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FACULTY OF LAW**

SOUTHERN AND EASTERN AFRICAN REGIONAL CENTRE FOR WOMEN'S LAW

(MASTERS IN WOMEN'S LAW)

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LIST OF ACRONYMS

CEDAW Convention on Elimination of all forms of Discrimination Against Women

ICESCR International Covenant on Economic, Social, Cultural Rights

MDG Millennium Development Goals

SADC Southern African Development Committee

UN United Nations Development Programme

NWP National Water Policy

UNICEF United Nations Children's Emergency Fund

WWSRU Water and waste Regulatory Unit

ZINWA Zimbabwe National Water Authority

DEDICATION

THIS PIECE OF WRITING IS DEDICATED TO ALL FEMINISTS FOR THEIR TIRELESS FIGHT TO IMPROVE WOMEN'S LIVES ALL OVER THE GLOBE .PLEASE KEEP ON WITH THE FIGHT.

EXECUTIVE SUMMARY

A clean and healthy environment is the key to the healthier population in any part of the globe. To have a cleaner and healthier environment requires the efforts of all stakeholders that is state actors and non-state actors. However to come with up healthier environment requires proper guidance and machinery in respect of laws, policies and dialogue among the stakeholders. In the light of the above, water and sanitation is a critical area of life that needs attention by government and also the community. Access to good water and sanitation world over has been area that has received so much attention in media. International organization such as the United Nations Development Programme (UNDP), United National Children's Emergency Fund (UNICEF) and the World Health Organization(WHO) have come up with strategies that governments, local authorities must follow in order to improve the health of the general populace by providing clean drinking and proper sanitation. Other international instruments have such as the covenant on economic, social and cultural rights have added their prowess to by declaring the right to water as human right .In the light of the above, this study gathered empirical data from purposeful and randomly sampled respondents using in-depth interviews, individual interviews on water and sanitation problems, causes, impact and how its managed. My findings indicated that local authorities who are city fathers are failing to adhere to the prescribed international, let alone domestic standards regarding good supply of water and sanitation. The major problems identified are the lack of political will, lack of adequate funding to maintain water reticulation machinery, failure to enforce the domestic laws and the failure to involve the community to participate in the water management issues at both community and corporate level. My recommendation is that budgetary enhancement and legal and policy enforcement are cardinal to achieving the goals.

**A CRITICAL ANALYSIS OF POOR WATER AND SANITATION, CAUSES, IMPACT AND
PANACEA: A STUDY OF KADOMA'S HIGH DENSITY AREAS**

BY

STEWART CHIYAYIKA

TABLE OF CONTENTS

Contents

UNIVERSITY OF ZIMBABWE	i
ACKNOWLEDGEMENTS.....	ii
LIST OF ACRONYMS	iii
DEDICATION.....	iv
EXECUTIVE SUMMARY	v
1.0 CHAPTER ONE	2
1.1 INTRODUCTION	2
1.2 Study Area.....	2
1.3 Statement of the problem	3
1.4 Justification of the study	3
1.5 Objectives of the study	4
1.6 Research Assumptions	4
1.7 Research questions	4
2.0 CHAPTER TWO	5
2.1 LAW AND LITERATURE REVIEW	5
2.2 Introduction	5
2.3 Women Water, sanitation, policy and the Law	5
2.3.1 Why does it matter?	5
2.4 Water and Sanitation: Where are the benefits?	6
2.5 Sewerage and health of the people	7
2.6 legal and policy framework	8
2.6.1 SADC Regional Policy.....	8
2.7 Domestic Policy.....	9
2.8 National Water Policy	9
2.8 National Frame work	10
2.8.1 Constitution of Zimbabwe.....	10
2.9 THEORETICAL FRAME WORK.....	11
2.9.1 Liberal theory Feminist Approach	11
2.9.3 Social Exclusion and Construction	12

2.9.4	International Human Rights Framework	12
2.9.5	<i>Convention on Elimination of all Discrimination Against Women(CEDAW)</i>	12
2.9.5	<i>International Covenant on Economic, Social and Cultural Rights(ICESCR)</i>	13
3.0	CHAPTER THREE	14
3.1	METHODOLOGICAL FRAME WORK.....	14
3.2	Grounded Theory Approach	14
3.3	<i>Women’s Law Approach</i>	14
3.4	<i>Sex and Gender analysis</i>	15
3.5	<i>Influence of actors on structures</i>	16
3.8	RESEARCH DESIGNS.....	18
3.8.1	Sampling of Respondents	18
3.9	DATA COLLECTION METHODS	18
3.9.1	In depth interviews with key respondents	18
	Individual interviews	19
3.9.2	<i>Focused Group Discussions</i>	19
3.9.3	<i>Observations</i>	19
3.9.4	<i>Analysis of Documents</i>	20
3.9.5	<i>Assessment of Methodology</i>	20
3.9.6	<i>Challenges/limitations of the study</i>	20
4.0	CHAPTER FOUR	22
4.1	FINDINGS AND ANALYSIS	22
4.2	<i>The unheard voices of the Non-State Actors</i>	22
	<i>Connected ...!but no supply</i>	22
	<i>Water Availability and accessibility</i>	23
4.3	<i>Sanitation</i>	24
5.0	The voices of the state actors.....	26
5.1	<i>Lack of Policy on water and sanitation</i>	26
5.2	<i>Obsolete infrastructure</i>	26
5.3	<i>Failure to enforce Water Act</i>	27
5.4	<i>Public participation in water and sanitation</i>	27
5.5	<i>Inadequate Funding</i>	28
5.6	Conclusion	28

6.0 RECOMMENDATIONS29

- (a) **Immediate-within the next twelve months**.....29
- (b) Long Term: from 36 months onwards.29
 - 6.1 *Refurbishment of water system*.....29
 - 6.2 *Reticulate all housing units to main water supply*.....30
 - 6.5 *Construct New Housing/Ablution blocks Units*30

DECLARATION

I, Stewart CHIYAYIKA declare that this report entitled;

A CRITICAL ANALYSIS OF POOR WATER AND SANITATION, CAUSES, IMPACT AND PANACEA: A STUDY OF KADOMA HIGH DENSITY AREAS

Is an original work based on my field findings and has never been submitted to any institution of learning for any type of academic purposes.

SIGNED

DATE:.....

SUPERVISOR

DATE.....

1.0 CHAPTER ONE

1.1 INTRODUCTION

The city of Kadoma has been experiencing severe water shortages since the beginning of this millennium. Water supply problems have been reported even when the water sources are full (ZINWA). Critical shortage of water in any location of the globe has devastating effects on the lives of inhabitants. It brings with it several different kinds of diseases that such as cholera, typhoid and dysentery. The lack of water also has a devastating impact on the general sanitation of people in any particular area of the globe. People are unable to use their toilets in a clean and orderly manner and this contributes to unhealthy environment which becomes a health hazard to the people.

