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RETHINKING WATER SERVICE DELIVERY SYSTEM IN ZIMBABWE: A CASE STUDY OF KWEKWE MUNICIPALITY

BY

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Declaration

I, Wiseman Mupindu, solemnly declare that this study is my original work and has not been derived from, or submitted to, any other organization prior to submission to the University of Fort Hare. I further declare that due care has been taken to acknowledge sources in order to avoid infringing on the intellectual property of those cited, overtly or covertly, in this study. All sketches, figures and tables were drawn by the researcher save where it is acknowledged that another is the author. Any interpretation and representation of information contained in this study rests with the author.

13 April 2011

Signature date

Abstract

This study examines the perceived scarcity of household water service delivery in the city of Kwekwe under the Midlands province of Zimbabwe. Kwekwe Municipality appears to be characterized by an erratic supply of clean water for household use. The city of Kwekwe has experienced an unreliable domestic water service delivery system since the beginning of this millennium. This study aims to investigate the causes of the problem, its extent, impact and what could be done to mitigate the problem. The study employs interviews, questionnaires, observations and document analyses to establish that population growth, ageing equipment, a lack of foreign currency and local funding, as well as a lack of expertise and of political will have contributed to the poor domestic water supply in the city of Kwekwe. The city of Kwekwe needs to commit itself to improving the current situation by involving the community, constructing more storage facilities, and by putting monitoring and evaluation mechanisms in place. The research design took the form of a case study of Kwekwe Municipality. A mixture of qualitative and quantitative research designs were used in this study. The qualitative/interpretivist approach was more dominant, allowing some overlapping with the quantitative/positivist paradigm whenever this was considered reasonable. The study sample consisted of a conveniently assembled sample of 120 respondents. The target population for the study comprised of 110 residents of Kwekwe urban and 10 Kwekwe City Municipality Water Authorities from the Works Department. This study focuses on the 4 residential areas of Kwekwe Municipality. The data collection instruments include questionnaires and focus group interviews. Electronically recorded, in-depth interviews were held with the water authorities and the consumers to establish their perceptions on the best practice of the

water service delivery system in Zimbabwe. The data collection tools contained a preliminary section on the biological data of the respondents. All data was subjected to either qualitative or quantitative analysis techniques in order to strike a balance between the structured survey instruments and the anecdotes of the respondents. Quantitative data was analyzed using a Statistical Package for Social Sciences (SPSS), while qualitative data was subjected to document analysis which entailed classifying the data, extracting themes, identifying patterns, tallying and quantifying responses and making generalizations out of these patterns. This implies that the research methodology focused on the method, tools and techniques used to assist in achieving the objectives of the study and answering the research questions that the research seeks to address. The term research methodology is used, in this study, to refer to the philosophical assumptions, values, and theories which inform and underpin the way in which a particular research method is used. In this study, the case study research design was used as the operational framework for data gathering. The case study research method is essentially grounded in the interpretive research paradigm. To this end, the study sought the perceptions of both the consumers and the water authorities. The major finding of the study is that the ability of Kwekwe Municipality to provide household water service delivery to its consumers is slightly below average. However, there was a slight improvement in the household water service delivery but consumers are still remaining dissatisfied. Another finding, related to this one, was that the electricity deficiency cost the efficacy of Kwekwe Municipality in its provision of household water service delivery. The study proposes that more studies which seek to interrogate the domestic water service delivery system of the Zimbabwean Municipalities should be embarked upon by

the state. The study also recommends that service delivery training programmes be implemented in order to enhance the competence of the water authorities. Furthermore, the study suggests that consumers be placed at the center of household water debates when policies, rules and regulations of the water service delivery system are formulated. Finally, the study implores that municipalities need to have their own reserves and generators for emergency cases during electricity power cuts. It is imperative that the water reservoirs constantly hold 4 days' worth of water capacity. The municipality of Kwekwe must refurbish the entire water reticulation system. Municipalities must carry out an audit of water meter readings and also confirm that all water meters are functional. Manpower to read the correct meter reading should be increased in number and must have reliable transport.

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First and foremost I want to proudly thank the Almighty God for shepherding me and giving me the wisdom to complete this study. Naturally, I am tempted to appreciate God's grace upon me using my mother's tongue. *"Pazvirevo zvenyu Mwari, ini ndinowana njere.,"*. Thank you Almighty God for caring and protecting me during my stay in South Africa. It was through His grace that I was allocated a caring, thoughtful and able esteemed supervisor and promoter; Professor Reckson Thakhathi. Prof. Thakhathi skillfully nurtured and sharpened my intellectual skills, by modeling high expectations for me and allowing me the space to manoeuvre and making the appropriate interventions when the need arose. He took on my challenges as if they were his challenges and my success as if it was his success. He was instrumental in the progress of this study from its inception to its conclusion. His verbal and written comments concerning this study were apt and incisive. His consistent encouragement, professional etiquette and genuine concern for my academic welfare and progress shall remain eternally embedded in my modest mind and consigned to posterity. I will forever cherish his invaluable contribution to my success. May God richly reward him several folds so that he can continue to guide the current generation into the vocation of academia.

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this study. In this regard, it must be noted that scholarly work is not possible without the academic assistance from relevant authorities and moral support from various groups and individuals. I therefore wish to express my deep gratitude and appreciation to the following people, without whom this study could not have been possible. The following library staff members are worth mentioning: Moyo Matthew and Bokwe Pyreen for their guidance on the use of online database resources; Howard Pim Library staff, Phillip and Tobela; front desk library staff; Madikane Nomzingisi, Jekwa Sipho, Hlakanyana Sandile, Songwiqi Phindile, Mbongisa Ndzima, Kembe Malusi, Bill Xolisile and Ntsendwana Buyisile for their excellent service to make this study a success. Guys. You rock.

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Dedication

This study is dedicated to my late father Jeskiel Musundire Chorima Chinherera, my late brother Eframe, my mother Anna, my wife Chipo and lovely daughter Kudakwashe.

Key words

Water service delivery system

decentralization

cost recovery

neo-liberal theoretical framework

municipalities

water authority

water policy

household/domestic consumers

water act

human rights

economic good

water tariffs/revenue/water bills

rights-based theoretical framework

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ASGISA	Accelerated and Shared Growth Initiative for South Africa
BURA	Bulawayo United Residents Association
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CESCR	Committee on Economic, Social and Cultural Rights
CFU	Commercial Farmers Union
CG	Central Government
CKRA	Combined Kwekwe Residents Association
CIDA	Canadian International Development Agency
CMAs	Catchment Management Agencies
CRC	Convention on the Rights of the Child
CZI	Confederation of Zimbabwe Industries
DFID	Department for International Development
DM	Demand Management
DWAF	Department of Water Affairs and Forestry
DWD	Department of Water Development
EMCOZ	Employers Confederation of Zimbabwe
ESAP	Economic Structural Adjustment Programme
FAO	Food and Agricultural Organisation
GEAR	Growth Employment and Reconstruction
GDP	Gross Domestic Product
GIS	Geographical Information Systems
GoZ	Government of Zimbabwe
HIV	Human Immunodeficiency Virus
ICESCR	International Covenant on Economic, Social and Cultural Rights
IFIs	International Financing Institutions
ILA	International Law Association

IMF	International Monetary Fund
INGOs	International Non-Governmental Organizations
IWMI	International Water Management Institute
IWRM	Integrated Water Resources Management
KRI	Kwekwe Respondents for Interviews
KRQ	Kwekwe Respondents for Questionnaires
LGUs	Local Government Units
MDGs	Millennium Development Goals
MERP	Millennium Economic Recovery Programme
ML	Mega liters
MNE	Multinational Enterprise
NEDPP	National Economic Development Priority Programme
NEPAD	New Partnership for Africa's Development
NER	National Economic Recovery Programme
NGOs	Non-Governmental Organizations
NIC	Newly Industrialized Countries
NLP	Neurolinguistics Programming
NWRS	National Water Resource Strategy
OAU	Organization of African Unity
ODI	Overseas Development Institute
PPWM	Pre-paid water meters
RBs	River Boards
RDP	Reconstruction and Development Programme
SADC	Southern African Development Community
SAPs	Structural Adjustment Programs
SDSS	Spatial Decision Support System
SKANSKA	Aktiebolaget Skånska Cementgjuteriet
UDHR	Universal Declaration of Human Rights
UDI	Unilateral Declaration of Independence
UFH	University of Fort Hare
UK	United Kingdom

UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
U.S.A.	United States of America
WC	Water Conservation
WRMS	Water Resources Management Strategy
WUAs	Water Users Associations
WWV	World Water Vision
ZESA	Zimbabwe Electrical Supply Authority
ZILGA	Zimbabwe Local Government Association
ZIMASCO	Zimbabwe Mining & Smelting Co. (Pvt) Ltd
ZIMPHOS	Zimbabwe Phosphate Company
ZIMPREST	Zimbabwe Programme of Economic and Social Transformation
ZINWA	Zimbabwe National Water Authority
ZNCC	Zimbabwe National Chamber of Commerce
ZISCO	Zimbabwe Steel Company

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CHAPTER 1

HISTORICAL AND SOCIOLOGICAL STATE OF WATER SERVICE DELIVERY SYSTEM IN ZIMBABWE

1.0 Introduction

The purpose of this chapter is to give a theoretical outline of the study which sought to investigate the extent of rethinking the water service delivery system in Zimbabwe. The background section explores important issues related to aspects of domestic water as an economic good. Evidently, there is a scarcity of literature on the domestic water service delivery system in Zimbabwe. Further, an extensive literature search, conducted by this study, revealed that most studies that address water service delivery predominantly emanate from Europe, Australia and America. This scenario reflects that household water service delivery system is an under researched area. It was also essential to relate this discourse to the movement from centralization to decentralization. It was therefore inevitable to rethink the best practice for the domestic water service delivery system from a global perspective cascading down to Zimbabwe through the lenses of decentralization, neoliberalism and rights-based theoretical frameworks. The background of the study, the statement of the problem, the research questions, objectives, research methodology, purpose of the study, the significance of the study, the justification of the study, the delimitations of the study and the limitations of the study are set out in this chapter.

1.1 Background of the study

During the previous years, central planning was recognized in nearly all developing countries as an approach to providing rational and practical policies for using scarce resources effectively to provide speedy development in industrial output. According to

Rondinelli and Cheema (1993) central planning was prescribed by international assistance agencies such as the World Bank as a way of promoting modernization; accelerating social and political change; generating employment and mobilizing capital for further investment. It would allow the state to commence, support and direct economic development. Central planning and administration were considered necessary to direct and control the economy and to integrate and unify nations that were emerging from long periods of colonial rule (Rondinelli and Cheema, 1993; Naidoo, 2002; Vroom and Yogo, 1988). Central planning had its own shortcomings.

During the yesteryears, it was generally recognized that central planning had not achieved the goals it was intended to. Economic escalation remained unhurried in most developing countries during the 1960s, and even where growth rates were high, only an undersized group benefited from increased national production. The income disparities between rich and poor, within various regions, widen in many countries. The living standards of the poorest groups in the least developed nations have declined. Further, the numbers of people living in what World Bank officials called absolute poverty were greater than ever. Several development planners and administrators began questioning the efficacy of strategies based on increasing industrial output. They challenged theories calling for utmost economic growth apart from the patterns of income distribution. Centralization, after political independence, therefore led to the unproductive implementation of donor funded projects (Rondinelli and Cheema, 1983).
From the end of the 1970s onwards, there was a move towards democracy in many developing countries, particularly on the African continent (Van der Mescht, 1996).

Even though the move is partially accredited to outside pressure, mainly from donor countries and international organizations, it is also attributed to governments' own inventiveness to improve participatory democracy in their countries. Among the chief objectives of the move towards democracy was the need to ensure the effective participation and involvement of citizens in decisions regarding their social, economic and political development. There had been an emphasis on decentralization and devolution of power to the lower levels with the intention of empowering people to make decisions on their own improvement. The assumption was that the involvement of people in decisions regarding their own development will motivate them to ensure the successful implementation of programs and policies intended to benefit them (Naidoo, 2002; Vroom and Yogo, 1988).

The increasing attention in decentralization is attributable not solely to a sense of disappointment with the consequences of centralization but also to the recognition that development is a multifaceted and tentative process that cannot be easily planned and controlled from the centre. It is believed that the first demand for greater popular participation in the African social welfare development process was made in 1987, at the time of the conference on the challenge of economic recovery in Abuja, Nigeria (Oakley and Cleggy, 1999). This convention was a precursor to the 1990 Arusha declaration seminar on the Role of Popular Participation in meeting the challenges of recovery and development in post colonial Africa.

Accordingly, it was through the 1990 Arusha International Conference that the African Charter for Popular Participation in Development and Participation was adopted (Oakley

and Cleggy, 1999). The Charter attested to the crucial responsibility of popular participation in generating the support necessary to overcome Africa's developmental crisis. To this end, Adedeji (1990: 68) proclaims the ethics of popular participation as those: *"Where the governed and their governments are moving hand in hand in the promotion of the common good and where it is the will of the people, rather than the wishes of one person or group of persons however powerful that prevails".*

The water sector was no exception to the developments that occurred in developing countries during the process of decentralization. The water sector was recognized as a driving engine in the social and economic development of both developed and developing countries. Therefore African countries, like all other developing ones, have placed main concern on the enhancement of domestic water service delivery systems by devolving certain powers to the local water authorities. Noticeable in this trend is a shift from autocratic models of decision making by a few people to collective decision making and team work (Jacobson and Berne, 1993).

With a strongly constrained budget, the government of Zimbabwe has been viewed as following the lead of developed countries that have sought to restructure public clean water service delivery through decentralization, by contracting municipal private partnerships and related reforms. Such reforms in service delivery are generally welcomed when it is believed that private sector partners are better equipped to provide certain services than are governments. With respect to basic and essential services, however, a higher degree of uncertainty and apprehension exists as the focus shifts from simply minimising the costs of delivering clean household water services to

broadening access to all citizens. Accordingly, the Bill of Rights (section 27(1) (b)) of the 1996 Constitution, stipulates that everyone has the right to have access to sufficient clean water for household use. Affordable and subsidised domestic water, then, is not a privilege but a fundamental right of all citizens. Nevertheless, the constitution is silent on the issue of payment. Neither does the constitution state that it is a human right not to pay the household water service delivery.

The main focus area of the study aims to assess the extent to which the provision of clean water for domestic use in Zimbabwe is sustainable and cost-effective in terms of provision, as well as reasonably priced to the consumers. The decentralized municipalities in Zimbabwe experienced the transformation by bringing the household water service delivery system closer to the community. This promoted a reorganization of the system of government in order to improve the quality of supervision; bring about winning policy implementation and a clean household water service delivery system and, eventually, facilitate municipalities to become self-reliant and self-managing (Samuel, 1999).

Structures were recognized at the municipal level and have been given powers and responsibilities. A number of schemes aimed at developing the nation's domestic water resources, with the intention of making water available to consumers, have been established at various locations in Zimbabwe. It is a fact that dams and boreholes were sunk in most urban and rural areas of Zimbabwe as a solution to the scarcity of water for domestic use.

Since Zimbabwe's political independence, the service delivery system in the Water sector has been guided by the Water Act of 1976 which was amended in 1998. The act allowed for restricted stakeholder involvement. The government is viewed as the major financier of the household clean water service delivery system and little attempt has been made to use private capital. The 1998 Water Act replaced an act which has been in place since 1976, and was approved by the parliament, together with the Zimbabwe National Water Authority (ZINWA) Act.

The Act is perceived as promoting an integrated and decentralized household water service delivery system. It is assumed to be fundamentally different from the previous legislation, particularly with regards to the domestic water rights of the consumers. Under the present ZINWA Act of 1998, clean water for family use is considered a public resource. Only the right of use and not ownership is granted to users. Another major feature of ZINWA is the decentralization of the domestic water service delivery system through the establishment of Catchment Management Agencies (CMAs) and Water User Associations (WUAs). Moreover, it is perceived that caring measures have been introduced to secure household water allocations for basic human needs (ZINWA, 1998).

ZINWA is a parastatal establishment which replaced the present Department of Water, and the Regional Water Authority from 1998 to 2008. This parastatal organization is responsible for supplying raw water to the municipalities of Zimbabwe. The municipalities took over the responsibility of supplying household water to the consumers from ZINWA in 2008. It is interesting to note that these two water bodies

have been changing positions with a directive from the Government of Zimbabwe and they work hand-in-glove. This study outlines the historical background of ZINWA before focusing on household water service delivery as apparent in a case study of Kwekwe Municipality.

It is projected that stakeholders are involved in improving the domestic water service delivery system which was the case in the past. The organization of ZINWA thus integrates and appears to be giving direction to river boards and catchment authorities. The Water Act and ZINWA Act, both of 1998, became effective on the 1st of January 2000. Enshrined in the two acts were the establishment of the Zimbabwe National Water Authority (ZINWA) and the management of the household water resources on a catchment basis.

It is assumed that the new Water Act also called for improved stakeholder contributions in the household fresh water resource service delivery system and in the resolution of disputes amongst consumers. These legislative documents opened the door for stakeholder involvement through the establishment of catchment and sub-catchment councils. After the promulgation of the new Water Act and ZINWA Act, ZINWA and the catchment councils have become operational. The implementation of the these Acts triggered a number of Statutory Instruments that institutionalized and gave operational guidelines to decentralized domestic water legal bodies that would then look into development issues of the municipalities at the local level. These officially authorized instruments include:

Statutory Instrument 33 of 2000: Water (Catchment Council) Regulations 2000.

Statutory Instrument of 2000: Water (Sub catchment council) Regulation 2000.

Statutory Instrument 95 of 2000: Water Levy Notice, 2000.

Statutory Instrument 34 of 2000: Water (River Systems Declaration) Notice 2000.

Statutory Instrument 219 of 2000 (Zimbabwe National Water Authority "Water levy Amendment Notice, 2000 No. 1").

Groundwater Regulations and Pollution Control (ZINWA Act, 1998).

Administratively, Zimbabwe is divided into seven catchments according to the seven major rivers, namely Manyame, Mazowe, Save, Runde, Mzingwane, Gwayi, and Sanyati river catchment systems (ZINWA Act, 1998). Each catchment is headed by a catchment manager, who is employed by ZINWA. The Kwekwe Municipality is under the Sanyati river catchment system. The catchment and sub-catchment councils were created for the day-to-day administration of the domestic water service delivery system in the seven catchments. Catchment councilors are elected from water users, and they report to the Minister (Statutory Instrument Number 243, 2000: 1325). The term of office for board members is believed to be three years.

It is prudent to discuss how domestic water is distributed to the consumers as a useful scarce resource in Zimbabwe, particularly in Kwekwe municipality. It is a fact that there is no equal allocation of water, for household use, to the consumers. The domestic water service delivery system in Zimbabwe appears to be lacking emphasis on the provision of clean water to the consumers. It is perceived that the costs need to be recovered, while at the same time consumers should not be denied access to clean domestic water because they find it difficult to pay the water tariffs. Access to clean

water for domestic use is a human right. This line of reasoning is related to the rights-based theoretical framework.

The progression towards the improvement of the water sector came, primarily, from an old-fashioned water law; uncoordinated efforts in water service delivery system by various government departments; and managerial and economic ineffectiveness (Bosman, 2005). It had also become necessary to embrace the modern philosophy of neo-liberalism through incorporated water resources management (IWRM) and bring stakeholders into the domestic water resources management landscape. Following the same line of thinking, neo-liberals argue that domestic clean water can be accessed through paying water tariffs using the meter system in order to recover the costs. The neo-liberal theory is assumed to promote cost recovery through payment of water tariffs. The government is alleged to be finding strategies of accommodating the consumers through decentralizing the household water service delivery system using the rights-based approach.

Globally, the rights-based approach is perceived as a decentralized approach to the management of water resources. Central to this approach is the need for fairness, competence, environmental water demand, and clearness for trust. It appears that all the planning, improvement and administration of water resources must conform to the policy. The water policy forms the foundation for the water authority's mission: "To ensure optimum planning, development, utilization, and management of water resources of Zimbabwe in an efficient, equitable, sustainable, and socially desirable manner with the participation of all stakeholders" (Statutory Instrument 242, 2000).

1.2 Challenges for water improvement

The household clean water improvement is viewed as a means of first-rate progress for the water sector, but not without its challenges. Most of the work that was done to reform the water sector in Zimbabwe assumed a well-informed immediate consumer. The Water Authority's relationship with users dictates the kind of efficiency to be achieved in the country. The link between the consumer and the domestic water resources administration is of paramount importance to the water sector. Consumers of household water give researchers the greatest challenge because they have not yet fully understood the requirements of the Water Act.

The consumers are always complaining of the unavailability and quality of water. It is the right of every human being to access clean water for household use at a reasonable cost. It is proper for this study to find out if the consumers actually have a voice to be heard by the giants participating in the debates surrounding the provision of a domestic fresh water service delivery system in a neo-liberal environment.

1.3 Household water pricing to urban water consumers

Clean water for the use of the family unit is believed to be an economic good which can be accessed by every consumer. Price is a powerful motivating factor in the assortment of incentives and disincentives that can be used to achieve efficient clean water for domestic use (White, 2002: 36). What appears to be the greatest challenge in Zimbabwe is the cultivation of a culture of paying for services, including paying for domestic water.

The consumers must pay a reasonable amount of water tariffs for the household water service delivery system to be maintained. The provision of clean water for domestic use at prices below its true economic value is considered the main reason for incompetent use of water and its allocation in Zimbabwe (Mukheibir & Sparks, 2003: 45). Policy changes through the years have seen a move towards recovering the full cost of all services. This line of reasoning is related to the neo-liberal approach which emphasizes the issue of cost recovery during the process of delivering water to consumers for household use. This discussion concerning cost recovery is viewed as a noble idea, but it is perceived as lacking the support of consumers since most of them may find it difficult to pay the water tariffs.

In setting a pricing strategy for household water use charges, the Water Act of 1998 requires the need to consider measures necessary to support the organization of tariffs by water service authorities in terms of section 10 of the Water Service Act (Water Act, 1998), and the use of lifeline tariffs and progressive block tariffs (s56(6) (c)). The Act also states that subsidies should be reviewed on an annual basis, made public and paid annually. This should be based on the annual cost of domestic water supply. This will ensure that the annual price of domestic water will fairly reflect the current price-structures and economic conditions within the country.

1.4 Challenges of shared watercourses and International legal framework

The fact that Zimbabwe shares some of its major rivers with its neighbouring countries creates a challenge for the country's domestic water supply services. To facilitate the

management of fresh water on a shared watercourse, the country manages its water resources within global and regional frameworks. The intention is to ensure sustainable utilization of water in collaboration with the neighbouring States, together with the promotion of the fair use of water and avoidance of conflicts. The country observes the 1967 Helsinki Rules on the Use of Water in International Rivers (Browne, 2003).

The Helsinki Rules on the Use of the Waters of International Rivers is a worldwide principle regulating the use of rivers and ground waters that cross national boundaries. These set of laws were adopted by the International Law Association (ILA), in Helsinki, Finland in August 1966 (Browne, 2003). The Helsinki Rules emphasize the rights of all bordering nations to a reasonable share in the water resources, with rational consideration of factors such as past routine usages of the resource and balancing the variant needs plus demands of the bordering nations. It also commands the fortification of resources by neibouring nations with respect to water effluence and sets forth recommendations for solving disputes over the usage of such watercourses.

In 1970, the UN General Assembly called upon the International Law Commission to prepare a set of “draft articles” on the “non-navigational uses of intercontinental watercourses. This effort led to the UN General Assembly approving the UN Convention on the Law of Non-Navigational Uses of International Watercourses by a vote of 104-3 in May 1997 (United Nations, 1997). While the Convention will not come into effect until it receives 35 ratifications, it already is the most excellent synopsis of the customary international law (International Court of Justice, 1997).

Soon after the General Assembly approved the UN Convention, the International Law Association decided that the customary international water law needed further development beyond its codification in the UN Convention. This process resulted in the International Law Association generally approving the Berlin Rules on Water Resources in August 2004 (International Law Association 2004).

1.5 Transition from centralization to decentralization of water policy in Zimbabwe

Nonetheless, water decentralization policy implementation in Zimbabwe is not a concept cropping up in a social vacuum, but, one originating in response to the universalisation of localism. The transition from centralized to decentralized water policy in Zimbabwe draws parallels with events that took place in the world as a global village. Similarly, water decentralization policy implementation is a complex process that deals with changes in the way that local municipal administration goes about making policy, generating and spending funds, in different sectors within Zimbabwe.

The decentralization of municipality administration in a neo-liberal state can be part of broad political reforms. It can be undertaken on its own at institutional level. It is important to have an understanding of the socio-economic context and political forces behind household water as every country has different reasons for adopting the decentralization policy implementation. Decentralization is a vague term, although unambiguous in political source and coincides with the rise of neo-liberalism (Donahue, 1989).

