors' contribution to livelihood benefits. Better monitoring of outcomes of service delivery, both by communities and high-level managers and policy makers, should replace service provision as a profitable commodity.

Service providers should adjust their roles. First, more technical ef-

forts are needed from local to national levels for the development and dissemination of appropriate technologies and training of engineers in participatory planning. In developing these technologies, the rationale for multi-purpose dams at larger scales holds in the same way for technologies at community and even household scale in rural and peri-urban areas where people depend in many ways on water. Cost-effective and inclusive multi-purpose designed water technologies would be the rule, and single-use the exception.

Second, expertise is needed to turn water 'use' into benefits, for example through agronomic training, ensuring market access, hygiene education, or exposing the unequal division of domestic chores. Line departments and programmes need to better collaborate and offer that support to local government in an integrated demand-driven manner, rather than in the current form of top-down parallel projects, each with its own planning cycles and reporting requirements, and without any flexibility to adjust to local needs.

Last, but not least, both for new infrastructure projects and for higher level policy makers, this articulated community-driven demand for services should form the basis for comparison with other public investment options. When corporate sectors seek to graft social responsibility components on their interventions, they should prioritize communities' articulated preferences in order to access subsidies for 'social' infrastructure. Social impacts should be justified by rigorous *ex-ante* impact assessments of both the indirect and direct benefits for high numbers of specified, localized women and men rather than assumptions about trickle-down effects. When higher level policy makers design poverty alleviation programmes, for example cash transfers or employment generation, they should compare them with water programmes and look for synergies. In those areas where costs of water service delivery are exorbitant, communities themselves should decide how they want available sums of public funding to be spent.

9.3 Redressing inequities of the past

In spite of constitutional commitments, many of the past inequities in terms of access to water have continued and even widened. The corporate sector, the middle class, and engineering firms have continued to benefit from government's subsidization of bulk water infrastructure and water services delivery, even though they are supposed to use 'commercial' infrastructure. They rapidly claimed access to the last remaining uncommitted

water sources and affordable sites for development. This renders access to water for the deprived majority of black South Africans significantly more difficult.

Addressing historical and ongoing inequities requires the factual implementation and enforcement of full cost-recovery, and mobilization of revenue for future state investments – especially to pay for the ever-increasing price of infrastructure development, and the off-budget financing of new infrastructure. Indeed, a similar project is needed for all commercial infrastructure. This had been implemented in the transfer of what had been public irrigation management to private irrigation boards to free up public funding. In such wide-scale ‘commercial water management transfer’, well-paying clients will hold the corporate water service providers accountable, while the State will focus on regulation in the interests of all other citizens. With the increasing costs of infrastructure development, taxation of water over-uses and compensation for taking the most cost-effective sites in order to fund the new expensive infrastructure is also justifiable. Regulation should become a tool for redress by targeting high-impact users who over-use and pollute the most, instead of targeting the victims.

9.4 Lessons for Africa

Is South Africa an exception regarding the role of the State as duty bearer to meet women's indivisible constitutional rights? Or would the recommendations be equally valid for other low- and middle-income African countries that have ratified international human rights laws to non-discrimination on the basis of gender, race and class? Are there lessons to be learned in the light of the mushrooming foreign and national investments in land and water by the corporate sector and middle class, a process that creates more inequalities? One major difference is that such investors would already be mainly self-financing. Another difference is that other countries still have more undeveloped water resources.

Nevertheless, it is precisely in this earlier stage of water development that other governments can anticipate problems and ensure that the most profitable sites for infrastructure development are not increasingly taken away for free, a process that renders future investments more expensive, and accelerates the need for a distributive reform to achieve equity. These governments can timeously negotiate co-financing social infrastructure, taxing over-use, and ensuring broad-based benefits, while safeguarding water quality. Also, regulatory measures to reduce over-use

and pollution can be targeted. From the onset, committed governments can ensure a strong citizens' voice in the short route to accountability from the very beginning by recognizing water users' rights to co-produce access to water for domestic and productive purposes, including that provided through local government. At the same time, other African countries still have water resources available to improve access to water for both domestic and productive uses for the majority of their citizens in order to meet the indivisible rights to water and food and adequate standard of living. This would ensure rights-based water development from the outset, a constitutional commitment that South Africa still has failed to realize.

Chapter 15

Gender-Equality in Statutory Water Law: the Case of Priority General Authorizations in South Africa

Barbara van Koppen and Barbara Schreiner¹

1. INTRODUCTION

1.1 Overall theme: human rights risks associated with water permit systems

The aim of this chapter is to unravel the implications of the Convention on the Elimination of All forms of Discrimination against Women for statutory water law in Sub-Saharan Africa in general and South Africa in particular. These water laws, which allocate and regulate water resources, are licence (or permit) systems. Focusing on women (and men) small-scale water users, who typically encompass all poor water users, three current risks to gender-equality and other human or, for South Africa, constitutional rights, are identified:

- first, the reinforcement of the historical discrimination by which colonial powers captured ownership of water resources and undermined African customary water law;
- second, structural discrimination as a result of governments' lack of administrative capacity in licensing the large numbers of small-scale users, which reinforces the bias to only

1 The authors gratefully acknowledge the excellent comments on the draft by Stephen Hodgson, Stefano Burchi, Jacqueline Goldin, Marika van der Walt, the anonymous reviewer, and colleagues in the research project 'Gender, human rights and water governance in Southern and Eastern Africa: actors, norms and institution'. The responsibility for the contents remains ours.

register the ‘male household head’; and,

- third, discrimination of the smallest-scale users whose exemption from the obligation to apply for a licence relegates them to a second-class entitlement to water.

Based on South Africa’s constitutional rights to gender- and race-equality and non-discrimination, on the texts and experiences of implementing the National Water Act (1998) and on the pro-poor prioritization rules in the National Water Resource Strategy (2013), the authors propose a transformative legal tool of priority General Authorizations for black female and male small-scale users to meet constitutional obligations. The underpinning notion of justice is that every citizen should be entitled to equal access to at least the minimum quantities of water needed to progressively achieve rights to water, food, and non-discrimination, while the remaining water resources should be allocated to high-impact users through licences with strict conditions.

1.2 Water law from a human rights perspective

While debates on water and waste management from a human rights perspective are gaining momentum,² little attention has been paid as yet to gender equality,³ in particular in statutory water laws. Focusing on Sub-Saharan Africa in general and South Africa in particular, this chapter seeks to answer the question: ‘How are women’s human rights of non-discrimination and the rights to water, food and an adequate standard of living reflected, and how do gender, class and race intersect, in statutory water law?’ The dominant water law on the continent is the administrative system of licences (or permits, concessions, or water rights; all refer to the same system of the continental European civil law tradition⁴). Most Sub-Saharan African countries, including Burkina Faso, Kenya, Mozambique, Tanzania, Zambia and Zimbabwe revisited and strengthened the enforcement of the licence systems they had inherited from the colonial powers. The few countries, such as South Africa and Ghana that had no nationwide licence systems as yet, adopted this system in the 1990s as influenced by the global promotion of Integrated Water Resource Management.⁵

After independence, the colonial water laws remained rather dormant

2 Water Governance Facility (WGF) (2012).

3 Helling (2015).

4 Caponera (1992).

5 Van Koppen et al. (2014).

in most of Sub-Saharan Africa. Governments' focus was on water storage and infrastructure development for socio-economic growth. Overall, less than 6 per cent of water resources have been developed in Sub-Saharan Africa,⁶ so there is still considerable scope for water development to increase year-round water availability for all. However, the question of justice and human rights has come up forcefully in the recent surge in large-scale agriculture-based and other investments, dubbed as a 'grabbing' of land *and* water.⁷ These grabs are both by foreigners and national urban elites.⁸ In women's negotiations for voluntary, informed consent on such investments, their entitlements and the state's custodianship over water resources in a public interest are critical normative frameworks. Even if impacts on water availability for others are still relatively minor today, a neglect of poor women's and men's human rights now might accelerate the concentration of water resources in the hands of few men in the future.

The legal and water management experts who drafted and implement the revised water laws, such as policy makers, senior water managers, lawyers and the international banks and donor agencies that financed the revisions and initial enforcement, ignored human rights frameworks. However, they justified their actions indirectly as the expectation that nation-wide licensing would enable effective state regulation of water resources in a public interest. Government officials can reject or approve applications for licences, and, if approved, they can set conditions for water use. Conditions concern, for example, the duration of the authorization and the need for renewal, caps on volumes of water uses, waste discharge requirements and, a novelty introduced by the World Bank: fee payments to finance government or public water resource management institutions.⁹ Licensing of high-impact users, such as large-scale irrigation, large industries and mines, and enforcement of licence conditions is also the primary tool to avoid water grabbing, over-use and pollution. Such state regulation safeguards the poor, who are often hit hardest and have least means to protect themselves against water scarcity and pollution.

However, as this chapter argues, in their current form, licence systems across Sub-Saharan Africa entail three potential infringements on the human rights of the rural and peri-urban poor in general and women's right to equality and non-discrimination in particular. First, they consol-

6 Bahri et al. (2011).

7 Mehta et al. (2012).

8 Jayne (2014).

9 Van Koppen (2007).

idate historical dispossession of indigenous water laws. Second, they are particularly disadvantageous for poor female small-scale users who are obliged to apply for a licence, not only because government capacity is too limited to process applications from many small-scale users in general, but also because those constraints reinforce the tendency to only register men, and consider women as subjected to the 'male household head', so not entitled to be licence holders in their own rights. Third, they exempt the smallest-scale users, most of whom are women, from the obligation to apply for a licence, which relegates them to the second-class entitlement derived from being exempted.

Rural and peri-urban women constitute a significant proportion, if not the majority of a country's water users and typically include the poor. Women not only need water for domestic uses but their diversified, agriculture-based livelihoods also require water for a range of productive purposes, including horticulture, irrigation, livestock, fisheries, tree-growing, brick-making, small-scale enterprise and ceremonial uses. In order to meet those needs, especially men, but also women invest privately in water storage in fields, wells, tanks, rooftop harvesting, small mechanized pumps, or conveyance infrastructure. They are primary water takers, directly accessing water from surface and groundwater resources. While their efforts to store and channel water can be intensive, the total quantities per individual remain micro- and small-scale, because the volumes are capped by the small scales of their farms or other water-dependent enterprises. Besides being self-employed primary water takers, poor women can be farm workers or employed in other water-dependent enterprises. Many are unemployed. Although only a portion uses water at the moment, abstract human rights and entitlements to a share of the nation's water resources remain highly relevant for them. Abstract entitlements enhance options and bargaining position, also when citizens refrain from concretizing their entitlements by taking water up.

We apply international human rights frameworks to entitlements to water resources by asking how state regulation can protect, respect and promote access to water by poor women (and men) to contribute to achieving their socio-economic human rights pertaining to water, food, adequate standard of living, non-discrimination, and participation (United Nations Committee on Economic, Social and Cultural Rights, General Comment No. 15, 2003).¹⁰ This includes state water allocation and regulation to ensure that adequate water resources are available to meet

10 United Nations CESCR (2003).

the human right to water for domestic uses and sanitation, as established in 2010 (UN, A/RES/64/292 2010).¹¹ This human right obliges the state to invest in infrastructure and deliver affordable services to that end. For productive uses, there is no such state commitment of service delivery to everybody. Yet, the state does deliver water services for productive uses to some and, moreover, water users themselves invest in infrastructure for their multiple water needs, or would want to. This chapter focuses on how the state allocates and regulates entitlements to ‘raw’ water resources for multiple uses and not on infrastructure investments and water services per se.

We propose that the state, as duty bearer of socio-economic rights, equality, non-discrimination, should at the least safeguard a core minimum of water resources available for basic livelihoods. More specifically, our questions are: should licence systems incorporate a core minimum entitlement to raw water resources that states should safeguard for rural and peri-urban poor women (and men) whose access to water is a matter of meeting basic human needs? Should every citizen have an equal right to such a minimum share of the nation’s water resources, whether he or she takes that water up or not, before the remaining water resources are distributed to larger-scale users? What are the considerations that could establish such a minimum core?

In South Africa, a debate has started precisely about these questions. The South African Constitution (Act no. 108 of 1996) aims at redressing inequities from the past and recognizes gender equality and non-discrimination and socio-economic rights to water and food.¹² To prevent discrimination and to facilitate substantive equality the Constitution calls for proactive measures to ‘promote the achievement of full equality, legislative and other measures designed to protect or advance persons’.¹³ We will argue that the Constitution, together with the National Water Act (Act no. 36 of 1998)¹⁴ and the second National Water Resource Strategy of 2013 (NWRS-2)¹⁵ call for such equal access to minimum quantities for all within the current water use authorization system. In our view, the legal tool to realize this is the General Authorization provision of section

11 United Nations (2010).

12 Republic of South Africa (1996).

13 Ibid. Article (2) 2nd sentence.

14 Republic of South Africa (1998).

15 Department of Water Affairs (DWA) (2013a).

30 of the Act¹⁶ combined with the prioritization of water for equity and poverty eradication contained in the legally binding NWRS-2. For ease of reference, the proposed combination of these two legal provisions is referred to as a proposed 'priority General Authorization'.

South Africa's water use authorization system resembles the licence systems elsewhere in Sub-Saharan Africa in many ways. Hence, the discussion below offers relevant lessons for other countries. Paradoxically, the tool is even more relevant elsewhere, as the proportion of the rural poor depending on diversified, agriculture-based livelihoods is even larger than in South Africa. Moreover, in other countries water resources are still available and equitable allocation is less contested, unlike South Africa where demand increasingly outstrips supply and where there is already fierce resistance by the vested users to give up any prior water uses, which might be an implication of the adoption of priority General Authorization in some cases. This renders South African poor even more vulnerable as they can lose even the very limited water quantities they are currently using.

1.3 Questions, methodology and structure

The central questions in this chapter are:

- How can South Africa's water use authorization system, based on licensing, be interpreted as a transformative, nationwide tool for poverty eradication and redressing inequities from the past by ensuring equal rights to minimum quantities of water for all according to constitutional imperatives, while distributing the remaining water resources among larger-scale, higher-impact users through licences with strong, enforceable conditions in the public interest?
- How can this design be replicated in other countries in Sub-Saharan Africa?

Our focus is on the authorization of water abstraction and the associated volumes of water. For regulating water quality or other dimensions of water regulation, similar arguments would be applicable, but are not further elaborated here.

Methodologically, this article is based on a global literature review; an analysis of the South African Constitution and of legal texts and of the regulations as interpreted, operationalized and implemented by the De-

16 Republic of South Africa (1998) Section 39, General Authorizations to use water.

partment of Water and Sanitation (DWS)¹⁷ in South Africa; and interviews with stakeholders. As implementation of the National Water Act in general and General Authorizations in particular are still relatively recent, there is no relevant case law as yet, as far as we are aware.

Below, we first elaborate the three current risks of infringements on human rights in licence systems across Sub-Saharan Africa and elsewhere, in order to show how the same risks and especially the solutions in South Africa are relevant for other countries. The subsequent sections analyse South Africa's current laws and regulations and discuss how these provide a potential transformative tool in General Authorizations associated with the priorities of the NWRS-2. Section three explains the underpinning concept of differential regulation and support, and translates that to the water use authorization system of the National Water Act in terms of its categories of lawful water uses and prioritization rules. The subsequent sections discuss the three risks of infringements and the ways in which the proposed priority General Authorization can overcome those. Section four focuses on historical justice; section five on structural non-discrimination in the administration, including the issue of the setting of thresholds for the priority General Authorization; and section six on the prioritization of users exempted from an obligation to apply for a licence. Section seven draws the conclusions for South Africa and elsewhere.

2. RISKS OF HUMAN RIGHTS INFRINGEMENTS IN LICENCE SYSTEMS IN SUB-SAHARAN AFRICA

This section describes the three risks of infringements on human rights frameworks vis-à-vis poor female small-scale users in the current licence systems across Sub-Saharan Africa, as basis for the later sections that will highlight similar risks in South Africa, and the potential solutions provided by the proposed priority General Authorization.

2.1 Continuing past discrimination

First, license systems continue the colonial imposition of one formal legal system, and, hence, by default, continue to declare customary water laws, which typically governed water use by Africans at the time, as illegal. Colonial powers vested ownership of all water resources in themselves and declared that the only 'lawful' way to access water was through licences, or, as in South Africa, through ownership of land since riparian water

17 From 2009 to 2014 the Department of Water and Sanitation was called Department of Water Affairs.

allocations were tied to land. While this enabled some regulation of water use by the minority white settlers and was justified on those grounds, the other side of the coin was that it formed part of a greater process of dispossessing African women and men from access to a range of natural resources, including land and water. At independence, ownership of water moved to the new state as the custodian or Public Trustee of water. Without questioning these historical injustices and, ironically, while intending to achieve equality (as ‘one cannot exclude the majority’, as a Tanzanian official said), the obligation to apply for a licence was extended overnight to the majority of citizens, including rural areas where colonial water law had barely reached and where living customary water law still governed water management. Instead of redressing historical injustices, the blanket adoption and extension of the licence system continued colonial dispossession of customary rights.¹⁸ Note that we are not, in this, questioning the state as Public Trustee or custodian of water resources, but rather ask: what do states do with their power in this role, based on which state commitments to redress inequities from the past (whether framed as ending race- class-, or gender-based discrimination or otherwise)?