The problem of rapidly growing urban populations has contributed significantly to the increase in the demand for fresh domestic water in the urban areas (Mpande & Tawanda, 1998; Nel & Barry, 1992). This increase is causing a water crisis that has serious consequences. Urbanization is increasing in the SADC region, Kadoma Zimbabwe included, and water experts say that most cities have not been able to develop the basic utilities for water and environmental services (solid waste disposal systems, sewage treatment, and industrial pollution control) to keep pace with the rapid growth (Tsiko, 2007)

In the light of the above, it is against this background that I elected to investigate the environmental health issues with regard to water and sanitation and impacts it brings on the people of Kadoma especially women.

1.2 Study Area

The study research was conducted in Kadoma which is one of the major urban areas in Zimbabwe.



The city is located south West of the city of Harare on the main road to Bulawayo. The city provides gold, copper and nickel to Zimbabwe. The population of Kadoma was set at 76 173 in 2002(Zimbabwe Central

Statistics Office, 2002).The central statistical office estimated an annual growth rate of 3% which estimated the population at 99,024 by year end 2010.

Kadoma City has a total of nine residential areas namely Parktown,Mushamavale and morning which are designated low density areas. There are also two medium density areas namely east view and west view. Rimuka, Chenukukute, Ngezi and Waverly are the four major high density areas in Kadoma City. Forty percent (40%) of the population of Kadoma resides in Rimuka (Kadoma City Information Center)

1.3 Statement of the problem

Safe drinking water, sanitation and good hygiene are fundamental to the health, survival, growth and development. However, these basic necessities are still a luxury for many of the Kadoma's poor. Global figures that describe lack of water and sanitation services are alarming as more than 1.1 billion people lack improved water supplies (WHO and UNICEF 2006).Lack of sanitation is even a larger problem with an estimated 2.5 billion people live without improved sanitation(WHO). The city of Kadoma and other outlying areas are no exception to this global water and sanitation crisis. In the year 2008 Kadoma was hit by a cholera outbreak largely necessitated by lack of clean drinking water and poor sanitation (Standard, 2010). The non-availability and accessibility of clean and safe drinking water in Kadoma puts the health of many people at risk of contracting waterborne diseases especially women and children(The Herald 2010). Poor water and sanitation remains a public health concern in Zimbabwe, Kadoma City inclusive. Months after the cholera outbreak had begun, predicting just 2000 cases cholera cases. Two months later, the death toll had already reached the focused 2000 mark and roughly 98600 cases were reported over the same period, by January 2010 there had 98741 reported cases and 4293 deaths making the deadliest African Cholera outbreak in the past 15 years (Ncube 2011)

There are no immediate solutions to the country problems in as far as improving water and sanitation services provisions. Urban communities continue to live under conditions of high exposure to both untreated and inadequately treated drinking water and most cases insufficient quantities and untreated and untreated waste water (Ncube, 2011).As a result of the water shortage, there are number of negative impacts which generally result in stringent water rationing which further causes increase in disease such as diarrhea dysentery and cholera as people are unable to bathe and flush their toilets (Nyoni, 2007)

1.4 Justification of the study

The United Nations as part of its Millennium Development Goals(MDG) has set a global target of halving the proportion of people without access to drinking water and sanitation by the year 2015.Therefore, in

carrying out this research my main objective was to investigate the water and sanitation problems, causes, impact and its management on the women of Kadoma and which findings would serve as a yardstick to the people of Kadoma City, especially the marginalized and local and government authorities in achieving the MDGs and attainment of water borne disease free environment.

1.5 Objectives of the study

The main objective of the study was to argue the case of the community in Kadoma especially women who are always burdened with the responsibility of fetching the commodity with respect to their right to clean and potable drinking water, accessibility and availability. The following assumptions and research questions guided my study:

1.6 Research Assumptions

- (a) Poor implementation of water and sanitation related laws and policies cause health
- (b) Poor Urban infrastructural planning lead to environmental health problems
- (c) There is unawareness on environmental health issues due to limited access to information
- (d) Governments' lack of prioritization in budgetary allocations leads to ineffective implementation of environmental health issues
- (e) Financial inability to access basic resources leads to unhealthy domestic environment
- (f) Exclusion of women in decision making process in environmental health concerns leads to gender insensitive policies, laws and programmes

1.7 Research questions

- (a) Does poor implementation of water and sanitation laws and policies cause environmental health problems?
- (b) Does poor infrastructural planning on water treatment plants, sanitation lead to environmental health problems
- (c) Does limited awareness to access information on water and sanitation issues lead to unhealthy surrounding and disease outbreaks?
- (d) Does lack of government lack of prioritization in budgetary allocations lead to ineffective implementation of water and sanitation issues?
- (e) Does financial inability to access resources such as water unhealthy domestic environment
- (f) Does exclusion of women in decision making process in water and sanitation concerns lead to gender insensitive programs?

2.0 CHAPTER TWO

2.1 LAW AND LITERATURE REVIEW

2.2 Introduction

Provision of good water and sanitation can be used as a tool to achieve the Millennium Development Goals (MDGs). For example Goal 7 –Target 10 which calls upon all member states of the United Nations to halve the proportion of world population without sustainable access to safe drinking water and basic sanitation by 2015(MDGs)

2.3 Women Water, sanitation, policy and the Law

2.3.1 Why does it matter?

Women's participation in water and sanitation sector activities springs logically from their traditional roles. Women are the most often users, providers and managers of water in the household. Women are usually guardians of household hygiene (Wakeman 1995). Women and to a lesser degree children, are generally the ones who obtain water for the home, transport it, store it and then use it for various household purposes and because of this they have a great deal of knowledge about water sources, their quality and reliability, restrictions and advantages of their use and acceptable storage method(Wakeman, 1995). Women and young carry a double burden of disadvantage since they are the ones who sacrifice their time and their education to collect water(UNDP,2006). At any given moment, approximately one-half of the people in the developing world suffer from disease caused by drinking contaminated water or eating contaminated food (United Nations, 1997b). Improving access to clean drinking water and safe sanitation is one the least expensive and most effective way to improve public health and save lives (ACS 200)

Access to sanitation is measured by the percentage of the population using improved sanitation facilities.

Improved sanitation includes sanitation facilities that hygienically separate human excreta from human contact.

Access to basic sanitation is measured against the proxy indicator: the proportion of people using improved sanitation facilities (such as those with sewer connections, septic system connections, pour-flush latrines, ventilated improved pit latrines and pit latrines with a slab or covered pit)

Shared sanitation facilities are otherwise-acceptable improved sanitation facilities that are shared between two or more households. Shared facilities include public toilets and are not considered improved (WHO).