The concept of household water decentralization policy implementation enshrines such thoughts as the participation and involvement of local authorities which are significant in the achievement of the goals for which these organizations are set. The reason for this is that the participation of local stakeholders in managing the local resources meaningfully is most important towards promoting a successful water service delivery system. Elmore (in De Clercq, 1993: 4) states that the successes and failures of the implementation of a domestic water decentralization policy will differ. This depends on how the lower authority levels think, work out and make use of their powers and space, given their resources, capacity and leadership in order to appreciate the goals of decentralization in a neo-liberal community.

The responsible water authority strives to improve and encourage the availability of adequate resources in order to promote a quality water service delivery system which is the functional purpose of establishing these municipalities. The quality of resources is essential in providing a household water service delivery system in Zimbabwe as a neoliberal state. It is perceived that the inadequacy of resources such as water treatment chemicals and proper sewerage system facilities had resulted in the outbreak of waterborne diseases like cholera and the exodus of first-rate municipality officials.

The acquisition of resources by municipalities appears to be taking place at a slow pace due to perceived constraints in their management and implementation of the policy *vis-à-vis* the participation of local stakeholders. The apparent professed inadequacy of resources in municipalities affects their core operational role. The continuous loss of electrical power also affects the performance of the Kwekwe water plant. The water

authorities tend to level the blame of water shortages to the Zimbabwe Electrical Supply Authority (ZESA).

Despite this, the city officials continued disconnecting residents with outstanding water bills. In Kwekwe, the residents in the Western suburbs complained of disconnections over unsettled water bills. The Kwekwe City Council seems to be more concerned with fundraising rather than the welfare of residents. The water bills will be paid as long as council provides a service to the people, but when residents are faced with situations like this, how can they pay? Water problems have been occurring for years with residents complaining of low pressure and taps running completely dry around the afternoon, on a daily basis.

These problems adversely affect the ability of the municipalities to deliver clean water, for domestic use, to the consumers. This research makes every effort to ascertain the capacity of the Kwekwe municipality to deliver household clean water to its residents on a rights-based and neo-liberal theoretical premise. Following the neo-liberal restructuring of local governments in the 1980's, it is argued that "by and large, urban sociology ceased to connect with the issues arising in cities, space and society at large" (Susser, 2002:393). This study hopes to contribute empirical and theoretical knowledge to a topic that urgently requires the attention of strategists in an area that has evidently been neglected by mainstream academic sociology across the world. It is also important to discuss the political and legislative system of Zimbabwe because it contributes towards understanding the historical overview of the country.

1.6 Political and legislative system of Zimbabwe

Zimbabwe is divided into 10 provinces each administered by a provincial governor. The provincial governor is assisted by the provincial administrator and representatives of several service ministries. The provinces are further divided into 63 districts. Kwekwe Municipal forms part of the districts which fall under the Midlands Province in Zimbabwe. The legislation refers to the legal reasonably endorsed by the legislative authority of Zimbabwe and agreed to by the President of Zimbabwe. In Zimbabwe, legislative power is vested in the President and parliament.

The Legislature of Zimbabwe is able to bestow supremacy on any authority to create binding laws. At present, the Legislature of Zimbabwe is a bicameral structure comprising of a Lower House (Parliament) and Upper House (Senate). The senate was recently ushered in through Constitutional Amendment Number 17 of 2005 (Zimbabwe Constitution, 2006). The method of passing legislation is entrenched in Section 11 of the Constitution. All legislation in Zimbabwe is styled as Acts of Parliament or Statutes. Other authorities such as the President, acting unilaterally, and Ministries can pass legislation known as Statutory Instruments or Subsidiary Legislation (Saki and Chiware, 2007).

The political and legislative system outlined above is the parent rock upon which the brief organizational profile of Kwekwe City rests. Their relationship will be instrumental to the debates surrounding the household water service delivery system in this study. A brief description of the Zimbabwean municipal system in terms of structure, composition

and operational strategies is offered below as essential preliminary information for the statement of the problem.

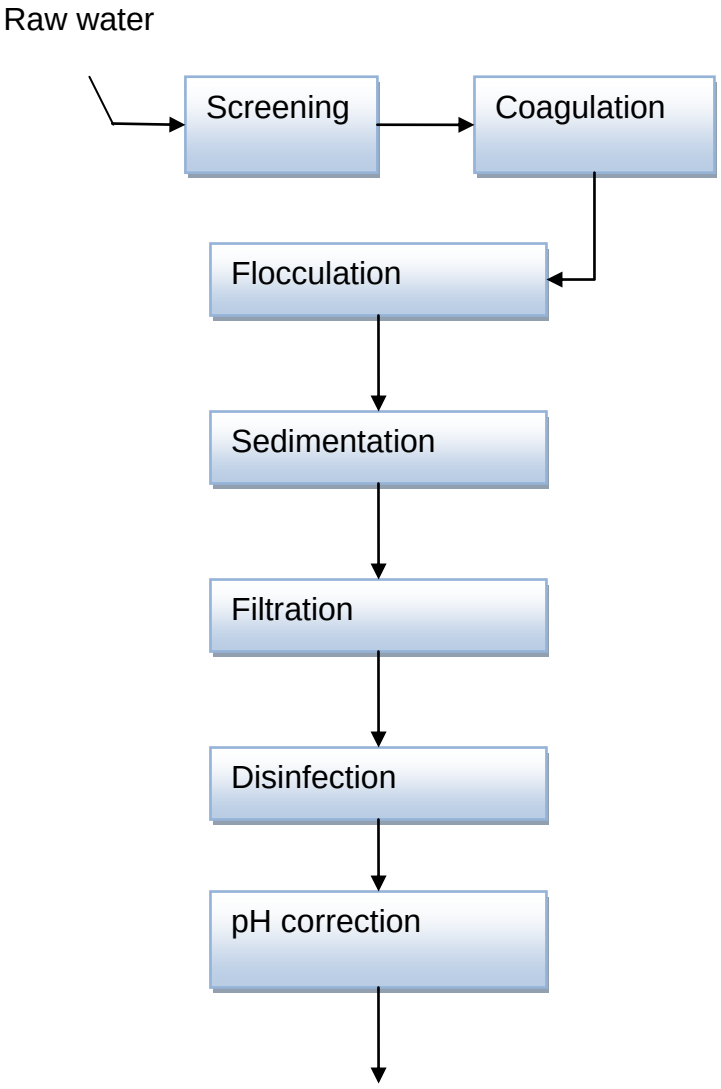
1.7 Brief organization profile of Kwekwe Municipality

According to Mhlanga (2005) Kwekwe is a mining town in the Midlands Province of Zimbabwe established on the re-discovery of prehistoric gold workings in 1894, which became the Globe and Phoenix Mine. Development was stable and the community was elevated to a Village Management Board in 1914, a Town Management Board in 1928 and confirmed a Municipality in 1934 (Mhlanga, 2005).

1.8 Stages in Water treatment

Raw water that has been abstracted from the catch-up weir undergoes seven treatment processes before the final effluent from the plant is pumped to consumers within the distribution system. A layout of the processes that the water undergoes is represented in figure 1 next page:

Figure 1: Water treatment processes.



(Source: Kwekwe Municipality Department of Works)

1.9 Screening

Screening is done before the raw water is pumped to the main plant for treatment. It removes suspended matter in the water like twigs, leaves, stones, aquatics and other materials that can block downstream pipes or damage equipment such as pumps. The screens are fitted in the intake pipes as well as the suctions of the low lift pumps which transfer raw water to the main works. The screens are cleaned whenever the prescribed head loss across the intake pipes is reached.

The above discussions therefore serve as a preface for the unveiling of the statement of the problem. In Zimbabwe, the domestic water service delivery system depends on the ability of municipalities to distribute clean water to its clients, who include the underprivileged, for household use. These municipalities are expected to distribute clean water for household use to the public. This study focuses on the statement of the problem which is characterized by the perceived poor service delivery system of clean water, for household use, in the city of Kwekwe.

1.10 Statement of the problem

Most Municipalities in Zimbabwe, including Kwekwe Municipality, appear to be characterized by an erratic shortage of clean water for household use. It is a fact that there is an unreliable domestic water service delivery system in the city of Kwekwe. This goes against the provision of clean water for human consumption to the city's consumers. The municipality of Kwekwe is characterized by an inconsistent domestic water service delivery system which is evidenced by the bursting of water pipes and unreported water cuts which frequently affect the residents. The breakdown of pumping

equipment in Kwekwe Municipality has left the city with many residents facing shortages of clean domestic water. Consequently, this has raised fears of a possible outbreak of waterborne diseases such as cholera and typhoid.

This problem seriously affects the poor and most of the literature reviewed so far is silent about the provision of clean household water to the poor. This perceived fresh water service delivery system compromises the main functional task of Kwekwe Municipality, which is to provide domestic clean water services to its consumers. This is contrary to the existence of the water decentralization policy, water authority acts of 1998 and statutory instruments outlined above; all of which emphasize the water policy implementation, participation and the involvement of the local authorities in decision making.

In this regard, questions arise pertaining to the effectiveness of Kwekwe Municipality since the delivery of this resource appears to be more defective than it was before the decentralization policy. The gap between the poor and the rich appears to be widening. As a result, as detailed below, several fundamental research questions have been asked in all situations.

1.11 Research Questions

The following research questions were generated to assist the attainment of the main objective:

Does Kwekwe municipality have the capacity to provide clean household water services to residents?

Can most consumers afford paying water tariffs to the responsible water authority under Kwekwe Municipality?

Does the water policy in Zimbabwe accommodate the human rights of consumers?

What are possible recommendations towards improving the household water service delivery system in the city of Kwekwe?

These are some of the salient research questions that assisted in addressing the research problem. These questions formed a critical component of the quest for an effective, equitable and sustainable domestic water service delivery system in Zimbabwe. According to Bless, Smith and Kagee (2006: 1), gaining new knowledge involves a process of formulating specific questions and then finding answers to them in order to gain a better understanding of ourselves and our environment. By raising these questions, the study sought to help policy makers and those implementing the water policy in unveiling the challenges faced by the household water service delivery system in order to map the way forward. This study also tried to establish the capacity of Kwekwe Municipality to provide clean domestic water services to the consumers as a human right.

1.12 Objectives of the study

The objectives of the study are to:

Assess the capacity of Kwekwe Municipality to provide clean water to its residents for domestic use.

Find out the rate of paying household water tariffs by the residents of Kwekwe urban.

Suggest the best practice to improve the provision of a clean water service delivery system in Zimbabwe.

1.13 Research methodology

According to Gough (cited in Ndebele, 2007: 13), research methodology refers to "a theory of producing knowledge through research and provides a rationale for the way the researcher proceeds". Viewed in this sense, methodology does not restrict itself only to particular techniques such as, for example, conducting observations. Methodology also provides the justification for using such techniques in relation to the kind of knowledge or understanding the researcher is seeking.

The process of data capturing, data interpretation and analysis is dealt with more closely in chapter 5 of this study. The process involved designing the study. According to Gibbons and Sanders (2002: 5), the starting point for any research should be to take time to reflect on the world that know and ask, "Of all the things that I believe, why do I see as such and what is the philosophical framework that makes it so?" Two broad research philosophical frameworks, the neo-liberal and rights-based conceptual frameworks are explained in chapter 3 of the study.

This study, though primarily based in neo-liberalism, draws heavily on the decentralization theory and rights-based theoretical framework. In this study, it was appropriate to adopt the case study strategy of inquiry as the domestic water service delivery system constitutes a specific case of innovation. Data gathering techniques that were found appropriate for this study are the focus group interviews, questionnaires,

observations and documentary analyses. These are dealt with in more detail in the methodology chapter of this study.

1.14 Purpose of the study

The purpose of this study is to assess the capacity of Kwekwe Municipality (KM) to provide the domestic water service delivery system to its residents, including the urban poor. The purpose of this study is also to critically assess efforts on the part of the urban poor in Zimbabwe in order to address their lack of adequate access to local household water resources. The ultimate aim of the study is to provide clean water, for domestic use, to the residents of Kwekwe as a public good and as their human right.

1.15 Significance of the study

This study should be significant to the responsible water authorities as its results create awareness of the effect of rethinking water service delivery systems on municipal effectiveness. The findings of the study enlightened the water authorities to the degree of the scarcity of the domestic water service delivery system desired by the consumers. This study provides a picture of what is taking place within municipalities in terms of a domestic water service delivery system for the consumers. The study was carried out with the hope that it would have positive ripple effects, not only in Kwekwe Municipality, but also on the Zimbabwe water service delivery system as a whole.

The study focuses on the effectiveness of the domestic water service delivery system in Kwekwe by the Kwekwe Municipality with a view to improving the fresh water service

delivery system. Given that a void exists in the theory and literature of household water service delivery system, the study sought to hopefully contribute to the broad body of literature and understanding of domestic water service delivery to the poor. Very little was apparently known about the attributes of municipalities in developing countries such as Zimbabwe. Focusing on these issues was meant to sensitize water authorities' consciousness of the water service provided to consumers, in a neo-liberal environment. Thus, it was hoped that the results could have implications for the consumers' rights to access domestic water as a common good.

Further, the study was meant to contribute to the debate and understanding that the quest for household water service delivery could not be restricted by national or societal boundaries, but should be one that calls for greater international insight. It was indeed felt that this could positively inform policy formulators in the resistance of notions that perceive of and place consumers in subordinate positions. This rethinking may value the role of water authorities in the household water service delivery system and thus dismantle social class stereotypes. In this sense, the study would inform water policy and debates on the best practice of the water service delivery system.

The study will add scholarly and new knowledge concerning water service delivery to the poor through a decentralization policy implementation in Zimbabwe. Sayed (2002) argues that there are a number of cases which highlight the ongoing gap between clean household water policy intention and its best practice. The study will also unveil the possible recommendations and conclusions promoting clean domestic water to be accessed by every consumer because it is an economic good and a human right.

1.16 Justification of the study

There is a lot of debate on the idea of delivering clean water, for household use, to the consumers as their right. It is believed that domestic water is an economic good which deserves to be accessed by every consumer without considering social class. It is therefore against this background that interest was developed to investigate the extent of accommodating the poor during the process of domestic water service delivery from the municipality to the consumers. A great deal of research has been done in this area of household water service delivery systems. Still, not all theorists agree on the issue of placing consumers at the centre of the debates.

It was imperative, therefore, that concerted efforts be made and resources invested in research that sought to reveal the nature, attributes and attitudes of personnel, from a neo-liberal and rights-based perspective. This revealed an under-researched area through using the lenses of neo-liberal and rights-based theoretical frameworks. It was appropriate that resources be expended in such an investigation. Further, selecting the poor was an attempt to rectify the neglect in the literature of domestic water service delivery systems and management by the water authorities. The rights- based theories imply that it is a right of every human being to access clean water for household use. There is no emphasis on the capacity of consumers to pay the domestic water tariffs. However, the neo-liberals recognize the importance of consumers accessing household water as their right but emphasize the ability of the consumers to pay water bills in order to sustain the water authorities and municipalities. It is hoped that this study will bring forth new knowledge that will help water authorities, municipalities and consumers rethink the best practice of a domestic water service delivery system in this paradigm

shift. Therefore, this study will be didactic in nature. It is also hoped that the study will contribute new knowledge towards the household water service delivery system directed at the disadvantaged residents of Kwekwe municipality.

1.17 Delimitation of the Study

Not everything concerning water decentralization policy can be analyzed in a single study. Thus, the research is confined to Kwekwe Municipality in Zimbabwe focusing on the effectiveness of household clean water service delivery systems. The sample population of the study will comprise 10 city council members and 110 residents of Kwekwe Municipality. The study is limited to the provision of a clean domestic water service delivery system by Kwekwe municipality, to its residents. The key terms are clearly defined in this chapter to enhance the clarity and brevity of concepts.

1.18 Definition of terms

In this study the following terms were used and perceived as follows:

The term “poor” is used to refer to consumers who are in the low income bracket of earning a maximum of US$ 100 per month. The poor are those living below the datum line of poverty. In this study it is interesting to note that Kwekwe Municipality was also failing to deliver due to urban poverty. The poverty of the municipalities is characterized by the shortage of household water purification chemicals and dry taps. Poverty is the lack of resources for production to afford a decent standard of living, leading to the inability to access basic, but essential, goods and services (Sola, 2001).

Substantial discussion has enclosed the definition of the term “decentralization” to the extent that there is still incongruity among scholars. Rather than contribute to the confusion, this study prefers to accept Mawhood’s (1983: 2) assertion that a definition is normally accepted on grounds that it is useful rather than because it is true. Decentralization, broadly defined, means “the transfer of planning, decision-making, or administrative authority from the central government to its field organizations, local administrative units, semi-autonomous and parastatal organizations, local governments, or non-governmental organizations” (Rondinelli & Cheema, 1983: 18).

Further, the World Bank (2001) defined decentralization as the transfer of responsibility for planning, management and resource raising, as well as allocation from the central government and its agencies to the lower levels of government. In its true sense, decentralization is about the transfer of authority from a higher level to lower one so as to enhance public participation in decision making (Wadesango, 2008: 3). Decentralization is a comprehensive course of action that reaches beyond the structural reforms proposed in institutional frameworks. Decentralization occurs when national government shares some of its power with other groups, particularly those that are either geographically dispersed, or those that are responsible for specific functions, or those which are given jurisdiction over specific physical locations (Mawhood, 1983: 4).

The key elements in the decentralization process seem to be power, authority and responsibilities. These are diffused in such a way that they flow from the centre to the periphery, or to sections of the periphery, in a manner deliberately decided upon by the centre. Smith (1985: 1) distinguishes between mere dispersal of branches of a central

government ministry from the capital to the periphery from decentralization, which amounts to subdividing the state's territory into smaller units and institutions. These are then given the supremacy and influence to carry out certain specific political and administrative functions pertaining to their designated areas of specialization. The organizations and institutions to which central power and authority are transferred may themselves relocate some of their power and authority to lower levels within their designated areas.

To the extent that decentralization involves the transfer of power; it should follow that aspects of governance such as development, democracy, participation, equality, and efficiency have a bearing on the concepts. These elements are easier to understand after defining the various types of decentralization commonly in use in developing countries. Deconcentration is the transfer of adequate authority for the carrying out of specified functions from central ministries and their agencies to staff of the same ministries of agencies who are situated outside the national headquarters (Hyden, 1983: 85). It is an intra-organizational pattern of power relationships (ibid). The idea is that of shifting the work load, from officials who are centrally located to their colleagues located outside the capital city, as a way of allowing adjustments to central directives to suit local conditions (Rondinelli et al, 1983: 14).

Devolution, unlike deconcentration, is the transfer of 'legally' defined elements of political power to local government units (LGUs) or to specialized or functional authorities (Crook and Manor, 1991: 22). The bodies to which such political power are

transferred thus have the responsibility to execute specified functions in their areas of services within their field of specialization.

In other words, devolution refers to the inter-organizational transfer of power from the centre to units outside the normal command structure of central government (Hyden, 1983: 85). The functions performed by these local units generally lie outside the direct control of central government (CG) which, nonetheless, maintains indirect supervision and control of these autonomous units (Rondinelli et al, 1983: 24).

Delegation, the third type of decentralization, commonly used in developing countries, pertains to the transfer of managerial responsibilities, for functions that are specified, from CG to public corporations or parastatals, which normally, lie outside the regular bureaucratic structure (Gasper, 1991: 9). Delegated authority can also be transferred to 'regional development agencies, special function authorities and semi-autonomous project implementation units' (Rondinelli et at, 1983: 19). As under devolution, CG does not have direct control over bodies to which delegated authority is granted. It, however, retains ultimate responsibility for these bodies. Arguing that delegation is a form of deconcentration, Crook and Manor (1991: 22) imply that the key difference between the two is the separation of the financial and administrative functions of bodies with delegated authority from those of central bureaucracy. Most authorities, however, treat delegation as significantly distinct from deconcentration.

The fourth and final type of decentralization is privatization, which occurs when CG divests itself of responsibility of certain functions, or the provision of certain services,

and transfers them to, or allows them to be performed or provided by voluntary, private or non-governmental organizations (Makumbe, 1998: 9). Privatization also includes CG's transfer of responsibilities and functions to what Rondinelli et al (1983: 28) call 'parallel organizations'. These include professional groups, trade associations, political parties, religious groups and co-operatives. In other cases, CG transfers responsibilities and functions to groups which represent various interests in society, some of which are mentioned above.

1.19 Limitations of the study

A study such as this one is bound to be overwhelmed by overabundance of challenges. The Likert type nature of the responses to the two sets of questionnaires tends to blanket perceptions and attitudes which could be revealed by face-to-face interviews. Further, the researcher was bound to be drawn back by the constraints that centred on time constraints, expenses, and access to the relevant documents on the domestic water service delivery system. The problem of time scarcity was solved through revisiting the time that was allocated to respondents. The practice of being punctual and time consciousness helped to overcome this obstacle.

Zimbabwe currently uses multiple currencies which are difficult to access. The charges for transport from one place to another are expensive. This posed a challenge related to the transport costs. Most sampled households were far apart, which rendered the data gathering exercise expensive, in terms of money and time. Administering questionnaires to 120 respondents, and carrying out interviews, required a lot of time which this

researcher could not afford. A lot of costs were incurred in the stationery, typing, printing and binding of this study. The strict budgeting of the money from the Zimbabwe Presidential Scholarship assisted significantly in overshadowing these costs. It took a week for the Kwekwe Municipality authorities to approve the process of data collection. This hurdle was cleared through avoiding the bottom up protocol. It was essential to go directly to the Town Clerk's office, by which the authority to carry out this study was given.

Some respondents misconstrued the researcher's good intentions, and were therefore apprehensive about the investigation despite the fact that the researcher had granted them anonymity and confidentiality during the exercise. Further, being a case study, generalizing results of the study to households outside Kwekwe urban was inappropriate.

The researcher, nevertheless, strove and found ways of circumventing these challenges. The researcher, among other things, augmented his research funds from the limited meagre resources. Nonetheless, these seemingly insurmountable challenges did not deter the researcher who employed strategies such as walking long distances, employing research assistants and using persuasion. Most of these challenges were mitigated and the exercise was satisfactorily completed.

1.20 Ethical Considerations

The Ethical Guidelines form part of the agreement with all research leaders in most projects. This study adhered to the following ethical consideration guidelines: The study was carried out in full compliance with, and awareness of, local customs, standards, laws and regulations of the University of Fort Hare (UFH). Researchers undertaking research on cultures, countries and ethnic groups other than their own should make their research objectives particularly clear and remain aware of the concerns and welfare of the individuals or communities to be studied.

According to Barbour (2008: 66), ethical considerations include paying attention to the way in which the research is presented to potential participants; the likely impact of taking part in research (both for individuals and pre-existing groups); the effect of sampling strategies; engaging with the researcher (and other participants) and dissemination sessions. The study considers the ethical issues which require attention at the outset of a project, but stresses the importance of engaging with further ethical issues that arise, including taking into account the possible impact on researchers and ensuring their safety during fieldwork encounters.

The study avoided undue intrusion into the lives of the individuals or communities of the area of Kwekwe. Full confidentiality of all information and the anonymity of participants were maintained. Procedures were put in place to protect the confidentiality of information and the anonymity of participants in all research materials. All research materials were preserved in a manner that respects the agreements made with participants (Denzin & Lincoln, 2005).

1.21 Organization of the study

The following sequence of chapters will be followed:

Chapter 1: Historical and sociological state of water service delivery system in Zimbabwe.

This chapter is the introduction and background to the study. It gives the general outline of the entire study in respect to the problem and its setting, whilst highlighting the background of the study. That is, it provides the contextual framework within which the problem of clean household water scarcity exists, statement of the problem, the purpose, assumptions, objectives, significance of the study, scope of the study, which includes the delimitations and the definition of terms.

Chapter 2: Literature review

The study is theoretically grounded in neo-liberal theory and rights-based approach which posits that clean water for domestic use is an economic good. The neo-liberal and the rights-based approach provides a lens for the reader in order to relate the literature review on the clean household water service delivery system to decentralization policy implementation in Zimbabwe. Literature that is linked to the household water service delivery system is reviewed and linked to the neo-liberal and the rights-based theoretical framework. Gaps and inadequacies in previous literature are identified and thus validate conducting the study against the backdrop of previous researchers.

Chapter 3: Critical perspective of the clean household water service delivery system in Zimbabwe.

The purpose of this chapter is to provide a critical perspective of the household water service delivery system in Zimbabwe. This chapter focuses on the case study of Kwekwe Municipality. For consumers to access domestic water there are some costs which need to be recovered by the responsible authorities. It is incumbent upon consumers to pay for household water tariffs. The consumers in Kwekwe urban are finding it difficult to pay their domestic water bills. The consumers are not placed at the centre of debates when policies, rules and regulations of water service delivery system are formulated. This also affects the implementation process.