2.2 Structural discrimination in states’ administration

The second risk of infringement for both women and men is related to the reality that Sub-Saharan African states lack the administrative capacity to issue and enforce licences for large numbers of water users, many of whom use small amounts of water. Licence systems can work as regulatory tool for relatively small numbers, such as a minority of colonial settlers, or in formalized industrial water economies in high-income countries, where water is distributed to limited numbers of formal water companies, parastatals or well-organized water user associations, and a limited number of individuals who directly take surface and groundwater sources, and where the state has sophisticated administrative and technical resources at its disposal. However, even in such conditions, the administrative burdens of individual licensing are increasingly avoided. For example, The Netherlands, which lies partly below sea level, has intensive water management requirements and a long-standing tradition of licensing. Nevertheless, water managers are currently moving towards more effective general rules instead of individual licences.¹⁹

In contrast, in low- and middle-income countries, primary water tak-

18 Van Koppen et al. (2014).

19 Van Rijswick (2012).

ers are the large majority, each only taking a relatively small quantity of water, while state resources are too limited to process all applications of those who are obliged to apply. Moreover, the demand on state resources to license many small users jeopardizes the enforcement of licence conditions among the large-scale and high-impact users who need to be regulated most urgently.

From the water users' perspective, there is the risk of being criminalized if state capacity is too limited to implement what the law prescribes the user to do, so that water is used without the necessary authorization due to slow procedures or administrative inaccessibility. This especially affects those who, not through their own fault, are most difficult to reach by the administration. These users, typically small-scale poor users and especially women, are discriminated against by the administrative systems, while the administration-proficient male-dominated elite will best be able to engage with the authorization system.

It is true that the administrative procedures for licence applications for high-impact users are generally more sophisticated than for smaller users. However, for smaller-scale users the transaction costs to access government services compared to the benefits from water are disproportionately high. Transaction costs are aggravated by illiteracy, legal illiteracy, limited mobility in remote rural areas, and high transport costs.

Women are even less able to bear these high transaction costs. Further, poor women are least able to contest government's decisions and are more vulnerable to corruption and intimidation. Last but not least, this lack of administrative capacity even further reinforces the well-known tendency of administrators to vest titles in men as the assumed male heads of the household and deny women titles in their own right, in spite of legislation mandating joint registration.²⁰

As these relatively high transaction costs for small volumes of water are also a burden for government, some governments try to allocate licences to collectives of small-scale users. However, imposing a condition of organization on some people but not on others is also discriminatory. Group formation raises complex questions around who is in or out of the group. As membership criteria are equally biased in favour of male heads of households, women lose even more. Formal and top-down group formation is prone to capture by a male elite, who can easily claim to be the 'representative' of a collective. In Tanzania, where the government also seeks to vest permits in irrigation groups, a ward councillor commented

20 Ikdahl (2008).

that this would ‘create chaos’, as only a few individuals would be group members with corresponding entitlements, while other water users in the village would not. She and many other villagers preferred vesting of licences in the existing and much more legitimate form of representation, also for land and other natural resources: local government.²¹

Further, licences are based on an understanding and control of water flows. Yet, rural and even peri-urban areas lack infrastructure and water measurement devices and the naturally available fugitive and unpredictable water resources are difficult to assess, let alone control. Aggregate volumes of weather-dependent streams can only be a subjective guess by water officers. In contrast, large-scale users and their lawyers have access to considerably more evidence, water control and monitoring devices and the power to challenge arbitrariness.

2.3 Second-class entitlements for exempted users

The third form of discrimination concerns those who are exempted from the obligation to apply for a water use authorization, since they use a volume of water below a certain threshold. All water laws in Sub-Saharan Africa stipulate exempted uses, or *de minimis* uses.²² The General Authorization in South Africa is such exemption with limited obligations for somewhat larger quantities.

However, international literature bears out the understanding that exempted water users have little legal recourse to hold licence holders accountable if they infringe on exempted water uses. As lawyer Hodgson notes about this ‘curious type of residuary right’ of *de minimis* uses:

There is no great theoretical justification for exempting such uses from formal water rights regimes. Instead, a value judgment is made by the legislature that takes account of the increased administrative and financial burden of including such uses within the formal framework, their relative value to individual users and their overall impact on the water resources balance. [...] While they may be economically important to those who rely on them, it is hard to see how they provide much in the way of security. [...] The problem is that a person who seeks to benefit from such an entitlement cannot lawfully prevent anyone else from also using the resource even if that use affects his own prior use/entitlement. Indeed the question

21 Van Koppen et al. (2013).

22 FAO (2004).

*arises as to whether or not they really amount to legal rights at all.*²³

Exempting small-scale users from the need to apply for a licence may liberate them and the state from administrative hassles, but it is a second-class entitlement. This disproportionately affects poor women who typically use such small and micro quantities.

The priority General Authorization has to address all three forms of injustice.

3. SOUTH AFRICA'S EXPERIENCES

3.1 Overview

As also elaborated in Chapter 14 in this volume, South Africa shows extreme inequalities as a result of water grabbing in the colonial past. The Gini coefficient, which expresses how skewed access to attributes is, is already the highest in the world for the income distribution of South Africa: 0.69. With a Gini coefficient of 0.99 for the distribution of water use in rural areas, inequality is even worse than that for income. In rural South Africa, 1.2 per cent of the population controls 95 per cent of water used and, hence, also determines whether and how benefits of such water uses trickle down. The large majority of 98.8 per cent of the population has only access to 5 per cent of the water resources.²⁴ These huge inequalities especially affect the poor. Almost three quarters (72 per cent) of the poor live in the former homelands, where 19.9 million people, or 40 per cent of the total population lives on 13 per cent of the land.²⁵ The other quarter of the poor are among the rural and peri-urban unemployed, wage workers and tenants on large-scale farms.

In the past 15 years of implementation of both the progressive Constitution and the National Water Act, the extreme dominance of non-historically disadvantaged individuals (white men) in access to water resource entitlements has continued. Of the 4,284 licences issued between 1998 and 2012 for new water uptake, only 1,518 (35 per cent) were for historically disadvantaged individuals (encompassing Africans, Coloureds, Indians, together also referred to as 'black people', constituting 89 per cent of the population, and white women). Most of these licences (76 per cent) were for forestry as stream-flow reduction activities. The total volumes of

23 Ibid.

24 Cullis and Van Koppen (2008).

25 Republic of South Africa (RSA) (2011).

water allocated to historically disadvantaged individuals remained negligible: just 1.6 per cent of total water allocated through all licences.²⁶ The limited available data suggest that the percentage of women licence holders is currently less than 10 per cent.²⁷

Obviously, many factors beyond water law contributed to this. As a result of the negotiated settlement to end apartheid, political power has shifted significantly since 1994, but the skewed, dual economy has continued, as reflected in the applications for new water use. Also, while the DWS has done a great deal in providing potable water to households, neither the DWS nor the various other government departments have significantly invested in, or revitalized infrastructure for productive uses by historically disadvantaged individuals. Women's access to water infrastructure has only been promoted for homestead water harvesting, but neither for larger-scale infrastructure, nor land reform, nor enterprise development (see also Chapter 16 in this volume). Co-ordination among the various government departments has also been a major challenge. For example, it was expected that the restitution and redistribution of land would include the water resources linked to the claimed land. Yet cases have been reported where water rights were sold off before the transfer of the land, so that the black recipients obtained land without water rights.²⁸

While this highlights that a water use authorization system is not a sufficient condition for justice in water allocation. It remains an important question of whether and how the authorization system itself may have contributed to the reinforcement of inequality. The argument that the current water use authorization system is good, but that implementation is lacking is, at best, partial. The South African government has allocated substantial resources to the implementation of water use authorization. If the implementation requirements appear unrealistically high, the regulations should become more realistic. This is even more relevant where states have limited resources to spend.

What, then, could be the missed opportunities in enshrining justice in water use authorization texts and regulations, and how can water use authorization become a more robust transformative tool? South Africa's National Water Act, formulated under the leadership of former human rights professor Kader Asmal, is widely hailed as world-class. It has operationalized the country's equally renowned progressive Constitution,

26 Department of Water Affairs (DWA) (2013b).

27 Aileen Anderson, personal communication 2013.

28 Anderson et al. (2008).

which enshrines equality and non-discrimination irrespective of gender, race and socio-economic status and explicitly includes the right of access to sufficient food and water.²⁹ Unlike water law in many other countries, the National Water Act operationalizes these constitutional goals to redress the highly unequal access to water and the benefits derived from water through, *inter alia*, water use authorization. Section 27(1)(b) of the National Water Act addresses this ‘need to redress the results of past racial and gender discrimination’ as an important criterion in any water use authorization.

Moreover, the Act creates the ability to re-allocate water from the ‘haves’ to the ‘have-nots’, wherever new water uptake has become a zero-sum game. In such cases, section 22(6) allows for state compensation if re-allocation from the ‘haves’ results in ‘severe prejudice to the economic viability of an undertaking’, but not if the impact is minor. Obviously, refusal of new water uptake and curtailment of existing ones, even for the purpose of redistribution, is a last resort measure to be used only after all other options to increase the availability of water have been exhausted, such as new infrastructure construction, water conservation, water re-use, avoidance of water theft, water demand management and implementing the use-it-or-lose-it principle.

After the promulgation of the Act, further unique steps were taken to redress inequities in access to water. In 2004, the DWS launched a Water Allocation Reform programme, purposively abbreviated as WAR: a war for equity and a war against hunger. Ambitious goals, but only for race- and gender-based redistribution, and not for class-based redistribution, were set: 60 per cent of allocable water should be in black hands, 50 per cent for women, by 2024.³⁰ From the late 2000s onwards, licence conditions also included measures for redress, such as requiring the implementation of the country’s affirmative action policy and legislation, called Broad Based Black Economic Empowerment.

In 2013, the Department of Water and Sanitation addressed some remaining flaws in the Act in a policy review process that paves the way for amendments.³¹ They proposed, for example, the strict adherence to the ‘use it or lose it’ principle, which, in turn, abolishes water trading in the expectation that all unused water would return to the state for re-alloca-

29 Republic of South African (RSA) (1996), Section 27(1)(b).

30 Department of Water Affairs and Forestry, Republic of South Africa (2008).

31 Department of Water Affairs (DWA), Republic of South Africa (2013c).

tion to historically disadvantaged individuals. Further, due to the way that section 27 of the Act was drafted, DWS was not sufficiently empowered to demand that equity be addressed as a priority consideration in assessing water use licence applications. Indeed, DWS lost a case in the Water Tribunal when an applicant whose application for water use had been rejected because it did not address the issue of racial equity, argued that equity cannot be taken as the highest priority among the various criteria for water allocations under section 27 of the Act. The policy review proposes that the goal of redressing inequities from the past be the decisive criterion.

Probably the boldest measure in the second National Water Resource Strategy (NWRS-2) of 2013 is the vesting of a legally binding high priority for 'the allocation of water for poverty eradication, the improvement of livelihoods of the poor and the marginalized, and uses that will contribute to greater racial and gender equity'.³²

In the Water Allocation Reform programme, a debate has been running since the mid-2000s on the role that General Authorizations could play to overcome the risks of reinforcing historical injustices through administration-based exclusion of those who are obliged to apply for a licence and the relegation of exempted users to a second-class water entitlement.³³ A General Authorization is a resource-specific exemption from the obligation to apply for a licence, and may specify the volume of water use that is allowed, the type of water use activity allowed, the geographic area in which it applies, and the groups that may make use of the General Authorization. The Minister may, or may not, oblige water users whose uses fall under a General Authorization to observe certain rules, for example to register, conduct certain measurements, or pay. General Authorizations, which are gazetted for public comment, are only valid for a specified time period, and therefore require revision and re-publication in due course.³⁴

The DWS issued General Authorizations in 1999 and 2004 for various quaternary catchments. Initially, the purpose of a General Authorization was to reduce government administrative burdens in areas without water stress and where the volumes used under General Authorizations would be a 'negligible' proportion of total volumes. Therefore, the 1999 and 2004

32 Department of Water Affairs (DWA), Republic of South Africa (2013a), p. 47.

33 Anderson et al. (2007).

34 Republic of South African (RSA) (1998), Section 39.

General Authorizations only existed in non-stressed basins.

In 2012 a draft revision of the General Authorization of 2004 was gazetted for public consultation.³⁵ By then, the Water Allocation Reform had generated new insights on opportunities for achieving re-allocation of water through the General Authorization tool. However, the major objection against General Authorizations was their second-class entitlement status. In our interpretation of the legal tools mentioned above, this valid concern is overcome by vesting the high priority for water for poverty eradication and redressing inequities from the past in the NWRS-2 in the tool of General Authorizations. Hence, we propose that the revision of the 2004 General Authorization will be designed as a transformative tool of individual-based and gender-equitable priority General Authorizations for small-scale black water users.

3. THE PRIORITY GENERAL AUTHORIZATION

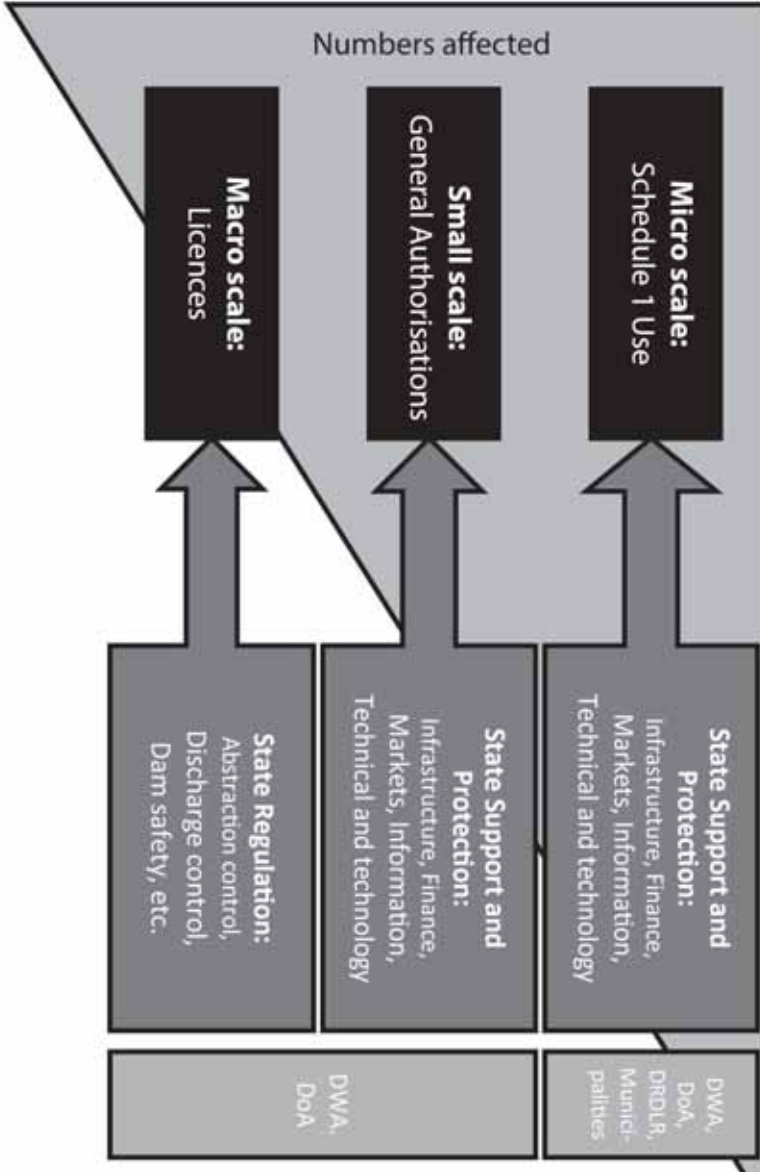
3.1. Water use authorization categories

Our proposed way to enshrine socio-economic rights, gender equality and non-discrimination in licence systems is based on a straightforward differentiation. Instead of aiming at *regulation* of small-scale users, both women and men small-scale users should be *protected and supported* in taking up water as a basic minimum for all. At the same time, the smaller number of large-scale and highest-impact users should be rigorously regulated. Regulation through licensing and especially enforcement of conditions should start with them. In Figure 1 we integrate this notion into the different categories of water use authorization in the National Water Act.

The two main categories of water use authorization in the National Water Act (1998) are licences, which are typically for the large-scale uses, and exemptions from licences, for smaller- and micro-scale uses. As any new water law has to define the legal status of water governed under preceding laws. The Act stipulates that water uses, which were lawful in the period of two years preceding the promulgation of the Act (Existing Lawful Uses), continue to be lawful until they will be converted into licences under processes of 'compulsory licensing' in specific geographic areas with one or more water resources. The initial expectation was that the whole country could rapidly be covered by compulsory licensing in order to establish one uniform water use authorization system. For com-

³⁵ Department of Water Affairs and Forestry, Republic of South Africa (2012).