Unimproved sanitation facilities do not ensure a hygienic separation of human excreta from human contact and include:

- pit latrines without slabs or platforms or open pit
- hanging latrines
- bucket latrines
- open defecation in fields, forests, bushes, bodies of water or other open spaces, or disposal of human faeces with other forms of solid waste.(WHO)

Further to comprehend more on the right to water I sought to be guided by the General Recommendations No.15 on the right to water adopted in 2003 by the Committee on Economic and Social and Cultural Rights which pronounced principle elements of availability ,quality and accessibility as elements of rights. The right to water like any other human right imposes on the states parties to ensure that the right to water is respected. (Hellum 2007)

Despite the identification of the problem of water and sanitation as the major cause of disease outbreak, government, local authorities, through legislation and appropriate policy has failed to address this problem which mainly affects women and children. The argument is that as long as the gap between law and policy at both national and local government level is not narrowed down, the fight to clean and health environment is far from being achieved. This has resulted in the transmission of communicable diseases, such as cholera and diarrhoea, which has wreaked havoc on the city. In 2008-2009, the city was the epicentre of the worst cholera epidemic in Zimbabwe. The city needs to commit itself to turning the situation around by involving the community, building more storage facilities, and by placing monitoring and evaluation mechanisms in place (Mangizvo 2009)

2.4 Water and Sanitation: Where are the benefits?

Water and sanitation improvements, in association with hygiene behaviour change, can have significant effects on population and health by reducing a variety of disease conditions such as diarrhoea, intestinal helminths, guinea worm, and skin diseases. These improvements in health can, in turn, lead to reduced morbidity and mortality and improved nutritional status (WHO and UNICEF,2006).

Water and sanitation improvements affect health primarily by interrupting or reducing the transmission of disease agents. This occurs through a variety of mechanisms. Of primary importance is the safe disposal of human faeces, thereby reducing the pathogen load in the ambient environment. Increasing the quantity of water allows for better hygiene practices (WHO and UNICEF,2006).

Raising the quality of drinking water reduces the ingestion of pathogens. With less disease, children can eat and absorb more food, thereby improving their nutritional status. Also, a healthier adult population is a more productive population, and improvements in water and sanitation can improve income and the capacity to acquire food. Other benefits associated with better water delivery include time savings for primary caregivers, which can result in the preparation of more or better food for children (Bergeron 1993).Improvements in sanitation have been shown consistently to result in better health, as measured by less diarrhoea, reductions in parasitic infections, increased child growth, and lower morbidity and mortality. The expected reductions in mortality can be substantial, particularly in areas with low levels of education. Modest improvements in sanitation, such as pit latrines, will result in better health, but major improvements in sanitation, such as flush toilets, will result in even larger health benefits (Anker 1980).

2.5 Sewerage and health of the people

The provision of sewage services in the Third World is a major challenge. Around two-thirds of the Third World's urban population has no hygienic means of disposing of excreta (Hardoy *et al*, 1993). Zimbabwe's cities and towns have been experiencing a lot of burst sewer challenges in the last few years. Most towns have had raw sewage flowing onto the streets and in open storm drains. Rapid urbanization has presented serious challenges on the management and disposal of sewage (Chiuta *et al*, 2002; Moyo and Mtetwa, 2002). Raw sewage could be a source of diseases. For example, untreated sewage is likely to have been the source of the eggs of the bilharzias causing flatworm, which were recovered from the dropping of seagulls at the mouth of Mbokodweki River in Durban (O'Keefe in Chenje 2000).

The problem of burst sewer pipes and outflows of raw sewage has almost become ubiquitous in all cities. Kadoma is, therefore, no exception. The whole city was experiencing the problem in various residential areas, as well industrial areas between May 2005 and March 2008, when the study was conducted. However, this study was focused on East View residential area of Kadoma. Findings from this study could be generalized to other areas in the city (Mangivzo 2006).

2.6 Legal and policy framework

2.6.1 SADC Regional Policy

The regional water policy for the SADC region is mainly a document aimed at providing a framework for sustainable, integrated and coordinated development, utilization, protection and control of national and trans boundary water resources in the for promotion of social –economic development and regional integration and improvement of quality of life of all people in the region.

In the light of the fore stated, the Zimbabwean Government as a member state, based on the policy frameworks stated above has the social and economic responsibility to ensure sustainable access to water supply for basic human needs in to its citizens, prioritize the allocation, access and utilization, provide clean water for domestic use to the poor and marginalized communities in rural and peri urban areas in order to alleviate poverty.

The Regional Water Policy is supposed to be implemented through a Regional Water Strategy. In order for the Regional Water Policy to be implemented at national level, Member States would need to harmonise their policies with this Regional Water Policy.

The policy further requires countries to institute closer coordination of the Regional Water Policy with other sectoral policies in the SADC. However, despite the policy advocating for gender main streaming in which women are recognized as being a major player in the provision, management and safe guarding of water and also participate in the implementation of policies, processes and activities, little has been achieved by the regional body to ensure implementation of the water policy. The policy can be safely described as ‘White Elephant’ as it has no enforcement or compliance mechanism to ensure implementation by member states. This in generality has contributed to lack of provision of clean water and sanitation especially to the women. When lack of provision and availability of water becomes inadequate, people are forced to use contaminated water resulting in related diseases such as cholera, dysentery and diarrhoea as they fetch water from unprotected sources and use the bush as toilets because of shortage of water. (Dungamano, 2007)

2.7 Domestic Policy

2.8 National *Water Policy*

Zimbabwe recently launched its National water Policy on the 22nd of March 2013. The policy is largely founded on international best practice and includes International Development Goals and other agreements that Zimbabwe is a party to. The water policy includes sub sectorial policies for both urban and rural water supply. The policy under urban and water supply and sanitation services conceded that the urban water supply and sanitation services have faced serious challenges due to population pressure and economic challenges of the past decade. The state of deterioration of urban water supply and sanitation services in Zimbabwe is estimated as follows;

- Access to urban supply decreased from 97% in 1990 to 60% in 2008(NWP 2013)
- Access to Urban Sanitation decreased from 99% in 1990 to 40% in 2008(NWP 2013)
- Hourly availability of water dropped from 24hrs supply to between 6 and 12 hours per day and costs exceeded tariffs in 50% of urban local authorities as 2012(NWP 2013).

The National water Policy attributes this failure and down ward trend to water and sanitation problems to the Zimbabwe National Water Authorities' (ZINWA) failure to run water supply operations at catchment basis which has a huge bearing on operational costs and inefficiencies associated with long distances and time taken to monitor and maintain stations. In effort to reverse the continued downward spiral of the water and sanitation sector the NWP seeks to establish the Water and Waste Regulatory Unit (WWSRU) which operate will operate as a section under the Ministry of Water Development and Management. The core functions of WWSRU will be to monitor all water supply and sanitation services, receive and assess tariff applications, oversee the licensing of water service providers by water services authority and ensure consultation among Water service provider and consumer are undertaken prior to adjustment of tariffs. A further examination of the national water policy reveals the inability to mainstream gender and the capacity to articulate specific gender objective. In many cases sector policies are normally influenced by broader national policies. Policies can play an important role in overcoming obstacles in equal participation of women and men in decision making (WSSG 2003-2008). In this respect an example of a good practice/policy to influence strategy is based on based on the Government of Uganda national gender policy, the water and sanitation sector developed its sector strategy (WSSG 2003-2008). Similarly in Tanzania water and sanitation policies, which promote equal representation of women and women through

national policy which requires local communities water committees to contain equal female representation (World Bank, 2010).