However, it is also important to practically critique this line of thinking through the reasoning that clean domestic water is a human right. This reasoning is steeped in the rights-based approach. Clean water for household use deserves to be accessed by everyone, including the poor. The government is expected to subsidize a certain amount of domestic water, free of charge, to poor consumers. Disadvantaged consumers can also benefit through subsidized social grants by accessing taxpayers' money. They may use the social grants to pay for extra household water consumed beyond the fixed amount dedicated to use by the residents of Kwekwe.

Chapter 4: The Research Methodology

The research design in this case, which is the case study of Kwekwe Municipality, discusses the research instruments. In addition to this are discussions of the ethical considerations of the research as well as an examination of concepts such as: triangulation, population, sample, data collection, data analysis, validity and reliability. The last part of the chapter gives a preview of the data collected.

Chapter 5: Data Presentation, Analysis and interpretation:

In this chapter, all the data collected were presented, analyzed and interpreted in order to give significance to the study. This is the central nervous system of the study. The findings, conclusions and recommendations are derived from the discussions in this chapter.

Chapter 6: Summary, Conclusions and Recommendations:

This chapter provides a summation of the findings in relation to the problem, the methods used to reach the findings and how they relate to the study objectives. Conclusions, recommendations and their implications for policy makers and for further researches will conclude the chapter.

1.22 Conclusion

This chapter has attempted to bridge theory and the best practice of household water service delivery through a neo-liberal approach and a rights-based conceptual framework. This study provides a broader perspective of the research problem. The

background has been given and the research problem defined. The four critical research questions and objectives have been outlined. What the study anticipates to achieve has been elaborated and the constraints as well as parameters have been delineated. The key terms have been described within the context in which they are used.

Moreover, literature available on the domestic clean water decentralization policy implementation to improve the quality of household water service delivery to the poor and its effectiveness on the involvement and participation of the ZNWA officials was reviewed. The study identified key surmountable challenges as researcher mobility, respondents' apprehensions and the non-generalizability of results.

CHAPTER 2

Literature Review

2.0 Introduction

The previous chapter outlined the problem and noted the lack of literature on household water service delivery systems in African and Zimbabwean contexts. This chapter reviews a wide range of literature related to the water service delivery system through decentralization policy implementation using the lenses of neo-liberal and rights-based theoretical frameworks. Specific themes on the capacity of consumers to pay water tariffs, competency of Kwekwe Municipality to offer services and water policy implementation form the basis of the review. The study relies heavily on the few case studies of domestic water service delivery systems that have been carried out in sub-Saharan Africa.

Moreover, the study adopted the neoliberal conceptual and rights-based frameworks in trying to establish and discuss household water service delivery in Zimbabwe. These theoretical frameworks became lenses through which service delivery systems are interpreted and acted upon.

The two theoretical frameworks are congruent in the sense that, it is the right of every human being to access clean water for domestic use, but consumers need to pay their water tariffs in order to sustain the water sector. It has been proven that municipalities are failing to deliver quality services due to consumers whose accounts are in arrears. For this reason, neo-liberalism has prioritised the payment of domestic water tariffs, by

consumers, in order to receive first rate service delivery. It must be borne in mind that the study recognises the plenitude of water service delivery challenges confronting Africa and Africans. This study does not propose to answer all the tribulations of Africa.

In this study, therefore, focus is on the involvement of state and non-state actors in the water sector reform processes and the implications of their activities for equitable household water usage in Zimbabwe and the survival of Zimbabwean peoples in the shorter and longer terms. Efforts are made to fashion out optional trajectories for normative policy and other strategic actions which will enable the country to engage with the challenges arising from the prevailing global economic system. By drawing on learned experiences, this study accentuates the significance of a rights-based approach as well as the neo-liberal theoretical framework to the formulation of legal, policy and institutional responses to initiatives implicating water service delivery system in Zimbabwe. The parameters of the overarching connection between a rights-based approach and water governance *vis-à-vis* non-state actors are elaborated in subsequent discussions in this study.

The literature reviewed helped to access, analyze and acknowledge what previous researchers have done in related problem areas concerning household water service delivery. Leedy and Ormrod (2001: 70) speculate that a literature review describes the theoretical perspectives and previous research findings related to the problem at hand. This implies that the researcher will look at the related texts unveiling the problems of the domestic water service delivery system. The purpose of a literature review is to "look again (review) at what others have done in areas that are similar, though not

necessarily identical to one's own area of investigation" (Leedy and Ormrod, 2001). The literature review pays attention to water service delivery systems from international studies cascading down to the case study of Kwekwe Municipality in Zimbabwe. From an international perspective, there are a number of countries that have undergone water decentralization policy implementation from which Zimbabwe can learn. These include European, Asian and other Sub-Saharan African countries.

This study had its theoretical foundations premised in the neo-liberal and rights-based theoretical frameworks. The study unfolds with a brief outline of neo-liberalism and then turned to an account of its rise to dominance. The relationship of the neo-liberal theoretical framework and clean water service delivery system through decentralization policy implementation was discussed in this chapter. This study examines the way a general discourse of clean water service delivery systems, through decentralization processes, evolved and filtered into a neo-liberal country like Zimbabwe. However, this theoretical framework concerning the neo-liberal approach was married to the rights-based theoretical framework focusing on the clean household water service delivery system in Kwekwe urban. It is the right of consumers to access fresh water for domestic use without social class discrimination. However, consumers must also recognize the sustainability of the household water system through paying the water tariffs in order to maintain the water infrastructure.

In this chapter, the literature related to a household water service delivery system is discussed in detail. Efforts are made to relate the neo-liberal and rights-based theoretical frameworks to the subject under review. The critical perspectives of clean

water service delivery system are interrogated from the global level cascading down to Zimbabwe, culminating in a case study of Kwekwe Municipality. This study is theoretically underpinned by and biased towards the neo-liberal and rights-based theoretical frameworks. The study accentuates the significance of these theoretical frameworks to the formulation of legal, policy and institutional responses to initiatives implicating the water service delivery system in Zimbabwe.

2.1 General outline of the conceptual frameworks

There is little doubt that neo-liberalism, as a global phenomenon, has swept everything in its path; in effect creating and re-creating a world in its own image (Narsiah, 2008: 1). Therefore, Zimbabwe has not been immune to the neo-liberal influence. In the water sector there has been a focus on the impact of neo-liberal approaches to low income communities (McDonald and Ruiters 2005).

Neo-liberalism gains gratification from a fairly important reputation from the mid-1970s onwards. Due to the recent movement from an epoch of nation states towards a global society dominated by regional market economies, and growing interdependence, several governments are turning to neo-liberal monetarist policies, which undermine the politics of social democracy (Campfens, 1997: 14). The idea brought about by the neo-liberal theoretical framework is that for consumers to get good service delivery they must have the capacity to pay the tariffs.

According to Haines (2000: 48-49), the global economic recession of the early 1980s and increasing Third World debt influenced this policy paradigm shift. A democratic service delivery system, in the sense of a neo-liberal economic institute, is ruled by free of charge market viewpoint. It considers state intervention with the market machinery as unrewarding, counterproductive and principally not consistent. The state should, above all, endeavour to lower the monetary discrepancy through devaluation, deregulation of prices and decreasing state subsidies. Limiting the role of the state, a liberal economy and a strict monetary policy according to the guidelines of the International Monetary Fund (IMF) and the World Bank are the major policy options in many Third World countries (Schuurman, 1993: 11). It chiefly discards the idea that the state should embody the value of mutual solidarity through which wealth is redistributed in the course of income assistance and social services (Campfens, 1997: 457).

According to Schuurman (1993: 203-204), neo-liberalism is composed of a “new modernity” approach by which the state assumes accountability for its citizens through participation and emancipation. In this regard, social activities are an emancipatory power trying to enter into the aborted modernity system in underdeveloped countries. The commodification of the domestic water service delivery system is not just characteristic of neo-liberalism but one of its exceptional characteristics. But neo-liberal entrepreneurial globalization is exceedingly an assortment of, with its forms, content and relational dynamics often differing very much from one country to another. As Keil (2002:125) puts it: “neo-liberalism comes in many guises, is expressed on multiple spatial scales, and moves through different historical trajectories”.

Neo-liberalism therefore cannot basically sweep away the history, institutions, culture and struggles it finds in each country. Instead, it articulates a dialogue that tries to find its bearings in the authentic soil of the country, and appear as democratic, rational and even compassionate as possible, though the domino effect of its policies is diverse. These cautiously constructed discourses often assume forms of control and domination which reverberate with the earlier period of colonialism. Harvey (2005) et al refers to the "colonization of life-forms" through the commodification of necessary services such as household water services. According to Crush (1995: 9), "the essential trope that Europe shows the whole world the image of its own future is of much deeper and broader purchase". The cumulative effect of commercial penetration of domestic water services is the steady "dissolution of the public realm" (Clarke 2004: 27).

Nevertheless, challengers of the neo-liberal faction are of the opinion that the governments who accepted its principles are neglecting their responsibility towards the poor. They are reasonably frank in their criticism: the whole rationale of development as a reduction of poverty and the promotion of equity. It failed to focus on the bona fide structural parameters of poverty. Neo-liberalism decided to move towards affluence by ignoring the problems of poverty and pauperization in which people are engulfed (Kothari, 1993: 6-8). Latouche (1998: 139) believes that the claim of economic escalation to be the indispensable objective of human society is basically based on the famous trickle-down effect. This is magnified by the excitement of the legends of modernity.

According to Husy (2001: 62), Zimbabwe's post-colonial domestic water policy framework (which has been significantly influenced by the nature of the political transitions of the 1990s) reflects in many ways an "ideological victory of neo-liberalism over the ideals that provided the impetus for the struggle against the colonial government".

2.2 Neo-liberalism: origins, theory, definition

Since the 1990s, activists employ the word 'neo-liberalism' for international market-liberalism ('capitalism') and for free-trade policies (Muller, 2002). In this sense, it is universally used in South America and has been approved by a lot of developing countries including Zimbabwe. The analysis here compares neo-liberalism with its historical forerunners. According to Martinez and Garcia (cited in Wolin, 2004), neo-liberalism is not just economics: it is a social and moral philosophy, in several aspects qualitatively diverse from freethinking.

Nonetheless, the study visibly perceived the sound effects of neo-liberalism married to decentralization policy implementation in Zimbabwe as 'the rich grow richer and the poor grow poorer'. This gap was closed through marrying the neo-liberal approach and the rights-based conceptual framework. The rights-based theoretical framework emphasizes provision of household water services to the poor without segregating them because of their social class. This is a positive notion. However, neo-liberals argue that consumers need to pay for their domestic water services in order to recover the cost despite the concept that it is their right to access clean water for domestic use. Around

the world, neo-liberalism has been made compulsory by authoritative financial institutions like the International Monetary Fund (IMF), the World Bank and the Inter-American Development Bank (Bird, 2001). The capitalist catastrophe over the previous years, with its dwindling profit rates, stimulated the corporate elite to breathe life into economic liberalism. That is what makes it 'neo' or new.

This logic of the word 'neo-liberalism' is far and wide used in Latin America. However, neo-liberalism is more a phenomenon of the wealthy western market democracies, than of underprivileged regions (Hayek cited in Birner, 2001). A wide-ranging characteristic of neo-liberalism is the yearning to intensify and expand the market, by increasing the number, frequency, repeatability, and formalization of transactions. Neo-liberalism is not purely an economic formation; it is a philosophy (Hewison and Robison, 2005). This is most visible in attitudes to society, the individual and employment. Neo-liberals tend to see the world in terms of market metaphors.

Therefore it is professed that, from a neo-liberal point of view, dirt-free water cannot be offered by the responsible authorities free of charge regardless its perception by other authorities as an economic good. The aspect of neo-liberal cost recovery causes clean domestic water not to be accessed free of charge. As would be expected from a complete philosophy, neo-liberalism has answers to stereotypical philosophical questions such as "Why are human beings not accessing fresh water free of charge?" and "What should they do to recover the cost?” (Dollar and Kraay, 2000).

They exist in a world characterized by the market, and they need to compete. Neo-liberals tend to acknowledge as correct that humans continue living for the market, and not vice-versa. Cockett, (1994) long-established that it is a symbol of authority to participate in the market and that those who do not contribute have been unsuccessful in some way.

Neo-liberalism is a philosophy in which the existence and function of a market are esteemed in them, separately from any previous relationship with the production of goods and services. Further, it is assumed that there is not any attempt to justify them in terms of their effect on the fabrication of goods and services. The operation of a market structure is observed as an ethic in itself, capable of acting as a directing tool for all human accomplishment, and a replacement for all previously existing ethical beliefs (Kuttner, 1997).

Neo-liberalism is thinking, in fact a carry-over and redefinition of conventional liberalism, influenced by neo-classical theories of economics. According to Birner (2001), this is a political-economic point of view that began in the 1960s and rose to greater heights in the 1980s. The innermost principle of neo-liberal policy is the idea of the free market and at no cost trade. Thus, for consumers to access fresh water for domestic use they need to pay reasonable tariffs. In the United States, neo-liberalism can also refer to a political pressure group whose members endorsed some free market positions, which include free market economics and welfare reform (Jomo, 2001).

It is believed that neo-liberalism seeks to relocate part of the control of the economy from the state to the private sector or parastatal organizations, like the municipalities, to bring a more capable government and to improve economic indicators of the nation. Therefore, it becomes related to the concept of domestic water decentralization policy implementation. According to Hewison and Robison (2005), the ultimate statement of the material policies advocated by neo-liberalism is often taken to be John Williamson's Washington Consensus. This is a list of policy proposals that appeared to have gained consensus of approval among the Washington-based international economic organizations like the International Monetary Fund and the World Bank.

2.3 Williamson's list

Included the following points:

Monetary policy discipline;

Redirection of public expenditure from subsidies ("especially indiscriminate subsidies") in the direction of broad-based provision of key pro-growth, pro-poor services like primary education, primary health care and infrastructure investment;

Privatization of state enterprises (Williamson cited in Hewison and Robison, 2005).

2.4 Fall down of embedded liberalism

Williamson (2000) noted that the system of rooted liberalism began to fracture towards the end of the 1960s. It is perceived that the 1970s were defined by an increased accrual of capital, unemployment, inflation (or stagflation as it was dubbed), and a variety of financial crisis. Wade (2002) also noted that a number of theories concerning

new systems began to build up, which led to extensive debate between those who advocated social democracy and central planning on the one hand plus those with liberating corporate and business supremacy and re-establishing market freedoms on the other. It is believed that by 1980, the latter faction had emerged as the leader, advocating and creating a global economic system that would turn out to be known as neo-liberalism (Kanbur, 1999).

The philosophy encourages a “liberalization” of capital markets, therefore the name “neo-liberal”. However, it is important to note that water decentralization policy implementation, which is a corner stone of the clean domestic water service delivery system, rooted its foundations in the neo-liberal approach to the development of municipalities. This approach developed because of the fruitfulness of the “Newly Industrialized Countries” (NIC) in East Asia which is at this time thinning out to developing countries like Zimbabwe. Sizeable numbers of neo-liberals regard the East Asian experience as a model to be replicated in the rest of the developing world, including Zimbabwe as a neo-liberal country (Milanovic, 2002).

2.5 International spread

It is perceived that the constant monetary catastrophe all the way through the 1980s, and the fall down of the Communist community at the end of the 1980s, assisted foster political resistance to state interventionism, and worked in favour of free market transformation policies. From the 1980s onward, many communist countries commenced various neo-liberal market reforms, such as the Socialist Federal Republic

of Yugoslavia under the direction of Ante Markovic (until the country's crumple in the early 1990s), and the People's Republic of China under the direction of Deng Xiaoping (Rodrick, 2001). This has now spread to developing countries like Zimbabwe. Therefore, in Zimbabwe, the debate of a household fresh water service delivery system is theoretically grounded on neo-liberalism and a decentralization approach.

The neo-liberal approach argues that clean water for household use is an important basic commodity which cannot be accessed free of charge. It is perceived that the consumers, including the underprivileged, need to pay the household water service delivery system in order that the costs are recovered by the municipality. The poor are also expected to pay their water bills in cash. It is assumed that this can be achieved through receiving subsidized social grants from the government using taxpayers' money. This is just an assumption which needs to be fulfilled by the government authorities.

2.6 Reach and effects

It is perceived that neoliberal activities in due course changed the world's economies in several ways. Some of the preceding changes are clear and unambiguous, like:

The privatization of formerly public-owned enterprises.

The transfer of the share of countries' economic wealth to the top economic percentiles of the population. A lot of governments have generally spent more on household sanitary water, health, education, social security, welfare and/or housing. Nevertheless, populations have increased and populations have aged in wealthy countries. In addition,

some of the services such as health care and domestic water service delivery are also very inefficiently organized (Hewison and Robison, 2005).

2.7 Support for economic liberalism

Living standards

Proponents of neo-liberalism argue that higher economic freedom has a strong correlation with higher living standards. It is also alleged that higher economic freedom leads to increased investment, technology transfer, innovation and a responsiveness to consumer demand. The claim by many neo-liberals is that a government is incapable of managing a social system as vast as a countrywide economy (Hewison and Robison, 2005).

Neo-liberalism and decentralization are considered to be related to one another because they both motivate for the concept of participatory democracy and cost recovery to towards improving the domestic clean water service delivery system. While theorists in general depict neo-liberalism as the modern version of capitalist expansionism, linked to shifting worldwide authority and restoring profit rates, a number of theorists argue that the terms "decentralization" and "neo-liberalism" must be thoroughly alienated and that a service delivery system should be the primary lens through which the concepts are understood. Neoliberalism is not just money matters. It is a societal and ethical philosophy, in some aspects qualitatively diverse from liberalism." This coincides with the work of German author Paul Treanor who argues that the thoughts derived from neo-liberalism (and neo-liberalism itself) are more of a philosophy and should not be perceived as just a "monetary structure" (Milanovic,

2002). For example, a neoliberal would perceive the world in a “term of market metaphors”.

It is further assumed that neo-liberalism clearly treats its poorest citizens badly, by allowing for the increased disparity of the distribution of wealth ("the rich get richer, while the poor get poorer"). This line of thought draw parallels with a household sanitary water service delivery system through decentralization policy implementation because it also widens the gap between the rich and the poor.

However, this gap will be neutralized by the employment of the rights-based conceptual framework of this study. This study explains the difference between neo-liberalism and liberalism by pointing to liberalism's association with class compromising ideology, stating that “"Liberalism" can refer to political, economic, or even religious ideas (Rodrick, 2001).

2.8 The superiority of neo-liberalism

It is perceived that neo-liberalism has become a catch-all expression accepting a range of market-oriented thoughts and interests that have evolved over the past three decades. Nevertheless, the neo-liberal project has some core elements that can be identified in a range of economic, social and related political policies that emphasize the market, fiscal discipline, trade, investment and financial liberalization, deregulation, decentralization, privatization and the reduced role of the state (World Bank, 1983; Williamson, 1990; Wade, 1992). According to Portes (1997), it is very important to know that neo-liberalism may be well thought-out in two complexly entangled areas. The

provision of new economic convention with a political and policy edge to it may be seen as the bona fide neo-liberal ‘revolution’ (Weiss, 2003).

In addressing this jam involving political and economic liberalism, neo-liberals had understood that market capitalism would arise spontaneously from the progressive lessons of economic crises and shocks or from the impulsive choices of rational, self-interested individuals. Increasingly, however, neo-liberal political economists came to the conclusion that not only politics mattered but that change had to be enforced by ‘change teams’ of technocrats operating within the state but able to rise above vested interest (Williamson, 1994; Grindle, 1991). Because markets had to be secluded from politics, neo-liberalism contained the elements of what Jayasuriya (2000) has called ‘authoritarian liberalism’.

Neo-liberalism also had significant impacts in development theory and practice. As the Keynesian-inspired development efforts of the 1960s and 1970s floundered, a range of critics and opponents emerged. One avenue of opposition was within the structuralist and dependency schools, where the problem was laid at the feet of inherently exploitative relationships between the industrial centre and the underdeveloped periphery of the world economy. While this approach proved politically attractive in many developing economies, it was to be the ideas of those who railed against ‘market distorting’ state interventions that would eventually establish a new economic and development policy orthodoxy (Bauer, 1971).

Neo-liberal policies now filtered through and gained ascendancy in the domestic policy arrangements of a lot of developing economies as debt, fiscal and broad economic crises made existing policies unsustainable. The structural adjustment conditionalities imposed by the IMF and the demands of the World Bank during the 1980s were specifically directed towards deregulating financial and trade regimes, imposing monetary stability and fiscal austerity (Rodan, Robison and Hewison, 2001).

2.9 The political contradictions of neo-liberalism

Markets are 'politically constructed', with governments setting rules and allocating access (Zysman, 1994; Higgott and Nesadurai, 2002; 29). It is theoretical that this process does not involve government alone. As has been suggested that change involves contending coalitions of state and social power with interests in promotion and protection. These compete to shape the rules and set the terms and limits of access. No less than any other agenda for organizing power, neo-liberalism may itself be politically understood in terms of those interests and coalitions assembled behind its agenda (Chaudhry, 1997; Robison and Rosser, 1998). On the other hand, the involvement of business in the neo-liberal push for markets was a two-edged sword (Stiglitz, 2002).

2.10 The development of neo-liberalism

Supporters of neo-liberalism argue that a market economy, particularly when free of government 'intervention', is the critical prerequisite for engendering and sustaining economic prosperity. The rather doctrinaire and all-encompassing approach of some neo-liberals has led other fairly mainstream commentators, such as Stiglitz (2002) and Soros (1998), to use the term 'market fundamentalism' as a synonym for neo-liberalism. It is abstract that neo-liberals espouse a conservative political agenda in which the

political leadership should attenuate the activism of civil society and allow technocrats the discretion, freedom and scope to pursue the market-oriented economic agenda.

For all the academic supremacy that neo-liberal ideas have achieved over the last two or three decades (Buchanan and Tullock, 1962), It is important to emphasize that there is and was nothing unavoidable about this. On the contrary, neo-liberalism marks a significant departure from the ideas and philosophy that guided the global order that emerged in the wake of World War 2. Neo-liberalism was passionately and successfully promoted by a powerful group of 'policy entrepreneurs' who were in due course able to obtain the formidable political support of Margaret Thatcher in Britain and Ronald Reagan in the US (Cockett, 1994). However, it is necessary to complement the neo-liberal theoretical framework with the rights-based approach.

2.11 Basis for a Rights-based Approach to the Water Service Delivery System in Zimbabwe

With the formal commitment of a range of international institutions, intergovernmental agencies and international non-governmental organizations (INGOs) towards integrating human rights ethos into their developmental work, the prevalent thinking in contemporary development discourses is the rights-based approach. Although there exists a divergence in the outlook of what each agency or institution perceives as representing the rights-based approach, certain elements have crystallized over the years as representing the central dynamics of the concept (Olowu, 2008: 76). In a definition that encapsulates some of the more fundamental elements of the rights-based approach, the Overseas Development Institute (ODI) proclaims that:

A rights-based approach to development sets the achievement of human rights as an objective of development. It uses thinking about human rights as the scaffolding of development policy. It invokes the international apparatus of human rights accountability in support of development action. In all these, it is concerned not just with civil and political rights, but also with economic, social and cultural rights.

In another comprehensive definition, the United Nations Development Programme (UNDP) posits that:

A rights-based approach is based on the values, standards and principles captured in the UN Charter, the Universal Declaration of Human Rights and subsequent legally binding human rights conventions and treaties…Civil and political rights and social, economic and cultural rights should be simultaneously advanced in a rights-based approach to poverty alleviation.

There is thus an unmistakable consensus among the various theories on the rights-based approach that the full realization of human rights should be a vital goal of all developmental efforts. The approach canvassed in this study, therefore, perceives human rights as essential components of development programs and policies that must necessarily be integrated in all processes designed to deliver the promises of a safe household water service delivery system in the context of the Millennium Development Goals (MDGs). Taken together, the rights-based approach contemplates human-centered modalities for the domestic water service delivery system in ways that

emphasize equality and non-discrimination; accountability and transparency; and popular participation.

Over the past three decades, debates concerning household water have been addressed in a number of international conferences. During these international confernces the participants have recognized water as a basic human need and some have gone as far as explicitly affirming the rights to water. In 1977, the Mar del Plata Action Plan that emerged from the UN Water Conference held in Mar del Plata, Argentina, stated: All people, whatever their stage of development and their social and economic conditions, have the right to have access to domestic water in quantities and of a quality equal to their basic needs (Olowu, 2008: 78). Everyone has the right to access sufficient food and clean water for domestic use.