FIGURE 1: JUSTICE ENSHRINED IN THE WATER USE AUTHORIZATION CATEGORIES IN SOUTH AFRICA, WITH CORRESPONDING RESPONSIBILITIES OF THE DEPARTMENT OF WATER AFFAIRS (DWA), DEPARTMENT OF AGRICULTURE (DoA), DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM (DRDLR), AND MUNICIPALITIES.



parison, the water laws in other African countries prescribe such conversion instantaneously and countrywide, 'granting' a period of some years, which is invariably repeatedly extended.

Immediately after the promulgation of the Act, all users with Existing Lawful Use entitlements had to register their water use in the Water Authorization and Registration Management System (WARMS) database. Registration of Existing Lawful Use is clearly not seen as licensing that use. Registration only 'improves claims to water in future licensing' (<http://www.dwaf.gov.za/Projects/WARMS/>). While WARMS allows some rough water resources assessments, this database primarily serves billing purposes.

Thus, licences are required for post-1998 water uptake, and for pre-1998 water uses in an area subject to compulsory licensing. Newly allocated licences are also registered in WARMS. Currently, the total is some 80,000 registrations, by some 18,000 users. Keeping the register up to date requires significant human resources and updated information from water users, which is not always forthcoming. In our proposed transformative tool, licences remain the main instrument for *regulation*, but not for entitlement.

The National Water Act has two types of exemptions to the obligation to apply for a licence. The first is the nationwide Schedule One for micro-uses. The National Water Act defines Schedule One as 'water for reasonable domestic uses, small gardening (but not for commercial purposes); and the watering of animals (excluding feedlots), provided that the use is not excessive in relation to the capacity of the water resource and the needs of other users; storing and using run-off water from a roof; or emergency uses'.³⁶ While other countries quantify such nationwide micro-uses, for example 0.25 hectares or 'mechanised water lifting devices', South Africa deliberately left such judgment to the discretion of their officers to avoid having to measure and quantify such micro-use. Although there is no obligation to do so, some water users falling under Schedule One have registered the water use in WARMS.

The General Authorization is the second form of exemption from an obligation to apply for a licence. Its initial aim was alleviation of administrative burdens in areas with sufficient water resources. Volumes can be high, for example 25 hectares of irrigated agriculture. In areas with greater water stress, the thresholds are lower, because this is supposed to allow for

36 Republic of South African (RSA) (1998), Schedule 1, Permissible use of water.

more rigorous regulation. In some quaternary catchments they are even lower than Schedule One uses, as proposed in the draft revision in 2012. The General Authorization of 2004 excludes water-stressed areas, while Schedule One water use is valid in all areas. The purpose of our proposed nationwide priority General Authorization for black people is protection and support. Realizing constitutional rights in water allocation warrants protection *in particular* in stressed basins. It is in these basins that the need for water re-allocation from the 'haves' to the 'have-nots' is most likely. The advantages of a General Authorization over Schedule One, as currently formulated in the National Water Act, are that the former can be locally specific and that the Minister can promulgate general rules, as needed and enforceable, both nationwide and in specific contexts, such as the obligation to register or participate in surveys, avoid pollution, pay fees (if that makes sense because the collection of those fees will often be much more costly than the revenue generated), or ensure conflict resolution mechanisms in case of conflicts among General Authorization holders, or between General Authorization holders and licensed or Existing Lawful Users. While we will not further consider Schedule One here, we note that other African countries can expand their exemptions of *de minimis* use into a tool like the General Authorization.

Another element of South Africa's authorization system, which is widely replicated in other countries, is the Reserve, which consists of an Ecological Reserve and a Basic Human Needs Reserve. The Reserve is the nation's water highest priority and obliges the state to ensure that water is made available for these purposes. For the definition and quantitative determination of the Basic Human Needs Reserve, the National Water Act refers to regulations under the Water Services Act 1997, which confines basic human needs to domestic water needs only, as was general international practice at the time. Currently, this is 25 litres per capita per day, which overall is often less than one per cent of the total volume of water resources so commonly smaller than the error of hydrological models. The Basic Human Needs Reserve does *not* entail an obligation to also provide infrastructure services to access water. The latter is incorporated in the Water Services Act and its regulations. For small-scale productive uses that contribute to meeting constitutional rights, there is neither a protection in the Reserve nor any state obligation to invest in infrastructure.

The Ecological Reserve, which aims at sustainable water use, has been calculated at much higher quantities, around one fifth of the water resources, which should remain in rivers or aquifers as local ecosystems require.

3.2. Priority setting

Section 7 and section 23 of the National Water Act stipulate that, after the Reserve, priorities for water allocation are specified in the National Water Resource Strategy in a legally binding manner. Thus, the NWRS, which is required to be revised every five years, provides the framework for the assessment of licence applications. The priorities of the Strategy also guide water distribution and curtailments among all lawful water users in drought periods and other periods of temporary shortage. The yearly and even monthly average aggregate water quantities mentioned in individual licences become irrelevant under periods of water scarcity, when no water user can get their average share. Then, priorities count. Indeed, average volumes primarily serve the purpose of volume-based pricing and hydrological estimates of aggregate water uses for stochastic planning purposes.

One form of prioritization is the allocation of a certain ‘assurance of supply’ to certain categories of use. Agricultural uses typically have the lowest assurance of supply of 70 per cent, meaning that they are likely to get their full water allocation in seven out of ten years. Power generation and related industries obtained the highest assurance of supply (99.5 per cent). This means that in drought periods, irrigation farmers are the first to be curtailed, with municipal water supplies second, and power generation and strategic industries only curtailed thereafter.

The recently issued NWRS-2 ranks water for poverty eradication and redress of inequities from the past as the third highest priority, after the Reserve and international obligations, but before so-called strategic uses (which is mainly electricity generation) and, lastly, water for general economic purposes. In our proposal, this third priority would be addressed through a General Authorization for every black woman and man to obtain equal and non-discriminatory access to minimum quantities of water for basic livelihoods. This is an abstract entitlement, whether people take up the entitlement concretely, or not. Factual uptake depends on many more factors, including access to land, water technologies, inputs, markets, skills and other assets that especially women typically lack. They are not further considered here.

In the next sections, we discuss how this priority General Authorization addresses the three forms of injustices and how thresholds can be set above which water uses are to be licensed and below which water uses are to be protected and supported through the priority General Authorization.

4. REDRESSING PAST DISCRIMINATION

4.1 Current entrenchment of past discrimination

The acceptance of Existing Lawful Use as lawful under the National Water Act reproduced the immense inequalities in access to water and the profoundly discriminatory pre-1998 race-, gender- and class-based water use authorization system. Almost no black man, let alone a black woman, whether in the former homelands or living on farms and elsewhere in former white Republic of South Africa, had a formal water right in 1998. The colonial and apartheid regimes had stripped Africans from entitlements to their waters by adopting the British riparian regime in the 1912 Irrigation Act. This was grafted on the British land title deed system according to the 1913 and 1936 Land Acts. These Land Acts dispossessed Africans of 91 per cent, and later 87 per cent of the land *and*, thereby, the often more abundantly available riparian surface and groundwater sources of the white Republic of South Africa. The remaining 13 per cent, the later homeland areas, were declared as state land, so the water resources were also owned by the colonial state. Formally, this right could be transferred to inhabitants of the homelands. However, in practice this hardly ever happened, and this was 'justified' as bureaucracy: 'Sometimes the problem was to determine which official of the State had to grant the necessary permission'.³⁷ In reality, in these areas, customary water right regimes co-existed with the formal legislative regime.

In contrast, in the pre-1994 white Republic of South Africa, a range of legal instruments for water governance among whites developed, including riparian rights; normal and surplus flows; private groundwater rights; irrigation schedules determined by the irrigation boards; permits for commercial afforestation; or area-specific Government Water Control Areas (in both the white RSA and former homelands) with virtually full state control. During the extensive public consultation processes when drafting the National Water Act, these vested water users strongly protected their existing water entitlements. The new government, at the same time, did not want to completely disrupt the functioning white agricultural and other sectors. The drafters of the Act were aware of the complexity of and administrative resources needed for converting one legal system into another.

The post-1994 government has paid insufficient attention to this highly unequal starting point and to ways to overcome the historical injustices.

37 Thompson et al. (2001).

Black people's water tenure or 'living customary laws' in former homelands, on white farms and in black peri-urban settlements, have hardly been studied and rather as a cultural or 'indigenous' phenomenon instead of an issue of power, survival and livelihoods. Gender dimensions have hardly been studied at all.³⁸ An exception is a study of public smallholder irrigation schemes in the former homelands that shows the lack of clarity on the legal status of land and related water entitlements vested in membership of water user associations.³⁹ In contrast, large-scale users, for example, in former irrigation boards have well-defined individual (strongly male-biased) entitlements within a well-established collective.

Thus, white men, in particular, can continue defending their pre-1998 water entitlements on the basis of clearly defined, if not already recorded, Existing Lawful Use. In contrast, black people continue to lack formally recognized grounds to prove and defend their pre-1998 water uses. Moreover, the same highly unequal starting points continue to affect post-1998 processes of licensing and compulsory licensing.

4.2 Gender-equality in priority General Authorizations to redress past discrimination

In the proposed priority General Authorization, a nationwide conversion from legal pluralism to one uniform licence system can partially redress inequities from the past by a *priority* for exempted uses and ensuring equal access to water for minimum uses for all (potential) small-scale water users in former homelands and white South Africa. Such priority General Authorization enables more black women and men to take up small-scale water uses and protects their uses vis-à-vis licence holders and Existing Lawful Users. Importantly, black adult men and women will be entitled *as individuals* to a minimum quantity of water under General Authorization, thus meeting constitutional gender equality requirements and empowering women in male-dominated tribal and other hierarchies.

In no way would this priority General Authorization inhibit black users from expanding their water uses beyond the threshold of the General Authorization. On the contrary, it would prepare many to get to that stage. Above the threshold, anyone would have to apply for a licence and abide by conditions set. Throughout South Africa, larger-scale users would only be able to expand their water use if the access to minimum quantities of water by black people is met. Any licence holder would have

38 Sithole (2011).

39 Manona et al. (2010).

a lower priority than small-scale users falling under the priority General Authorization.

Such redress of past injustices was the main argument of the Department of Agriculture, Fisheries and Forestry (DAFF) in their comments on the draft General Authorization of 2012. DAFF proposed a threshold of 30 hectares of irrigated land – the Land Bank’s definition of a smallholder. As argued, with 1.3 million hectares irrigated by large-scale farmers and only some 50,000 hectares by smallholders, the current proportion is just 3.5 per cent.

A priority General Authorization for individual black women and men would also serve as a country-wide redress prior to compulsory licensing. Compulsory licensing has been seen to be much more administratively cumbersome than the drafters of the law had expected. To date, the Department has implemented only three small compulsory licensing processes.⁴⁰ Yet, some officials see compulsory licensing as the only tool for redress of historical injustices in water allocation. This view severely delays water re-allocation to black people by ignoring the many measures that can be taken instantly, such as the application of a priority General Authorization.

5. NON-DISCRIMINATION IN LICENCING

5.1 Current structural discrimination in administration of water licences

As mentioned, the percentage of women licence holders is currently less than 10 per cent (Anderson, personal communication 2013). There has been no debate whatsoever about possible joint titling of pro-active support to individual women. Neither has there been any debate as to what measures should be taken to ensure that the percentage of female licence holders should correspond to the number of female water users. The disproportionate relationship between the number of women who use water for productive purposes and the number of women who hold licences constitutes systemic (structural) gender discrimination.⁴¹ Structural gender inequality is, as pointed out by the Committee on Economic, Social and Cultural Rights, often a result of systemic discrimination understood as ‘legal rules, policies and practices or predominant cultural attitudes in either the public or the private sector which create relative advantages for

⁴⁰ Msibi and Dlamini (2011).

⁴¹ Women’s protection against direct, indirect, structural and intersectional discrimination in relation to water is elaborated in Chapter 2.

some groups and disadvantages for others'.⁴²

Although state capacity in South Africa is much stronger than elsewhere, even just the processing of licence applications for *new* water uses has been difficult. A serious backlog developed over a period of years, which has only recently been reduced. For example, for a sample of 23 licences out of the 70 that were allocated by mid-2009 in Limpopo Province (with 39 to black users), the average period between the application and final allocation was 5.7 years.⁴³ In spite of the intention to prioritize licence applications by black applicants, particularly those living in remote rural areas, similar delays occurred with these applications. The NWRS-2 recognizes this structural inability of the state to reach all those who are obliged to apply for a licence: 'Current licensing processes are often costly, very lengthy, bureaucratic and inaccessible to many South Africans'.⁴⁴

These administrative burdens compete with the ultimate goal of the National Water Act, which is enforcing the licence conditions where they are most needed. Such enforcement has also been difficult, with a resultant failure to achieve social and environmental justice through effective regulation. A number of mines have been operating without water use licences. Large-scale farmers continue to illegally intercept water from the expensive canals of the Lesotho Highland Project to Gauteng. Many municipalities abstract more water than they are licensed to use and discharge poorly treated sewage effluent into rivers. Civil society has started challenging both licence holders and the DWS about the lack of enforcement. Compliance to the conditions set in such licences is a rallying point for civil society and watchdog media, for example when high-level politicians are accused of mining without licences.⁴⁵

Thus, the question is how these risks of structural administration-based discrimination against especially women small-scale water users who have to apply for a licence can be overcome, while maintaining the regulatory role of the state.

5.2 Thresholds for licensing to prevent discrimination

An answer to this question is to adjust the design of individual licences to the state's capacity to implement and enforce. Focusing regulation on high-impact users makes sense for water managers, who always face the

42 United Nations Committee on Economic Social and Cultural Rights (CESCR) (2003), para. 12.

43 De Jong (2010).

44 Department of Water Affairs (DWA) 92013A), p. 48.

45 *Mail and Guardian* (2012).

trade-off between administrative burdens and actual regulation of those who need to be regulated most urgently.

The adjustment of licences to implementation capacity should be the core criterion for setting the threshold for the obligation to apply for a licence: preventing direct, indirect and structural discrimination against small-scale users so as to achieve substantive equality as required by the South African Constitution. Licensing then becomes a well-targeted, enforceable tool for regulation of the relatively few high-impact water users that need to be regulated most intensely. Once strategic priorities in regulation have been met over the years, thresholds can be lowered for stricter regulation.

A quantification of administrative burdens and related water quantities is essential for setting thresholds. The WARMS database of *registered* uses allows plotting water users according to volumes used (and related transaction costs of just registration, if not licensing) and the volumes registered (or licensed). For South Africa as a whole, 70–90 per cent of water use by volume is captured by registering the 10 per cent largest users only. Registering (and licensing) of the 60–80 per cent of small users hardly adds any volume⁴⁶.

Thresholds can be locally specific. Figure 2 shows numbers of registered uses and volumes registered in the Inkomati water management area. The volume of about 1,100 registered users below 200,000 m³ per annum (the equivalent of about 25 hectares under irrigation) is only a tiny fraction of what the sixteen largest users use. Such locally specific quantifications should inform decision-making on the allocation of the scarcest good: government resources for regulation.