In the light of the fore stated, even though the National water policy is yet to be tested of its efficacy, taking into consideration its recent launch, a closer analysis of the NWP reveals glaring inconsistencies in as far as the supply of adequate clean water to the community at large is concerned. The establishment of the a Water and Waste Management Regulatory Unit is likely not be efficient in its allocated tasks which were viewed to be enormous for ZINWA for the simple reason that the WWSRU will not be an autonomous unit therefore will be subject to bureaucratic and political interference. According to studies conducted globally, public water and sanitation services are often plagued by inefficiency, which drives no services, restricts coverage and leads either to needless subsidies. This performance has to have led to a recent increase in a number of public systems that have been decommissioned or other brought into private operators (Christophe Bosch 2002).

Further, it is encouraging to note that the national water policy recognizes the General Comment No.15 of 2002 on the human right to water, which entitles everyone to sufficient, safe, physically accessible and affordable water for personal and domestic uses.

2.8 National Frame work

2.8.1 Constitution of Zimbabwe

The year 2003 saw an international breakthrough for the human right to water. The committee on Economic, Social and Cultural Rights, in General comment No.15 (2002) on the right to water, made a plea on the right to water beyond the nation state. The right to water like any other human right imposes on states parties an obligation to ensure that the right to water is respected, protected and full filled on a non-discriminatory basis in laws, policies and programs. State parties must ensure that new laws and policies do not lead to segment of a population being denied this right either by de facto or de jure (Helleu 2007). A closer analysis of the current Zimbabwean constitution reveals the provision of certain rights of the individual such as the right to life, right to property etc. However, conspicuously missing from these rights is the right to water. The lack of political voice was affirmed in the Power, Poverty and Global Water Crisis, UNDP, Human Development Report as follows;

Access to water for life is a basic human need and a fundamental human right, yet in our increasingly prosperous world, more than 1 billion people are denied the right to clean water and

2.6 billion people lack the lack access to adequate sanitation. These deadline numbers captures only one dimension of the problem. Every year some 1.8 billion children die as the result of diarrhea and other diseases caused by unclean water and poor sanitation. At the start of the 21st century unclean water is the world's biggest killer of children. Everyday millions of women and young girls collect water for their families-a ritual that reinforces gender inequality in employment and education. Meanwhile the ill health in water and sanitation undermines productivity and economic growth, reinforcing the deep inequalities that characterize current patterns of globalization and trapping vulnerable households in cycles of poverty. As the report shows, the sources of the problem vary from country to country, but several themes emerge. First few countries treat water and sanitation as a political priority as witnessed by limited budget allocation. Second some of the poorest people are paying some of the world's highest prices for water reflecting limited coverage of utilities in slums and informal settlements where poor people live, third the international community has failed to prioritize water and sanitation in partnerships for development that has coalesced around the Millennium Development Goals

2.9 THEORETICAL FRAME WORK

2.9.1 Liberal theory Feminist Approach

Its starting point is the Law and policy blatantly discriminates against women, as the approach's view are that women and men become subjects of law in very different social cultural, economic and political context (Tong 1994). Contemporary women's and feminist movements in the world emphasize that women subordination is rooted in law and therefore they demand gender equality before the law as the only way to access to public sphere as involvement in water and sanitation matters. Liberal feminist theorists believe that female subordination is rooted in set of customary and legal constraints that blocks women's entrance or success in the so called public world. Because society has false belief that women are by nature, less intellectually and/or physically capable than men, it excludes from the academy, the forum and the market place. As a result of this the true potential of this policy exclusion, the true potential of women goes unfulfilled (Tong 1994)

The most notable aspect liberal-feminist agenda is the recommendations for action so that gender justice is achieved by leveling the playing field .They conclude that through better gender equity, with the non-participation of women in decision making regarding water and sanitation could be narrowed down. The focus is removing the social and legal obstacles to women's equal civil and political rights within the

liberal state. Following this approach women's subordination in this sector can be achieved by reform of laws and policies regarding water and sanitation Vis a vis the right to water.

2.9.3 Social Exclusion and Construction

Social exclusion has been defined as the 'Process' through which individuals or groups are wholly or partially excluded from full participation which they live (Francis 1997). The recognition of gender equality and empowerment of women are important goals in their own right and vital to poverty alleviation and achievement of all the MDGs (DFID 2009). Often reducing poverty and attaining MDGs is made harder by phenomenon of social exclusion where certain groups of people such women are socially excluded from developmental agendas. Social exclusion is used to portray multitudes of lacks ranging from civic rights and human fulfillment (SILVER 1994)

We need to explore more about how to reach the women and how to include them in decision making regarding their environmental health at community and national level. Social exclusion can be used as modified criteria to for use in Kadoma's high density areas of Ngezi and Rimuka to access political rights and basic welfare such good water and sanitation.

2.9.4 International Human Rights Framework

2.9.5 *Convention on Elimination of all Discrimination Against Women (CEDAW)*

Article 2(f) of Convention on Elimination of on All forms Discrimination against Women (CEDAW) Obliges state parties to take appropriate measures, including legislation, to modify or abolish existing laws, regulations, customs and practices which constitute discrimination against women. Parties are supposed to take appropriate measures to eliminate discrimination against women by ensuring that women participate in the formulation of policies and their implementation and participate in Non-Governmental organization and associations concerned with public life of their country. The CEDAW further in article 14 (h) provides that state parties ensure the enjoyment of adequate living conditions for rural women particularly in relation to sanitation and supply. Although my study relates to urban area as opposed to rural. Although my research was not focused on rural women but on urban women, this article remains applicable to the study because if potable water and sanitation should be made available to rural women, the same should apply to urban women; CEDAW specifically mentions rural women as they are the ones are visibly left out in development. This too makes the case for urban women stronger as their access to potable water and sanitation is assumed to be obvious (katsande 2006).

2.9.5 *International Covenant on Economic, Social and Cultural Rights(ICESCR)*

Pursuant to article 11 (1) of the Covenant, State parties "recognize the right to adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions". The committee on Social, Economic and Cultural Rights has on several occasions recognised that water is a human right (Hellum, 2000). The Term "Including" in accordance with dynamic interpretation of the committee, indicates that the catalogue of rights encompassing the right to livelihood is not exhaustive but must be adapted to changing social and Economic concerns such as global water crisis (Hellum, 2000). Thus human right to adequate housing, which is thus derived from the right to an adequate standard of living, is of central importance for the enjoyment of all economic, social and cultural rights (Sixth Session). They include the following; an adequate house must contain certain facilities essential for health, security, comfort and nutrition. All beneficiaries of the right to adequate housing should have sustainable access to natural and common resources such as safe drinking water, energy for cooking, heating and lighting, sanitation and washing facilities, means of food storage, refuse disposal, site drainage and emergency services(sixth session 1991).

In the light above water and sanitation are adequately covered by the covenant and Zimbabwe as state party has not taken major steps to recognize these rights either by domesticating the same in the constitution or any policy documents such as the national water policy. An analysis of the Water Act also reveals no particular mention of any of these requirements.