For those who constitute the most vulnerable and most deprived in Africa to make any effective water claims as people, the rights-based approach could become a platform for accessing information, for pressing collectively for individual and or group rights, and for accessing fair assessment of competing claims. It will define the role of the African state as purveyor of those rights that enhance the conditions of human life in their respective situations. In this regard, it does not require the state to be a mere charitable entity but to become responsible for promoting policies that will secure the MDG regarding water. It will help all non-state operators in the water sector to promote genuine development beyond induced bureaucratic set-ups that produce contrived water policies and services (Olowu, 2008: 81).

The rights-based approach works in tandem with international initiatives and other development efforts, focusing on the twin issues of equality of access and sustainable development. With regard to water resources, all human rights are to be perceived as components of holistic response to the pressures of economic globalization, without compromising the interest of future generations. It would seem appropriate to explore some practical experiences of human-focused water initiatives and popular participation in household water service delivery system.

2.12 Rights-based Approach to Water Service Delivery System: Lessons Learnt

Even though the rights-based approach remains largely a theoretical framework and is confined to mainstream development discourses, the positive realities in its application to several social spheres, in different national contexts, cannot be overemphasized. In Ghana, the rights-based approach places particular emphasis on the involvement of human beings in the processes through which policy goals are determined and implemented, and could help to eliminate conflicts among stakeholders in the water sector.

The rights-based philosophy to domestic water use implies that the people themselves have the democratic authority to make the decisions about household water. Such authority translates to ownership issues relating to domestic water use: ownership of household water resources per se and ownership of the decision-making processes that

govern domestic water use. Such ownership may be expressed through different democratic structures and systems.

The approach has proven, in the case of Zimbabwe, its capacity to guarantee procedural legitimacy through popular participation and inclusion, paying special regard to vulnerable groups who are normally excluded from the decision-making process. In another respect, the Zimbabwean experience conveys the lessons that unclear roles and responsibilities under decentralization processes, low capacity and limited civil society capital as well as limited

inter-sectoral partnerships could hamper the enthronement of an effective, people-friendly water service delivery system.

Extrapolating from all the above arguments and experiences, a rights-based approach to a household water service delivery system exhibits the capacity to strengthen the normative agenda for regulatory and protective policies in an objective way and to facilitate universally acceptable tools and operational guidance which are pivotal in justifying policy measures and informing their design, implementation and evaluation. This would be a veritable response to the democratic deficit highlighted in the decentralization discourses. The other benefit in applying a rights-based approach to the household water question in Zimbabwe is that, beyond rendering governments accountable to democratic demands, it could subdue the impact of unscrupulous MNEs who would indulge in exploitative and anti-people activities such as a corollary of the naming and shaming stratagem.

For the Millennium Development Goals (MDGs) to become a tool for advancing the dignity of human beings, they must be treated not as a technical process, but as a political process. There is, therefore, a pressing need for civil society to push for a rights-based approach to the MDGs that goes beyond improving statistical indicators to addressing root causes of human rights violations. A holistic approach will enable the international development community to pursue household water issues with the human being at the centre. In this regard, discourses on the MDGs implicating domestic water should focus on safe and adequate access so that the full utility and value of MDGs can be realized. It is in this light that progress on improved access to water and sanitation under the MDGs has been adjudged as sub-optional. A well-coordinated approach to household water issues in the MDGs, which is integrative, effective, equitable, flexible and inclusive, as proffered in the approach canvassed in this study can help steer priorities in the right direction and impel new actions towards success in economic efficiency, social equity and sustainability of the domestic water service delivery system in Zimbabwe.

2.13 Conclusion

This study has explored several literature sources on household water service delivery systems. A brief nature and historical evolution of water service delivery theories was proffered. The pertinent issue in this chapter has been to put into perspective the neo-liberal research and the rights-based theoretical frameworks as well as unveiling their marriage to the clean water service delivery system through decentralization policy implementation. The two conceptual frameworks have been discussed in-depth and

efforts were made to relate them to the topic, research problem, objectives of the study and research questions.

The study is deeply rooted in the neo-liberal and rights-based theoretical frameworks due to their relevance to the literature under review. This study has attempts to show that a comprehensive participatory model which provides opportunities for disentangling all the implications of the reform interventions is therefore necessary for the efficacy of further actions and policies. In formulating the trajectories of comprehensive rethinking of water sector reforms, and in pursuing the MDG target on water, it is crucial to ensure that any further reforms in the water sector effectively benefit the poor, focus on access to safe drinking water and prevent the complete commercialization of a sector directly concerned with the fulfillment of all human rights. This was the basis of the rights-based approach rigorously canvassed in this study. Far from being an ex cathedra pronouncement on all the dynamics that should inform domestic water service delivery system and the fulfillment of the MDG target on household water in Zimbabwe, this study serves its purpose if it stimulates further intellectual discussions on its theme.

Chapter 3

Critical Perspectives on the Clean Household Water Service Delivery System in Zimbabwe

3.0 Introduction

In light of the increasing scarcity of fresh water for domestic use, coupled with the weakness of post-independence policy frameworks to ensure the effective management and distribution of water resources, most developing states of the world are now taking steps to exploit their water resources in a more sustainable way. They are thus implementing systematic changes to the use of water resources and water delivery services. There are ongoing major changes in policies and laws in most states. African states are no exception. State policy initiatives now often encourage private investment in water services, and in the case of many African, particularly in the so-called sub-Saharan regions, this is often foreign.

3.1 An overview of household water debates

Water for domestic use is one of humankind's most valuable resources. Nowadays, at the dawn of the new millennium, the world faces the likelihood of life-threatening household water shortages. Escalating demand, changes in consumption patterns, desertification, pollution and an insufficient infrastructure all appear to be leading us towards a global water crisis (Yaron, 2000: 7). The weakness of post-independence policy frameworks to ensure the effective service delivery and distribution of water resources is increasing the scarcity of domestic water.

Water paucity is assumed to be a prominent general concern featuring highly in worldwide debates because of its significance in maintaining human life. This suggests that there is an important link between household water and human life (Burke, 1995). Since the prehistoric epoch, water for domestic use has been compared to life. Clean water for domestic use is perhaps, the most valuable helpful feature on earth. Hence, water is important to all aspects of life. It is essential for all forms of growth and development which include that of humans, animals and plants. Water for household use is the most fundamental thing for life, after air.

Further, Bosman (2005) cemented the above argument through confirming that, clean water is in fact the very essence of life because human bodies are 75 % water. It is perceived that clean water is an inadequate resource worldwide due to the failure of municipalities to provide household water to their residents. This is principally factual for geographical regions where the water demand is increasing due to the growing population or an improved living standard, and is reaching the limit of available water resources.

Water is life because we can live for only a few days without it. Water is death because when contaminated, it can be as deadly as poison. Yet one billion of the six billion people on this planet have no access to an adequate household water supply and two billion have no access to proper sanitation (Barrett and Jaichand, 2007:543). It is a fundamental basic need for sustaining human and economic activities. Furthermore, water for domestic use constitutes a very small percentage as outlined below. Clarke (1991:97) stated that 75 % of the Earth's surface is covered in water, while 98 % thereof

is undrinkable sea water; only 1 % constitutes fresh water, which is locked in the polar caps and in glaciers.

This essential life commodity is a fundamental requirement for the development of nations. It is the spring of life itself and has an aesthetic value in the fountains and clear running streams. There is need for a comprehensive strategy to adequately address the need for an equitable, sustainable and economic way to use domestic water resources. Tomori and Tomori (cited in Onimode et al, 2004: 44) assert that clean water for household use is an important national resource, and one that is taken far too lightly in government circles. Hence, there is a need to rethink the best practice of a domestic water service delivery system to the low income group in a neo-liberal environment.

Therefore, this study proceeds from the premise that a regular supply of clean and safe water for domestic use is probably the most important and essential service in poor communities. The centrality of habitual and adequate water access for development and poverty alleviation, let alone its eradication, is clear in the literature (Bond 2002; Drakeford 1998; APF 2004; Pape 2001; Bakker 2002; Ruiters 2002; McDonald 2002; Public Citizen 2004; McDonald and Ruiters 2005).

Most developing states of the world are now taking steps to exploit their household water resources in a more sustainable approach. They are also implementing systematic changes to the use and delivery of clean domestic water services to the poor as an economic good. Since household clean water is essential for life, it appears as a

resource which deserves to be developed in order to meet the needs of the consumer using a neo-liberal approach and a rights-based conceptual framework.

However, many people around the world, particularly those in the low income bracket, still lack access to adequate domestic water to meet their most basic needs. There is a global water crisis which has been described as “the greatest threat ever to the survival of our planet” (Barlow and Clarke 2002).This study will attempt to rethink strategic ways of improving the fresh water service delivery system to the low income earners since clean water is perceived as a scarce resource. Access to clean water for domestic use is a human right, which is guaranteed by international conventions ratified by almost all the countries in the world. In Gaza, 150 000 Palestinians have no access to tap water (Africa Water and Sanitation Magazine, 2009: 10).

Therefore, it is factual that there is a critical crisis of clean water for domestic use throughout the world. This way of thinking forms the foundation of human civilization. Civilization is, in some sense, a discourse between people and clean water for household use. The importance that the world accords to the need for an adequate and wholesome domestic water supply is an index of its civilization, growth and development. According to Odediran (2004: 165), providing clean water for family use in the desired quantity and quality at the right time and place has been a constant endeavor of all civilizations. No other natural resource has had such an overpowering influence on human history. The debate about a household water service delivery system in a neo-liberal world is also perceived to be affected by an increase in human population.

Based on population projections alone, some 33 countries are expected to have chronic shortages of domestic water by 2025 (Yaron, 2000: 8). Moreover, such projections do not take into account the possibility that climate change could eventually further exacerbate water shortages. Therefore, the demands on water for household use appear to continue growing due to human population increases. Furthermore, the desire for a better standard of living and economic activities is also expanding in scale and diversity. In many parts of the world the amount of water being consumed has exceeded the annual level of renewal, creating a non-sustainable situation (Onimode, 2004: 46).

Hence the need to rethink the skills of improving the water service delivery system to the poor in a neo-liberal world. It is believed that the scarcity of clean water for domestic use may also lead to poor people using contaminated sources of water. This appears to expose underprivileged people to waterborne diseases such as cholera. In China, immediately after local residents began to experience symptoms of fever, diarrhea, stomachaches and vomiting, they stopped using tapped water, after which the city disinfected the municipal tap water system (Africa Water and Sanitation Magazine, 2009: 13). An adequate supply of safe household water is perceived as a prerequisite for significant socio-economic development in this neoliberal world.

With 12 million residents, the metropolitan area of Manila in the Philippines is one of the largest and fastest growing in the world (Bernhardt in vonWeizsacker, Young and Finger 2005:25-7). By the mid-1990s, one third of its population had no access to the domestic safe water system (Ibid). The United Nations, for example, declared the 1980s the

International Drinking Water Supply and Sanitation Decade (Odediran cited in Onimode et al, 2004: 167). Sanitary water for household use appears to take center stage at the Second World Forum in The Hague in March 2000. The Ministers of Water also declared that clean water for domestic use is vital for life and the health of people. Other international declarations have also clearly recognized that access to household water is a fundamental right of the poor.

This study strives to find solutions to the domestic water problem using the neo-liberal and rights-based conceptual framework. Fresh water lakes and rivers, which are the main sources of water consumed by people, contain an average of ninety thousand cubic kilometers of the total global fresh water reserves (Odediran cited in Onimode et al, 2004: 168). This minute fraction is spread in a very uneven manner on earth, creating a broad range of environments, from arid regions and deserts to humid areas, which experience regular flooding. The scarcity of clean water is believed to be a worldwide discussion which is fundamental to human beings and industrial development. The availability of domestic water appears to be progressively declining across the globe. Therefore, the responsible management of this valuable and scarce resource is crucial.

The household consumption of clean water in a neo-liberal world doubles every twenty years, at international level, which more than double the rate of human population growth (Barlow, 2001:1). It is perceived that the increase in population promotes challenges towards accessing natural resources. The world's population is expected to grow from six billion to eight billion in 2050 (Cohen, 2000: 1172). The existing absolute

and relative universal population growth rates are far higher than any experienced before World War two. The annual addition of seventy seven million people poses formidable challenges for clean water for domestic use, political organization and public order (Cohen, 2000: 1172).

Moreover, the decision-making process in terms of household water service delivery system often takes place without adequate dissemination of information and involvement of the poor. The universal utilization of clean water for domestic use is growing with the population and more than one billion people on earth already lack access to safe household water (Odediran cited in Onimode, 2004: 168). The cost of an insufficient clean water supply, in terms of human suffering, is enormous. This is a thought provoking situation, the demands of which need to be addressed through water decentralization policy implementation using neoliberal and right-based approach. Having said this, at world level it is also necessary to rethink the debate of domestic water service delivery system in Africa and come up with the best practice to improve the system.

One must acknowledge that rigorous, worldwide, lawful and guiding principles or initiatives for domestic water issues are incipient. However, what is worrisome is that states, multilateral institutions and civil society in the African region, generally, do not respond to the challenges of water governance in a coherent and effective way. If current trends persist, by 2025 the demand for household fresh water in Africa is expected to rise to 56 percent more than the amount that is currently available (United Nations cited in Wateraid, 2002: 37). This is a perceived problem which is likely to affect

the ubiquitous population throughout the continent of Africa. Theoretically, African leadership prioritizes the essential issues in relation to their countries. This includes issues such as security, land and clean water for household use. In practice the truth is different. It is alleged that they consider safe water for domestic use to be the most important, and in contemporary societies the issue of household clean water provision has taken a turn for the worse.

Numerous scholars warn that future wars will be fought over water and not land. If this predicament is not solved with vigilance it can cause a lot of fighting throughout Africa and even beyond. The scarcity of water, for domestic use, is likely to cause disputes amongst countries sharing common water tables. Barlow (2001: 1) postulates that “The wars of the next century will be about water”. Thus, water has become one of the central testing grounds for the implementation of global and national neo-liberal policies.

According to Narsiah (2008: 1), the neo-liberal offensive incipient during the 1970s developed into a globally hegemonic discourse during the 1990s. The escalating “water wars” over ownership and control of this strategic resource is “just one of the several unexpected tracks down which a neo-liberal world order has shunted millennial urbanization” (Shiva, cited in Bosman, 2005: 2). The conversation about a domestic clean water service delivery system discussed above is grounded on the neo-liberal theoretical framework. However, it can also be argued through the lens of a rights-based approach. The aspect of a household clean water service delivery system is informed by the decentralization policy implementation.

Therefore, in this study, it is essential to discuss what water decentralization policy implementation entails through rethinking the household clean water service delivery system by focusing on the poor in a neo-liberal continent. Early in the post-independence era, the control of water resources for domestic use in many African states was the task of central planning. Regrettably, water management soon became a miry adventure in most African states largely because of warped planning and implementation. This study examines the phenomenon of private sector involvement in a household water service delivery system and seeks to understand the effect of such involvement on the right to water in Africa in the context of the Millennium Development Goals. This study explores the continuing relationship between African governments and non-state actors in the service delivery of water resources in the neo-liberal age.

The study further analyses the role of various national water governance initiatives *vis-à-vis* the efficient service delivery system of water resources and the sharp contradictions in their frameworks from a rights-based perspective. It evaluates the normative frameworks of access to water as a human right in Africa. Further, it contends that consumers must be placed at the centre of water discourses in assessing all role players and their responsibility.

It is therefore perceived as necessary to put consumers at the centre of policy and decision making in the water sector. There exists a need to embrace the consumers through social transformation. Extrapolating from the experiences of various states within and outside Africa, this study advocates a neo-liberal conceptual framework and

rights-based approach to water issues. It also takes into consideration the value for the ultimate purpose of human-centered development.

Moreover, decentralization not only affects government and civil service, but is conditional on the involvement of community organizations, stakeholders in the private sector, international aid organizations and citizens. Decentralization brings decision-making closer to the community and therefore yields programmes and services that better address local needs. The challenge is to make sure that all stakeholders can and will voice their opinions. As part of the decentralization process, policy makers and politicians integrate programmes to address citizen participation, promote advocacy groups, incorporate the consumers in policy decisions, and encourage sub-national autonomy and creativity in addressing local needs.

While decentralization has certainly gained a reputation within the last two decades, it is not a new concept. The term attracted attention in the 1950s and 1960s when British and French colonial administrations prepared colonies for independence by devolving responsibilities for certain programmes to local authorities. In the 1980s, decentralization became the vanguard of the development agenda together with the transformed universal emphasis on governance and human-centered approaches to human development. In more recent times, both developed and developing countries are pursuing decentralization policies. The justification for the adoption of some form of decentralization is to promote democratic governance and participatory approaches to development (Hussein, 2004: 106).

There are several different reasons why governments practice decentralization and there are various forms and degrees of decentralization. As Ebel (1998) points out in his overview of decentralization:

The western world sees decentralization as an alternative to provide public services in a more cost-effective way. Developing countries are pursuing decentralization reforms to counter economic inefficiencies, macroeconomic instability, and ineffective governance. Post-communist transition countries are embracing decentralization as a natural step in the shift to market economies and democracy. Latin America is decentralizing as a result of political pressure to democratize. African states view decentralization as a path to national unity.

Decentralization is strongly related to the notion of subsidiarity which proposes that functions or tasks be devolved to the lowest level of social order that is capable of completing them. As the UNDP (2000) states: Decentralization governance is the reorganization of power so that there is a system of

co-responsibility between institutions of governance at the central, regional and local levels according to the principle of subsidiarity, thus escalating the overall quality and effectiveness of the system of governance, while increasing the authority and capabilities of sub-national levels.

There are four types of decentralization: deconcentration, delegation to semi-autonomous or parastatal agencies, devolution to local governments, and transfer of functions from public to non-governmental institutions (Stephen and Betley, 1999). A vital current debate in the developing world is about the degree of control that “central

government can and should have over development planning and administration" (Rondinelli & Cheema, 1983: 7). Decentralization is perceived as more of an art, rather than a science, whose complexities multiplies as it touches different functions and levels of action, and affects the various role-players in different ways. It is believed that making it work requires consideration of the needs of all participants.

The reorientation of the local government system towards decentralization has been viewed as central to most developing countries, including Zimbabwe. Most developing countries have embarked on the political and administrative decentralization of government and development structures, among others, to promote democratic governance and participatory approaches to development (Ikhide, 1999: 165; Tordoff, 1994: 555-80). Administratively, decentralization appears to be an essential practice that allows decongestion of the central government and reduces the workload to convenient magnitude. From a political perspective, decentralization is considered a key strategy for promoting good governance, interpreted as greater pluralism, accountability, transparency, citizen participation and development (Crook, 1994: 340).

It is believed that the breaking-up of the workload promotes greater efficiency, coordination and effectiveness in the domestic water service delivery system. Since decision-making powers are transferred from the centre to the local institutions, decentralization provides an opportunity for local involvement in decision-making and harnessing local knowledge, resources and expertise in the development process (Ikhide, 1999: 165: Mutizwa-Mangiza et al, 1996: 79). It appears that the perceived

good reason for the adoption of some form of decentralization is to promote democratic governance and participatory approaches in the service delivery system.

Throughout Africa, the decentralization of the household water authority is perceived as the process of re-assigning accountability and related decision making authority for specific functions from higher to lower levels of government and organizational units. Sayed (2002: 22) considers decentralization in the local government administration as a process of effecting change in four areas: the global, national, local, and institutional municipal level with specific reference to the functions of decentralized institutes. Proponents of decentralization policy execution allege that decentralization improves the quality of service delivery by locating decisions closer to the point at which they ought to be carried out and by stimulating local authorities and administrators to perform a better job (Fiske, 1996: 24). Therefore, governments throughout Africa adopted a water decentralization policy as a solution towards the scarcity of clean water for domestic use.

Decentralization is a widespread occurrence experienced the continent-over and is a discursive practice within the overall neo-liberal dialogue in Africa. Both developed and developing countries have shown their proclivity for it. In this study, decentralization policy implementation is going to be discussed on international, national and local levels whilst focusing on the hygienic water service delivery system to the consumer. Decentralization of water authority is becoming a rising concern in Southern Africa. It is a multifarious enterprise. Fiske (1996: 19) thus argues that the road from concept to

implementation is by no means straight because some African leaders see decentralization policy implementation as a means to achieve a political goal.

Decentralization has been used as a device to disperse authority, ensure political stability, bring representative governance closer to citizens, and improve the accountability and responsiveness of local leaders (World Bank, 2000; Dillinger, 1999; Silverman, 1992). Decentralization of the water service delivery system has also been undertaken due to dissatisfaction with the efficiency of centralized provision of household water services. Habitually, inefficiencies have been coupled with the difficulties of coordinating big sets of activities in incongruent locations from a centralized point. Greater autonomy in decision-making by local officials of the central government has removed layers of bureaucracy, decreased decision-making times, and reduced information costs associated with diseconomies of scale (Dillinger, 1999; Shah, 1998; Silverman, 1990).

It has also been argued, as in the literature on fiscal federalism, that decentralization appears to improve allocative efficiency by bringing greater diversity into the supply of domestic water services. When preferences for municipal services differ across localities, decentralization can represent a great improvement in welfare for the country's citizens by allowing a blend of services that is better able to meet these diverse preferences. The encouragement by international donors for the provision of domestic water service delivery system has provided further impetus to the push for decentralized water sector.

Policy documents such as the 1978 World Health Organization/UNICEF Primary Health Care Declaration of Alma Ata and the 1981 Health for All by the Year 2000 stressed the significance of household sanitary water provision and the function of community participation in planning and providing hygienic domestic water services (World Health Organization, 1981). The promotion of household clean water service delivery system was seen as incompatible with centralized systems of the water sector (Collins &Green, 1994), though concerns about equity and sustainability, rather than efficiency, generally spurred these efforts. The World Bank (1987) has cited the efficiency gains from decentralization among a set of water sector reforms, including expansion of risk coverage, charging of user fees for private pure water services among those able to afford them, and better use of private and non-government resources.

It is perceived that a number of countries in Africa such as Malawi, Zambia, Tanzania, Zimbabwe, Namibia, and Kenya advocate for household water decentralization policy implementation with particular emphasis on strategically rethinking the domestic water service delivery system. Countries that have current or imminent domestic water shortages are home to some of the poorest people on earth. Today, 60 percent of people in developing countries live without an adequate supply of domestic water, and consumers spend eight or more hours daily carrying water from distant sources (Africa Water and Sanitation Magazine, 2009: 4).

Hence, there is a need to rethink strategies to improve the household sanitary water service delivery system through a rights-based approach and neo-liberal conceptual framework. Domestic clean water deserves to be accessed by everyone including both

the rich and the poor. No one should be denied household water because of the inability to pay water tariffs. It is the right of every human being to access clean water for domestic use. However, the neo-liberal line of thinking argues that citizens need to pay water tariffs in order to enjoy their right to access clean water for household use and also as a cost recovery means by the water authorities. Throughout the continent, the household water service delivery system is perceived as an arrangement which is in a poor condition and inefficiently operated due to insufficient staffing and resource allocation (World Health Organization, 2000: 140).

It is perceived that most of the solutions do not accommodate the needs of consumers and yet access to water for domestic use is a human right. According to (Bayliss, 2002: 5), several Sub Saharan African governments have announced plans to decentralize their water authorities. In Zambia, the World Bank supports the decentralization of household sanitary water authority to the Lusaka Water and Sewerage Company. In Kenya, the Bank develops strategies for decentralizing household water supply in Mombasa and the coastal region as well as providing technical assistance for the preparation of a decentralization strategy for hygienic water supply in Nairobi. In Malawi, the Bank provides support for a review of the options for a decentralized authority involvement in the water sector in Blantyre and Lilongwe (Work, 2002: 17). It is argued that there is a severe shortage of clean water for household use in most African countries. This has been exemplified by the cases of countries from the Southern African Development Community (SADC).

As a result, donors and policy makers are active in shaping the conceptualization and implementation of the domestic water service delivery system. Zimbabwe and several countries in Southern Africa are in the process of rethinking how best can household water be delivered to consumers. These nations are responding to the global development debates, as well as their own ecological conditions and historical imbalances in access to water through national water reforms which are designed to decentralize the water service delivery system, increase stakeholder participation in water management institutions, and create a more efficient and sustainable water sector (Walker, 2006: 2). The discourses on water service delivery systems are currently centered on how to most effectively deliver household water services.

Further, debates concerning the best practice of domestic water service delivery system are also based on how the water sector can successfully generate its own funding and decrease reliance on national governments. The deliberations also emphasize how to price water and create markets that reflect the true value of water as a scarce economic good. These discussions are meant to ensure that all people are guaranteed a right to the minimum amount of domestic water to fulfill their basic needs. What is striking about the above discussions is that donor agencies no longer view the poor as central to the best practice of water service delivery system. Today, discussions and policy documents have a tendency to neglect the importance of the poor as water users, an omission that significantly limits the potential effectiveness of water policy reform (Derman, Ferguson and Gonese, 2000).