6. EQUAL ACCESS TO SMALL-SCALE WATER QUANTITIES FOR ALL

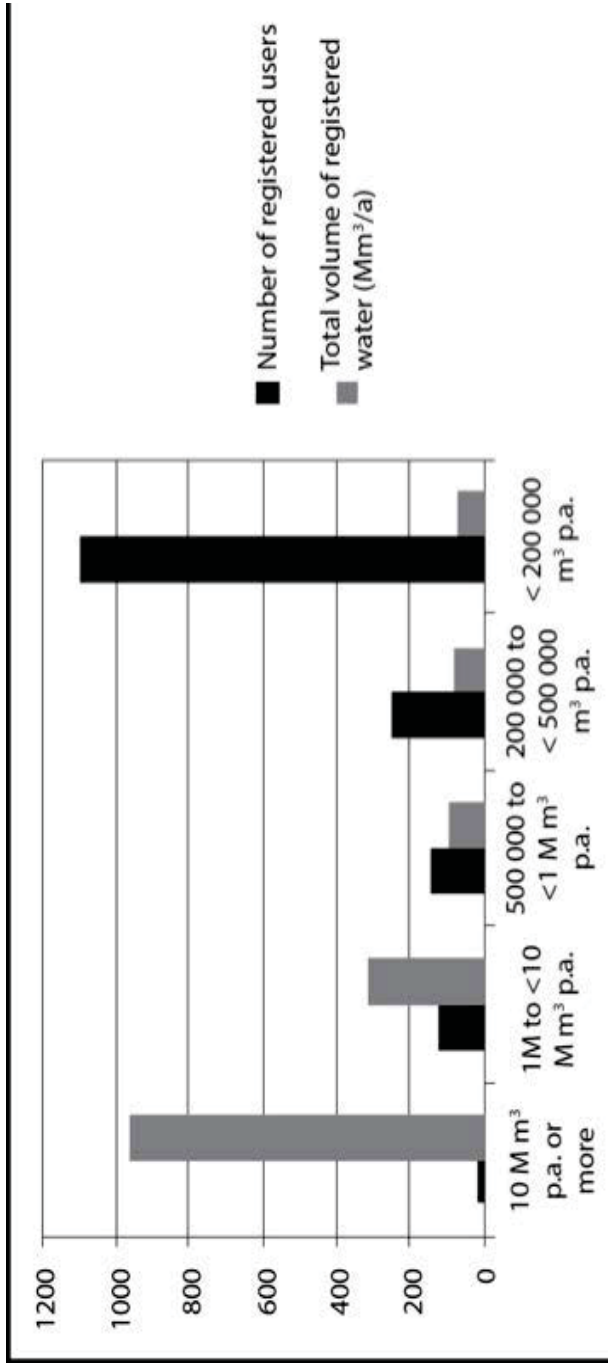
6.1 The current second-class status of exemptions

As mentioned, Schedule One and General Authorizations risk resulting in structural discrimination against small-scale water users falling under these tools because the entitlements of water uses exempted from an obligation to be licensed are less strong than licences, whether only perceived as such, or by law, or both. In South Africa, licences are certainly seen as a stronger entitlement than uses under Schedule One or a General Authorization. Also, a number of water users with Existing Lawful Uses have applied voluntarily for the conversion of their Existing Lawful Use

46 Cullis and Van Koppen (2008).

FIGURE 2. VOLUMES OF WATER REGISTERED BY NUMBER OF REGISTERED USERS IN INKOMATI WATER MANAGEMENT AREA.

Source: WARMS data; Schreiner et al., 2010.



into a licence, as the latter are seen as more secure entitlements. Similarly, throughout the debates of the Water Allocation Reform on the possible role of General Authorizations, the single most important objection was that a General Authorization would be a lesser entitlement than a licence, and would thus discriminate against those users (in this case black users) falling under a General Authorization.

Certain service providers also perceive General Authorizations as second-class entitlements. The Land Bank, for example, obliges its future clients to have a formal licence as a condition for loans, and is reluctant to accept a General Authorization. From the Land Bank's perspective, a licence supposes at least some consideration of the water resource situation of the loan taker (even though the National Water Act does not guarantee that licensed water will be available to its full amount every year). This saves the Land Bank the efforts of assessing the viability of the enterprise from the perspective of water availability. Thus, in the current situation small-scale users have no other choice than wanting a 'paper for each group member that enables each of us to access loans and markets', as found by Department of Agriculture's officials engaged in prolonged procedures to obtain water use licences for smallholder schemes in Limpopo Province (personal communication 2013). How can the second-class status of exempted uses be overcome?

6.2 Vesting the third priority in General Authorizations for black women and men

Exempted water uses by black women and men align with the third priority for water for poverty eradication and redress stipulated in the NWRS-2. A combined reading of the NWRS-2 and the National Water Act not only stipulates a legally binding priority over strategic and licensed uses, but also entails the right to compensation if other uses cause severe prejudice to the activity undertaken. It addresses the current omission in the Reserve to prioritize small-scale productive water uses in the sense that the implications of meeting the ecological reserve and international obligations are to be borne by strategic and licensed uses, and not by exempted users.

However, this legally binding position risks being ignored in the ongoing revision process of the General Authorization of 2004. Once included, it should also be communicated clearly among the small-scale users concerned, government departments, the Land Bank and other institutions. This priority removes any ground for banks and other service

providers to demand a licence, as strong water entitlements already exist. If banks need other information to judge the viability of an enterprise, they can employ their own staff, or ask explicitly for such information from government officials.

Another significant change of the priority General Authorization compared to the current General Authorization is its nationwide implementation, *especially* in water-stressed basins. That is the situation of the zero-sum game in which micro- and small-scale water uses by poor black users need to be protected and negotiated most urgently. It is there that the widely acclaimed aims and legal tools for redistributive Water Allocation Reform are most needed. Current water uses under a priority General Authorization or new small-scale uptake of water (which supposes investments in expensive infrastructure) might require large-scale users to share their earlier entitlements. If the latter face severe economic prejudice, they are protected and can lodge a claim under section 22(6) of the National Water Act, which prescribes compensation for licence holders under certain conditions.

A priority General Authorization would empower both black women and men small-scale users in a bottom-up manner to enter any locally specific arena of competition with an entitlement to at least minimum current uses but also the option of future uptake as an alternative fall-back option. As these are individual entitlements, they increase women's bargaining power vis-à-vis men significantly more strongly than under customary water law. Both women's and men's negotiation powers are increased vis-a-vis competing larger-scale water users, to be at least noticed, but also respected, protected and enabled to negotiate a range of locally specific pathways out of poverty. The legal option of taking up water for self-employment may enable stronger bargaining power for better job creation in enterprises of large-scale water users, for example as farm workers. The future will learn whether South Africa's black female small-scale users will finally be able to negotiate at least some benefit from the nation's water resources.

7. CONCLUSION

The potential to use a priority General Authorization tool in South Africa, or a similar tool elsewhere, maintains the regulatory role of licence systems for justice in the sense of state power to regulate high-impact users in the public interest, starting with those who need to be regulated most urgently. At the same time, it overcomes the three generic Sub-Saharan

African forms of injustices especially for the numerous women small-scale water users.

- First, it restores pre-colonial entitlements for small-scale water users under local and customary living laws, but now with the major advantage of equal rights for women and men.
- Second, it removes the administrative discrimination against especially women small-scale users that is the result of states' limited capacity to implement water laws that were designed by, and for a minority of male settlers. Realistic thresholds not only avoid such discrimination, but also allow the state to better focus on actual regulation instead of mere administration.
- Third, this tool ends the demotion of the majority of black women and men water users to second-class entitlements. Instead, it ensures equal access to minimum quantities of water for basic livelihoods for all according to the right to water, food, and adequate standard of living.

Only once those needs are met, the remaining water resources are to be distributed to larger water users. Other Sub-Saharan African governments can adjust their licence systems along the same lines.

Chapter 16

Gender, Rights, and the Politics of Productivity The Case of the Flag Boshielo Irrigation Scheme, South Africa

Barbara van Koppen, Barbara Tapela and Everisto Mapedza

1. INTRODUCTION

1.1 Rights in the politics of productivity

Can South Africa's world renowned constitutional socio-economic rights to access to sufficient water and food be realized by technology-driven capital-intensive economic growth, especially agricultural growth, or are there inevitable trade-offs? Is growth of the country's well-advanced, large-scale businesses a necessary condition to redress past inequities along race and gender lines and achieve substantive equality? Or would the promotion of sophisticated technologies for 'economically viable' productivity inevitably reinforce past and present wrongs: concentrating income, land and water among the few; widening the skills gap; and increasing the numbers of unemployed, especially women and youth? These questions are certainly not unique to South Africa, but the views at both ends of the spectrum are probably more at variance than elsewhere.

Answers to these questions are vital for gender equality. A persistent stereotype is that technology design, construction, operation and maintenance are male domains. Yet, the constitutional right to substantive equality prohibits any gender-based exclusion from control over technologies. Moreover, in the case of agricultural technologies for black agriculture, women historically dominated, and still dominate, cropping in South Africa. Thus, in principle, they are more interested in learning technologies that can render their labour more productive.

The first step in unravelling these questions is to analyse the role of rights regarding gender equality and non-discrimination in the political-economic processes, that shape the control over the infrastructure, and hence the production process and its benefits. We call these processes the 'politics of productivity'. This chapter focuses on control over agricultural and water technologies – and hence water – as part of the agricultural and rural production processes, which still constitute an important mainstay in poor people's livelihoods, especially in the former homelands. The majority of the poor, especially women, still live in former homelands or in rural areas of the former white Republic of South Africa, or in small towns.

Technologies are key to accessing water. Water technologies (or infrastructure, both terms are used interchangeably) such as wells, water harvesting structures, storage tanks or dams, canals, pipes, and pumps or soil moisture retention techniques are indispensable to bring water of the right quantity and quality at the right time to the site where people need it for themselves, their crops, cattle, fisheries and other uses. Technologies such as dikes, banks and drainage also protect against too much water. Infrastructure is costly: for many poor women and men, carrying buckets is still the only affordable technological solution available. People do not need land, but they need land with water, so riparian strips or land with abundant groundwater or wetlands are prime land for settlement and agriculture.

There are two types of infrastructure development with different politics of productivity. As this chapter will confirm, people usually combine the two when they meet their multiple needs from multiple sources. First, people can invest in and own water technologies for self-supply. Household wells are the most common example. Self-supply is often for multiple uses because multi-purpose infrastructure tends to be more cost-effective than single-use infrastructure. Second, people can be clients of a public or private service provider. Public water services are organized in administrative sub-sectors, each with a mandate for a single use. The irrigation sub-sector is primarily concerned about water for crops, while the Water, Sanitation and Health (WASH) sub-sector focuses on water for domestic uses and sanitation. As elaborated in Chapter 14, clients can hold water service providers accountable through payment or other means – the short route to accountability. Moreover, public service provision forms a part of political and administrative government systems, which finance and organize such provision; and they are or can be influ-

enced by citizens – the long route to accountability (World Bank, 2011).

The right to access to sufficient water and food is well articulated in the Constitution of South Africa.¹ Its operationalization into service delivery for domestic uses and sanitation has received considerable attention. However, water is also a necessary, if not the limiting, factor for a range of livelihood activities, especially own production for food security and income to realize the constitutional right to food. For the majority of the poor and for women, even more than for men, self-employment in cropping, horticulture, livestock, fisheries and water-dependent crafts and small-scale enterprise are vital components of their diversified livelihoods.

While white farmers occupy 1.3 million hectares of irrigated land, black smallholders in former homelands only have access to an estimated 50,000 hectares, just over 3% of public irrigation schemes. After the first democratic elections in 1994, many smallholder schemes partially collapsed. By 2010, it was estimated that 206 schemes were still operational, but that 90 schemes, a third of the total, had collapsed (Van Averbeke, 2011). Of the two-thirds which remained operational, on average, less than two-thirds of the farm land was cultivated (Denison and Manona, 2007). Water technology strongly influenced performance. Percentages of functionality were highest for gravity-fed canal schemes (81%), which have lowest operation costs and can be controlled best by farmers. By contrast, only 70% of pumped surface irrigation schemes; 65% for overhead irrigation; and 56% of the micro-irrigation schemes were still operational. The most common reason for collapse given was poor management.

The continued decline of agriculture in former homelands includes a century of the erosion of black agriculture in order to create a cheap urban labour force. Recent studies in the Eastern Cape show that only 10% of rural fields are ploughed annually. At present, crop production mostly occurs in home gardens. Farming today mainly serves as an additional source of food (Van Averbeke et al., 2011). Increased competition in retail markets reinforces this process. A national food production and distribution system, using the produce of the large-scale farmers, has been established; and it reliably provides food almost everywhere in the country. Four large supermarket chains retail about 60% of all food. The poor are increasingly passive consumers of the produce of white large-scale farmers (Van Averbeke et al., 2011). The country's massive social grants programmes of USD12 billion² for 15 million South Africans serve hu-

1 Constitution of South Africa Act (no. 108), Section 27 (1b).

2 Throughout the chapter a conversion rate is applied of USD 1= ZAR10.

manitarian goals but also boost a consumer market.

Within this context, we seek to unravel the gender aspects of the politics of productivity and the role, if any, of the new constitutional rights to access to sufficient water and food, substantive equality, and redress of inequities from the past. For this purpose, we undertake a historical analysis of the era before 1994 and of the continuities and discontinuities afterwards.

1.2 Research design: the case of the Flag Boshielo irrigation scheme

The case study for this analysis is the Flag Boshielo Irrigation Scheme in Limpopo Province. This scheme is some 300 km north-east of Pretoria. The river and its large dam constructed in 1987 provide year-round water to the left and right bank. The potential command area is well over 2,000 hectares. The wider region is also rich in minerals. This case study focuses, in particular, on the row of the 12 black smallholder sub-schemes (or 'farms') on the right bank, and one farm, Elandskraal, on the left bank (see map overleaf).

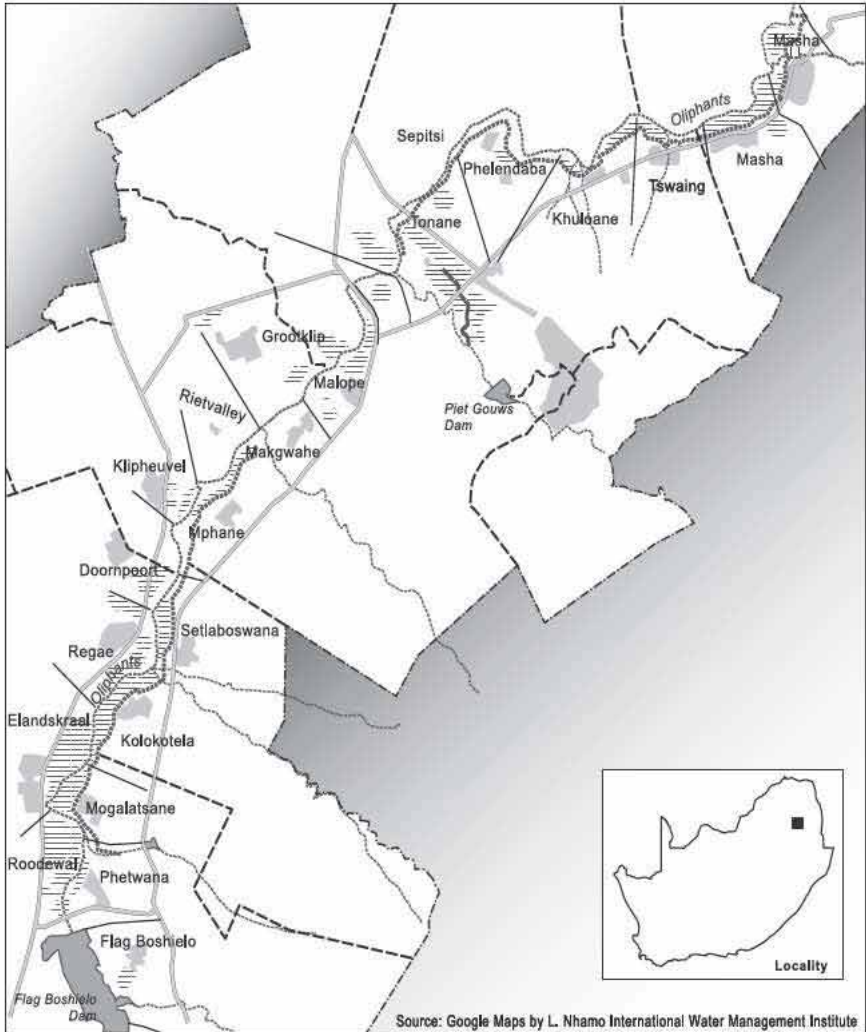
This chapter is based on a literature review, interviews with key informants, regular field observations and topical studies since 1999. It is structured according to the respective periods, which happen to coincide with changes in the name of the scheme, as follows.

1.3 Chapter structure

In Section 2, we discuss the pre-1994 history of settlement on the riparian strips of the Olifants River and subsequent irrigation development of the so-called Olifants-Sekhukhune irrigation scheme. This will highlight the intrinsic political, elite, and male-dominated nature of settlement policies, marginalizing women as 'housewives'; and the increasingly centralized irrigation infrastructure, managed by a subsidized white agri-business. This conjunction seamlessly served the goals of the apartheid régime, or 'Pretoria'. With the construction of the Arabie dam in 1987, the name of the irrigation scheme changed to the Arabie scheme.

Section 3 analyses the collapse of the Arabie scheme after 1994, primarily as a result of the dismantling of the political structures, which used to manage the scheme, when the new democratically elected government came to power. Instead of operationalizing any new constitutional rights, neo-liberal notions of 'standing on one's own feet' were used to legitimize this collapse.

Section 4 traces wide-ranging spontaneous responses to this collapse



WATER RESOURCES

POLITICAL:

OLIFANTS-SEKHUKHUNE

(ARABIE)

IRRIGATION SCHEME

KEY

Farm Boundary ———

Ward Boundary - - - - -

Canal ————

Road ———

River, Dam ————

Cropland ————

Settlement ■■■■■

by women (as the majority of irrigators), other inhabitants, government officials, private consultants and the agro-business. This included three, small-scale, joint ventures between chiefs or plot holders and private large-scale farmers in charge of all cultivation on a lease or share-cropping basis. However, government's response from 2001-04 focused on the design and pilot-testing of a large national programme on participatory Revitalization of Smallholder Irrigation Systems (RESIS). The sudden decision of newly appointed senior government staff favoured blanket upscaling and the option of joint ventures between plot holders, strategic partners and government – forming part of the RESIS Recharge programme from 2005. They allocated lucrative tenders to private manufacturers of new and even more centralized irrigation equipment. This subsidization of the agro-business was justified with a strong discourse about modern technology and the economic viability of commercial approaches. In this period, the name of the dam and irrigation scheme changed to Flag Boshielo, an anti-apartheid activist.