2.9.6 Conclusion

The fore stated chapter has critically looked and analysed existing policies, laws and other relevant literature with respect to water and sanitation on both the international, regional and domestic perspective. However, a close analysis of the same revealed a consistent lack of enforcement of the prescribed legal and policy guidelines to the detriment of proper management of the water and sanitation sector in Kadoma City. The chapter further exposed the ineffectiveness of most of the existing laws both at international and domestic level thereby infringing on the human rights of the masses especially women. In order to test the efficacy of the existing laws and policies, the next chapter discusses approaches to data collection and methods used and analysis of the same.

3.0 CHAPTER THREE

3.1 METHODOLOGICAL FRAME WORK

3.2 Grounded Theory Approach

I ventured into the field with one complete objective of investigating the water and sanitation problems. Throughout my research I was guided by tools propounded under this theory (Glass and Strauss). Whilst in the field I allowed myself to adjust my assumptions and suppositions depending on the flow of information emerging from respondents. Prior to engagement of field work, I launched myself with the assumption that households are unable to afford basic water treatment agents such as chlorine and Aqua Tab. This approach enabled me to just deal with non-state actors on the issue. Having realized this, it was inevitable to adjust my assumptions to include state actors such as health authorities. This allowed me to circumnavigate the issue and come up with follow up questions on non-state actors such as how frequent are said treatment agents given per family or household.

In the light of my follow up questions, it became increasingly clear that state actors were only providing households with water treatment agents only in times of an outbreak. This compelled me to find out from the public health office of the local authority who admitted that despite some wells being condemned in certain areas, distribution of treatment agents is not frequently done due to financial difficulties. This sequence of interviews was based on grounded theory which enabled me to pursue the matter to its logical conclusion. In this respect state actors are not doing enough to ensure the safety of the community.

3.3 *Women's Law Approach*

Women's law as an academic discipline rests on the premise that although sex and overt gender discrimination have largely been addressed by law and its common laws that purportedly apply equally to both men and women, in reality the consequence of gender neutral laws in a very sex and specific manner the reason lies in the different conditions and needs that women experience as compared to men in their daily lives. A crucial point of departure in women's law is that through researching women's 'lived realities' and crafting situation-specific responses, the position of women in law and in society can be improved. Women's law also emphasizes scrutinizing areas that have fallen under legal purview from a gender perspective. (Dahl, 2009). Therefore, in an effort to assess women's access to clean water and proper

sanitary conditions I needed to develop an appropriate framework and to achieve this, I adopted women's law approach. Women's law approach is a methodology that relies on empirical data collected on the ground focusing on women's lived realities and experiences as a starting point for analysis of the position of women in law and society (Benzton, et al, 1998). This process helped me to decide what sort of data to collect and how it should be interpreted (Katsande, 2006). A perfect model of this is after a few days in the field, I realized that women in Ngezi SQ had no or complete sanitary facilities due to the state of their toilets being unusable due to blocked sewer system whereas women in Rimuka SQ had shared or communal toilets facilities but poorly maintained and below WHO standards. The process helped me to interpret the data.

3.4 Sex and Gender analysis

To understand the impact of inadequate water and sanitation in the city of Kadoma, I employed sex and gender analysis. Gender analysis is a powerful tool for evaluating, it is a tool for raising people's awareness about gender differentials in roles (Wakes 1995) Gender analysis describes social relations between characteristics of women and men's participation in determination of their roles including access to rights, power and control over resources (Coates 1999). Helped me to critically comprehend the disadvantage the women of Kadoma, specifically In Rimuka SQ and Ingezi SQ, undergo due the lack of infrastructural development of their housing units vis a vis the inadequate water and sanitation problems. Ingezi SQ and Rimuka SQ are very old residential areas which were specifically designed for single men in the colonial era. The housing units are one roomed quarters without any toilet facility inside. The toilet and bathe room facility is a communal ablution block which is about a 100 meters from the main block. The housing units have completely no water reticulation and even though they had, there is completely no water to flow through. The communal toilet too has completely no water. Most of the occupants of these housing units are house wives whose husband are out to work normally in the gold mine outside the city. During night time these women are unable to walk to the communal toilet defecate or urinate for fear of being raped. This compels them to retain urine for the rest of the night. The retention of urine has serious health hazards. During the day, it's also difficult for the women to clean up whenever they have menstruated as the communal toilet is shared with children, the lack of water compounds the situation gravely.

During day time the women due to lack of water reticulation, walk considerable distances to draw water from the communal taps. Sourcing of potable water culturally is viewed as the "women's" work. In the

absence of water reticulation, it is the duty of the women to fetch the commodity .This increases the burden on the woman.

The Gender and sex analysis was a vital tool in my study in that it made me take keen interest in finding out how women are impacted by the water and sanitation problems in Ingezi and Rimuka as compared to men. I did this because I was made aware that in there are also sex differentials when it comes to water and sanitation matters, especially in the African context.

3.5 Influence of actors on structures

My assumption on the influence of Actors on structures was that budgetary constraints on water and sanitation services by Municipal Council compromised the standard of water and sanitation that was provided to community. I evaluated the responsibility of the Kadoma municipal council with regard to its legal requirement to provide good and potable drinking water to the community and enforce public health regulations. I identified that the lack of provision of funds by the municipal council has a direct impact on the provision of potable water and portions of good sanitary services to community. In terms of the cleanliness and hygiene of the communal toilets in Rimuka SQ and Ingezi SQ, It was evident that lack of funding had a very significant impact on the sanitation of the residents exposing the users to risk of contracting serious diseases. In my view, beside the budgetary constraints experienced by the council, there is a gap between the State actors and non-state actors in respect of health awareness.

3.6 Human Rights Approach

The right based approach places the individual as the holder of basic rights at the core process of development and it also emphasizes the relevance of the array of human rights in development process(Hellum 2000).The approach further offers an analysis of development of a development problem from a holistic perspective of human rights and corresponding obligation of government according to international human rights standards(Goonesekere 2000).This means embracing human rights in policies as well as implementation of programmes (Munalula 2011).The rights based approach helped me to engage properly with the injustices faced by the women of Kadoma ,specifically in the high density areas of Rimuka SQ and Ngezi SQ in terms of the right to access good water and sanitation. I found that despite the Millennium Development Goals to reduce by half by 2015 the number of people without safe reliable potable water and basic sanitation, no special attention with regard to policy or the law to move towards

the goal no 7 of MDG was in place at district level. The women did not understand to what extent the international law and policy on water and sanitation addresses their plight to accessibility, availability.

To analyze and assess the extent of infringement in terms of water accessibility, availability quality and state of sanitary conditions in Rimuka and Ngezi respectively, I was guided by the WHO standards on improved water and sanitation standards. WHO and UNICEF provide the UN system's monitoring of progress on MDG target 10. The JMP defines safe drinking water and basic sanitation as follows;

Access to safe drinking water is measured by the percentage of the population using drinking water for domestic purpose, drinking, cooking and for personal hygiene. In respect of safe drinking, safe drinking water is water that is considered safe if it meets the certain microbiological and chemical standards on drinking water quality provided by water quality guidelines by WHO(WHO,2011).