Moreover, most of the reviewed documents in this study are largely silent on establishing the consumer's independent water rights, which are believed to enhance the customer's well-being and bargaining position, thereby increasing efficiency in the water sector (Zwarteveen, 1997). This discussion of the household water service delivery system is situated in the context of Zimbabwe where the water authorities are currently reforming how water is managed in attempts to address historical inequalities in access to water as well as making the water sector more sustainable and efficient to better cope with changing climatic conditions.

This study directs its attention to the clean water decentralization policy implementation debate from external best practice cascading to Zimbabwe, with specific focus on the case of Kwekwe Municipality. Nevertheless, developing countries, like Zimbabwe, have their own peculiar trademark of neo-liberalism in assorted forms such as decentralization of the domestic water service delivery system through rethinking the best practice to improve the water sector. It is therefore perceived that skilful and careful water purification management principles are paramount in order to improve the provision of water in Zimbabwe.

Thus, it is important to ensure that the water sector infrastructure is maintained properly through repairing leaks as soon as possible and that accurate meter readings are taken regularly. In Zimbabwe, the household hygienic water system is characterized by water losses due to leakages from badly maintained pipes and extensive illegal withdrawals. The local government officials of Kwekwe municipality are faced with a situation of

insufficient revenue to re-invest in the repair and upgrading of the water system, and thus find themselves in an un-breakable and vicious cycle of poor household water service delivery systems. It is assumed that the situation regarding the status of domestic clean water supplies has caused particular concern. This study examines the way in which a broad-spectrum discourse of water decentralization policy implementation evolved in Zimbabwe and how institutions acted as disseminators of a discussion of decentralization in the water services sector.

Further, this study will argue that access to adequate clean water, for household use by the poor, illustrates the growing gap between needs and rights in post-colonial Zimbabwe. This essential need, which is framed as a right in the post-colonial Constitution (Zimbabwe National Water Authority, 1998), is denied to many Zimbabwean citizens by the transformation of water beyond a tiny and woefully inadequate free lifeline into a commodity, to be bought and sold on the market. This appears to be anchored in a disregard for poor black working class households. The post-colonial state inherited this pattern of extreme inequality in household clean water service delivery.

Many scholars consider adequate consumption of clean water for domestic use to be a precondition not only for a healthy and productive life for the poor, but, a requirement for participation in public life and an active and vibrant citizenry (Mehta, 2000; Swyngedouw, 2004; Marvin and Guy 1997). However, lack of access to domestic clean water by the poor in Kwekwe urban illustrates the persistence of social disparity in post-colonial Zimbabwe. An institutional fresh water service delivery system through

decentralization policy implementation brings accountability and responsibility to the local authorities.

Unlike the other most important basic service, water has no substitutes and almost always enjoys a ‘natural monopoly’ (Ruiters 2002; Bond 2002; Bakker 2002). The numerous positive public externalities of adequate and uninterrupted water supply, particularly in ‘Third World’ settings, are well documented (Lorraine, 1991; Barlow and Clarke, 2002; Bond, 2002; Bakker, 2002; Ruiters, 2002). One would therefore reasonably assume that the most critical area of social policy which responsible and responsive democratic governments, even under pressure from external institutions bent on decentralizing domestic water supply (Bond 2002), would not want to ‘mess with’ is water for household use.

It must be borne in mind from the onset that the current debates and challenges relating to domestic water supply and service delivery in Zimbabwe cannot be properly understood without reference to the historical developments of the subject from the colonial period onwards. In much of pre-independence Zimbabwe, the management of household water resources was primarily the responsibility of the colonial national British government. The centralization model thus remained the dominant approach to domestic water service delivery in Zimbabwe, even at independence. However, with the ubiquitous failure of various centralized water and other development-oriented project initiatives, the government of Zimbabwe embarked on the idea of decentralizing bureaucracies, social services and governmental planning, with the objective of enhancing efficiency and accountability, among others.

While the assumption of the vast majority of African states that opted for the decentralization model was that decentralization would guarantee better management of public resources for the common good, practical experiences of the decentralized model across states including Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Morocco, Mozambique, Namibia, Nigeria, Zambia, Senegal, South Africa, Sudan, Tanzania, Uganda, Zimbabwe and others all showed that decentralization largely compounded the problems sought to be avoided (Olowu, 2008: 63). It should be remembered that following the gale of water decentralization programmes across the continent, there were various protests and public outrage. Consequently, water service contracts have been terminated in Gambia, Ghana, Guinea, Kenya, Mozambique, South Africa and Zimbabwe, among others.

The decentralization of the water sector was introduced into African states based on the assumption that decentralization will benefit the poor consumers and improve access to sanitation and clean water. However, this obviously has not been the overall outcome and while there have been pockets of relative success; the decentralization of the water sector has failed in many other cases (Ndegwa, 2002). One of the main grounds of criticism was that the tariff hikes following water decentralization were not affordable to low-income consumers.

In some Zimbabwean urban areas, where unemployment is very high, for example, high reconnection fees and volumetric charges were followed by cholera outbreaks. In Kwekwe there were reported cases of illness due to the use of water from rivers and

stagnant ponds, as most consumers could not afford higher tariffs. Further, in Zimbabwe, a United Kingdom (UK) company (Biwater) terminated its water provision contract claiming that the customers are too poor to pay tariff rates that would have enabled the firm to make a decent profit. Empirical data shows that 50 percent of the Zimbabweans earn less than US$ 1 per day and 40 percent live below the national datum line of poverty. In addition, 35 % of Zimbabweans lack access to safe drinking water, yet poor households in several communities in Zimbabwe spend up to 25 % of their earnings on drinking water. Water decentralization manifests its problematic edges in many other areas as far as Zimbabweans are concerned (Nemarundwe and Kozanayi, 2003).

Throughout the developing world, there are significant social, economic, ecological and capacity obstacles to meeting the Millennium Development Goals for water and sanitation. It is conceivable that overcoming them will require more effective and participatory water governance, improved water management, enhanced capacity at all levels, and greater empowerment of the poor. The distribution of access to clean water for domestic use and proper sanitation is highly unequal.

3.2 The importance of domestic fresh water

Human life is dependent upon fresh water which is not only needed to grow food, generate power and run industries but it is also needed as a basic part of human life (Klug, 1997). Access to limited water resources in Zimbabwe appears to be historically dominated by those with access to land and economic power, as a result of which the

majority of Zimbabweans have struggled to secure the right to clean water for household use. It is perceived that colonial era legislation governing water did not discriminate directly on the grounds of race, but the racial imbalance in ownership of land resulted in the disproportionate denial to black people of the right to clean water.

The poor urban population appears to be traditionally vulnerable in terms of their right of access to fresh water. Clean water for domestic use is viewed as the basic element upon which human existence depends. Aristotle once argued that government exists not only to make life promising, but to make life good (World Health Organization, 2003: 6). In this case, life for the poor can be made good through accessing clean water for household use. To analyse Aristotle's discourse within a more current paradigm, one may consider, *inter alia*, Maslow's hierarchy of needs and its premise that it is not feasible to make life good until it happens that life has been made possible.

In this regard, Maslow's hierarchy of needs can be substantially interpreted to mean that attempts to satisfy the higher order needs of the general community would be meaningless; unless and until adequate improvement has been made towards addressing lower order basic needs, such as the need for food, household sanitary water, shelter and clothing. Fresh water for household use has been described as the fundamental human need and human right, without which many of the other globally recognized basic human rights cannot be fully experienced. This point resonates with the fact that lack of access to safe water for domestic use has a major effect on people's health and poor health constrains the living conditions of every human being (World Health Organization 2003:7). The discussion is focused on the provision of dirt-free water for use by the family unit as an essential service to consumers. The

discussion thereafter takes account of a few of the many challenges of the public provision of water for household use in Africa.

3.3 Challenges of the clean domestic water service delivery system in Africa

Clean domestic water service delivery systems, worldwide, are perceived as non-linear in their progression. It appears that they are characterized by inconsistencies, contradictions, continuities and discontinuities. In the same way that a household water service delivery system through decentralization policy implementation typically has many goals; the impact of this concept needs to be considered from several perspectives. Moreover, most countries have difficulties with regulation and politics remains influential. Africa has been undergoing a clean water crisis for over 20 years (Kankwenda, cited in Onimode, 2004: 3). Solutions in the form of strategies, policies and programmes have been formulated and implemented.

Solutions are proffered in one or more of the following policy areas:

Economic reforms (including the problem of aid and debt;

Political reforms including governance;

Environmental protection;

Humanitarian assistance.

The results of these efforts appear unconvincing. It is perceived that, Africa has yet to get out of the household clean water crisis and put itself on the right path of improving the fresh water service delivery system through decentralization policy implementation. While many developing countries have devolved water service delivery system to the local governments in recent years, no study has examined whether or not

decentralization really leads to better water sector allocative efficiency (Akin, Hutchinson & Strumpf, 2005: 1417).

Therefore, a gap is evident in these matters. It is perceived that most of the events surrounding the unfolding of household clean water service delivery systems universally, including Zimbabwe, are politically grounded. Zimbabwe borrowed the concept of its domestic water service delivery system from a worldwide perspective. In the water sector there has been a focus on the impact of neo-liberal approaches and the rights-based conceptual framework on low-income communities (McDonald &Ruiters, 2005). Yet there remains a gap in the domestic water service provision in literature, in particular when it comes to examining the decentralization discourse that has entered this field. It appears that there is a deficiency in literature concerning household clean water service delivery system in Zimbabwe.

A dearth in literature on domestic fresh water service delivery system through decentralization policy implementation in a neo-liberal Zimbabwe exists (Stoneman, 1981; Peel &Ranger, 1983; Mandaza, 1986; Herbst, 1990; Gibbon, 1995; Moyo, 1995; Makumbe, 1996; Bond, 1998; Mararike, 1999; Bond & Manyanga, 2000). Further, it is also perceived that the previous researchers were silent on the position of the poor since fresh water for household use is viewed as their human right. It is this gap in domestic clean water service delivery system literature in a neo-liberal Zimbabwe that this study addresses.

The main effort of this study is to close this gap through recognizing the perceived rights of consumers in the domestic water service delivery system. The study argues that decentralization policy implementation is a discursive practice within the overall neo-liberal discourse concerning the household water service delivery system. Decentralization is a nebulous term, although unambiguous in political origin (Donahue, 1989), which coincides with the rise of neo-liberalism. Decentralization of state assets, especially those relating to infrastructure and services, is an essential element of neo-liberal economic development policy and a key strategy in the counterrevolution against state intervention. Moreover, for its proponents, decentralization is the very incarnation of the liberal project. According to Wadesango (2008: 2), democratization and decentralization are concepts that are rooted in the neo-liberal philosophy which advocates for equal opportunity for all to participate in both formal and non-formal decision making processes. The main tenets of democratization and decentralization are freedom, liberty, rationality, empowerment, devolution of power and the ability to recognize and solve problems. These concepts came from the realization that central control had failed to achieve its intended goals.

Rondineli and Cheema (1993) postulate that central planning was prescribed by the international assistance agencies such as the World Bank as a way of promoting modernization, accelerating social and political change, generating employment and mobilizing capital for further investment. It would allow the state to initiate, spur and steer economic development. Central planning and administration were considered necessary to guide and control the economy and to integrate and unify nations that

were emerging from long periods of colonial rule (Rondineli and Cheema, 1983, Naidoo, 2002, Vroom and Yogo, 1988).

By the end of the 1960s, it was widely recognized that central planning had not achieved the goals it was intended to. Economic growth remained sluggish in most developing countries during the 1960s, even where growth rates were high, and only a small group benefited from increased national production. However, the income disparities between the rich and the poor increased in many countries. The living standards of the poorest groups in the least developed nations declined and the numbers of people living in what World Bank officials called absolute poverty were increasing. Many development planners and administrators began questioning the effectiveness of strategies based primarily on increasing industrial output and challenging theories calling for maximum economic growth regardless of the patterns of income distribution. Centralization after independence, therefore, led to unsuccessful implementation of donor funded projects (Rondineli and Cheema, 1983).

From the end of 1970s onwards, there was a move towards democracy in many developing countries, particularly on the African continent (Van der Mescht, 1996). Although the move is partly attributed to outside pressure, particularly from donor countries and international organizations, it is also credited to governments' own initiatives to enhance participatory democracy in their countries. Among the main objective of the move towards democracy was ensuring the effective participation and involvement of citizens in decisions regarding their social, economic and political development. There had been an emphasis on decentralization and devolution of power

to lower levels with the intention of empowering people to make decisions regarding their own development. The assumption was that the involvement of people in decisions regarding their own development would motivate them to ensure the successful implementation of programs and policies intended to benefit them (Naidoo, 2002; Vroom and Yogo, 1988).

The growing interest in decentralization is attributable not only to the disillusionment with the results of centralization but also to the realization that development is a complex and uncertain process that cannot be easily planned and controlled from the centre. In its true sense, decentralization is about the transfer of authority from a higher level to a lower one in order to enhance public participation in decision making. It is believed that the first demand for greater popular participation in the African social welfare development process was made in 1987, at the time of the conference on the challenge of economic recovery in Abuja, Nigeria (Oakley and Cleggy, 1999). This conference was a precursor to the 1990, Arusha declaration workshop on the Role of Popular Participation in meeting the challenges of recovery and development in post-colonial Africa.

Accordingly, it was through the 1990 Arusha International Conference that the African Charter for Popular Participation in Development and Participation was adopted (Oakley and Cleggy, 1999). The Charter attested to the fundamental role of popular participation in generating the support necessary to overcome the continent's developmental crisis. To this end, Adedeji (1990: 68) proclaims the ethics of popular participation as:

“Where the governed and their governments are moving hand in hand in the promotion of the common good and where it is the will of the people, rather than the wishes of one person or group of persons, however powerful that prevails”.

The municipal sector was no exception to the developments that took place in the movement of developing countries towards democracy. Municipal service delivery systems have been seen as a driving engine in the social and economic development of both developed and developing countries. Therefore, African countries like all other developing ones, have placed priority on the enhancement of the municipal service delivery system by making it a right and ensuring its implementation through the Zimbabwe National Water Authority (UNESCO, 2001), amongst other bodies.

Decentralization makes clearly articulated assumptions about the production and consumption of basic commodities including clean water for domestic use. Decentralization policy implementation is viewed as the most efficient provider of services to society. But this view is perceived as the result of a historically constituted discourse - the collapse of the Keynesian state intervention approaches of the post-Second World War era and its supplanting by the conventional monetarist school. It is alleged that devolution of power is thus a discursive strategy aimed at constructing a subjective reality. And, indeed, devolution of authority produces particular forms of disciplinary conduct or, as Foucault (1980) conceptualized it, governmentality. Water decentralization policy implementation appears to have serious implications for the delivery of household clean water services, for example, at the local level. The devolution of domestic fresh water services became a serious option during the 1990s

as restructuring on the local government scale left municipalities in an unsubstantiated situation when it came to financially sustainable delivery.

Thus, the household sanitary water service delivery experience in Zimbabwe is not devolution in the sense of a change in possession but rather a form of authority by which new techniques (marginal cost accounting in particular) that imitate the private sector are implemented. The prevalence of pre-paid technology believes that the poor are now paying more than the rich for household water services because, in addition to their clean water usage, they have to pay for the pre-paid metering technology. Indeed, the poor now subsidize the rich (Barchiesi, 1997). Furthermore, new forms of visibility and identification are created through this process which includes the reconceptualization of domestic clean water as a commodity and the transformation of citizens into consumers, respectively.

3.4 The cost recovery approach

One of the most critical assessments is to establish what constitutes the discourse of decentralization by engaging with its key parameters: full-cost recovery and marginal cost pricing through a neo-liberal line of thought. Therefore, one study cannot discuss the relationship of a household hygienic water service delivery system through decentralization policy implementation and neo-liberalism in Zimbabwe. The point of view adopted in this study considers the parameters through which decentralization policy implementation is made rational and reliable. These are full-cost recovery and subsidiary cost pricing. Providing clean domestic water services on the basis of full-cost recovery means that all the costs of production are recovered from the consumer.

Nevertheless, this cost recovery approach is necessary because subsidy mechanisms are removed, through a process of differentiation which is facilitated by accounting procedures. The crucial dirt-free water cost pricing strategy is used in both public and private sectors to determine the costs of production and to effect full cost recovery. Marginal cost pricing is a product of neoclassical economics. It is a reaction to the classical price theory, which claims that prices equal average cost and socially necessary labour time (Beckwith, 1955).

Marginal clean water costing shifts the focus to the micro-scale of individual prices. It means pricing clean water for domestic use as a product so that the price covers the cost of producing one extra unit of the product (Rickwood & Piper, 1980). Hence, the neo-liberal ideology and the rights-based approach become germane in the domestic clean water service delivery system through decentralization policy implementation.

Marginal pricing of domestic water informs prices in two major ways. Firstly, prices may be set such that the marginal household fresh water cost equals the price. That is, the marginal costs of producing domestic clean water would establish the price. Secondly, they may be set so as to equate to marginal revenue. The second approach is used by profit seekers (Beckwith, 1955). Furthermore, in the calculation of domestic sanitary water costs there are two wide-ranging kinds of marginal costing: short term and long term. Short term marginal costing means calculating costs taking into account fixed and variable costs, while long-term means taking into account future expenses, such as investment in fixed capital. Beckwith (1955: 14) has suggested that long-term marginal

costing is ‘always arbitrary and indemonstrable’ and the ‘lumpy’ nature of fixed investments makes it exceptionally unreliable.

Thus, the costing of household hygienic water presents added difficulties, for example the ‘quantification of the true value and costs of clean water, including the environmental value’ (Zilberman &Schoengold, 2005: 7). It is believed that the costs for domestic water can only be viewed as approximations. Full cost recovery in the water sector appears to be based on insecure foundations and may be linked to rent seeking. In effect, managers in this sector have complete control over prices and may manipulate them to satisfy certain performance indicators. It appears that consumers usually have to pay for service delivery costs, which may be subject to any number of externalities related to the nature of the investment environment.

In the reviewed literature thus far, the State-Civil society relations were also qualitatively reconfigured. Legislation and supporting records all emphasized the economic value of domestic clean water service, full cost recovery and the ‘user pays’ principle. The notion of a resident was conflated with that of client or customer. Residency thus became a function of the market. The metamorphosis of citizens into consumers engenders the stripping away of collective decision making. Conservative macroeconomic policy, such as the Growth Employment and Reconstruction (GEAR) policy, which emphasizes monetary discipline, demands citizens to be conceptualized as consumers. In South Africa for example, GEAR advocates reducing state spending, the deficit, and the size of the public sector, but the government is also committed to fulfilling the promise of the Reconstruction and Development Programme (RDP) to extend basic services (Van Niekerk, 1998: 1). Cost recovery is thus neo-liberalism incarnate. A cornerstone of the

neo-liberal approach towards the provision of domestic clean water service delivery is believed to be cost recovery. A failure to pay for services leads to disconnection. This is allegedly a problem to the low income bracket consumers who find it difficult to pay their water bills.

However, through the lens of the rights-based approach, it is perceived that the above approach is unfair to the poor who cannot afford to pay for the fresh water service delivery system. Ruiters (2000) demonstrates how the entry of the private sector into domestic clean water services delivery has led to disconnection on a substantial degree and large-scale debt. Since 1997 a number of local authorities have exercised the options of outsourcing their services and concessions. It is therefore perceived that the household water service delivery system has not been recognizing the welfare of the poor throughout Zimbabwe. This study will strive to unpack the capacity of Kwekwe Municipality to deliver household clean water services to the consumers.

The new era, post 1996 signaled a new-fangled approach by Zimbabwean municipalities to efficiency and financial sustainability, which is not undesirable (Latham, 2002). The consequence was that citizenship had been subsumed under a conservative brand of economics. Yet this approach was not the consequence of technocrats being newly liberated from the fetters of the colonial regime. It has been observed that municipalities in Zimbabwe, such as Kwekwe Municipality, were forced to rethink the concept of cost recovery from the clean household water service delivery system in order to prevent bankruptcy. The central government exercised firm financial control, especially with regard to transfers to municipalities. Thus, the only alternative left to municipal administrations was to implement stringent fiscal and credit control measures

to guarantee solvency. This created space for the domestic clean water service delivery system through decentralization in a neo-liberal country.

Issues such as household hygienic water for all, quality of life, and a sustainable environment are an essential part of the country's national priorities and require considerable attention. In addition, implementation of the National Water Act of 1998 and the related national domestic sanitary water strategy places considerable demand on fresh water management and calls for research support. The role of Zimbabwe, in SADC (Southern African Development Community) and NEPAD (New Partnership for Africa's Development), regarding water resources and household sanitary water supply issues, poses new challenges and requires new initiatives (South Africa Water Research Commission, 2004).

Moreover, it conceptualizes household fresh water as a commodity stripping away the human rights and basic needs aspect of domestic water and reconceptualises it as an economic good governed by economic principles. Thus, clean water for domestic use is subject to marginal cost pricing, that is to say; conventional neoclassical economics. It is important to know the absolute and relative price that users are affording to pay for fresh water in order to assist decision-makers regarding the allocation and development of water resources (South Africa Water Research Commission, 2005).

In laying out the principles that guide its research thrusts, the discussion above responds to the global and national trends towards the neo-liberalization of sanitary water services delivery systems. Internationally, there was a reconceptualization of the

supply and demand of household clean water services. In terms of supply, state intervention gave way to the increased participation of the private sector from concessions and management agreements through to outright decentralization, while on the demand side; hygienic water for domestic use was treated as an economic good. The key moment, in this regard, was the 1992 Dublin International Conference on Water and the Environment, which concluded that clean water for household use has an economic significance in all its competing uses and should be recognized as an economic good (South Africa Water Research Commission, 2002:7).

This study addresses key challenges for the domestic water service delivery system in Zimbabwe by focusing on the Kwekwe Municipality. Among the perceived challenges is the sustainable delivery of household water services to the residents of Kwekwe without segregating the poor. In each case, cost effectiveness and efficiency will be stressed. Cost recovery should be perceived as a concept which may not facilitate the process of denying access to domestic dirt-free water by the poor simply because they cannot afford to pay the water tariffs. The delivery of hygienic water services for household use is a business.

It is therefore important to ensure that domestic fresh water services institutions operate according to sound business principles (South Africa Water Research Commission, 2005: 6). Moreover, full cost recovery was accepted as a legitimate premise with innovative cost recovery methods required to sustain and fund free basic clean water services delivery. Effective credit control policies and procedures must be developed in order to deal with the problem of poor cost recovery and financial

sustainability of municipalities (South Africa Water Research Commission, 2005: 9). The Commission considered cutting off the water supply due to non-payment an acceptable credit control measure and advised the 'development of innovative cost recovery mechanisms and credit control procedures including best approaches for managing water supply cut-offs'. The idea that household sanitary water cut-offs might be a violation of human rights does feature in the thesis. That treated water for domestic use is an economic good which ought to be managed according to economic principles effectively closes off alternative arrangements.

It is apparent that, during the post colonial era, the provision of domestic sanitary water services has been framed in particular discursive terms. Of particular interest is the decentralization of clean household water services. By linking neo-liberalism and decentralization as a discursive framework, this study presents the idea that domestic water services are being decentralized in order to renegotiate the relationship between state and society. The efficiency argument is used to turn marginal costing and cost recovery into key principles for the delivery of household fresh water services and how this particular discourse has engendered a partnership between academia and key institutions. This study plays an integral part in opening up a space for policy and practice that is overtly neo-liberal in orientation.

Nevertheless, the question that is likely to be asked by the reader of this study is: Why discuss the domestic clean water service delivery system in Zimbabwe from 1990 to 2010? The 1990-2000 timeframe, which was the phase of neoliberal market reforms, can be described as having a development paradigm. The period after 2000 has

observed a number of attention-grabbing, and some remarkable, developments in Zimbabwe including the decentralization of the clean household water service delivery system and the implementation of various policies.

The study also focuses on the historical context of the domestic hygienic water service by going as far back as 1980, when Zimbabwe gained political independence. At independence in 1980, the black political leadership that gained authority from a white settler regime inherited one of the most deep-rooted historical inequalities in the world. It was not merely an unbalanced society; it was also a dual society stratified along racial fault lines. Indeed, Richard Gray (cited in Machingambi and Manzungu, 2002) describes the Rhodesian society as “the two nations”. This racial bifurcation of society was evident in virtually all facets of life from access to household clean water, health and education to physical infrastructure, the economy and politics.

Zimbabwe was a society of interest groups of variable strengths and contradictory expectations which had implications for policy as Jenkins (1997: 583) explains:

Government had to balance black aspirations with the imperative of creating a favourable climate for domestic business, and was constrained by hostility from those who controlled the economy, and by conflicting concerns between urban-based interests and rural voters.

This was part of “Zimbabwe’s inheritance”, as Colin Stoneman (1981) characterized it and this is the legacy that the new Government sought to redress in the course of a battery of policy interventions.