Section 5 traces the implementation. Plot holders had to organize as a co-operative and give up their land and livelihood options and had to wait passively for their share in the profits, entirely generated by the strategic partner. Younger men resisted the complete lack of transparency and demanded more control, invoking their democratic rights, especially when the strategic partner claimed that losses had been made. As a result most joint ventures broke down. At the same time, elder women expanded informal irrigation in homesteads, from canals, river or wetland. Men also engaged in fisheries to meet basic livelihood needs. The chapter ends with recommendations on how to ensure especially women's control over water technology through locally-driven informed decision-making about the full range of water technical options and other factors needed to turn water use into health and wealth.

2. THE PRE-1994 COLONIAL ERA: THE OLIFANTS/SEKHUKHUNE SCHEME

2.1 Appropriation and settlement of prime land

Up to the mid-1800s, the prime riparian land along the Olifants River was occupied by the Pedi, the ethnic group living in this area of South Africa. It is very likely that they also irrigated. This changed with the arrival of the Afrikaner Boers settlers. They had left the Cape in search of more land and for access to harbours for trade, and were followed by the British. As elsewhere in the colony, the settlers declared large portions of

land under the British title deed system as their own, initially, mainly for speculation purposes (Lahiff, 1999). This 'lawful' encroachment was enforced by the British imperial army, in particular by defeating paramount Chief Sekhukhune in 1879 (Delius, 1984).

Surveyors carved out 14 blocks of land of between 50 and 250 hectares (called 'farms'), and individuals with both Afrikaner and English names obtained title deeds from 1871-73. Through sale, inheritance, and bankruptcy all farms changed hands at least once and some as often as five times. In 12 out of 14 farms, the farms were transferred to mineral speculation companies, who separated out the mineral rights, which they retained for themselves. The surface rights were further transferred. By the 1930s, all land (minus the mineral rights) was in private hands. The Pedi inhabitants of the area were probably subjugated as tenants or farm workers (Lahiff, 1999).

The title deeds also mention water levies for irrigation activity paid to the Middleburg Irrigation Board. The latter was one of the first white Irrigation Boards to be established. By declaring that this part of the Olifants River had to be regulated by the 1926 Water Court 'normal flow apportionment', the white settlers also 'lawfully' exerted their self-declared rights to the passing waters, dispossessing the Pedi from their prior water rights in the process (Lahiff, 1999). A river abstraction weir, abstraction pump house and earth canals were constructed in 1933.

In 1936, the Native Trust and Land Act³ was passed. This made provision for the purchase of land in order to extend the so-called Native Reserves. The South African Native (later, Development) Trust bought many of the farms between 1938 and 1963. Chapter 29 in the Tomlinson Report reported vibrant irrigation by black people. Some had taken up irrigation on their own initiative and explicitly requested further irrigation support. The north-eastern regions of the Transvaal (currently Limpopo and Mpumalanga provinces) had the majority of the 122 irrigation schemes in the entire Union. Within this area, the Olifants River was particularly important: 36 farms lay along it. The Tomlinson Report also mentioned how Pedi farmers in the nearby Nebo district had voluntarily contributed labour to construct 60 earthen dams in collaboration with the agricultural section of the Native Department, and 11,300 bags of wheat were produced (Houghton, 1956).

However, resettlement of black people on the purchased Trust Land along the Olifants River seemed less smooth. The Tomlinson report not-

3 Native Trust and Land Act, 1936 (Act No. 18 of 1936).

ed that, initially, 'the local population was very unwilling to take up irrigation'. However, by 1952 '472 plots had been allocated'. Other farms were purchased later. An annual 'maintenance rent' of £1.10 was charged (Houghton, 1956). Each household obtained a plot of usually 1.28 ha (1.5 morgan) plus a house with the same number as the plot in the new settlements. After 1969, all Pedi plots were held on the basis of a Permission to Occupy (PTO) according to the Bantu Areas Land Regulations (Proclamation R188 of 1969).⁴ This drew its legal authority from the 1936 Native Trust and Land Act (Lahiff, 1999).

After 1948, the apartheid regime promulgated the Bantu Authorities Act of 1951,⁵ the Promotion of Bantu Self-Government Act of 1959,⁶ and Lebowa's declaration of internal self-government in 1972. The latter consolidated the appointment of a Lebowa government of chiefs reporting to, and implementing orders and investments by 'Pretoria'. The settlement and irrigation development in the Olifants scheme served up to seven goals in line with these male-dominated politics, from the top down:

- consolidating the territorial segregation with the above-mentioned purchase of Trust Land along a stretch of the river, which then became the boundary between Lebowa and white South Africa;
- pacifying forcefully removed chiefs and their followers by 'compensating' them with irrigated land;
- favouring allied chiefs to break resistance of, especially, Chief Sekhukhune and his followers – a stronghold of the emerging African National Congress;
- pacifying men by enabling them to have more power over their wives;
- pacifying all settlers in the scheme through food security (by the late 1980s, only 30% of the food consumed in the homelands was produced internally – the large majority of black people already depended on the purchase of food produced by white farmers);
- providing employment to white irrigation engineers and managers;

4 Bantu Areas Land Regulations (Proclamation R188 of 1969).

5 Bantu Authorities Act, 1951 (Act No. 68 of 1951).

6 The Promotion of Bantu Self-government Act, 1959 (Act No. 46 of 1959).

- and, in the course of the years, ensuring full white control over mechanization, including the vital means of production i.e. irrigation infrastructure.

There has never been any ambition to initiate ‘economically viable’ irrigation.

The settlement processes on the farms on the right bank illustrate these goals, as we will see, from upstream to downstream. The allocation of the two most upstream farms, Hindoestan (later Phetwane) and Coetzee-draai (later Mogalatsane), were allocated to Frank Sikoane Matlala Maseremule. This chief with his followers from the Ba-Kone tribe was first removed from Pietersburg, and settled in and around Jane Furse (in Sekhukhune land). He had no strong bonds with Chief Sekhukhune and was one of the first chiefs to accept Pretoria’s offer of a position in Pretoria’s newly declared Lebowa homeland government. His son Mokgome M. Matlala became minister in the department of home affairs, instilling a strong tribal-based authority, which continues today. These chiefs allocated the plots of the two farms in perpetuity. After 1994, a land claim for this farm was lodged by a community that resided in Leeuwfontein, near Marble Hall. Their grandparents were called ‘Petwane’. According to the claim, they had lost this land in 1958 for ‘reasons of ethnicity’ to the people of Matlala (Lahiff, 1999; Claassens, 2001; Tapela, 2009).

In 1962, the farm Krokodilheuvel (later Kolekotela) was occupied by members of the Mampana community. They had previously lived on white farms and scattered in Sekhukhune, but were brought together on this farm. Chief Mampana was less powerful than M.M. Matlala (Lahiff, 1999).

The nine farms from the next downstream farm Struisvogelkoppie (later Setlaboswana) up to Haakdoringsdraai (Tswaing)⁷ were followers of Chief Masemola, who had always resided in the area of the scheme under Paramount Chief Sekhukhune. Families had been scattered on various white farms, but eventually they were consolidated. The central area, Veeplaas (‘place of cattle’) only received irrigation infrastructure in 1983.

The most troubling relocation was that of Chief Masha and his followers, who were settled on the next downstream farms, Strydkraal and Mooiplaas. In the 1950s, they were forcefully removed from Kalkfontein,

⁷ The respective Afrikaner (and current) names are: Gaataan (Mphane), De Paarl (Makgwabe), Veeplaas (Tonane), Wonderboom (Phelendaba), Vlakplaas (Khuloane) and Haakdoorn-draai (Tswaing).

near Lydenburgh in current Mpumalanga. Pretoria gave Chief Masha and some of his followers these farms as some economic and moral compensation. Chief Masha obtained a relatively important position in the Lebowa government. He interacted actively with the Lebowa Department of Agriculture and white engineering firms, which gave him the reputation of an entrepreneurial and progressive chief. In 1987 a centre pivot was given to 'his community'. However, as a community member told us, when it appeared difficult for 'the community' to manage it, Chief Masha took the management over. He, in his turn, leased the operation out to the first strategic partner in the area, a white farmer (Farmer B.) from Marble Hall, the nearest white town approximately 60km away. His contract was to last until 2007. Other community members did not like Farmer B. 'He was shooting at our animals even if they were far [away], and without warning'.

However, the Nchabeleng and Ga-Nkoane communities of Apel, further downstream, lived in the same area and already cultivated the farm of Mooiplaas. They felt that Chief Masha and his people were forced upon them without consultation, and that they deprived them of a part of their land through the irrigation scheme. This compounded an increasing political contest between Nchabeleng's anti-apartheid movement and Chief Masha. The struggle became violent and led to the abandonment of most of the Mooiplaas scheme.

Lastly, the most recent removals were by the people settling on the Trust farm, Elandskraal. This farm is on the left bank, opposite Mogalatsane (see map). These inhabitants were settled in the 1980s, after removal from Moutse in the former Kwa'Ndebele homeland (Tapela, 2009).

2.2 Centralizing water infrastructure and managerial control

As elsewhere in South Africa's homeland irrigation, the water infrastructure was mostly flood irrigation until the 1970s. Also triggered by floods in the 1950s, the apartheid government improved the water provision, e.g. by constructing the still existing concrete canals and the Makotswane, Lepellane, Nkadimene and Piet Gouws dam in the 1960s. The latter was also for domestic water for Chief Masemola's village. In the upstream farms, water was pumped out of the river, but in the middle, near Veeplaas, a weir was constructed in the Olifants River to feed a gravity canal that conveys water to the fields of the downstream farms until today.

After the 1956 Water Act,⁸ the riparian stretches along the entire Oli-

8 Water Act 1956 (Act No. 54 of 1956).

fants River became Government Water Control Areas. New Irrigation Districts were formed to control water abstraction. The stretch upstream including both Chief Matlala's farms; and those on the left bank became part of the Olifants Irrigation District (proclaimed in 1968), while farms further downstream along the right bank of Olifants River and flowing through Lebowa became the Sekhukhuneland Irrigation District (proclaimed in 1969). Interestingly, in 1980, an agreement about the apportionment of water between the 'co-basin states' of the white Republic of South Africa and the entire self-governing Lebowa was arranged. Acknowledging the latter's 'rightful claim to the water' of the river that crossed their area, a proportion of precisely 52.65% of water during critical months was set. However, even though the allocation was shared, an addendum stated that because of water variability in large upstream Loskop Dam, 'the allocation to Lebowa and the other consumers downstream of the Loskop Dam also has to be determined from season to season' (DWA, 1991a).

Again in line with irrigation developments elsewhere in the country from 1980 onwards (Van Averbeke et al., 2011), Pretoria, development corporations and the white engineering firms in the homelands stepped up their efforts in another round of investments. They upgraded the schemes to more expensive, energy consuming, and more centralized technologies. These were 'excessively capital intensive, based on the most sophisticated modern technologies' (Laker, 2004). They reasoned, 'Since consultants always received a fee based on a percentage of the capital expenditure, it was to their advantage to plan the most capital expensive system. The South African government funded only capital expenditures and not running costs and it was thus easy to convince homeland governments to go for capital intensive projects, rather than those with higher running costs, e.g., labour intensive ones' (Laker, 2004). This started a trend in which 'design solutions' appear to be scaled-down versions of first world technology rather than solutions that would work well for smallholder farmers' (Machete et al., 2004).

With great zeal and efficiency, technologies were developed in the Olifants scheme. Within just three years, i.e. by 1983, new equipment and electricity were installed. Pumping from the canals or river gave pressure to piped sprinklers (which were still easy for farmers to move around and control), and centre pivots (which required more centralized control). These upgrades included the central grazing area of the Masemola community, Veeplaas, in order to pacify Chief Sekhukhune. The Veeplaas

Farm became a sprinkler irrigation scheme with 28 plots of 2.5 ha (out of which five were allocated to women) and two plots of 10 ha (allocated to male relatives of Chief Masemola) (Lahiff, 1999). Thus, the total area on the right bank from upstream Hindustan (Phetwane) to downstream Mooiplaas became 1,873 ha. Conventional piped sprinkler covered 71% of the irrigated area, centre pivot 10% and flood irrigation 19% (Small and Stimic, 1999).

In 1987, the government of Lebowa finished a large new dam just upstream of Phetwane, called the Arabie dam.⁹ Its purpose was to provide for domestic water supplies for communities downstream and for irrigation. The available surface water from the Arabie dam for irrigation was set at 2,767 ha. However, in the medium-term the provision of municipal water to the province's capital of Polokwane, 100 km away, was also considered; as well as water provision to mines further downstream in the Limpopo and Mpumalanga provinces and in the adjacent North-West Province (Department of Water Affairs, 1991b). Moreover, the dam allowed for better regulated downstream dry-season flows and flood mitigation, although severe floods still caused major damage to the irrigation schemes. An estimated 200 people have been displaced without compensation for this large dam inundating 1,288 ha. Some of them raised this issue and lodged a land claim in 2012 when plans for a nature conservation to attract tourists were discussed (Tapela, 2009).

2.3 State-subsidized outgrower arrangements

The centralized water technologies of pumps and sprinklers required more centralized management. This was provided either by commercial agencies contracted by government or by government itself. Between 1983 and 1988 the greater part of the scheme was managed by the Agriculture Management Services (AMS) on behalf of the Lebowa government; and the rest was managed by the Lebowa Department of Agriculture and Environmental Conservation itself. From 1989 to 1992 another company, the Lebowa Agricultural Corporation (LAC) took over from AMS. In 1996, with the consolidation of the nine new provinces, the greater part of the scheme came under the management of the Agricultural and Rural Development Corporation (ARDC). This was a merger of the various development corporations in the three former homelands in the north (Matlala and Shaker, 2003). ARDC, receiving USD7 million per

⁹ While some reports (e.g. DWA, 1991a) refer to this dam as the Mokgoma Matlala (M.M. Matlala) dam, others give that name to the Piet Gouws dam.

year from treasury, employed a staff of 1,200 and had a salary bill alone of USD2,2 million, cultivating and providing services for 120,000 ha of government land (Shah et al., 2002). Service costs were paid by government subsidies and by service charges to farmers.

In 1993, the ownership of the irrigated plots was transferred from the South Africa Native Trust to the Government of Lebowa, except for two schemes, which were bought by the Masemola Tribe, and two farms that stayed with the South African Development Trust (Lahiff, 1999).

In this centralized management, the white managers employed African staff. The Arabie Scheme had five extension workers. One of them recalled, 'I was always there as the black man with the white man, to mediate and explain. For example, black cultivators were numbers. Sometimes people who had worked hard and had harvested well, got less income. I was then the one to check, so I found out that the numbers had been mixed up'.

The management dictated from the top-down: the crop to be sown (alternately wheat and maize, sometimes cotton, but hardly ever high-value vegetables, although farmers were quite interested (Maloa and Nkosi, 1993)); the dates of ploughing and other operations; the provision of paid mechanized ploughing services; the fertilizers and chemicals to be used; the day and hours when the sprinkler pipes had to be moved; the days for harvesting and central collection of the produce; and the payment days. The management insisted on collecting all produce and discouraged any local trade (though it still occurred). They brought the harvest to the Oos Transvaal Kooperasie – East Transvaal Co-operative, or Nord Transvaal Kooperasie – North Transvaal Co-operative, which calculated the income. The costs of the inputs and ploughing services were subtracted from the total income to calculate the net incomes to pay to the farmers. Indeed, farmers were not more than labourers on their own plots, bearing the risks of this high-input, expensive and high-risk form of farming (Shah et al., 2002). A farmer, confronted with this dependency on others and high costs on his bill, commenting on the AMS said, 'Though we produced little before they came, we owed nobody' (Maloa and Nkosi, 1993).

2.4 Gender in irrigation

As mentioned above, in the course of the 1980s, technologies became 'scaled down versions of first world technologies' (Machethe et al., 2004) as part of divide-and-rule politics among men. However, well before

that, white norms about the gendered organization of farming were already being employed in a last attempt to pacify the Pedi men. Men were co-opted by giving them new powers over the labour of their female kin.