WHO further categorizes improved drinking water mean water as a source that by nature of its construction, adequately protects the water from outside contamination, in particular faecal matter(WHO,2011).Common examples include, piped water, public standpipe, borehole, protected dug well, protected rain water. In order to comprehend and contrast what constitutes access to drinking water, improved source and vice versa, WHO defined unimproved water sources as those that include unprotected dug wells, unprotected spring, surface water (Lakes River, stream etc.), and vendor provided water, bottled water and tanker water.

3.7 Conclusion

The chapter has detailed the main methodological approaches and theory adopted to conduct the research. The approaches undertaken emphasised the need to unpack and comprehend the inequalities that are currently obtaining between the women and men as regards to the matters of law and policy. The approaches discussed above helped to discover imbalances affecting women in respect of water and sanitation as will be discussed in the next chapter.

3.8 RESEARCH DESIGNS

3.8.1 Sampling of Respondents

I used a purposive method where my respondents selected strategically depending on research question(Bryman 2008).For instance my key respondents such as Kadoma City Council, Environmental Management Authority ,ZINWA, Gender Department were purposely selected. However, my respondents in the community were randomly sampled.

3.9 DATA COLLECTION METHODS

3.9.1 in depth interviews with key respondents

The key informants were interviewed in order to get deeper and wider information on water and sanitation problems, problems associated with it, its causes, impact and management. I was able to triangulate the findings with other sources and test matters of reliability and validity

RESPONDENTS	FEMALE	MALE	TOTAL NUMBER
PUBLIC HEALTH DEPARTMENT		01	01
ENVIRONMENTAL MANAGEMENT AUTHORITY		01	01
GENDER DEPARTMENT		03	03
DIRECTOR CENTRAL ADMINISTRATION		01	01
ZINWA		01	01
ENGINEERING DEPT		02	02
DIRECTOR FINANCE	01		01

Individual interviews

Interviewee	Female	Male	Total No.
Rimuka SQ		1	11
Ngezi SQ	9	2	11
Eiffel Flats	2	0	2
TOTAL	21	3	24

There was no particular preference in terms of gender on persons to be interviewed. The interviewees were selected at random mostly at their homes. The respondents were asked their opinion and experiential data in so far as water and sanitation issues are concerned. The interviews started by briefing the respondent, through my translator, on the objective of the study. The Interview guide was split into the following sections;

3.9.2 Focused Group Discussions

FGD are employed to emphasize a specific theme or topic, that is being explored in depth and this method opens up for arguing thereby ending up with a more realistic accounts on issues at hand.(Bryman 2008).During my field I held one focused group discussion in Ngezi. Mobilizing women for the focus group discussion was rather challenging. My initial plan was to conduct focus group discussion at the water collection points, but this could not work out due different schedules of women drawing water. I managed to hold a focus group discussion at a house housing four families under one roof. The five discussants were all housewives and the aim of the discussions was to discuss the implication of poor sanitation and erratic water supply and the impact it had on the family. Several statements that emerged were that men were not affected with situation as most of the time they are out to work and only show up the evening demanding to freshen up and eat. Therefore it a woman who bears the effect and not the man. One women disagreed with the notion referring most to culture and the need to be obedient to their husbands. The debate rage on until I stepped in to calm the storm. The debate method had a special that prowess in that it helped me understand that women also understand the women though suppressed they are able to engage in meaningful debate about their plight.

3.9.3 Observations

My observation during my study was two fold, firstly how the respective families stored their drinking water and secondly the nature of latrines and how they are were shared among different households respectively. I observed that the lack of reticulated water from the council or local authorities has forced residents to improvise water storage containers for drinking water. Most household had special container

reserved for drinking water which were either left outside with a cup placed on top with flies teeming around the cup and the bucket of water. Further, I observed that children were more likely to contract diseases as they are allowed to use filthy communal toilets with adults. The toilets were littered with faecal matter making it a hoard of disease outbreak as the toilet had no hand washing facility and running water.



Figure 1. Improvised water storage

This technique of collecting data was specifically adopted because it gave me the chance to triangulate the information I obtained from the local authorities regarding water supply and maintenance of the communal toilets by the council.

3.9.4 Analysis of Documents

Qualitative analysis of documents related to Water and sanitation was an important component of my study. The method was non obstructive and objective as it also avails an opportunity to triangulate the data through other methods. In the process of analyzing the data, I broadened my perspective on water and sanitation via a vis service delivery.

3.9.5 Assessment of Methodology

The methodologies I employed worked very effective for me despite engaging into the field with the help of my translator. I Noticed that my national status had some kind of unexplained effect on the interviews as some respondents appeared to withhold certain information vital to my research on account of not being the national of Zimbabwe. However, my translator was always apt to the task of explaining my situation. On the side of government officials, despite getting all the necessary permission to interview them, the respondents also appeared to be have free to discuss the prevailing situation on my subject of research.

3.9.6 Challenges/limitations of the study

During my field research I encountered challenges with the respondent from the Zimbabwe Water Authority who could not deal with certain questions administrative questions for the simple fact that he

was a technical person. He referred all queries to Chinhoyi or Harare. Therefore due limitation of funds, a follow-up has not been made.

In conclusion the study made use of focused group discussion FGDs as major input as a major source of primary data in addition to use of secondary data such as laws and policies etc. Three institutional informants were also done to support the data from the community. This helped the researcher to be able to triangulate the data and come up with findings as will be discussed in the next chapter.

4.0 CHAPTER FOUR

4.1 FINDINGS AND ANALYSIS

4.2 The unheard voices of the Non-State Actors

This Chapter shall present my findings, discuss and analyze pertinent issues that contribute environmental to health problems that emanate from the mishandling of water and sanitation, causes, impact and management.

Connected ...! But no supply

After a day of trying to sort my bureaucratic processes with my Key respondents from the council and other government departments, I finally engaged myself in the field the just around noon and headed for Rimuka. By time I settled to interview one client I was left with very little time to do a considerable job. But I launched myself with the help of the translator, but thank goodness the interviewee was literate enough such that the translator was rendered immaterial to do the job. During my first interview, I quickly realization that water provision by the local authorities was one challenges most residents faced. My first interviewee had this say;

“Hey my brother! I have living in this location for more than ten years and I have never seen a drop of water coming out the tap. Yet we are made to pay for the service. Is that fair? Where ever you will go the problem is the same. We rely on bore hole water provided by the donors”

Despite the Local Authority being provided with power to furnish a wholesome supply of water for drinking and domestic purposes and being required to under section 66 of the Public Health Act to maintain existing water supplies in good order, the situation as observed in Waverly was totally different, residents of Waverly are connected to the council main water supply but the council is unable to supply water. Some residents interviewed indicated that at times they do receive water but when the water comes through the pipes the water is usually rusty and smelly one resident was bold enough to say;

“The water is not good for consumption; we don’t believe in the council to supply good water for drinking. All we do is use it for other domestic purposes other than drinking. Like my family we draw our water from the bore hole, its much safer”

As a way of survival residents have resorted to digging shallow unprotected wells behind their back yard disregarding the law concerning digging of wells. A closer analysis of the lack of provision of potable

water is a clear breach of the ICECSR in particular article 2(2) which describes the right to adequate housing as to contain certain facilities including safe drinking water. This right is also rightfully affirmed in the general recommendation 15 of 2003 by the ICESCR committee. Therefore, the local authorities being the agents of the government are regarded to be in direct breach of the international conventions which Zimbabwe is a party.