In 2006, the Cabinet of Zimbabwe issued a directive that the Zimbabwe National Water Authority (ZINWA) should take over the entirety of water and sewerage services in all cities and towns in the country. Following the takeover of the water and sanitation utility of the cities and towns, there was an outcry from local authorities, residents and the public at large. The bone of contention has been whether ZINWA had the capacity to take over the household water services from the local authorities. Currently, household water is controlled by the municipalities. ZINWA is now concentrating on raw water, but the water treatment and service delivery to the consumers is conducted by the municipalities.

Moreover, it is also believed that ZINWA was operating in a difficult period characterized by the unrealistic inflation rate of the Zimbabwean dollar. Of late, there is a new economic hurdle in the form of the Global Economic Recession which is affecting the economies of many countries including Zimbabwe. Concerned with the protest focusing on the Cabinet directive and the seeming deterioration of water service delivery after the ZINWA take over, the Portfolio Committee on Local Government (2007) conducted an inquiry into the issue of ZINWA taking over the water and sewerage services of some municipalities in Zimbabwe.

A proposal was also made on the takeover of these services in other cities and towns in the rest of the country. The Committee was tasked to find whether ZINWA had the capacity to provide clean domestic water services to the consumers; exactly how ZINWA planned to carry out the directive and the impact that the takeover would have on the authorities and residents in the country. The Cabinet decision for ZINWA to take

over household clean water and sewerage services in cities and towns was made when it realized local authorities had failed to efficiently provide services. The city of Kwekwe faces numerous challenges resulting from the growth and expansion of the city and increase in population. The capacity of the local authority had been reduced since the domestic clean water services continued to deteriorate in the city. It has been observed that the government had then decided to step in to provide water to the residents of Kwekwe and other urban areas.

However, there may be a misconception that the water authority is incapable of carrying out the Cabinet directive. This may be untrue since the authority had highly skilled personnel and was consulted by countries such as Malawi, Zambia and South Africa for advice on household sanitary water issues (Zimbabwe National Water Authority, 2000). The idea that the water authority was not capable can therefore be viewed as unauthenticated. Observations noted that from the time that municipalities took over the household water services from the Zimbabwe National Water Authority (ZINWA), a lot had been achieved despite the various challenges that were faced. It appears that the authority managed to increase water production from 350-400 mega litres a day to 600 mega litres a day from the Morton Jaffray water plant. Major renovations are believed to have been done at Morton Jaffray, Harare's main water treatment plant.

It is assumed that, during its time, ZINWA had also managed to clean numerous reservoirs that had not been cleaned for 50 years. On the other hand the Dutchman's Pool water plant in Kwekwe urban has not been renovated for decades now. A lot of attention is given to Harare as the capital city of Zimbabwe. This unveils a gap

concerning the fact that most of the research and development of water infrastructure is conducted in Harare where there is a concentration of resources. This study also confirms whether similar research is funded for execution in cities such as Kwekwe. It is viewed that research projects of this nature are concentrated in Harare in comparison to other small cities and towns. This is further illustrated in the discussions below.

3.5 Concentration of water research in Harare

The notion that urban councils have failed to provide household water services especially in the City of Harare was ill conceived. It appears that there is a concentration of research in Harare and its surrounding towns, at the expense of the cities like Kwekwe. The question is why is research for domestic clean water service delivery system concentrated in Harare and its surrounding towns?

It is therefore viewed that research projects concerning the household clean water service delivery system are based in the big cities such as Harare and Bulawayo thereby disadvantaging the small cities such as Kwekwe. This is done at the expense of small cities like Kwekwe where most of the low income consumers reside. Further, previous research is silent on the provision of domestic water service delivery system to consumers, especially the poor. The poor do not have an audible voice in the urban community. It is high time their voice is heard in order to enjoy their right to access household fresh water service delivery system through subsidized funds from the government.

It has been viewed that by taking over water for domestic use in the City of Kwekwe, the municipality of Kwekwe had also inherited problems that were prevalent in the city for the past 20 years. These include the problems of bursts of water and sewerage pipes that failed to match with the continued growth and expansion of Kwekwe as well as the increase in population. In 2002 ZINWA had appointed a new Board whose mandate was specifically to provide clean water for domestic use in urban areas. In line with the deficiencies that had been detected in the system, the Board constructed a committee that sits weekly to address the immediate challenges faced in making household water available to the urban residents of Kwekwe and other cities in Zimbabwe.

ZINWA had faced some challenges in carrying out the directive to take over clean household water services in the cities and towns of Zimbabwe. That is the reason why the Government of Zimbabwe facilitated the takeover of this responsibility by the municipalities in all urban areas of Zimbabwe with effect from the end of 2008. ZINWA was reallocated its previous duty of providing raw water from the rivers and dams to the municipalities. ZINWA owns all raw water under the ground and on the surface. During the data collection one respondent confirmed that, *"ZINWA owns every particle of raw water including the human tears".* Nevertheless, municipalities are also characterized by their own challenges of failing to provide satisfactory household water services to consumers. For the sake of convenience the discussion was centered on the municipality of Kwekwe.

The Kwekwe Municipality is perceived as having a problem of acquiring chemicals to purify household water. ZINWA relied on Aluminium Sulphate from the Zimbabwe

Phosphate Company (ZIMPHOS) and any disruptions at ZIMPHOS affected water production in the Kwekwe Municipality. It appears that Kwekwe Municipality was also greatly affected by the frequent power cuts by the Zimbabwe Electricity Supply Authority (ZESA). Each time ZINWA lost power the production of water was reduced in Kwekwe. If Kwekwe Municipality lost power for 30 minutes it would take up to 3 hours to get back to full production (Shackleton et al, 2002).

3.6 Challenges faced by ZINWA

The Zimbabwe Local Government Association (ZILGA) confirmed that the takeover of the entirety of household pure water and sewerage services would have a devastating effect on service delivery by local authorities since the historical basis for the establishment of urban authorities was to provide and control sanitary water services as Sanitation Boards (Abu-Zeid, 2001). The general development of urban councils has, over the years, been built around these services. It is perceived that ZINWA's takeover of the supply of domestic fresh water services in cities and towns would therefore have policy, financial, technical, operational and developmental implications.

3.7 Water as a public or private good: critically distilling the discourse

Marvin and Guy (1997: 21) assert that "Water for household use is the lifeblood central to the socioeconomic structures of society". Therefore, water for domestic use is indispensable 'stuff' for maintaining the metabolism, not only of our human bodies, but also of the wider social fabric. The very sustainability of cities and the practices of everyday life that constitute the 'urban' are predicated upon and conditioned by the

supply, circulation and elimination of household water (Swyngedouw 2004: 1). Crucial to understanding how domestic water, as a public good, has been subverted is the role played by corporate-driven globalization which involves the increasing commodification of natural resources. The commodification, not only of household water, but of other parts of nature and of life itself, is a distinguishing feature of corporate-led globalization today (Barlow and Clarke 2002:88). There exists voluminous literature proclaiming household water as a public right and access to which should not be subject to monetary requirements (Black 2004; Swyngedouw 2004).

Nevertheless, it is therefore necessary to critique this line of thought by arguing that the provision of clean water for domestic use deserves to be consistent. This can be achieved solely through making the consumers pay a subsidized amount. The government is expected to be involved through the provision of grants to the poor so that they can pay their water bills in cash to the municipalities. Hence, Jarman (1997) states that: water and sanitation are important pre-conditions for good health, and protecting the health of the poor to reduce their vulnerability.

It is essential to recognize the voice of the poor when it comes to a household water service delivery system. The rights-based approach emphasizes that it is the right of every human being to access clean water for domestic use. Chambers (1989: 188) has identified a healthy body as one of the most important assets of poor people. In this regard, a sick adult moves from being an asset to being a heavy liability needing to food, clothes and housing.

3.8 Policy Implications

The principle and success of the household water service delivery system through decentralization policy implementation hinged on the extent to which central government allowed local authorities to exercise the power accorded to them by the Urban Councils Act. The local government system vested the administration, control and management of a local area in a council. This entailed that decisions affecting a particular local government area were made locally and residents had the power to determine how they were governed (ZINWA, 1998). The existing legal and administrative frameworks were well established and clear. The system where ZINWA provided bulk raw water and local authorities then purified and distributed the water had been working successfully and there was no need to change it.

The Urban Councils Act required urban councils to run separate water accounts, where tariffs were charged accordingly (Zimbabwe Water Act, 1998). The law directed local authorities to use funds generated within their very own local authorities solely for the requirements of that same local authority. However, through the Water Fund, as established in the ZINWA Act, ZINWA could generate funds and freely use funds in areas other than those in which they had been generated. There was a policy that when local authorities wanted to increase tariffs they had to consult the ratepayers first. This enabled urban councils to make decisions that were appropriate for their local circumstances.

3.9 Financial Implications

The household water and sanitation utility was the major source of revenue for urban councils. The takeover of this utility by ZINWA would therefore redefine the existence of local authorities and how they financed their activities. Revenue from water services had been critical in financing sub-economic activities and community services provided by the local authorities, such as recreational facilities and social welfare. Local authorities were also concerned with the takeover of domestic fresh water by ZINWA as they relied on water disconnection to enforce the payment of rates (WRMS, 2001). The takeover of clean water for household use meant that local authorities had to resort to issuing a summons to every ratepayer whose payment was in arrears.

This method of cost recovery is perceived as slow and costly. Moreover, disconnecting the domestic clean water service delivery system and summoning those in arrears is not a solution to the problem of household water scarcity. Access to clean water for domestic use is a human right and any move to deny consumers their rights is deemed acting ultra vires. This line of reasoning works hand-in-glove with the rights-based approach even though operating in the period of economic crisis in the country. The study evaluates the normative frameworks of access to water as a human right in Zimbabwe and contends that the human being must be placed at the centre of household water discourses in assessing all role players and their responsibilities.

Nevertheless, the domestic water services infrastructure constituted over 60% of urban assets (ZINWA, 2000). Application for international standards used in drawing up local authorities' balance sheets and budgets would therefore become difficult if ZINWA took

over the assets (Talen, 1998). The International Standards of drawing up a balance sheet specify that the company had more assets than liabilities. It is noted that the removal of assets from the balance sheets of Local Authorities therefore led to the liabilities exceeding the assets which in turn made Local Authorities insolvent. The authorities also used these assets as collateral security when borrowed from financial institutions and the takeover by ZINWA would greatly affect local authorities financially.

Most local authorities have made huge investments into domestic clean water augmentation and household fresh water as well as sewer reticulation financed by borrowed and local business community support (Zimbabwe Water Act, 1998). Agreements have been entered with stakeholders who have financed investments in clean water for household use. It would be difficult for local authorities to continue to meet the terms of agreement of stakeholders who have paid for their domestic fresh water in advance through capital support to local authorities.

Government has to be prepared for massive subventions to local authorities in support of the financial gap that was created by the takeover. Local authorities expressed concern on the issue of royalties that would be paid to them by ZINWA in order to compensate for the lost revenue. The local authorities had learnt from their experience with ZESA that the idea of royalties did not work. Councils that were affected by the takeover by ZESA in 1987 were receiving a paltry ZWD$ 267 in the name of royalties (Boelens and Davila, 1998). Therefore, similar problems were foreseen with ZINWA, as its financial capacity was worrying.

3.10 Economic and Technical Implications concerning water provision

According to the Zimbabwe Local Government Association (2007), local authorities would have difficulties in attracting investors due to the takeover by ZINWA. Most local authorities had been able to attract investors by offering them an assured domestic clean water supply. Investors played a significant role in the operations of local authorities and their absence would greatly destabilize urban councils. Engineering services in city councils are perceived as the basis of household clean water services (ZINWA, 2000).

3.11 ZINWA taking over assets and infrastructure

The Zimbabwe Local Government Association (ZILGA) expressed concern on the issue of ZINWA taking over assets and infrastructure from local authorities for free. ZINWA's argument was that the assets belonged to the residents and local authorities were the main custodians (ZINWA, 2000). There was a possibility that the overall take over of assets often lead to transfer of such assets to other failing facilities in the name of equitable distribution. This had happened in the case when ZESA took over the supply of electricity from Local Authorities in 1987 (Magadlela, 1999). The association suggested that an inventory should be taken before the take over of assets was completed so as to guard against the looting of assets. Concern was also expressed at the idea of ZINWA taking over designs and drawings that have been in the control of local authorities for as far back as 100 years ago (WRMS, 2001). Taking into account the Comptroller and Auditor General's report on ZINWA, the authority's record keeping methods were rather questionable. There was, therefore, no assurance that these records would be safe with ZINWA. The problem of improper taking over of resources

by ZINWA is now contributing towards its failure to deliver domestic water services to its consumers.

3.12 ZINWA taking over capital developments

A good number of local authorities are presently carrying out capital development programmes. Some of these programmes were as small as servicing stands while some were massive, such as the construction of reservoirs and the replacement of pumping equipment (Zimbabwe, 1998). If ZINWA actually should take over, then such programmes were to be taken over as well, including the repayment of loans taken out for these projects. The above discussions herald the removal of ZINWA from the responsibility and duty of executing household water service delivery to the consumers. It was reallocated back to the responsibility of supplying raw water to the municipalities. However, the above programmes were assumed to recognize the low income consumers who also need access to a domestic fresh water service delivery system like anyone else. The government needs to be reminded to include a clause which accommodates sources of capital for the poor to be financed and thus given the ability to pay the water charges so that the water authorities will recover their cost. This line of reasoning is related to the application of the rights-based and the neo-liberal theoretical frameworks.

3.13 Legal Framework

Sections 7; 168 and 183 of the Urban Councils Act empowered local authorities to provide clean household water services. The ZINWA Act empowered the water

authorities to intervene in domestic fresh water supplies, presumably in the interest of consumers. Subsections 1(e) and 1(f) of the ZINWA Act specified the functions of the water authorities as related to local municipalities (ZINWA, 1998). According to the Act, the responsible water authorities would encourage and assist in the discharge of their functions under the Rural District Council Act and the Urban Councils Act with regard to the development and management of water resources in areas under their jurisdiction and, in particular, the provision of water.

3.14 ZINWA's Preparedness and Capacity to Provide Household Quality Water

It is a fact that the local authorities did not have confidence in ZINWA taking over water for domestic use in cities and towns. Further, ZINWA's technical, organizational and financial capacity was also disturbing. ZINWA would have to raise their tariffs considerably in order to meet the obligation. This would result in a backlash from the residents of Kwekwe, especially the low income consumers. The Comptroller and Auditor General's report on ZINWA's capacity to provide quality water for household use to urban institutions had been quite damning (Manzungu, 2004). The report detailed ZINWA's lack of administrative aptitude and poor record keeping. ZILGA confirmed that correspondence with local authorities from ZINWA catchment managers indicated a lack of appreciation of the magnitude of provision of domestic sanitary water to urban areas. The programmes that were being proposed by ZINWA were too short to be sincere. Urban councils were worried by ZINWA officials who could not provide answers to the critical questions apart from claiming that they had instructions to adhere to.

3.15 Destabilization of Civic Functions

Local authorities were major consumers of domestic pure water, mainly for community and civil services from which they did not receive any income. ZINWA, being a commercial enterprise, had no obligations towards Civil Defence (Fire Brigade) or social obligation such as parks, public toilets and public taps (Kujinga and Jonker, 2006). These facilities are good for the benefit of the poor, but the government is expected to strategize its sources of funds in order for water authorities to recover the cost after providing clean water to public consumers. This line of thinking is greatly appreciated by those viewing the household water service delivery system through a neo-liberal lens.

3.16 Debates concerning the performance of ZINWA versus municipalities

Written submissions from the Combined Kwekwe Residents Association (CKRA) indicated that residents had not been consulted before ZINWA took over domestic water services in the city of Kwekwe (Swatuk, 2002). This was despite the fact that residents had willingly funded the construction of water bodies such as Sanyati and the development of the Sebakwe Dam as Kwekwe's main water supply source. It is perceived that residents, therefore, rejected the takeover of the household water and sanitations utility of the city of Kwekwe by ZINWA. This was confirmed by respondents during the data collection process of this study. Residents were concerned by the appropriation of assets without their consent or any clear Memorandum of Understanding. It was also learnt that there was apprehension regarding the framework of civic participation and consultation in increases of tariffs by ZINWA. Residents also wondered if the ZINWA Act therefore nullified the Urban Councils in their right to own and administer household water resources.

The submission by the Combined Kwekwe Residents Association highlighted that the takeover of domestic water services in Kwekwe, by ZINWA, did not address the systemic challenges affecting the city of Kwekwe or any other local authority. These challenges included access to borrowing powers, hyperinflation, national economic decline and maladministration. Instead of instructing ZINWA to take over, the Government should have capacitated the city with the necessary resources and leadership to boost its competence.

The Association revealed the fact that a number of challenges had been faced due to the takeover by ZINWA. The Kwekwe Municipality had lost a monthly revenue base as well as vehicles and other assets. Residents could also not lodge their complaints and objections to the water tariffs that were too high, as provided by the Urban Council Act, as ZINWA had no framework for consultation and redress. The Combined Kwekwe Residents Association expressed concern that increases in household clean water service charges by ZINWA were unjustified considering that there was no visible improvement in the domestic water supply and administration. There were continued water cuts, the failure to meet daily consumption requirements of Kwekwe and raw sewage continued to be deposited in water bodies. Similar cases are unfolded in this research which focuses on the rights of consumers to access the domestic fresh water service delivery system. This problem of a domestic water service delivery system does not only occur in Kwekwe urban.

Further, residents of Bulawayo, through the Bulawayo United Residents Association (BURA), confirmed that they did not accept the proposed takeover of the clean water

and sewage services by ZINWA (Latham, 2002). ZINWA had failed in its core business of supplying bulk raw water to Bulawayo's supply sources. The construction of the Gwai and Shangani Dam that was scheduled for completion by the end of 2007 had not started and the Authority had failed to rehabilitate the 77 boreholes at Nyamandlovu Aquifer (Chikozho, 2004). There was therefore no guarantee that ZINWA would succeed in the provision of household water services to the City of Kwekwe if it has failed to offer services to Bulawayo as the second capital city in Zimbabwe.

The submission from the Bulawayo United Residents Association expressed concern over the fact that the takeover by ZINWA would result in the loss of revenue for the Bulawayo City Council. The local authorities have taken up the responsibility of building primary schools and clinics in the cities. All these projects would be greatly affected by the takeover of the water and sanitation utility as it was a source of revenue for the city. As discussed above, research and projects concerning improving the clean water service delivery system are concentrated in the two big cities, Harare and Bulawayo. Small cities, like Kwekwe, are near to the bottom of the list of priorities and yet these areas are where most of the country's disadvantaged people reside. Therefore, this study strove to bridge the gap existent in this dynamic.

3.17 The Observations

From the report of the Comptroller and Auditor General on ZINWA in 2003, and from the evidence gathered during the inquiry, ZINWA was not in a position to take over these

services. It was therefore necessary for Cabinet to go back to the drawing board and make the takeover of household clean water and sewerage services in Harare a case study before ZINWA went on to take over these services in other urban areas (Zimbabwe, 1998). It should also be noted that ZINWA should only have temporarily stepped in to help Local Authorities in areas that had been declared disaster zones as provided for by the ZINWA Act. As Harare, and other urban areas, were not declared disaster areas, there was no need for ZINWA take over domestic hygienic water and sanitation services in those cities and towns. However, deserving cities like Kwekwe were not prioritized. It is also interesting to note that Kwekwe was one of the last cities to be taken over by ZINWA and it did not suffer much of a setback emanating from ZINWA. This was confirmed by respondents during the data collection process. The incompetency of ZINWA forced the entire household water service delivery system to be returned to the local municipal authorities in all urban areas of Zimbabwe including Kwekwe.

It was apparent to the researcher that simply changing the administrative authority over household water issues of cities and towns did not solve the problem of clean water scarcity that was faced in these urban areas. During observation it became apparent that the lack of adequate domestic water resources was a major cause of problems in the provision of clean water services in urban areas. Local Authorities also faced the problem of a chemical shortage and power cuts that the Minister of Water Resources cited as affecting the water authority. Further, if foreign currency could be made available to local authorities in the same way that it was made available to ZINWA; local

authorities could efficiently provide clean household water services to cities and towns like Kwekwe.

The pollution problem faced by the city of Kwekwe would never be solved by the change of the water authority. Kwekwe was one city that sat in its catchment area. This problem could not be solved by the provision of an alternative water source. There was therefore the need for ZINWA to prioritize the construction of the Sanyati Dam for Kwekwe, the Kunzvi Dam for Harare, the Gwai/Shangani Dam for Bulawayo and the Tokwe/Mkosi Dam for Masvingo and other dams for other deserving cities and towns, in order to solve the problem of the household fresh water supply (ZINWA, 2000). There were other dams that had been constructed but the water was not utilized because there were no connection pipes and pumps to distribute the water. It is also noted that the takeover of assets by ZINWA, at no cost, was going to have repercussions on the operations of local authorities because these assets were used for the provision of other services besides the running of domestic clean water and sanitation utilities.

Contrary to the Minister of Water and Natural Resources' assertion that Local Authorities were mere custodians of assets and had no right to complain about ZINWA's takeover of assets at no cost, it is felt that Local Authorities represent the residents' interests and should have been consulted on the issue. The submission by the Combined Kwekwe Residents Association highlighted that residents were not consulted on the issue and were therefore against the transfer of custodianship from Local Authorities to ZINWA. There were also no signed documents that showed that residents had given their consent to ZINWA to take over the clean household water service

delivery system from Local Authorities. All these debates attempt to confirm the capacity of ZINWA to take over the entirety of household pure water services in the country's urban areas, focusing on Kwekwe Municipality as a case study. The task of providing domestic fresh water services to urban areas is now under the control of the municipalities and ZINWA is back to its previous responsibility of supplying raw bulk water to municipalities.

All these debates are silent about the provision of the domestic clean water service delivery system to low income consumers as their human right which is the main thrust of this study. It is now perceived as important to turn back and observe the household fresh water service delivery system during the colonial era in Zimbabwe. This historical overview is salient in this debate because it unveils the real picture of previous events. Kujinga and Jonker (2006) state that until 1998, the legislation for a domestic water service delivery system in Zimbabwe had not changed since the colonial era. It was still skewed in favour of the rich white community who constituted 1% of the population. The colonial economic policy was so entrenched in white racial superiority to the extent that it aimed at creating "Socialism-for-the-Whites" (Herbst, 1990: 22).

In view of this background and the new black government's socio-economic priorities, the adoption of state-led development strategies such as a clean household water service delivery system through decentralization policy implementation was the only realistic and feasible route through which the colonial legacy could be redressed in a neo-liberal country. Anything short of this could have amounted to the state reneging on its liberation promises. The poor were not recognized as suitable to access domestic

clean water, as their human right, during the colonial period. Thus, it seems that this culture of denying the poor access to fresh water for household use was adopted by the current water authorities in Zimbabwe.

The legal denial of water, for domestic use, to low income consumers which was inherited by the Zimbabwean government from the colonial regime, led to miserable living conditions and the outbreak of waterborne diseases in high density suburbs where the majority of the urban population resides (Kambudzi, 1997). Since certain sections of the population were denied access to treated water, there were no formal clean household water service delivery system structures among the poor who resided in disadvantaged areas. In order to redress the colonial injustices in access, allocation and the service delivery system of domestic water resources, a new Water Act (Chapter 20: 24) was passed by the parliament of Zimbabwe in 1998 and came into effect in 2000. The promulgation of this Act raised high hopes that the new dispensation of a clean household water service delivery system in the country would result in equitable access to water by all, including the poor, and participation in management of the resource by the different groups of stakeholders.

This chapter analyses colonial and post colonial legislation adopted and enacted by the Zimbabwean government for its household fresh water service delivery system. The chapter highlights the extent to which pieces of legislation adopted and enacted at independence and after improved first-rate governance of the resource by ensuring equitable access, use, control and management of uncontaminated water for household use by different stakeholders within the country. The challenges and prospects with

regard to domestic hygienic water service delivery system in Zimbabwe will also be analyzed. The chapter looks at the extent to which the legal frameworks for water decentralization policy implementation in Zimbabwe enhanced or constrained the household water service delivery system.

The domestic water service delivery system through decentralization policy implementation in a neoliberal Zimbabwe, which culminated in the enactment of the Water Act of 1998, was heavily influenced by international organizations and donors who hold strong viewpoints about clean household water service delivery systems (Dube and Swatuk, 2002). Chief donors and international financial institutions, like the IMF or World Bank, are increasingly basing their aid and loans on the condition that reforms ensuring a household water service delivery system are undertaken. The field of domestic water service delivery has been no exception with regard to good services by international financial institutions and other international donors (Shackleton, et al, 2002).