The Pedi agrarian economy was strongly gendered (Mönnich, 1967). By the 1960s, a few activities such as gathering were done by everybody. Warfare, hunting, cattle, sheep and goats (but not pigs and fowls) were a male domain. This included the herding, milking, slaughtering, and cleaning of milking utensils. It was often a taboo for women to engage in this domain. Men were also responsible for keeping cattle out of the crops, on distant grazing lands, for example. Women, on the other hand, were responsible for domestic chores, including fetching water and wood for domestic uses. Other water-dependent activities, such as brewing beer, cleaning and repairing huts and courtyards also fell to women. Men were responsible for building and thatching houses, while women were responsible for the floors, walls and decorations. Pottery was generally considered a female task. Gender patterns for reed work varied. Men did woodwork and worked in hides and leather. Women were also the cultivators, using the iron hoe. Women decided what crops to cultivate from sorghum, millet, pumpkins, watermelons, calabashes, beans, yams to various types of tobacco. While there was no taboo preventing men from participating in cultivation, they shared the responsibility for land clearance. Girls assisted their mothers, and both boys and girls assisted in keeping birds away from the crops. This was a burdensome task with sorghum and millet, but not needed for maize. The cultivation of vegetable gardens could be done by men or women or both. Rights over land lay with the husband's kin. The mother-in-law allocated land to women. The importance of the mother-in-law is illustrated in the soubriquet the 'moon which bursts', coinciding with October's spring time, 'the strict mother-in-law', keeping her daughters-in-law occupied with agricultural activities from the ploughing season until the end of the harvest. The size of a farm depended primarily upon the capability to cultivate. Among the Pedi, this was two to six acres if cultivated with a hoe (Mönnich, 1967).

However, apartheid irrigation development ignored such gender relations. Instead, the rulers introduced the European notion of the nuclear family, solely engaged in farming, with the male household head as the natural and sole household member entitled to land, technologies, and other productive resources. The latter included the fruits of their wives' labour. Thus, the Tomlinson commission recommended a size of 1 or 1.5 morgen (1.28 ha) because, 'Out of the various farming and settlement

systems, irrigated farming is undoubtedly the enterprise for which the Bantu has proven that they are able, under white management and leadership, to make an economic living out of full-time farming and to use the land economically for food production. Unlike rainfed agriculture, the man does not avoid activities here – the man and his whole family are active on the plots'. The Tomlinson Commission explained that a size of 1.5 morgen would allow a nuclear family to cultivate full-time. As studies from the Olifants River scheme had shown, a gross income of £110 could be derived from 1.5 morgen (1.28 ha). This was seen as enough income for a reasonable livelihood – according to white perceptions of Bantu standards. The Commission also gave strict instructions that all those who were allocated plots should give up other farming and work full-time on the irrigation plots. Plot holders were not allowed to leave their homes for more than 14 days without written permission of the (white) scheme manager. Also, no other families were allowed in the dwellings of the irrigating households without permission of the manager (Houghton, 1956). The promoters of these relative privileges for men were silent about the culling of men's livestock under the notorious earlier betterment programmes and the exploitation of black men in the white wage economy. Instead, these new income opportunities and relative privileges for men over their wives served another goal, as also echoed in magazines like *Bantu*. Commenting how native men often went for migrant labour, while women continued cultivation, they stated that irrigation was the best way to raise men's interest in irrigated cultivation, so that men would stop migrating (*Bantu*, 1970).

While these 1.28 ha plots were allocated to male heads of households, only smaller gardens of one sixteenth of the size of irrigation plots were to be given to 'widows' (Houghton, 1956). In reality, those 'widows' may well have included married women. Indeed, by 1994, the majority of irrigating cultivators in the Olifants River scheme and all other government-supported smallholder irrigation schemes in the Olifants basin were – and still are – women. Percentages vary from 70 to 90% or more (Van Koppen, 2002). In the Olifants irrigation scheme, as many as 20 to 40% of the official PTOs were in women's names by 1999, although the law stated that only men could obtain PTOs. This reflected a strong female role in cultivation and their land inheritance after the decease of their husbands. In Veeplaas the proportion of women is 40%. Chieftainess Masemola explained how conflicts can arise when men claim part of the harvest on the basis of land claims without having contributed their labour. Her

late father considered that unfair. Moreover, when women came to cash the cheques from the marketing co-operatives, it caused confusion when the cheques were in their husbands' names (Van Koppen and De Lange, 1999). Women were generally more productive than men; more so, if they held the plot in their names, as Kamara et al. (2002) found in the mid- and late 1990s, during the last cropping seasons before or just after the withdrawal of state subsidies.

2.5 Food security and local water development

By the early 1990s, women (and men) plot-holders on the above-mentioned irrigated farms on the Olifants River irrigation scheme were generally content with food for household consumption, especially maize, and for income from surplus sales of wheat or cotton. Appreciating these livelihood benefits, they organized effectively for communal works such as canal maintenance or moving sprinkler pipes when the bell was rung. But these satisfied subjects of satisfied chiefs were a tiny minority among the inhabitants of Lebowa.

Although the irrigation canals were designed for irrigation only, they served other purposes as well, including access by the growing number of inhabitants without plots. People also used the canal water for domestic purposes, livestock, fisheries, etc. The few government boreholes installed in some residential areas were insufficient. Not only canals, but the dams and the river were also indispensable water sources. Homestead wells and boreholes also served livestock and gardening. Many irrigated gardens were set up, both formally by government and various NGOs, and informally by women's groups and individuals. The small communal garden plots were mainly or exclusively in women's names. For example, the gardens set up by the Rural Women's Association in Apel served some 300 women on 30 hectares (Pardeller et al., 1999). With the collapse of the irrigation activities and even under its revitalization, these informal water uses rapidly increased, as discussed in the next sections.

3. THE 1990S: COLLAPSE OF ARABIE SCHEME AND RESPONSES

3.1 Collapse

Already, from 1989 onwards, government's investments, which financed the white-dominated irrigation management agencies, began to decline by as much as 40% (Maloa and Nkosi, 1993). As highlighted in 1993, the reduced funding exposed the major dependency of

the smallholders on state support and vice versa, for example in weak repayment of credits. The (white) publicly funded agencies started being seen as expensive and inefficient (Maloa and Nkosi, 1993). Once the new ANC government had dismantled the same apartheid structures, the political will to continue funding these agencies was even less. Indeed, the government decided to drastically reduce funding of the ARDC, from USD7 to USD2 million (Matlala and Shaker, 2003). There was no reference whatsoever to constitutional rights of the farmers ultimately affected.

Hence, from the winter wheat crop of 1996 onwards, farmers had to take over all production costs, starting with the payment of electricity bills. However, capital for the purchase of inputs and the organization of farmers into collectives to arrange such collective action from scratch were lacking. The Transitional Local Councils had barely started to create the entirely new local government structures, and were still awaiting the demarcation of local government boundaries by 2000.¹⁰ Some traditional leaders filled the void to some extent, but with considerably less support from the ANC government than from the apartheid government. A downward spiral kicked in. Pumps broke down and were not repaired. Canals were no longer cleared. Lack of income from one crop prohibited the purchase of the costly inputs for the next crop. By 1999, only 30% of the scheme was cultivated (Small and Stimie, 1999). The bad news on the ground was accompanied by a strong recourse to a neo-liberal discourse of 'standing on one's own feet' and own payment for all inputs, which would soon include water as well. A farmer commented, 'It is okay for us to stand on our own feet, but this has been too sudden.'

Various responses emerged: plot holders, especially women, continued with irrigated cultivation; other inhabitants expanded their use of informal irrigation; agri-business dealt with groups of farmers and also arranged private deals with tribal authorities. Government first contested such deals, but later facilitated the same. The most marginalized, especially older women plot holders, lost out.

10 The boundaries of the new municipalities largely follow the boundaries of the chieftaincies. Elandskraal and Phetwane are in Greater Marble Hall/Elias Motsoaledi municipality; Mogalatsane Farm is in Ephraim Mogale; the farms from Kolekotela to Tswaing in Makhudu Thamaga, and Strydkraal and Mooiplaas in Fetakgomo local municipality. They all fall within the Greater Sekhukhune District Municipality.

3.2 Responses by women plot holders and inhabitants

Where possible, plot holders tried hard to take irrigated cultivation forward on their own. This happened mainly with gravity-fed irrigation. On the Pelendaba (Wonderboom) Farm, for example, small groups or individual farmers, mainly women but often led by men, tried their best to establish direct relationships with the Land Bank for loans (but they were too small to be considered) and direct contacts with the co-operatives for sale (which failed).

Along the canals, especially women started or continued with their informal gardens, also by newly constructing own off-takes from the canals, whether this was seen as illegal or not. Saving groups also emerged, particularly among food plot holders with small farms of 0.12 ha (Machethe et al., 2004). In Strydkraal, Chief Masha and Farmer B. continued operating the centre pivot, cultivating cotton.

Some younger men tried to organize a union, defending the resource rights of their illiterate mothers and fathers. However, they were ignored. The National African Farmers' Union failed to engage. There was some discussion about the option of transferring ownership of both land and irrigation equipment from government to the farmers, as proposed by, for example, the two larger farmers in the Veeplaas Farm. Community Property Associations might have been formed to that end: this was the institutional model that had been proposed for land reform elsewhere in South Africa (Van Koppen and De Lange, 1999). These Associations could have been aligned to the formation of multi-tier Water User Associations. However, this option was not further pursued, partly because of the risk that chiefs would entirely dominate the process.

3.3 Agri-business: cotton outgrower schemes

On two farms, agri-business attempted cotton outgrower arrangements with all plot holders on the Veeplaas and in Phetwane farms. Both efforts failed. Highly mechanized cotton cultivation is high-risk: inputs were costly, so profitability mainly depends on very high production. Any hitch in the production process can lead to net losses.

The first initiative was undertaken by LONRHO in Veeplaas in 1998 and 1999. However, logistic delays in the provision of inputs and fertilizers rendered the production for most farmers, except the most diligent ones, too low for any net benefits. As risks bearers, farmers wanted to return to the cultivation of maize for their food security. LONRHO left, also because of low profitability and internal strategic changes.

While the central buildings in Veeplaas were taken over from the ARDC by members of the Masemola chieftaincy, the land and the irrigation equipment remained idle. Farmer B. stepped into that void. He asked Chief Masemola to lease the land to him. Without much transparency within the tribal council, she agreed. Plot holders are said to receive USD20-30 per plot as annual rent, a very low value for this prime land and free infrastructure. Farmer B. has been cultivating various crops ever since, and also using genetically modified seeds of Monsanto. The Department of Agriculture strongly protested such private arrangements employing State land and equipment, and sued Farmer B., but no conclusion has yet been reached.

The second initiative was in Phetwane and supported by the Limpopo Department of Agriculture:¹¹ cotton growing with the Nordelike Sentrale Katoen/North Central Cotton (NSK). The Limpopo Department of Agriculture rehabilitated the scheme in 2002. Plot holders became outgrowers for NSK in 2003 and 2004, with a profit-sharing arrangement. However, as in Veeplaas, NSK was late in delivering fertilizers, so planting dates were late. Moreover, the dam providing water ran dry and wages were high. These factors contributed to severe losses for most, in spite of hard work; many had to use their pensions to pay labourers; and many had to sell their maize i.e. their food security buffer. Farmers were deeply disappointed by the outcome (Tapela, 2009).

3.4 Government: Revitalization of Smallholder Irrigation Schemes

The testing of outgrower arrangements with NSK was one of the pilot projects in the systematic effort by the Limpopo Department of Agriculture across the province to design a participatory strategy to re-establish irrigation (Shaker, 2005). From 1998 onwards, such projects were pilot-tested in three irrigation schemes, followed by a first and second phase of a Land Care project. It had extended to 28 irrigation schemes by 2004, including farms in the Flag Boshielo Scheme. Although the political context of South Africa was unique, some references were made to the global trend of the time, 'irrigation management transfer'. However, the name soon became 'Revitalization of Smallholder Irriga-

11 The initial name was Northern Province Department of Agriculture, Land and Environment. This changed to Limpopo Department of Agriculture, the name used in this chapter.

tion Schemes' (RESIS).¹²

RESIS envisaged spending a total amount of USD108,688,000 over five years, 2004–2010, i.e. USD18,114,000 per year. In this period, 126 schemes were to be revitalized, including the Flag Boshielo scheme, covering a total of about 19,730 ha and directly involving 12,432 farmers. The replacement value of the infrastructure was estimated at USD400 million and was 'mostly dilapidated, moribund and non-productive' (Shaker, 2005). RESIS aimed at socially uplifting the community, and re-building and developing profitable agribusiness through a 'comprehensive programme to structure, train and capacitate smallholder farmers to run their scheme profitably and sustainably' (DAFF, 2015). An integrated and participatory process-oriented approach was adopted, including extensive investments in human capital and upgrading infrastructure. RESIS envisaged responding flexibly to a wider range of community priorities, including homestead food production. It considered multiple uses of water, livestock and scheme interrelationships and dry land crop production (Denison and Manona, 2011).

RESIS paid less attention to land tenure issues and ownership of the infrastructure. Machethe et al. (2004) also commented that RESIS paid limited attention to the much needed reform of the input, mechanization, extension and marketing support structures. The same authors also stated that, 'Access to information about appropriate technology remains a major problem'.

Late in 2004, however, the new leadership in the Limpopo Department of Agriculture radically abandoned this approach, changing to 'RESIS Recharge'. RESIS Recharge took full control of land and water technologies and took all production out of farmers' hands, while leaving farmers with substantive risks.

12 The Department of Agriculture also protected the well-defined water rights of the smallholders in the ever-growing competition over water. In this case, various mines, organized in the Lebalelo Water User Association, wanted to take water out of the Olifants river downstream of the irrigation farms, to pipe the water to mines. The WUA asked the Department of Agriculture and the Department of Water to lease the water rights of the smallholders for five years. The mines also committed to raise the Arabie dam by five meters at their expense by the year 2006.. In return for the five year lease, the mines committed to finance an irrigation canal directly from the dam to the fields downstream. The design and construction of the canal by consultants was so weak that the canal has never been used. None of the farmers was included in these negotiations.

3.5 Towards joint ventures in RESIS recharge

3.5.1 Elandskraal

RESIS Recharge built on another response: the Elandskraal Balima Irrigation Scheme Trust. Elandskraal, which lies on the left bank of the Olifants River opposite Mogalatsane (see map), is a Trust Land farm. From 2000 onwards, the national Department of Public Works in partnership with the Limpopo Department of Agriculture upgraded 150 hectares with centre pivots, in collaboration with the 'Elandskraal Community Production Centre' (Sigcau, 2002). President Mbeki visited the scheme in 2001. A total of 223 smallholders lease land from the Limpopo Department of Agriculture, and form the umbrella Elandskraal Balemi Irrigation Scheme Co-operative.

Already in 2001, some of the farmers had initiated a joint venture with a large-scale farmer, Arthur W. Creighton, trading as a private company AWC (Tapela, 2009). In 2005, 18 farmers with 5 to 10 ha plots organized as the Elandskraal Balemi Irrigation Scheme Trust (EBIS-Trust) on 150 hectares and signed a bilateral contract with this strategic partner (SP). In this contract, the strategic partner commits to use his skills for highly mechanized irrigated production and to use his access to capital, input suppliers and marketing channels for the entire cultivation and marketing process, deciding about the production process in consultation with the co-operative. The contract also commits him to build the commercial and technical capacity of the emerging farmers. In return, he gets 70% of the net income in the first year, 60% in the second year, and 50% in later years, leaving the remaining amount, or the risk of losses, with the co-operative. The contract is silent on how the left-overs of the harvest are allocated.

Farmers, on the other hand, agree to organize into a collective and manage all intra-group matters. They commit to consolidate their plots into centralized farms as required for the centralized centre pivots, and to vacate the land to the strategic partner. The contract also stipulates the obligation to provide any labour that is still needed in this capital-intensive and labour-saving mode of production. The duration of this contract between AWC and the Elandskraal Balima Irrigation Scheme Trust is ten years (Tapela, 2009).

3.5.2 The design of RESIS Recharge

Favouring this initiative, the new leadership of the Limpopo Department of Agriculture decided to upscale this approach. Instead of trying to evict

private large-scale farmers who lease land from traditional chiefs and use public water infrastructure, the department decided to collaborate. Thus, the people-oriented RESIS design was replaced by RESIS Recharge for many more schemes in Flag Boshielo and some other schemes outside Flag Boshielo, such as Makuleke in Vhembe District (Tapela, 2009). This rehabilitation (instead of a revitalization) approach became an engineering centred re-construction of dilapidated infrastructure, focusing on investments in bulk water supply and in-field irrigation infrastructure (Denison and Manona, 2007) and leaving the entire production process to the strategic partner – without an obligation for consultation with the community. Net profits were to be shared on a 50-50 basis. Government used its resource rights to land and water to enable this new mode of production. Land in irrigation schemes formally remains State land, so a private farmer remains dependent on government to access this. Moreover, irrigation equipment is land-bound. These combined resource rights remained a government niche. Indeed, as a government official explained, government's interventions for irrigated agriculture *start* with land tenure and soil quality issues and with irrigation infrastructure. All other aspects of irrigated agriculture are only later addressed and by others.