“The water from the well is not normally used for drinking but I rely on so dearly she lamented the following”;

“I an HIV positive person and my doctors advised me not to take water from the wells and the tap, they recommended water from the borehole because it clean and pure”

Water Availability and accessibility

In terms of standard reticulation of housing units in both Rimuka and Ngezi, it was discovered that the council has completely failed to manage water distribution to most housing units despite the housing units being connected or reticulated to the main supply line. Some respondents indicated that there has been no water running through their pipes for as long as ten years one respondent had this to say;

“Just take look at the distribution meter! Does it have any life? It’s been dry for a long time and yet I am made to pay for that...Imagine!”

The failure by the local authority to supply water to the residents has forced families to walk long distances to fetch water from boreholes sunk by the donor community during the cholera outbreak in 2008. For those who are lucky the boreholes were located right at their door steps. For the unfortunate they have to walk some considerable distance to fetch water. When it comes to fetching water from far distances, the burden is on women rather than men. The Zimbabwean government, through local authorities, despite subscribing to CEDAW has failed to fulfill the requirement of Article 14(h) which obligates states to ensure the ensure the enjoyment of adequate living conditions for rural women particularly in sanitation and water supply. In the light of the above, it was observed that many women in these areas are disproportionately poor and tend to be mostly hit by the lack of water and sanitation service. The voices of these women have been neglected by the local authorities despite being primary mangers of house water. One woman had this to say;

“In my case ,I am bit lucky together with rest of my immediate neighbors, borehole was placed right on my door step...so I don’t feel the hustle of walking distances .but to tell you the least ..I feel for others”

Boreholes remain as critical resources that the communities have. They constitute the major source of

safe clean portable water given that the local authority still faced challenges in providing piped water to the city.

In the light of the above, The World Health Organization (WHO, 2011) defines access to potable water in urban areas as access to piped water or public standpipe within 200 meters of a dwelling or housing unit. I observed in Rimuka and Ngezi that were as some houses where within the prescribed WHO standards by nature of placement of borehole by authorities, the majority housing units were outside the prescribed WHO limit. Rimuka and Ngezi has access to piped water from local authorities though some respondents received piped water, they lamented that the water supply was heavily rationed and was only available for about 1-3 hours per day.

Potability of water

Most of the respondents who affirmed getting at least an hour to three hours of water from the council or drew their water from a piped council supply expressed unwillingness to drink the water as it was perceived to be contaminated. One of the respondents had this to say;

“I do not drink water from the tap, it is usually mixed with sewage and sometimes its comes out rusted. And I don’t know the health implications that may arise as a result of drinking rusted water. It’s not just safe to drink it”

Most of the respondent indicated that they would rather drink water from the bore hole than tap water. As a stop gap measure most of them have dug unprotected wells to supplement their water needs. The status quo has severe implication on the women as they are normally exposed to contaminated water which also puts the health of the family in general at risk of contracting waterborne diseases such as cholera. The lack provision of potable water by council has forced women to walk long distances to fetch water. Therefore to affirm the claim by resident of supply of contaminated water by the council, independent laboratory tests need to be carried out. However the perception by the residents remains unchallenged.

4.3 Sanitation

My interviews with respondents in Rimuka and Ngezi revealed that sanitation was the biggest challenge faced by community especially women. During my study I discovered that some houses in Rimuka and Ngezi were serviced by either communal toilets or individual household toilets but located about 30 meters outside the house. It revealed that most of the toilets that service individual households in Rimuka SQ were not usable due blocked sewer pipes which have forced faecal matter right to lavatory pan. The lack of

water compounds the situations too as residents are unable to flush faecal matter. This has forced the residents to lock their toilets and prefer open defecation in the nearby bushes across the road. As a result the Rimuka and Ngezi are still at risk of cholera outbreaks as a result of limited improvement in the provision of water and sanitation services. One respondent I interviewed had this say;

“we locked the toilets because they are teeming with maggots not a single toilet in this area is good enough for use. Would you like to see it for yourself? You have to cover your nose when you are ready to check our toilet”.

A Check in the toilet revealed horrible unsanitary conditions. I could see maggots teeming on faecal matter and there were a very bad odour from the toilets.



Figure 2. Pictures of blocked toilets due to blocked sewer system

Further my study revealed that some communal toilets in most of the houses were usable by the residents but the lack of water to the toilets brought about an unsanitary situation. A single block of toilet services approximately well above fifty families. A check in the communal toilet revealed that the toilet block was divided into two parts (gendered); being a man myself I was ushered into the men’s toilet. I could not believe myself with the state of the Toilet, the toilet was divided into three parts the Urinal, Bath section and squatter pan. There was no door on any of the toilet compartments and floor was littered with wet and dry urine with fecal matter not flushed. I could not believe that the same toilet was actually shared between the old and the young. This is also the cases with women. One the women said;

“Honestly how could continue to use toilets like these, the council who are supposed to clean the toilets never do so on a daily basis, it takes a while for them to clean up the toilets. Filth and unsanitary conditions in the toilets expose us to different diseases especially the children. Authorities need to do something “

The distance between the communal toilets and the housing units is another factor that caught my eye. During night time it is difficult for the women to use the toilet as they risk being attacked by potential male rapists. Most women withhold their urine throughout the night. This has health effects. One had this say;

“During night time I use when I feel like answering to the call of nature, defecate in a small plastic is disposed during day time because if you walk to the toilet you risk to be raped”

5.0 The voices of the state actors

5.1 Lack of Policy on water and sanitation

Zimbabwe recently introduced the National Water Policy on the 22nd of March 2013. As much as the policy is intended to improve the water and sanitation sector by incorporating or being founded on best international practices to which Zimbabwe is a party and also includes international development goals such as the MDGs, it came to my knowledge that the NWP is not widely used as a reference book by Kadoma City Council. Analysis of the NWP revealed a possible indirect discrimination to women. According to Hellum, Indirect discrimination occurs when a policy or program does not appear to be discriminatory on the face of it but has discriminatory effect when implemented. Even though the policy has not devolved to district level it disadvantages women as compared to men by failing to recognize the right to water. In this regard, Most of the council officials I engaged with expressed little knowledge about it, let alone did they not keep a copy. One official had this to say;

“Well I have not come across one and as Kadoma Council we I don’t think we have a copy either...may be may have a copy soon or later”