The key characteristics of a domestic treated water service delivery system include participation and equity (IMF, 1987). It is believed that the concept of equity should also be extended to the urban poor so that they, like anyone else in the community, can access fresh water for household use. The colonial legislation for a safe water service delivery system, adopted by the post-colonial government at independence, went against the basic tenets of a good service delivery system. Legislation adopted in 1998 has some elements of a high-quality water service delivery system, but there exists a need to re-think this legislation so as to remove sections which do not promote the first-

rate provision of a domestic water service delivery system to consumers, without forgetting the poor.

Under colonial legislation, broad-based participatory democracy in the sanitary water service delivery system was absent as the majority of the population, black citizens, could not participate in the clean household water service delivery system. The 1998 Water Act addressed this anomaly by broadening stakeholder participation to include anyone with any interest in managing the domestic hygienic water service delivery system (Zimbabwe Water Act, 1998).

In this chapter, equity in the treated water service delivery system entails fairness, social justice, acceptability of people's opinion of a reasonable relationship in an exchange situation, between rights and obligations, benefits and burdens as well as advantages and disadvantages. No one should be denied access to clean household water resources on the basis of poverty, race, ethnicity, gender, origin, political affiliation, HIV/AIDS status, and other factors. Although equality is difficult to achieve, a deliberate effort should be made to achieve a certain degree of equality and social justice in the process of providing a domestic fresh water service delivery system (Boelens and Davila, 1998; Talen, 1998).

A closer reflection of the colonial water legislation, inherited by the government at the attainment of political independence, shows that it promoted the inequitable allocation of hygienic water as only a small section of the population could access clean household water while the poor majority (blacks) were unable to do so. The Water Act of 1998 tries

to address this by introducing this concept of equity (Zimbabwe Water Act, 1998). The truth concerning the voice of low income consumers with regard to the debate surrounding the domestic fresh water service delivery system was unpacked during the course of executing the data collection process of this study. The poor have been viewed as not represented in most sectors for quite a long time. It is assumed that this is the right forum to recognize the poor in urban society.

Legislation for a household fresh water service delivery system in colonial Zimbabwe was first passed in 1927 and then amended in 1976. The 1976 Water Act is the one that was inherited by the post-colonial government and was only replaced in 1998 when a new Zimbabwean Water Act was put in place. The 1976 Water Act, was designed in such a manner that it gave wealthy people more access to clean water for family use in their circle than the disadvantaged of society, who resided in high density suburbs such as Mbizo and Amaveni in Kwekwe.

The majority of poor people were denied access to clean domestic water on the basis that they did not have the capacity to pay their bills. They accessed unclean water which was perceived as equivalent to their inability to afford to pay. However, the same water bills are viewed as exorbitant to an ordinary poor citizen of Zimbabwe, especially from Kwekwe area. This automatically meant that the majority residing in disadvantaged areas were unable to pay the water charges and could not be granted water rights (Magadlela, 1999).

As a result of this, they could not access hygienic water for household use; which is their human right. The water service delivery challenges of Kwekwe municipality are exceptional. Indeed, the “Right to Water” has been recognized as a cause for concern in Zimbabwe, however, significant social injustice remains. It is therefore assumed that, the gap between the poor and the rich continue to increase instead of decreasing.

Stakeholder water institutions under the 1976 Act existed in the form of River Boards (RBs) based on the sub-hydrological zones and Intensive Conservation Areas (Water Act, 1976). The main functions of the River Boards were to supervise the day-to-day management of water and provided technical advice to consumers on water issues and the application of water rights. In terms of representation, River Boards were composed of representatives of the white commercial farming sector, town Council and manufacturing industry (Mtisi and Nicol, 2003).

Only water rights holders could participate in water management under the framework of the River Boards. Thus, participation in River Boards was restricted, primarily, to the rich consumers of water. The River Boards’ charter allowed them to raise levies on water rights holders in their areas of jurisdiction and to monitor the use of water by right holders. River Boards were also involved in local informal arbitration and mediation in situations where conflicts would arise. In the event that local informal arbitration failed, the parties had to resort to the courts because the River Boards had no legal authority to enforce arbitration (Latham, 2002).

The Water Act of 1976 did not recognize the environment as a water user. As a result of this, water from rivers and dams could be abstracted beyond sustainable levels, thereby affecting all other forms of life which depend on water. Against the background of legislation which did not encourage good governance of the water service delivery system, it was only a matter of time before pleas for water reform reached a crescendo in independent neo-liberal Zimbabwe (Manzungu, 2002). The impetus towards domestic water service improvement was accelerated by the drought of 1991/92 which was the worst in the country's history. The drought posed a very serious challenge to the water sector which is the mainstay of human life (WRMS, 2001). There were more water conflicts as a result of the inequitable allocation of water caused by the priority date system. This necessitated the majority of stakeholders in the water sector to call for reforms which would benefit everyone, including the poor.

Donors and international organizations, such as the World Bank and the International Monetary Fund, also had a significant influence on the process of water transformation in Zimbabwe. These called for the government to decentralize the management of the domestic water service delivery system to stakeholders as a cost cutting measure and to improve the administration of water resources (Dube and Swatuk, 2002). Worldwide donors also called on the government to bring in policies and legislation that would regard clean household water as an economic good in line with universal trends of ensuring that those who use the resource pay for it (Global Water Partnership, 1999). This line of thought exposes a gap in the water authority administration because there are genuinely poor people in society who also have the right to access fresh water for

domestic use. On the other hand, the water system wants to recover its costs in order to continue functioning as a system.

Therefore, the application of rights-based and neo-liberal theoretical frameworks will attempt to address these problems. When Zimbabwe embarked on domestic clean water service improvement in the early 1990s, it was implementing the International Monetary Fund and World Bank sponsored Economic Reform Programme. One of the basic tenets of these reforms was the decentralization of certain functions from central government to local communities. It is perceived that the World Bank and the IMF are not the solutions to household fresh water scarcity in Zimbabwe, Kwekwe in particular, but, that they also contribute to this problem through advising the government to implement certain policies at the wrong time and place. The administration of water for domestic use was one area which was singled out for decentralization (Kujinga, 2001).

The household sanitary water reform programme in Zimbabwe can be traced back to 1992 when the Ministry of Water appointed a team of experts to move around the provinces in order to consult with stakeholders over the existing Zimbabwe National Water Act of 1998. Specifically, the experts were tasked to gather information regarding people's views on the strengths and weaknesses of the Water Act at that time. It is assumed that the team was given a maximum of two months to complete their task. Even though the allocated time was relatively short, this consultation process provided a starting point for the water service delivery system that was to be initiated later (Chikozho, 2002).

As a follow up to this, in 1993 a workshop on domestic fresh water resource management in Southern Africa was held at Victoria Falls. The workshop was sponsored by the World Bank, the Commonwealth secretariat, the United Nations Development Programme (UNDP), and the Canadian International Development Agency (CIDA). The workshop was perceived as a watershed moment in the history of household hygienic water policy conceptualization and shifts in Southern Africa, in general, and Zimbabwe in particular. It brought into sharp relief the realization that clean domestic water scarcity was for the whole region and household water management became a top priority. The role played by international financiers and players made it logical that the recommendations emanating from the workshop were aligned to globally adopted principles in one of the items of the agenda (Chikozho, 2002).

After the conference, an international consultant (Halcrow) was engaged to produce guidelines for the formulation of a sanitary water resources management strategy for Zimbabwe (Chikozho, 2002). The report of the consultant was adopted and, in 1995, a Water Resources Management Strategy unit (WRMS) was set up to produce a comprehensive strategy for improving the water sector and clean household water service delivery system in general. The project gained funding from the British and Dutch governments (WRMS, 2001). The main objective of the WRMS was to develop a comprehensive domestic clean water resources policy for Zimbabwe.

This had a steering committee which oversaw policy issues and a technical secretariat whose duty was to devise strategies and direct the transformation process. The steering committee had the task of ensuring stakeholder involvement in the reform process by

holding consultative meetings. The main objectives of the reform programme were outlined as the sustainable, equitable and economically practicable use of Zimbabwe's domestic water resources, taking into account shared waters (Latham, 2002). The reform entailed the drafting of a new Water Act for the country through a stakeholder consultation process, spearheaded by the WRMS unit, and the development of new institutions for managing household hygienic water service delivery systems. As recommended by the international players, one finds principles of decentralization playing a substantive role in the policy framework and institutional structures that emerged. A catchment-based water management structure emerged. From the discussion above, it has been observed that the debate around the scarce water service delivery system is silent on the rights of the urban low income consumer to access fresh water for domestic use.

In 1996, a draft Water Bill was presented to Parliament. The period between 1996 and 1998, when the Water Act was passed, can be termed a trial one where various thoughts and ideas outlined in the Water Bill were experimented with in two pilot projects, namely Mupfure and Mazoe (sub) catchments (Zimbabwe, 1998). A catchment area is defined as the area that contributes hydrologically to a river system that ends in the ocean or a terrestrial lake or inland sea. It is an area that receives or catches the rain that flows into a particular river. This is similar to a watershed, which is an area from which all surface runoff flows through a common point (Hirji, et al, 2002). The Mazoe pilot project was funded by the German Agency for Technical Cooperation while the Mupfure was funded by the Royal Netherlands Government (Latham, 2002; Chikozho, 2002). Sub-catchment Councils were formed in the pilot catchment areas.

The Mupfure pilot catchment later became part of the Sanyati catchment. Kwekwe municipality falls under the Sanyati catchment area. The reform process can be hailed for embarking on pilot projects whose outcomes were later extended to other catchment areas.

A closer look at the objectives of the reforms process shows that the major intentions of the household water reform process were to improve the domestic water service delivery system through ensuring equitable access to clean water, putting in place institutions for water management and ensuring that all water is vested in the state. According to Latham (2002: 29), the objectives of the water reform process include the following:

To repeal the Water Act of 1976 and replace it with another that was more appropriate to contemporary Zimbabwe;

To improve access to fresh water for all Zimbabweans through the application of equitable access;

To ensure that all surface and underground water belong to the state;

Regard water as an economic good and ensure that water tariffs take cognizance of those unable to pay for the full price of water;

The process of bringing about the improved domestic water service delivery system had to involve a major component of participation, that is, stakeholder consultations. Stakeholders from different sectors such as agriculture, industry, forestry, urban authorities and mining, were supposed to contribute to the new Act as well as the introduction of new water user institutions. (Kujinga, 2002; Swatuk, 2002; Manzungu,

2004; Chikozho, 2002). It is perceived that a number of domestic clean water consumers in the country were not adequately informed of the legal framework concerning the household water service delivery system. Kujinga & Jonker (2006) found that the majority of family unit sanitary water consumers did not have any knowledge of the 1998 Water Act and water user institutions through which they were supposed to be represented. Most of the stakeholders still profess ignorance of the domestic unsoiled water reform process, including the Water Act of 1998, and the existence of the Catchment and Sub-catchment Councils (Kujinga and Jonker, 2006).

3.18 Forms of the reform process

The results of the reform process manifested themselves in two major forms:

A new Water Act of 1998 was drafted and passed by Parliament

New institutions were established for the better management of water resources in the country, namely Zimbabwe National Water Authority (ZINWA), Catchment Councils and Sub-catchment Councils (Latham, 2002).

3.19 Provisions of the 1998 Water Act

The Water Act of 1998, as highlighted below, differs significantly from the 1976 Water Act as it tries to broaden access to, use and management of the country's fresh water resources. This is despite the fact that the 1998 Water Act has a number of shortcomings which are highlighted in later sections of this chapter.

3.20 Major provisions of the 1998 Water Act

This section takes a closer look at some of the major provisions of the 1998 Water Act as follows:

All water belongs to the state, including ground water;

The Zimbabwe National Water Authority (ZINWA), a parastatal set up by the ZINWA Act (Chapter 20: 25) of 1998 administers and manages water on a commercial basis in the country and gives technical advice to Catchment and Sub-catchment Councils.

The Ministry of Rural Resources and Water Development was downsized to a small body of professionals entrusted with policymaking and regulatory functions (Latham, 2002: 24).

The provision of household clean water as a basic human right, and an obligation of government, is first and foremost stated in the Bill of Rights of the 1996 Constitution Chapter 2. Other legislation in this regard, including the National Water Act, 1998 (Act 36 of 1998) and the Water Services Act, 1998 (Act 108 of 1998), exist to give effect to the obligations called for in the Bill of Rights of the 1996 Constitution. According to section 27 (1) and 27(2) in the Bill of Rights, Everyone has the right to have access to: health care services, sufficient food and water; and “The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights”.

The Water Services Act, 1998 (Act 108 of 1997) is the first act of Parliament in the post-colonial era that gives effect to the right of access to a domestic water supply and basic sanitation required in terms of the 1996 Constitution. This Act is wide ranging in its

scope, and confirms the National government's role as custodian of the nation's water resources, as well as confirming the key role of municipalities in directly delivering household water services. The Act further provides for national and provincial monitoring, oversight and intervention in municipal water services delivery; and calls upon all spheres of government to work together in the spirit of intergovernmental co-operative governance to ensure clean, safe, and affordable water for all.

In terms of the debate over the public or private provision of basic water supply and sanitation, this Act provides a regulatory framework for the operations of water services institutions and water services intermediaries, and also prescribes the manner in which national norms and standards for tariffs will be set. Consideration is given to the fact that municipalities have an obligation to ensure that consumers of domestic water in their jurisdictions receive efficient, affordable, economical and sustainable access to water (section 11(1)). However, in the case of private providers, this must be balanced against the need of providers to earn a reasonable profit, that is to say, return on capital invested (section 10(3) (f)).

3.21 Water permits

In order to ensure the equitable allocation of water and to abolish the concept of private water, under the 1998 Water Act, all water rights were done away with. All water, that is, surface and underground water is vested in the President of the Republic of Zimbabwe (Zimbabwe Water Act, 1998). A new system based on permits, which are valid for a maximum period of 20 years, are issued by Catchment Councils on the recommendation of Sub-catchment Councils and advice from the Zimbabwe National

Water Authority. People who held water rights at the time at which the Water Act (Chapter 20: 24) of 1998 came into effect, automatically had their water rights changed to provisional water permits for a period of three years. The new system of permits can be hailed as it gives Catchment Councils the right to reallocate water in the event that more people from a particular area apply for water.

The Act clearly specifies that in the event of more than one application for use of the same water, the Catchment Council shall be required to:

> Achieve, as far as possible, an equitable distribution of the available clean water
>
> Satisfy the need for each applicant; and
>
> Achieve the likely economic and social benefits of the proposed use (Zimbabwe Water Act, 1998).

The process that has to be followed, as shown above, tries to ensure that no one is denied access to clean water for domestic or productive purposes. Though, in the section quoted above, the Act tries to ensure equitable allocation of water, this is taken away in other sections of the same Act. The Act actually takes some stakeholders back to the colonial legislation which denied the majority access to clean water for household use. However, it is important to note that raw water for productive use and treated water for domestic use come from the same sources. Therefore, consumers, whether rich or poor, need to be responsible through using the water sparingly because it affects the same water table.

3.22 Water payments

A number of challenges exist to effectively supply affordable, clean and safe water for domestic use to consumers within the Kwekwe municipality. Key among these challenges is the issue of balancing the costs of providing it with the tariff (price) that consumers must pay for receiving it. The concept of cost recovery, although highly contentious, is salient to address the dichotomy between cost and price. Cost recovery, in the context of household water supply, generally refers to the situation in which all of the costs of providing domestic water are absorbed by those who consume it. Thus, the price that consumers pay for water for the family unit is calculated on the basis of a fixed component to cover start up and infrastructural costs, and a variable component to cover actual usage. Service providers have the option of full or partial cost recovery (McDonald and Pape 2002:17).

In many developing countries, however, the real challenge for governments is to broaden access to safe water supply for domestic use, whilst dealing with the reality that poor urban residents cannot afford to pay for the water they receive. This means that the burden of supplying household clean water to the poor and indigent must fall on those who currently receive water or can afford to receive water.

The three most common tariff approaches that aim to take account of equity considerations are (Pauw et al, 2002:283-4):

The life-line tariff – based on the basic human right of every person to safe consumable water.

The two-part tariff – a fixed monthly charge is levied to cover the fixed costs of water provision, and a variable portion of the tariff reflects actual consumption.

The block-rising tariff – the tariff per litre based on the amount of usage as categorised into blocks.

A different tariff is charge for each block, and consumers pay for the amount consumed multiplied by the block tariff for that level of consumption. Almost universally, further challenges to effective and efficient water provision have been identified. According to the World Health Organization (1987) common among these are:

Tariffs which are, in principle, correctly designed fail to generate sufficient cash revenue to cover cash expenditures;

The existence of non-revenue water which is defined as leakage, wastage and un-registered/illegal usage drives up the cost of provision and thus the tariffs charged to consumers;

Non-payment by consumers results in actual revenue representing a less than significant proportion of receivables due;

The economic cost of water increases in most urban areas as a result of distance from main water resources and pollution of future resources.

In the search for remedies to the above challenges, many governments have sought help from the private sector, either through public private partnerships or some other form or permutation of privatisation. Under the Water Act of 1998, any person who uses water for domestic or commercial purposes must pay levies to the Zimbabwe National Water Authority and the Sub-catchment Councils. The legislation is in line with

international neo-liberal thinking which regards clean water as an economic good (Global Water Partnership, 1999). The argument which has been used by neo-liberals in support of regarding domestic fresh water as an economic good is that the sustainability of the household water supply and delivery systems depends on generating enough funds to cover the administration, operation, maintenance and replacement of hygienic water system facilities. Though the funds for this could come entirely from the state budget, and none from direct users, there will be no incentive to conserve household sanitary water and use it rationally (Abu-Zeid, 2001).

Since the domestic dirt-free water reform process was financed by international organizations which hold neo-liberal views, this clause had to be adopted by the government of Zimbabwe, though some household clean water users are unable to pay what could be termed basic fixed water charges (Kujinga, 2002). The levies which have to be paid by household fresh water users include the ZINWA levies and Sub-catchment Councils levies for those who draw household clean water from sources which are not owned by the state.

Those who draw domestic water from state dams are supposed to enter into agreements with ZINWA and these agreements give them rights to use fresh water (Kujinga, 2005). The water levies paid by household clean water users to Zimbabwe National Water Authority go to the Water Fund which is administered by the Minister of Rural Resources and Water Development. This money is supposed to be used to fund water related projects such as the construction of dams and development of irrigation schemes and pay for the operations of Catchment Councils (Manzungu, 2001). It is

perceived that up to now the money has not been used to finance any water development projects.

Machingambi and Manzungu (2002) carried out a study in the Save Catchment area and found that most hygienic water users in Zimbabwe consider domestic sanitary water as a free good. Therefore, some water users are reluctant to pay water levies to the Water Authority and rates to the responsible Sub-catchment Council. Their argument is that household fresh water is a natural resource that comes from God and not from the government. They based their argument on the premise of the rights-based approach. They also argued that even if they pay, none of that money will be reinvested in their schemes which they have been managing themselves for years without government assistance (Kujinga, 2002).

On the other hand, it is also important to note that the process of providing household clean water to consumers demands a lot of money. The neo-liberal conceptual framework alleged that water infrastructure deserves maintenance. The water needs to be purified with chemicals and Water Authority workers are supposed to be paid salaries. All this expenditure is not offered free of charge. Therefore, how can treated clean water for domestic use be offered free of charge to the consumers as an economic good? Further, where can the poor get the money to pay the water tariffs? All these are viewed as challenging questions seeking some appropriate responses through the course of this thesis.

3.23 The environment as a water user

As mentioned earlier, the 1998 Water Act is perceived as recognizing the environment as a legitimate “user” of water which has to compete with other users such as industrial, agricultural, mining and domestic uses. Section 67 of the Act clearly spells out that: “In considering, formulating and implementing any proposal for the use, management or exploitation of water resources, due consideration shall be given to the protection, conservation and sustenance of the environment” (ZINWA, 1998). This is viewed as a radical shift from the 1976 Act which gave holders of water permits unlimited rights to abstract water from a water source such as a river or a dam. This is commendable as this seeks to ensure that water resources are not exploited to unsustainable levels. The only problem is that the legislation does not specify how much water is needed by the environment and how this can be determined.

3.24 Water management institutions

The 1998 Zimbabwe Water Act introduced new institutional structures in the management of water resources in the form of ZINWA, Catchment Councils and Sub-catchment Councils. The following sections discuss these in detail. Zimbabwe National Water Authority (ZINWA) is a statutory corporation charged with the operational aspects of what used to be the work of the Department of Water Development and the Regional Water Authority. This Water Authority is characterized by a variety of functions.

3.25 Functions of the Water Authority

The responsibilities of ZINWA are as highlighted below:

Development and management of the country's water resources on commercial lines whilst the regulatory functions remain the responsibility of DWD.

Providing technical advice to Catchment and Sub-catchment Councils in the development and management of water supply systems.

To advise the Minister on the formulation of national policies and standards on water provision.

Undertake water resources planning, management and development.

Water quality and pollution control and environmental protection; hydrology and hydro-ecology.

Dam safety, borehole drilling and water pricing (Zimbabwe, 1998).

It is believed that parastatals in Zimbabwe have a history of under-performing and ZINWA, since its formation, has not been far from that. The organization took over the provision of a bulk water supply in cities such as Harare, Chitungwiza and Kwekwe but consumers still face water shortages as was the case when the Harare City Council was in charge of the water sector. In November 2006, the Minister of Water Resources and Infrastructural Development actually gave the ZINWA board an ultimatum to sort out the perennial water problems in urban areas (The Herald, 26 October 2006). This shows the extent to which the organization was perceived as underperforming. Nevertheless, it is also crucial to remember that ZINWA was operating during a difficult economic period as indicated by the unrealistic high inflation rate of the Zimbabwean dollar.

Sources of ZINWA funds include national fiscus, levies, fees and charges from services rendered, such as the sale of raw water, waste disposal, drilling of boreholes and consultancy services (Zimbabwe, 1998). The Act does not recognize the role of the private sector in water development. In a country where the government does not have adequate financial resources to undertake all water related development projects, such as dam construction, it would have been prudent for the government to put in place incentives for the private sector to participate. The suspension of work at Tokwe-Mukosi dam is a case in point of the possible consequences of sidelining the private sector (Manzungu, 2001).

This obsession with control on the part of the state was also demonstrated by the fact that, by law, no trading of water is allowed and that investment in the water sector is tied to the direct utilization of water. According to section 44 of the Water Act, only the Minister, ZINWA and local authorities have the authority to sell water (Zimbabwe Water Act, 1998). Any other person or entity has to get special authority. This is contrary to the principle of treating clean water as an economic good. In such circumstances private funding in the water sector is not easily attracted under “build operate and transfer model” projects (Manzungu, 2001).

3.26 Catchment and Sub-catchment Councils

For operational purposes, the country was divided into seven catchment areas following the major rivers of the country. The seven catchment areas are Gwayi, Manyame, Mazoe, Mzingwane, Runde, Sanyati and Save. Each catchment area is under the management of a Catchment Council. The seven catchment areas were further divided

into sub-catchment areas supervised by Sub-catchment Councils. There are a total of 49 sub-catchment councils in the country, which means that on average each catchment council has 7 sub-catchment councils (Kujinga and Manzungu, 2004).

The catchment and sub-catchment areas are based on hydrological and sub-hydrological zones respectively. As a result of this, they span political and administrative boundaries. The delivery of sanitary water services based on hydrological zones is commendable as it allows for integrated planning for a particular catchment area. The only problem might be that some parts of catchment span over several administrative and political boundaries making coordination and planning difficult. It is good to note that the drafting of the Act took into consideration the notion that hygienic water defies political and administrative boundaries and that its delivery system should bring stakeholders from these different areas together.

The setting of other six Catchment Councils and Sub-catchment Councils, except for Mazoe Catchment Council and its Sub-catchment Councils, was done hurriedly in 1999. Stakeholders, especially those who did not have any prior knowledge and experience in the fresh water service delivery system were not given any opportunity to understand the roles and functions of these institutions (Kujinga, 2005). Moreover, it is perceived that the majority of the stakeholders had not heard about the new Water Act let alone Catchment and Sub-catchment Councils. Catchment and Sub-catchment Councils (except the Mazoe) were put in place within a period of six months.

The working groups in each province, chaired by Provincial Administrators, identified sectors which could be represented on Catchment and Sub-catchment Councils and then invited key people from these organizations for meetings where Sub-catchment Councils were formed and representatives elected. Chairpersons and vice-chairpersons of each Sub-catchment Council automatically became members of the Catchment Council. The representatives from different sectors were given time to consult their constituencies (Kujinga, 2002).

The establishing of stakeholder institutions can be seen as having the potential to enhance the participation of all stakeholders in the governance of water resources in Zimbabwe. The only cause for concern is the powers accorded to the Minister responsible for water resources under the Act which have the potential of constraining stakeholder participation, in general, and a good water service delivery system in particular. According to the Water Act, the Minister has wide ranging powers which can negatively affect how stakeholder institutions function and how they distribute water resources.