The new arrangements seemed to solve some problems of the pre-1994 setting (and of public irrigation schemes across the world). Substantive state subsidies are needed for management, also for agricultural management companies handling all forward and backward linkages and managing production (perhaps reducing incentives to optimize production and sale incomes). Rendering subsidized production more efficient is a world-wide challenge. In RESIS Recharge, the handling of forward and backward linkages and production was outsourced to one single large-scale farmer well equipped with labour-saving technologies. Such replacement of the earlier, inefficient, arrangements by a skilled and cost-effective partner, who is profit-oriented and favours cash crops (in this case potatoes) and who could finance inputs upfront, without a loan, may seem attractive to government. Moreover, *it shifts the production risks from government to strategic partners and smallholders*. In the past, state subsidies mitigated production risks for the companies and to a lesser extent to farmers. Farmers' risks were cushioned by government, for example through lenient credit arrangements. Under RESIS Recharge, the strategic partner bears risks but also gains from profits. However, plot holders are excluded from crop choice and any production so they are completely powerless and can only sit and wait as passive beneficiaries or

victims of others' actions. They were not only 'arm-chair farmers' (Tapela, 2009) or 'glorified labourers', but, in principle, *also risk bearers*.

The risks for the smallholders were high, as also consolidated in the standard contract of RESIS Recharge. By being obliged to hand over their land, they forfeited alternative livelihood opportunities with the land and water from the start of the construction phase. Construction, moreover, could take up to six years. Further, annually, they bore risks of crop failure and net income losses, shared with the strategic partner. However, as discussed below, fierce protests arose against precisely that risk, when co-operatives were suggested to put losses on the co-operative's account to be subtracted the following year. Moreover, the plot holders alone bore the longer term risks. The contract was short, just three years. This provided little incentive to the strategic partner to consider sustainability. There was no exit strategy, other than that the strategic partner would hand-over all shares to the co-operative or 'anyone appointed by the Limpopo Department of Agriculture'. The contract had no provision for depreciation and re-capitalization after the life cycle of infrastructure of some 10-15 years. Further, without contractual provisions for the management of conflicts, communities, being the least powerful, risk losing out. Last but not least, risks were made higher because the technology choice made by the Limpopo Department favoured overhead sprinklers, so-called floppies, a highly centralized and largely untested technology (Tapela, 2009). Plot holders' land became a field for experimentation.

All above risks were compounded by an essential new weakness in the RESIS Recharge contract compared to the bilateral agreement in Elandskraal between the strategic partner and smallholder co-operative (Tapela, 2009). In the RESIS Recharge contracts, the Limpopo Department of Agriculture included itself and in such a way that any accountability of the department *and* the strategic partner to the co-operative was taken away. In case of conflict, the strategic partner could always refer any complaints of the co-operative to the Limpopo Department of Agriculture. Yet, the department had no contractual accountability to the co-operative. In the contract, the co-operative's address was the department's address. Even though the contract mentions 'a board' of all three parties, the co-operative had still nowhere to go in case of conflict. The only commitment by the strategic partner vis-à-vis communities was that he should train them in the areas of finance, quality control, marketing, management, operational, technical and business operations. Significantly, this outline provides a role for business clerks but excludes agronomic

training which includes information about crop varieties or crop water requirements, and vesting own sustainable access to input and capital suppliers and output markets. Black farmers are still not supposed to become competitive producers.

Remarkably, the contract is also silent on the department's commitment to provide for irrigation infrastructure. In the problematic logic of government bureaucracy, the only accountability that the department assumed was to perform in the sense of spending money.¹³ Generous funding of the suppliers of irrigation equipment became government's core business in RESIS Recharge. The department opted for an irrigation technology provided by a manufacturer in Nelspruit, who had just started promoting very expensive and entirely new overhead sprinkler technologies, called floppies. Floppies further strengthened centralized control of production. This comfortable monopoly position also implied that there was no need to tender among a range of competing irrigation equipment manufacturers, as would have been the case for the widespread centre pivots. The strategic partner was not initially keen to work with this experimental technology. Nevertheless, the free provision of land and centralized irrigation infrastructure remained sufficiently attractive for him to commit. After gaining experience with floppies, the strategic partner and the department chose to revert to centre pivots (in Strydkraal). By then Arthur W. Creighton (AWC) was 'one of the three persons in South Africa who knows how to operate a floppy system' (Sithole, 2011). The consultancy firm that had operated in the Flag Boshielo scheme during the apartheid era was commissioned to make the irrigation designs.

In the public messages of RESIS Recharge, this approach was glorified as a 'commercial' and 'business-like' approach which would, it was suggested, finally lead to 'economic viability' of self-financed profitable farming. Floppy systems were hailed as the symbol of South Africa's unique, home-grown sophisticated expertise on water-efficient and highly productive mechanized agricultural technology. Neo-liberal terminologies of efficiency and commercial enterprise in the new South Africa seemed to leave the apartheid history far behind, aligning with the country's policy emphasis on capital-intensive technology-driven economic growth. In this discourse, all trust was vested in philanthropic white farmers to build

13 An example of reporting on performance to parliament that entirely focuses on spending patterns, rather than outcomes, is: <https://pmg.org.za/committee-meeting/8720/>.

the capacity of 'unskilled' black farmers.

Above all, these publicity campaigns disguised the heavy state funding that not only benefited 'well-performing' officials but also the private irrigation business and, with land and capital costs of water infrastructure for free, the strategic partner. Lastly, in line with the broader discourses of the time, Black Economic Empowerment figured high in selling this message, while rendering underlying processes even more untransparent. The Limpopo Department of Agriculture's extension worker of Elandskraal started trading under the name of Temong, and soon became both the Black Economic Empowerment partner of AWC and the co-owner of the Nelspruit manufacturing company of floppy systems.¹⁴ In this same period, the names of the dam and scheme changed to the 'Flag Boshielo' scheme, and the Afrikaner names of the sub-schemes became African.

Throughout this publicity campaign, farming for household food security, or constitutional rights to water or food, were ridiculed as backward, and an immediate criterion for disqualification and exclusion as backward and prohibiting progress. Unfortunately, but not surprisingly, the implementation of RESIS Recharge appeared very disappointing (DAFF, 2012).¹⁵

4. IMPLEMENTATION OF RESIS RECHARGE

4.1 Plot holders' organization and construction

With these top-down plans, the Limpopo Department of Agriculture contacted smallholders in the upper part of the Flag Boshielo scheme and in Strydkraal with the option to revitalize their irrigation sub-schemes with floppy systems. None of the communities was eager to consolidate all plots and give the land away for years of the construction of an unknown irrigation system. However, the department's approach was abso-

14 For the extension worker's establishment of another, partly overlapping, irrigation group in Elandskraal and the resulting court case on land conflicts, see Tapela (2009). Conflicts escalated further, leading to full collapse.

15 While this chapter focuses on the structural factors of government's accountability, there were also many rumours of corruption in RESIS Recharge and other infrastructure works in Flag Boshielo scheme. Allegations were that money for canals never led to even a single crop. Budgets for repair and maintenance quadrupled overnight. In 2009, Limpopo's standing committee on public accounts (Scopa) wanted the province's agriculture head charged with fraud and corruption. http://www.sowetanlive.co.za/sowetan/archive/2009/10/21/r68m-boss_faces-probe Yet, he appears in the Africa Davos Debates of 2010: <https://www.youtube.com/watch?v=3r0wcooR5-I>

lute, 'either this or nothing'. For example, farmers in De Paarl expressed serious doubts and their preference for food crops instead of a cash crop selected by the strategic partner, but they 'didn't hear from the department thereafter'. In Phetwane, farmers were especially reticent because of the recent negative experiences of cotton-farming (Tapela, 2009). In the end, the department decided to continue with the four upstream farms Phetwane, Mogalatsane, Kolekotela and Setlaboswane, and with Strydkraal.

In the organization of the plot holders into a co-operative, younger men quickly came forward, even if they did not have plots, attracted by money to be gained. Moreover, as an older woman commented, young men know English and may also know computers. The co-operative's committee reflected a weakening role for the tribal authorities. While the influence of Chief Matlala was tangible in Phetwane, Chief Masemola's influence in Setlaboswana was less. Chief Masha's influence in Strydkraal was initially strong in the various initiatives, but became increasingly contested.

The composition of members seems quite inclusive and gender balanced, although no in-depth research is available in this regard. Relatively equal, if not dominant, membership by women seemed aligned to earlier *de facto* plot use, irrespective of PTOs, and reflected women's primacy in cultivation. Access to the dividends was generally proportionate to plot size. If two people shared a plot, they also had to share the dividend. In some cases, the new floppy system did not cover all plots. While some co-operatives excluded those plot holders, other included them in the new co-operative. Yet, this land consolidation and organization came at a high price. Many members told us, 'Before, we had our own plots; they were indicated with pegs. But now, we cannot even access our own plot'.

During the vacation of the land and construction phase between 2005 and 2008 or 2009, all informal irrigation gardens along the canals, especially by older women, were removed without any form of compensation.

In Strydkraal, various initiatives took place. In 2008, a floppy system was installed that covered 20 ha in a part of the former irrigation scheme that couldn't be irrigated with the pumps because of major flood damage in 2002. This scheme had 18 members. Reinforcing the message of the hegemony of modern large-scale technology, respondents said that AWC even used to come with a plane to spread chemicals on the 20 hectare floppy scheme. In addition, 13 hectares were equipped, out of which AWC cultivated eight hectares, and provided free water to a five hectare vegetable garden of a women's group, Ikageng, which had ten

members. In 2012, the Limpopo Department of Agriculture finalized a major investment in another joint venture with AWC. Fertile land at a new site of 257 hectares was equipped new centre pivots, with an extension to include the centre pivot that had been operated earlier by Farmer B. The 263 members, mostly women, included all earlier plot holders of the Strydkraal irrigation scheme, and also some who had belonged to the earlier Mooiplaas irrigation scheme. For this large new scheme, also called 'Mooiplaas', the strategic partner pumps water out of the gravity canal from the upstream weir in the Olifants River into a high reservoir. He also maintains the canal up to the point where he abstracts the water from the canal. On another site, three centre pivots were installed, with 33 members. An apex co-operative, Likamamos, was formed that includes the floppy system, the five hectare women's garden and the new large centre pivot scheme. With the strong support of the chief, the female leader of the women's garden and a man became the leaders of this apex co-operative.

4.2 Production in RESIS Recharge

Table 1 provides an overview of the new irrigation investments, size of farm and size of co-operative, technology and cropping seasons from 2008 or later onwards, and crops (Tapela, 2009; Sithole, 2011; Van Koppen, field notes).

4.3 Collapse again

Especially in the first years, dividends for the communities were in the order of USD200 – USD800 per crop. However, in later years, dividends tended to reduce. In the case of potatoes, this was possibly due to declining soil fertility. On each farm, there were also seasons in which AWC announced net losses, so the community did not receive anything. While government officials emphasized that such variability is inevitable in commercial farming and that 'communities should understand this', major conflicts arose especially in the years with losses.

By 2012, all four upstream farms had stopped working with AWC, two of them before the expiry of the three-year contract. Only one scheme, Phetwane, is still operational thanks to major government subsidies. The other three have been abandoned, lacked maintenance and were vandalized. They now depend on the next rounds of public support for repair of the infrastructure. In 2014 AWC also withdraw from the new scheme in Strydkraal.

TABLE 1

Name	Former Name	Area (ha)	No of co-operative members	Crops	Years of functioning Share for farmers
Elandskraal Balemi Irrigation Scheme Trust		197 150 for EBIS Trust	12	Maize, cotton, wheat, vegetables	Centre pivots 2005-2016 30-40-50%
Phetwane	Hindustan	52	47** 14 M/33 F	Potatoes maize	Floppies 2009-2012 50%
Mogalatsane	Coetzeesdraai	133	98 M/F n/a	Potatoes maize	Floppies 2009-12 50%
Kolokotela	Krokodilheuwel	243 (220 floppy)	202 M=96 F=90 Unknown 2	Potatoes maize	Floppies 2009-2011 50%
Setlaboswana	Vogelstruis-koppie	114	96 M=38 F=37 Unknown = 21	Potatoes maize	Floppies 2009-2011 50%
Strydkraal & Mooiplaas	Till end 1990s 338 ha 2008 – to date: floppies 20 ha 2008 – to date: sprinkler 13 ha (with 5 ha for Ikagen women's garden and 8 ha by AWC) 2012 – to date: 15 centre pivots of 300 ha		Floppy: 18 Ikagen garden 10 women 15 Centre pivots 296, mostly women	Vegetables Maize Wheat	Floppies, Centre pivots 50%

* See Tapela (2009) for the Kgotlelo Balemi Irrigation Co-operative established in 2008 with Temong.

**Tapela (2009) notes how a total of 56 household had sharing arrangements to these plots.

The single most common complaint of the co-operatives was that the farm enterprise and its spending and income remained totally untransparent to the co-operatives. This hit hardest in years of claimed net losses, so there were no dividends. The proposition to put the losses on co-operatives' next year's accounts seemed to them to be totally unacceptable. Searching for clarity on the farm budgets, co-operatives only managed to talk to AWC's farm managers as the middlemen who were regularly on site. These middlemen (and AWC himself) generally referred all queries and issues to the Limpopo Department of Agriculture for clarity. However, the LDA didn't provide clarity on AWC's farm budgets either, possibly because they did not know what they were.

In Phetwane, women farmers complained that AWC 'even came in the night to put chemicals, so that the community did not know what he did'. After three winter seasons from 2008 –2011 in which potatoes or maize was grown, they felt 'enough is enough'. The co-operative and AWC agreed to terminate the contract. After that Phetwane continued on their own. However, during the following three seasons, LDA still paid for some (but insufficient) fertilizer, seeds, chemicals, the electricity bill, tractor services, and infrastructure repairs. The incomes from local sale remained very low: just enough to pay the labourers. Lack of transparency regarding accounting continues to divide the committees. Regular elections of new committees fail to bring any real or lasting solutions. President Zuma visited this 'success story' in 2013.

Internal tensions emerged in Mogalatsane. The committee's announcement that AWC had declared losses was met with considerable suspicion among members that money had disappeared into the pockets of the committee. New committees were elected, but with a continued absence of information for anybody except AWC himself, nothing changed.

In Setlaboswana, suspicion on AWC's claims of losses, in spite of the 'truck loads of potatoes that left the field' was the reason for several young men to travel to the potato buyer to check on the company. In 2010, they even opened a court case with the support of a (paid) lawyer from Pretoria to defend their case. However, given the contract, the case is still unsolved. Litigation costs were also too high for the villagers to continue the case. Tension about how to manage this conflict split the co-operative.

Thus, with growing internal tensions, co-operatives bore the brunt of the losses. The lack of transparency meant that even the 'crumbs of the cake' caused conflicts. For example, AWC suggested that the remnants of the potato harvest were free for picking by any villager, while the co-op-

eratives tended to see those benefits as their entitlement.

In Strydkraal, the lack of transparency took another direction. Learning from the other experiences, Chief Masha and the apex co-operative leadership negotiated more transparency from AWC. The leadership of the apex co-operative proudly claimed to keep accounts for the inputs, number of trucks leaving the fields, and income gained. They also insisted on co-deciding about the crop. Unlike the upstream co-operatives, the Strydkraal co-operative resisted the cultivation of potatoes because of the soil depletion and risk of plant disease, certainly when potatoes are grown in consecutive seasons. However, in the eyes of some members, this information was not properly communicated. Tension escalated when there were no profits. Chief Masha had already been 'under siege of his subjects' in the land restitution claim to the land in Kalkfontein from which the community had been forcefully removed in the 1950s. In that claim, some of his subjects challenged the chieftaincy's power and claimed an equal status in the Community Property Association. The same contest emerged in the apex co-operative. Younger male members lodged a strong case to both the apex leadership *and* the Department of Agriculture to provide full transparency about investments made in Strydkraal. At the same time, the house of the woman co-operative leader was set on fire. She left to live elsewhere. When AWC decided to leave Strydkraal, the young male members negotiated with Farmer B. to return as strategic partner to Strydkraal for the new large scheme. Older women and the majority of members, avoided being drawn into this conflict and gave up any gains.

4.4 Training and labour

Amidst of such allegations and lack of transparency, a second common complaint was that AWC had hardly given any training at all to community members, neither through active on-the-job training nor formally. In the four upstream farms, two persons from each farm were trained as pump operators, two were trained in health and safety issues and one person received training in operating the floppy irrigation system (Tapela, 2009). In Strydkraal, a respondent told us that AWC called people for training. Five people went, but as 'one needed to have maths and physics, four people were sent back. Then the last one was also sent back'. On other farms, he trained a pump operator. One of them told us how he could switch the pump on and off from his mobile! AWC clearly prioritized making money, half of which accrued to the communities.

In the end, the only benefit was paid labour. Job opportunities were in high demand. The co-operatives diligently registered the work provided and the payment. However, jobs were very limited as most operations were mechanized. Security guards and the pump operator had full-time jobs. In Mogalatsane, for example, planting offered two days of work to 100 persons, while harvesting provided two days of labour to 60 people. The wage was below the minimum wage: USD5 per day.

This course of events had major longer-term impacts. While AWC just moved out after some seasons with more or less benefits, communities again bore the brunt of the experiment. Soil fertility had reduced, especially where potatoes had been grown successively over several seasons. No commercial farmer would have done that on his own land, but in the joint ventures there was a strong the need for quick monetary returns, ironically for both AWC and the co-operatives.