5.2 Obsolete infrastructure

The Pasi water treatment plant is old and outdated. It was commissioned in the late 1930s. Over the years, the plant has undergone a series of upgrades; the last one was done in 1972. Equipment in the water provision system is dilapidated as a result of old age. Upgrades of the system have been done at least twice but to no avail the system cannot cope. The pump equipment at Pasi has outlived the efficiency of its design and, as a result, the city council is incurring huge maintenance costs to keep them functional. Due to obsolete equipment, the Pasi water treatment plant is producing an average of 12,000m³/day instead of at least 18,000m³/day. According to council officials, there were extensive

leakages along the main pipe line that supplies water to the city from the Blue Ranges water works. This resulted in the loss of approximately 30 percent of treated water. Water bursts were also being experienced in the oldest reticulation mains feeding the residential areas. It was also learnt that the water system had several underground leakages attributed to the age of the pipes. Vandalism cannot be ruled out too as the residents dig up for water illegally. One official had this to say;

“Our sewer system runs parallel to the water system...and when people dig for water they damage the water pipes. So when sewer pipes break. It’s pretty easy for sewer to mix with the water being pumped to houses. This creates a perception that council supplies untreated water”

The aging equipment was also compromising the efficiency of the water supply system. This meant that water shortages were becoming a regular occurrence in the city of Kadoma. Therefore as result of this of the shortage of water people have resorted to dig unprotected wells.

5.3 Failure to enforce Water Act

The Water Act has been described as a technically sound with a solid base for sustainable and efficient utilisation of water resources. However my findings revealed that the Water Act is being underutilized by the local authorities in Kadoma. The Water Act under section 35(b) prohibits any person to dig wells without authority. The lack of enforcement of these laws by local authority contributes to prevalence of people being exposed to deadly pathogens in drinking water drawn for the unprotected well. It can be safely said that continued utilisation of unprotected wells has a serious implication on the health of the people especially women. when council officials asked about the enforcement and safety of the wells had this to say;

“they are not worried about the wells! This is a big challenge. A big area to manage because we are reacting to situation...a situation which was caused by us. We failed to supply water to our residents in its terms...water is basic need. People reacted by providing themselves with water through digging well”

5.4 Public participation in water and sanitation

The core issues of public participation especially women remain a very pertinent and very limited, yet it remains an available option for water and sanitation matters in the city of Kadoma. The communities that I interacted with indicated that they had limited participation in planning for environmental health matters including water and sanitation. In this regard, it can be safely concluded that the women are socially excluded from participating in water and sanitation to the detriment of non-recognition of gender equality and empowerment of women in their own right and vital to achievement of MDGs. Often the

phenomenon of non-participation is made harder where certain women are socially excluded from development agendas.

5.5 Inadequate Funding

Budgetary constraints by the local authority were another area of difficulty that is affecting the council to implement certain clean up ventures in the area of water and sanitation. The council due to financial difficulties is unable to purchase water allocated to it by ZINWA. The council is unable to clean the communal toilets in Rimuka, buy disinfectants for the purpose of cleaning these toilets on daily bases. The lack of prioritisation of funding to the water and sanitation has a direct breach of the right to clean water and sanitation as provided for under Article of the ICESCR and also as affirmed as right to water by general comment No.15 by the ICESPR Committee. The scenario as highlighted above affects more women as compared to men since women are known to be care givers of most households and that they forced to move long distances to fetch water.

5.6 Conclusion

This study concentrated on the Environmental Health problems its causes, impact and how they are managed with special emphasis on water and sanitation. In order to this, the study examined international legislation and domestic legislation, policies and other relevant material. In the light of the above, it can be safely concluded that as much as the laws and policies on the subject matter are seemingly sufficient in some areas and insufficient in other areas too, the lack of enforcement of laws of has been identified as the major factor to water and sanitation as well lack of advocacy of reform of law where it is lacking respectively. Poor water and sanitation provision also remains the source of the problem in Kadoma and as such high density areas such as Ngezi and Rimuka remain potential disaster areas. The core issues of public participation in water and sanitation issues remain very limited with very little attention from local authorities.

6.0 RECOMMENDATIONS

The recommendations that follow recognize the complexity of the poor water and sanitation crisis in Kadoma. Without addressing the myriad of the root causes of the problem identified in the research no meaningful resolution to the poor water and sanitation can be achieved. There is realization that poor water and sanitation is usually a manifestation of multiple problems in the environmental health sector. These recommendations are thus categorised into Immediate and long term bearing in mind the intricacy of water and sanitation and the enormous resources required to manage it.

(a) Immediate-within the next twelve months

The following recognize the complexity of humanitarian and economic crisis in Kadoma. There is realization that most of the unsafe factors that trigger disease outbreak are existent in high density areas. Therefore, there will be need to hastily adopt the following activities in order to avert disease outbreak. The recommendations are crafted to cater for short and long term developmental needs, which when adopted will see the reduction of disease outbreak as a result of poor water and sanitation.

- (i) Local authority should step up the cleaning of communal toilets in high density areas and also provide disinfectants and hand washers and sanitizers to the ablution blocks. Provision of adequate water to ablution block is also very vital to wash away faecal matter after use.
- (ii) The use of unprotected wells by community is a source of water borne diseases due to contaminated water. Therefore strict enforcement of Water Act in relation to digging of illegal wells by the council is cardinal to reduction of pathogen intake.
- (iii) Awareness raising on the quality of piped water supplied by the council to the community will help the community to resort to use of piped water other than illegal sources of water such as unprotected wells
- (iv) The continued blocked sewer system in high density areas has forced residents to abandon usage of their toilets leading to open defaecation. It is recommended that the unblocking of sewer system will alleviate the problem and allow residents to resort to toilet use.

(b) Long Term: from 36 months onwards.

6.1 Refurbishment of water system

The council must make the refurbishment of the water system a top priority to avert the resurgence of diseases, such as cholera. This is important as access to clean water is essential to ensure human wellbeing. In the year 2000, the United Nations committed itself to attaining one of the Millennium Development Goals, which seeks to halve, by 2015, the percentage of people living without sustainable access to drinking water. This requires the council to adopt new technology with ready spares and better efficiency, instead of the old equipment installed in the late 1930s. The council can also sink more bore holes in various locations of the residences to reduce on the burden of women walking long distances to fetch water.

6.2 Reticulate all housing units to main water supply

The reticulation of all housing units to the main water supply line in high density areas is the key to reduction of poor water and sanitation. This would see community take up initiatives to clean the toilets on their own

6.5 Construct New Housing/Ablution blocks Units

In order to reduce the dangers of contracting diseases such as cholera, dysentery etc. the research recommends that council should build more communal toilets in the high density areas in order to comply with WHO standards on sanitation

The houses in Rimuka and Ngezi have outlived their usefulness. As long as the designs remain “colonial” and meant for single persons the likelihood of disease outbreak is strong due to overcrowding and sharing of toilets. Modern housing units will answer the question.

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HUMAN RIGHTS INSTRUMENTS/POLICY

Convention on the Elimination of all forms of Discrimination Against Women

Covenant on Economic, Social and Cultural Rights

Southern African Development Community Protocol on Gender and Development

NATIONAL LEGISLATION/POLICY

Constitution of Zimbabwe

National Water Policy