It also became very difficult to combat vandalism and theft of copper cables and transformers, which began as soon as communities decided to discontinue with AWC. The consolidation of land so that 'people didn't know their land anymore' further disabled communities from maintaining control.

Nevertheless, the idle land with potentially working irrigation infrastructure in Mogalatsane, Kolekotela and Setlasboswane keeps attracting other potential strategic partners, who now contact the co-operatives or chiefs. Making money remains appealing to some members. However, as discussed next, outside the floppy irrigation scheme, poor women and men initiated many other activities, wherever they were in control of the land and water infrastructure.

5. LOCAL WATER DEVELOPMENT

Outside the ambit of the co-operative, many other initiatives were taken, including informal investments in water infrastructure as a bottom-up way to realize the constitutional right to access to food. This partly compensated for the loss of such opportunities in the floppy irrigated areas and the cultivation of Veeplaas by Farmer B. In Elandskraal, for example, people irrigated two hectare plots outside the formal boundaries of the scheme. These were highly productive. Nevertheless, that water supply was cut off (Mapedza, field notes).

In many sites, rivers, wetlands and canals were used for cropping. For example, a canal from the Piet Gouws dam was 'redesigned' by former farmers at Veeplaas through punctures leading water through long fur-

rows to individuals' fields, some of which were as large as five hectares (Tapela, 2009). The various water sources also provided water for livestock, or brick-making and small-scale enterprise. Moreover, with dwindling employment opportunities, men and women took up fisheries in the river and dam reservoir. However, government officials discouraged these activities for basic livelihoods, and even criminalized them, for example, by prohibiting poor women and men with very small nets to fish without a license.

Farmers also invested in irrigation in risky areas. In Mooiplaas, a wealthier relative of Chief Masha living in Johannesburg started to invest in an area adjacent to the river and prone to flood damage. Such lands are generally seen as too risky and mediocre for the department to develop.

Last but not least, initiatives to bring water to homesteads for domestic and productive uses were particularly vibrant. Already in the early 1990s, development forums of 63 villages in the Flag Boshielo area had organized to compile an inventory of existing water points and their status. They offered their insights and request to provide for 50 litres per capita per day to the Lepelle Northern Water Board. This Board was constructing a treatment plant just below the Flag Boshielo dam with the intention to provide drinking water to downstream villages. The development forums were ready to assist with implementation, for example with the piping (MaTshepo Khumbane, personal communication). However, the Board continued on its own, gradually providing piped water to few villages. The residential areas of the four upstream irrigation sub-schemes were included.

The Board charged significant sums to pay for any water above the 6,000 litres per household per day, the cut-off point for South Africa's Free Basic Water policy. However, in all four villages, the average consumption was less than 6,000 litres per household per day (Tapela, 2009). Water users were still charged for this free basic water. Water bills were sometimes extraordinarily high. Moreover, partly as a result of long delays in formal connections, some connections were made 'illegally' by private plumbers and without meters. Although this water supply system is supposedly for domestic use only, water appeared an important buffer for food security when cultivation on the irrigation plot became impossible and informal gardens along the canals were forbidden. Older women, in particular, began to use the water of the Lepelle Northern Water Board for homestead cultivation for food security, in addition to using it for drinking and other domestic uses (Tapela, 2009).

Villagers realized that non-payment in the long term will be unsustainable. Even households with household connections and meters, who failed to pay bills in the short term, refrained from using much water, fearing high water bills later. Where possible, water from communal boreholes sunk during the apartheid era was used for free. The boreholes also provided water to the poorest households who were not connected at all. Without access to a borehole, these households either asked neighbours for permission to use their water supplies, or they went to the river and canals (Tapela, 2009).

While only some households in the upstream communities had lacked access to the new water supply, the situation in Strydkraal was worse. The services of the Lepelle Northern Water Board had not reached the area. The municipality generally failed to provide any water from either the pre- or post-1994 boreholes, or the reservoirs, and piped gravity schemes. In addition, the reservoir was too small to provide water to the rapidly expanding population. In the absence of adequate State support, private water vendors with donkey carts or cars took the initiative. They sold a 200-litre drum for USD2 or USD3. In Strydkraal, some women used and re-used this very expensive water to irrigate the vegetables in their homesteads. So, while state-subsidized, high-tech floppy systems abundantly irrigated several hundreds of hectares of crops, women paid for small amounts of expensive water or they carried dirty water with buckets and wheelbarrows from nearby gravity canals, or, worse, from the distant, crocodile-infested Olifants River.

In Strydkraal, MaTshepo Khumbane, founding member of the Water for Food Movement, trained women how to harvest run-off and roof water into underground tanks. Together with weather charting and soil fertility measures, this water is used and re-used for vegetable growing or small-scale enterprise for consumption and sale. Mind mobilization workshops encouraged participants to design plans for their own homesteads, the place where women can exert at least some control over their own lives. As the conflicts in the Strydkraal co-operative intensified (see above), women saw many advantages in this realistic water-harvesting option.

These numerous informal initiatives to invest in water for self-supply show once again the women's drive to produce crops for basic food security and sale, debunking all myths that black people are only consumers of the produce of others. Villagers creatively combine multiple sources of water (precipitation, run-off, streams, wetlands, and groundwater) to

meet their multiple domestic and productive water needs. Wherever hydro-geographies and topographies allow, water from both natural sources and public or private infrastructure allows for a range of uses in order to improve many dimensions of livelihoods. This is the only way in which women's indivisible constitutional rights to access to sufficient water and food are being met in the area of the Flag Boshielo scheme.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Government's view

In 2012, immediately after the expiry of the three-year contracts in RESIS Recharge, the draft strategy for irrigation of the Department of Agriculture, Forestry and Fisheries¹⁶ drew its conclusions and the lessons it had learned the hard way. In many respects, the rehabilitation approach of RESIS Recharge returned to the initial design of the revitalization approach in RESIS. We focus below on three main tenets in the strategy.

First, DAFF emphasizes the need to fully recognize diversity and cites human rights to water and, implicitly, to food. The strategy includes the poorest by taking the perspective of all inhabitants in the Flag Boshielo scheme and the multiple uses for multi-dimensional well-being, integrated into broader livelihood strategies.

The UN Committee on Economic, Social and Cultural Rights has recognized the human right to water. The human right to water is implicit in rights for food, survival, adequate standard of living and in the people's right to manage their own resources. (p. 22).

Participation, ownership and appreciation of diversity at scheme level needs to be integrated with livelihood strategies outside the irrigated context. This means taking into account the multiple water needs for personal use, livestock, fishing, laundry and other small businesses using water in addition to irrigation. (p. 13).

In the 'unavoidable split [of] farmers into subsistence, small-scale and commercial farmers' the strategy sees the level of risk as a main criterion and sets realistic expectations for commercial farming in former homelands. Accepting subsidization of capital investments, running costs should be paid by farmers. So a primary risk is the high operational costs of sophisticated pumping schemes, which force farmers to gain high incomes for net benefits. On the other hand, gravity and

16 DAFF (2012).

flood schemes are recognized to avoid that risk. A realistic and holistic assessment is made of the complexities of farming which include aspects such as markets, finance, inputs, infrastructure, capacity and institution-building and crop-production information, among other things' (DAFF, 2012: 11). Historical inequities are emphasized: 'The impact of isolated sites, difficult communication and poor supporting infrastructure will result in lower production than average commercial sector scenarios' (DAFF, 2012: 12).

The second tenet in the strategy regards the clear need for a participatory approach with voluntary, prior, and informed consent. This is also in line with the constitutional principles of participatory democracy. Successful revitalization requires that all relevant stakeholders be identified and their roles and responsibilities must be clearly spelled out. A key requirement is to involve beneficiary participation in the planning of revitalization for their specific scheme. This is essential to ensure sustainability and to avoid conflict (DAFF, 2012: 9). The draft strategy recognizes that the provincial departments of agriculture are the initiators and drivers of the revitalization process, but is adamant never to try 'to enforce any model, process or technology that is not acceptable to the specific farmers. That would be a trigger for conflict between the provincial department and the farmers and a guarantee for failure' (DAFF, 2012: 9).

The strategy also underlines that when the involvement of a strategic partner is considered, both the partner and the envisaged enterprise and technologies must be acceptable to, and formally accepted by, the farmers. Further, training and skills transfer with the strategic partner should be supported and include an annual monitoring and evaluation process. The Provincial Department of Agriculture should assume the responsibility of mediator to resolve any conflicts (DAFF, 2012: 10).

The third tenet regards the proposed budget, both the overall budget and its allocation. The proposed budget for the Limpopo province is USD466,401,000 over five to ten years. This is considerably higher than the budget proposed for RESIS (as mentioned above: USD108,688,000 for the period 2004-2010, mainly in Limpopo). The target increased from 19,730 ha in RESIS (for 126 schemes) to 22,909 hectares (for 28 schemes) (DAFF, 2012: 17). This gives a total rehabilitation costs per ha in Limpopo province of USD20,360/ha, which is among the country's highest.

The draft strategy makes a strong plea for a high allocation to the software component, citing:

Experience from various international and South African studies indicates that the total project cost in revitalization relating to infrastructure component must only comprise an estimated 33% of the total project cost. The cost attributed to human capital development (farmer training, institutional building, negotiation skills development, marketing support, mentoring, planning, etc.) and production input costs must comprise 67% of the total budget. (DAFF, 2012: 12).

Within these pertinent broad directions, we now turn specifically to conclusions that can further guide the progressive realization of women's constitutional rights to access to sufficient water and food, non-discrimination, and participation, with a focus on water technology development.

6.2 Implications for participatory water technology development to meet women's constitutional rights to sufficient water and food

6.2.1 Grassroots participation

In the politics of productivity, control over water technologies is key. In the case of self-supply, this means ownership of technologies. As the duty bearer, government should at least respect and protect rights-enhancing self-supply, instead of ignoring, if not criminalizing, the main way in which the poorest inhabitants of the Flag Boshielo Scheme seek to use water for livelihoods. Over time, government should further *promote* people's own investments in water infrastructure.

In the case of water service provision by government and service providers with or without strategic partners, citizens should be able to hold service providers accountable. Inclusive participatory planning and design is the first step. This targets everybody, in particularly women and the poorest. Instead of ignoring the grassroots initiative of the development forums in the early 1990s who offered their knowledge, skills and time to improve water management, such constructive citizens' initiatives should be encouraged. From the planning phase onwards, water users should have voluntary, informed and prior consent on technology choice and design, and related costs.

Nowadays, it is the mandate of local government and its Integrated Development Plans to enable such demand-driven planning. This should include the various local governments, line agencies, NGOs, CBOs and tribal authorities. Planning by line agencies, which currently often occurs in parallel, should increasingly be aligned with these planning processes,

while still providing the unique and needed technical expertise of line agencies.

People are often both investors in self-supply and water services users. Moreover, a distinction between domestic water supplies and irrigation is bound to fail. In poor areas such as the Flag Boshielo area, irrigation canals and rivers remain the major source of domestic water wherever formal services have not been supplied, or where they remain unaffordable. 'Domestic' supplies are vital for gardening and livestock for basic livelihoods. Hence, planning should start with a holistic understanding and mapping of all existing water sources, infrastructure, uses and users as well as institutional arrangements for construction, operation and maintenance. Access by the poorest should be the starting point. Ensuring enough for all forever in terms of access to water for basic domestic and basic productive uses should be a basic planning criterion.

This requires moving beyond 'the household' and recognizing intra-household diversity, both along gender and age lines. Instead of assuming that (irrigated) farming or other income generation is done by a nuclear family, which is headed by the man with voluntary labour inputs from his wife and all adult children, the existing reality should be the starting point. There are many highly diverse combinations of gender and age, on and off-farm, livelihood strategies in both female- and male-headed households. The size of land for production varies from tiny homesteads to ten hectare fields. There may be farm sizes below which it is impossible to realize the predetermined economies of scale required by centralized infrastructure. The latter demands a sufficient income to pay for the high costs of pumping and other inputs. However, if people and their available land sizes are considered initially, any area of land, no matter how small, can be rendered more productive with water. Farm size as such is not an impediment to productivity; access to water, other inputs, and rewarding markets are key (Denison and Manona, 2007; Van Auerbeke et al., 2011).

Investments in infrastructure construction or rehabilitation will also raise land tenure issues. This is an opportunity for land tenure reform, as proposed by Manona et al. (2010). The accumulated uncertainties surrounding longer-term land rights and lease contracts after almost a century of political forced resettlement and rapidly increasing populations with many young people, should be addressed.

Existing informal land-exchange markets can be encouraged so that those plot holders wanting to give up farming are compensated. Banks should be more imaginative in accepting sufficiently secure customary

rights, or other enterprise characteristic, as collateral for loan taking. Last but not least, these reforms can introduce more gender equality into plot rights, and finally ensure that those who cultivate, irrespective of age and gender, have secure rights to the produce. This is key for re-investment in higher production.

6.2.2 Water management and technology options

Instead of imposing centralized and large-scale irrigation infrastructure and required land tenure arrangements from the top, technology choice should be offered bottom-up, also strengthening land tenure security for women and youth. There are at least five sets of options.

The first set of options, and lowest hanging fruit, is to recognize and promote women's and men's already existing investments in infrastructure for self-supply for their priority uses. Any criminalization of water uses that contribute to realizing constitutional rights should cease. Examples are household wells, rainwater harvesting, reservoirs, wetland cultivation, pumping, and even connections from piped supplies or gravity canal diversions. While, it is true that some of these actions can damage infrastructure or deprive tail-end users, and undermine payment for services, in most cases such initiatives signal important contributions to the individual's constitutional right to water at no cost to the tax payer. Lastly, chiefs may have disproportionate powers to occupy lands, which government needs to curtail. In such specific cases, win-win solutions need to be found, invoking the constitution.

The second set of options requires pro-active promotion of self-supply by developing and disseminating appropriate technologies and encouraging sustainable market-led supply chains. The uptake of small mechanized pumps should be encouraged either by individuals or small groups of both women and men. If government focuses on providing central bulk supplies, whether through 'domestic' pipes or 'irrigation' canals, users can take charge of further distribution and on-site technologies. In order to ensure safe water for drinking and cooking, point of use treatment of minimally three to five litres per person per day should be promoted.

Third, it is the mandate of the domestic water supply sector and municipalities (public service providers) to provide for water to all to homesteads, i.e. including the poorest and women for whom the homestead is often the only site where water can be used for production. There are many untapped opportunities for Lepelle Northern Water Board and municipalities to 'climb the water ladder'. Increasing service levels for all

is probably the most significant option towards realizing the constitutional rights to access to sufficient water and food in rural areas such as the Flag Boshielo scheme. Service levels of Free Basic Water volumes should be increased to at least the 50 litres per capita per day proposed, as proposed by the area's development forum in the early 1990s. Supplies from multiple sources for up to 100 litres per person per day should be considered and pilot-tested. The incremental capital costs of augmenting pipes to allow for 50-100 litres instead of 25 litres are small compared to the additional livelihood benefits. Training in rainwater harvesting would provide water for domestic and productive uses at homesteads for a fraction of the costs per person of floppy systems. Participatory technical design enables women and men to choose what they prefer, also in terms of future operation and maintenance costs. The option of participatory design also holds for the fourth option.

The fourth set of options is initiated by the Department of Agriculture or Rural Development and Land Reform, and begins with participatory infrastructure design to ensure ownership and avoid abandonment and wasteful public spending. Where possible, flood irrigation may well be the preferred option. Villagers without any improved access to water for domestic uses, may wish the public investor to first meet this constitutional right to water for domestic uses before expanding to productive uses. However, opportunities for multi-purpose infrastructure are bound to exist, e.g. ensuring that cattle have proper drinking water sites and stay away from the irrigated crops. Depending on the nature of the risks, government is well placed to address insurance and other means of cushioning risks for smallholders who will need food and income during every cropping season.

The fifth and last option is to engage with individual strategic partners or agri-business. Having access to the other four options will offer strong bargaining power in any contractual negotiations. Various arrangements are possible. Land can be leased for a fixed amount; or share cropping arrangements can be agreed, stipulating how profits are divided as in the past joint ventures; or outgrowers can cultivate their individual plots, but collaborate with agri-business on cotton or other crops for inputs and marketing. As the Department of Agriculture recognizes, it has an important role to play in empowering communities to positively negotiate the design, implementation and monitoring of bilateral contracts and the division of profits and risks between agribusiness and community. Public agencies can monitor the agri-business partners to ensure that they meet

their commitments in time for the outgrower to play his or her part, and to hold outgrowers accountable in selling their produce to the company.

In all the above options, women and girls should be fully recognized as users of water for multiple purposes, and as producers who both ensure household food security and market produce for rewarding prices. The constitutional requirement to redress inequities of the past implies that black women and men farmers of the Flag Boshielo area should tangibly compete with the historically advantaged farmers for markets. They should finally be able to take up their fair share of the water allocation of the Olifants River.

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