The Water Act does not specify the circumstances under which the Minister can do any of the above. Each Catchment and Sub-catchment Council is supposed to have a maximum of 15 stakeholder representatives drawn from each Sub-catchment Council in the particular Catchment Council area. A Sub-catchment Council is represented by two or three representatives on the Catchment Council. The new legislation for water management sidelined stakeholders from other sectors from being represented on Catchment and Sub-catchment Councils. This is despite the fact that these

stakeholders have played a critical role in the management of domestic water and other resources. These institutions include traditional leaders, ward and village development committees and irrigation management committees. These institutions currently play an important role in CAMPFIRE project areas (Kujinga, 2006). Community management of natural resources, such as water for household use, has a good chance of being successful as long as the local communities are actively involved in the planning process and decision-making structures such as those mentioned above. It would have been appropriate to include and strengthen existing institutions rather than forming new ones without creating links with existing ones (Manzungu, 2001).

Each Catchment Council is supposed to prepare an outline plan for its river systems; determine applications and grant permits for water use; regulate and supervise the use of water; supervise the performance of Sub-catchment Councils and resolve conflicts amongst water users (Zimbabwe, 2000; ZINWA, 2001). The Catchment Manager, who is an employee of ZINWA, runs the day-to-day management and administration of the affairs of a particular Catchment Council. In performing his/her duties, the Catchment Manager acts on the advice of the Catchment Councils but is supervised by ZINWA. In some instances the Catchment Manager has powers to act alone without the approval of The Catchment Council as he/she could grant permits for the use of water, extend the duration of a temporary permit and cancel existing permits (Zimbabwe Water Act, 1998).

The powers conferred on the Catchment Manager go against the basic doctrine of participatory democracy as his/her actions, in some cases, would not promote the

involvement of stakeholders. The Act tries to introduce democracy in one area by broadening stakeholder participation through the introduction of Catchment and Sub-catchment Councils, but takes it away in another area by allowing the Catchment Manager to act on his own on certain issues regarding water management and development. This shows that there are contradictions within the Act as conferring too many powers on one individual does not augur well with the ideals of good governance. The Water Act identifies Sub-catchment Councils as the lowest water user organizations.

3.27 Functions of a Sub-catchment Council

The functions of a Sub-catchment Council are to:

Regulate and supervise the exercise of permits including ground water use;

Monitor water flows and use in a catchment council in accordance with the respective allocations;

Collect water levies (Zimbabwe Water Act, 2000; ZINWA, 2001).

Most of the Sub-catchment Councils have been regarded as too full-size for any practical programmes. Some of the Sub-catchment Councils cover long distances (Manzungu, 2001). Stakeholder representatives from a number of sub-catchment areas said that they find it difficult to address people they represent mainly because of the distances which they have to travel and due to a lack of transport to travel to most of the areas within their jurisdiction. Though stakeholder institutions were set up in Zimbabwe, literature documented so far has shown that, stakeholder participation in Zimbabwe's

water sector is more of a philosophy than an operational concept. This is mainly because no attention was paid to how stakeholder participation could be designed and practically implemented (Manzungu, 2002).

From a legal point of view, stakeholder institutions have limited decision-making powers. For example, they play no part in assigning names to the Catchment Councils or setting levels of water levies to be paid by consumers of clean water (Manzungu, 2002). Ordinary stakeholders, especially those from the disadvantaged communities such as communal areas, play no part in electing representatives and the representatives do not usually provide any feedback to their constituencies (Kujinga, 2002).

It is perceived that the new Water Act and the ZINWA Act, passed in 1998, were intended to redress the colonial injustices in access, allocation and delivery of unsoiled water resources for domestic use. The passing of these Acts raised hopes of the equitable right to access clean water for household use as well as participation in the delivery of sanitary water resources to the different groups of stakeholders. Whether or not the Acts have really promoted the equitable allocation of water and democratic governance in the management of water resources is still questionable.

This is due to the challenges created by the need to reconcile the adoption of the principle of clean domestic water as an economic good. This is in line with a neo-liberal perspective which sees treated water as a commodity which has a price attached to it. The other challenge is that, to date, many of those who are supposed to benefit from

the structures created for stakeholders' participation (such as catchment and sub-catchment councils) are still unfamiliar with them. In this thesis, it is also important to highlight the effects of the Economic Structural Adjustment Programme (ESAP) in relation to the household water service delivery system.

3.28 The impact of ESAP on the household water service delivery system

The study concurs that Zimbabwe made commendable development strides in the first decade of independence but that the introduction of ESAP in the 1990s marked the beginning of what has been described as the reversal of the gains achieved in the preceding decade. The fundamental question therefore is why the Zimbabwean state adopted ESAP at the time it did and why it is related to the current clean water service delivery system? What accounted for the paradigm shift because the decision to change a development strategy is fundamental and can only be taken when circumstances have essentially changed to make the reigning policy paradigm unviable.

Such a question is unavoidable given that paradigmatic shifts in policy entail a fundamental structural change in development strategy which threatens so many entrenched interests in society such that most governments will not initiate it without an overwhelming number of factors pushing it forward (Jenkins, 1997: 586). Indeed, there were many push factors that accounted for this radical policy shift by the government. The whole of the 1980s decade was marked by a distinct and strong rightward movement in ideology that culminated in the "triumph" of global capitalism with the collapse of empirical socialism in the former Soviet Union and Eastern Europe.

Closely linked to these external variables, was the role of International Financial Institutions (IFIs) among which are institutions such as the World Bank. These external forces operated in liaison with the local pressure groups that viewed clean domestic water service delivery system through decentralization policy implementation grounded on neo-liberalism as a key economic and fiscal recovery strategy for an economy whose budget deficit was becoming increasingly unsustainable. The extra push towards this policy also came from what Jenkins (1997) called “significant developments just before” the adoption of ESAP. In fact, it is believed that ESAP was introduced by the then Finance Minister Bernard Chidzero and a very small group of technocrats. It also saw the entry of the World Bank as a key player in the country’s economic policy making, invariably on the side of economic interest groups. Indeed, Bond and Manyanga (2002) claim that the key documents were prepared by the World Bank in 1987 and then revised so that a majority of the cabinet concurred.

The technocrats in Cabinet and the state bureaucracy, the powerful economic lobby groups, and the World Bank together constituted a powerful pro-adjustment coalition. Within the political leadership and government, certain coalitions were calling for the opening up of the economy to liberalization. In 1987, the Reserve Bank of Zimbabwe faced a severe foreign currency squeeze and decided to substantially reduce foreign currency remittances by halving them from 50% to 25 % (Zimbabwe, 1998). While foreign currency allocations to the industrial and commercial sectors were reduced to their lowest levels since the Unilateral Declaration of Independence (UDI), leading business interests that had prospered under state protection during both UDI and the

post-independence era began to demand the opening up of the economy (Nhema, 2002: 127).

Another contributory factor in the adoption of ESAP was that the economy of a neo-liberal Zimbabwe, though not in crisis, was certainly under stress. The socialist-oriented development approach was not delivering jobs and the need for new policy that would presumably ease the growth in unemployment was a very persuasive argument used by the Cabinet technocrats to persuade their colleagues to support ESAP. In addition, the social welfare policies of the government were draining the fiscus in an unsustainable way. For instance, Jenkins (1997) noted that government spending on subsidies has been larger than the wage bill for most years since the mid-1980s. She elaborates that the financing of budget deficits, which averaged 10 percent of GDP during the 1980s, contributed to macro-economic difficulties during the decade. Financing the equivalent of 10 percent of GDP each year not only has damaging effects on investment and consumption, but the debt servicing problem increases cumulatively. This was an important factor in pushing the Government towards adopting the ESAP in 1990 (Jenkins, 1997: 593).

It is perceived that the adoption of ESAP did not accommodate the poor since the economy became unstable at the expense of the poor. Under these difficult economic conditions, it was observed that the poor could hardly afford to pay the water charges in a neo-liberal country. Also contributing to this was the serious debt-servicing problem by the end of the 1980s, which was occasioned by the Government's large borrowings at commercial rates on foreign markets. It is assumed that the external debt service ratio

in the mid- 1980s was in the 34-40 percent range though by 1990 this had in fact dropped to around 23 %. By 1990, Zimbabwe's foreign debt was 45% of the Gross Domestic Product (GDP). Ironically, this rose to 75 % of GDP four years later under ESAP before falling to about 67% in 1995 (Jenkins, 1997).

Another critical variable in the decision to adopt ESAP was an external one, especially the influence of the international financing institutions (IFIs) and among these, the World Bank. However, these IFIs did not force Zimbabwe to adopt ESAP. The neo-liberal country enjoyed considerable policy autonomy and thus the IFIs were influential rather than instrumental with regard to the decision taken to adopt a structural adjustment programme at the end of 1990 (Jenkins, 1997: 598).

It was a different case though after ESAP was adopted and was being implemented. During the ESAP period the autonomy of the Zimbabwe State was severely tested. External forces operated in liaison with local corporate pressure groups such as the Confederation of Zimbabwe Industries (CZI), Employers Confederation of Zimbabwe (EMCOZ), Commercial Farmers Union (CFU), Zimbabwe National Chamber of Commerce (ZNCC), and financial intermediaries such as bankers' associations. These local groups viewed domestic clean water service delivery system through decentralization policy implementation as an opportunity to expand private sector participation. They also viewed this tactic as a key economic and fiscal recovery line of attack for the economy whose budget deficit was pegged at 10 percent of GDP. There was also a growing realization that while it had been possible to underwrite state sector

inefficiencies with huge subsidies in the early 1980s, by the 1990s, the fiscal capacity of the treasury was severely constrained by a host of endogenous and exogenous factors.

It is in this context that an accord was reached on a policy framework paper, the Economic Structural Adjustment Programme (ESAP) and by July 1990, implementation had started in earnest. On the domestic front, according to Jenkins, the white factor was crucial and this was facilitated by the Government's policy of reconciliation. The adoption of ESAP marked the first and major paradigm shift in post-independence neoliberal Zimbabwe.

Even those in the sub-government of Government appear not to have been ready and readied for the policy U-turn. What fruits did ESAP bear for the country? With a few exceptions, the verdict on ESAP is perceived as a devastating failure in all sectors including the Department of Water. The consensus on ESAP only breaks down when it comes to apportioning culpability with some saying the Government did not resolutely implement the letter and spirit of ESAP (i.e. did not take the medicine as prescribed) while others argue that the medicine was an incorrect prescription in the first instance and therefore that the 'treatment' was destined to miss the target disease.

Bond and Manyanya (2002; 320) are unequivocal about their verdict on ESAP that, in reality, ESAP failed miserably. GDP growth only reached 5% during one year (1994), and averaged just 1.2 % from 1991-1995. Sachikonye agrees with Bond and Manyanya by pointing out that the removal of subsidies on basic commodities and social services such as household water, health and education created conditions of crisis (1997: 122).

It is believed that one of the effects of ESAP was the erosion of domestic water service delivery standards due to a squeeze on incomes. Incomes simply did not keep pace with the deregulated prices of goods and services.

The impact of ESAP on the state in a neoliberal Zimbabwe was devastating, to say the least. The state, which during the first decade of independence had been the central mechanism of allocating and distributing basic hygienic water services, abrogated its sovereign obligations to market forces. The state shifted from a protective welfare state to a market-guided minimalist state, in essence distancing itself from its responsibilities over its national citizens. Bond and Manyanya (2002: 60) compare the first 'welfare' decade with the ESAP half-decade with some measure of nostalgia for the first decade:
Average annual earnings (after inflation) rose a half-percent each year from 1980-1990, but fell by more than 10% annually from 1991-1995. Between 1980 and 1990, the Zimbabwean dollar lost 70% of its value against the US Dollar; between 1991 and 1995 (half as long a period), it lost 67%. Inflation averaged 13.4 % from 1980-1990, and 27.6% from 1991-1995.

With the onset of the neo-liberal guided ESAP in the 1990s, the state also assumed an authoritarian posture. Neo-liberal policies, by virtue of their social costs, demand an authoritarian state that has a capacity to ignore or suppress dissent and implement policies that impose short-term costs on powerful strata such as vocal urban workers and civil servants. This implies that neo-liberal policies are inherently antithetical to democracy but promote sustainability of the water authority institutions.

The economic policy framework within which ESAP was implemented in Zimbabwe hardly meets the requisite conditions deemed ideal for effective implementation of household clean water service delivery through decentralization policy implementation. The political leadership in Zimbabwe was not morally obliged to create the so-called enabling framework because, except for the few technocratic cadres, the political leadership did not identify with the values that underpin water decentralization policy implementation. This, coupled with general inconsistency in overall economic policy formulation and implementation, created a framework that could hardly sustain effective implementation of domestic water service delivery policies in Zimbabwe.

3.29 Implementation of the Zimbabwe Programme of Economic and Social Transformation

After the end of the official ESAP in 1995, the Government crafted its “home-grown” economic programme that it christened ZIMPREST (Zimbabwe Programme of Economic and Social Transformation). This programme was belatedly announced in 1998 (but covered the 1996-2000 period), which, according to Bond and Manyanya (2002: 40) maintained many of ESAP’s arguments, but also recognized the need for policy reversals in several areas.

These included introductions of selective price controls, increased tariffs, import licensing on some goods, procrastination in meeting regional liberalization targets, pegging of the exchange rate, suspension of foreign currency accounts, introduction of new export incentives and application of new levies on household water. ZIMPREST sought to mitigate the social costs of ESAP by pursuing economic empowerment and

poverty alleviation through the generation of employment and encouraging entrepreneurial initiatives.

Despite the optimism that is exuded from the policy statement, its economic and fiscal targets were hardly realized. For instance, the GDP averaged 2.5 percent against the envisaged 6 percent by 2000 whilst the budget deficit increased to over 20% by 2000 (Zimbabwe, 1998). Growth in jobs fell below the 42 000 minimum planned in ZIMPREST. This is not surprising because ZIMPREST was still born. It was launched in 1998, two years after its official adoption. Between the official end of ESAP and the launch of ZIMPREST occurred what many believe is the beginning of Zimbabwe's economic plunge.

This refers to the financial meltdown of 14 November 1997, now known as "Black Friday", when the Zimbabwean currency fell from around Z$10 to below Z$30 to the US dollar over four hours of trading time (Kujinga, 2001). Its implementation was therefore behind schedule right from the onset. It was also launched at a time of macroeconomic and fiscal hardships. Under the prevailing conditions, the programme was not adequately resourced. In addition to this, ZIMPREST was too multi-focused. It sought to achieve issues that were too diverse, namely: employment creation, institutional reforms, land reform, decentralization and poverty reduction. While its targets were clearly spelt out, ZIMPREST did not have clear-cut plans to realize its intents.

Overall, the economy experienced severe declines in the value of the local currency, shortages of local bank notes, fuel and basic commodities such as clean water and

food. Financial and banking institutions were also hard hit by a spate of unethical business practices which saw banks such as Barbican Bank, Time Bank, Royal Bank, ENG Capital and Inter-Market Building Society either closed or placed under curatorship (Mandaza, 1996). In order to regulate and arrest economic decline, the Government, through the Reserve Bank of Zimbabwe, adopted a New Monetary Policy on 18 December 2003 (Zimbabwe, 1998).

The improved position of 2004 derives from the implementation of the monetary policy since its adoption. As a result of the monetary policy thrust, inflation declined from 623% in January 2004 to 209% by October 2004 (Roux and Eberhard, 1995). It is believed that the inflation target of 200% by December 2004 was achieved. However, inflation has since worsened such that by September 2009, it had soared to an uncharted territory of over 1200 percent, the highest in the world.

It is perceived that from ZIMPREST to the Macro-Economic Policy Framework (2005-2006), economic programmes were either implemented piecemeal or abandoned halfway or still remain paper reforms. In the last decade, Zimbabwe has been viewed as a graveyard of plentiful economic development programmes. According to Kuttner (1997), there have been vision 2020, ZIMPREST, Millennium Economic Recovery Programme (MERP), National Economic Recovery Programme (NERP), the 10-Point Plan, Macro-Economic Policy Framework (2005-2006) and the latest fad: National Economic Development Priority Programme (NEDPP).

The above legal framework persuaded the state to employ parastatal organizations, such as water authorities, as a way of finding possible solutions to the problem of a domestic clean water service delivery system in Zimbabwe. This water authority was created to ensure first-rate delivery of household water services to consumers despite the difficult economic situation fueled by the rate of inflation. To this end, it is believed that the state controlled the prices of domestic sanitary water services provided by the water authorities. In some cases, the parastatals were established as a response to the inability of the private sector to undertake certain large investments that were essential to the economy. Within a decade, the parastatal sector in the country had expanded from 20 in 1980 to over 40 by 1990 with the majority being monopoly companies in which government had 100% or majority equity shares (Grindle, 1991).

Government expansionary incomes policies of the first decade of independence also promoted security of employment in addition to raising the living standards of people, in particular, those who are paid the lowest. It also narrowed income differentials and reduced inflationary pressures, especially after 1982 (GoZ, 1996: 90).

This was done through the promulgation of the National Minimum Wage Act of 1980 and the Employment Act of 1980. The National minimum wage policy was also meant to stem from wildcat strikes between March 1980 and June 1981 that were viewed as an embarrassment to a government professed to be socialist (Sachikonye, 1986:268-72). This illustrates that the household water service delivery system, under local water authorities, was executed in the midst of some difficult economic conditions.

The chapter also discusses the impact of a clean domestic water service delivery system through decentralization policy implementation on water prices as the link between prices and water decentralization is not clear and water pricing is itself the subject of extensive literature. According to Menard and Clarke (2000), domestic treated water prices do need to be mentioned in the context of Guinea where prices rose to unaffordable levels as a result of the water decentralization policy implementation and this has had a significant impact on other outcomes. In Guinea, prices before water decentralization policy implementation were very low at $0.12 a cubic meter and they were expected to increase to $0.76 before falling to $0.68 (Kerf, 2000). However, prices rose by more than this figure when they reached $0.83 per cubic meter in 1996 (Ibid).

As a result, there was a steep fall in collections and a rise in inactive connections. High prices made it difficult for even wealthy people to pay and were higher than the average prices in Africa and Latin America (Tremolet and Neale, 2002). It is not entirely clear why household sanitary water prices rose so much but there appears to be a number of contributory causes. Costs were high due to low labour productivity, a large presence of expatriate staff and considerable bad debt. The pressure from the regulator to control these costs was weak since the government did not renegotiate a reduction of the lease contractor rate or revise the cost indexation formula (Brook and Locussol, 2001).

The huge domestic hygienic water price increase seems to undermine the bidding process where two bids were submitted and the Saur consortium won by putting forward a bid tariff which was 30 percent below consultant estimates and 15 percent below the other bid (Ibid). These experiences were perceived as contagious such that

their influence was diffused as far as Zimbabwe. Therefore, the scarcity of household clean water service delivery system in Zimbabwe's Kwekwe Municipality can be improved. This can be achieved through employing a rethinking strategy under decentralization policy implementation. The strategy is required to accommodate the poor through employing the rights-based approach as they are perceived to be underprivileged most of the time.

However, from a neo-liberal line of thought, domestic clean water needs to be priced for the responsible authorities to offer a quality service delivery system and recover its costs. Further, the poor also need to access clean water for domestic use but can they afford to pay the tariffs since these are too high for them? It is perceived that the government of Zimbabwe needs to offer some money, as a subsidy, from the tax payer directed to the poor who can then also pay their water bills, in cash, direct to the municipalities.

However, some of the reasons for rethinking the household fresh water service delivery system through decentralization policy implementation included the following: water and health finance, increased efficiency, redistribution of political power, improved quality of water and sanitation, increased innovation (Bartoli, 2000). The idea was that rethinking the clean domestic water service delivery system through decentralization policy implementation will generate revenues for the municipalities by taking advantage of local sources of taxation, as well as reduce the operating cost. The goal was to shift some of the financial burden for household fresh water to the regional or local government, community organizations, and local autonomy. This rationale is particularly

appealing for developing countries, since they often find themselves faced with severe financial constraints (Fiske, 1996).

However, the transition from a centralized water service delivery system to decentralization policy implementation was informed by the observation that centralization tended to impinge on the development of the sector as a whole because it focused on a few areas that were deemed high priority. This was primarily due to the high unit costs of providing basic clean water through a centralized system; one that government did not have the capacity to administer. Further, the domestic water service delivery system, through decentralization policy implementation, is expected to lead to more efficiency by eliminating many bureaucratic procedures and motivating officials to be more productive (Bayliss, 2001). In a centralized system all decisions are believed to be made outside of the area where they matter most, often far away from the actual issue and affected residents, especially the underprivileged.

To complement the water sector efficiency argument, the effectiveness rationale argues that, centralized planning policies have led to a domestic water service delivery system that is very expensive, thus resulting in a decrease in the quality of the household fresh water service delivery system as countries find themselves faced with financial constraints. Therefore, Zimbabwe borrowed the water decentralization policy from the global line of thought after observing the problems associated with the centralization policy adopted from the Rhodesian Municipality System. The rationale holds that making municipalities more responsive to the local community and eliminating the need

for centralized decision making can improve the service delivery system, administration and accountability (Winkler, 1993).

The post-independence Zimbabwean government has adopted and implemented policies and projects shaped by different ideological frameworks at different epochs, which have been defined as contradictory in nature. These policy shifts have followed a trend towards socialism (e.g. free access to clean water, free education, and free access to health care) in the early years of independence and moved towards an extremist position which favours capitalism with the implementation of an economic cost recovery programme, reversing the gains of the quasi-socialist era. It is perceived that the Zimbabwean government, however, upholds certain views, shaped locally and internationally at different historical epochs. This study performs a critical analysis of the clean water service delivery systems and policies characterizing these in post political independence Zimbabwe. The study thus offers a vital contribution to the water decentralization policy discourse, in general, and in Zimbabwe in particular.

According to Johnson, Deshingkar and Start (2005: 937), decentralization is commonly defended on the grounds that it will bring government closer to the people, thereby creating political structures that are more transparent for and accountable to the poor and marginal groups in society. However, a problem that is well recognized in the decentralization literature is that the devolution of power will not necessarily improve the performance and accountability of local government. Accountability is not confined to democratic forms of government (Robertson, 1985: 3).

Indeed, in many cases, decentralization simply empowers local elites to capture a large share of public resources such as the household clean water service delivery system, often at the expense of the poor. Reflecting on these relatively long-standing problems, an important strand of scholarship has argued that central government can play a vital role in counterbalancing the forces that tend to disfavour low income consumers. In this study, an effort is made to inform this scholarship by reflecting on the interface between local government and local people in Zimbabwe's Kwekwe Municipality.

A recurring theme that emerges from a sizeable body of literature on decentralization policy implementation is the relatively weak connection that exists between decentralization and service delivery systems (Blair, 2000; Crook and Manor, 1998; Crook and Sverrisson, 2001; Cross and Kutengule, 2001; James et al, 2001; Johnson, 2001; Manor, 1999; Moore and Putzel, 1999; Rahman, 2001). Explanations for the relatively poor performance of decentralization efforts tend to fall into one of two camps.

One argues that the devolution of fiscal, political and administrative powers has been insufficient, and it is the lack of substantive decentralization that explains the modest impact. Framed this way, decentralization is viewed as being at odds with the interests of central agencies and officials whose control of the state apparatus disfavours poor and marginal and regions. A second line of reasoning suggests that decentralization reforms are largely cosmetic, and that the ultimate distribution of power and resources in Kwekwe Municipality is dependent on the pre-existing pattern of social grouping. Without mechanisms in place to ensure accountability, decentralization will only

empower local elites to capture a larger share of public resources, often at the expense of the poor.

Reflecting on these relatively long-standing problems, an important strand of scholarship in decentralization literature has argued that central governments can foster a culture of accountability between local officials and the urban poor. Judith Tendler's study (1997) of governance and government performance in Brazil represents one of the more widely cited examples of this position. Central to Tendler's analysis was the 'paradoxical' (Harriss, 2001) finding that the effective delivery of sanitary water, health care, drought relief and other forms of government assistance was dependent on external support from 'higher-level' echelons within government and, in certain instances, a central state which constrained and usurped the authority of local government. In contrast to the 'stylized portrayal of decentralization' the central government took power away from local government, even though its actions ultimately contributed to strengthening the capacity of local government (Tendler, 1997: 147).

As Tendler (1997) rightly concludes, insights of this kind do not necessarily demolish the decentralization project. They do, however, put a wrinkle in a popular understanding of decentralization, in which policies aimed at devolving power to local bodies are locked in a zero-sum struggle with central agencies within government. Clearly, central agencies and officials can enhance the power of those systematically excluded from local political processes. However, proponents of decentralization (Manor, 1999; Crook and Manor, 1998; Rondinelli et al, 1989) argue that the scholarship is somewhat ambiguous about the conditions that would foster a balance between the autonomy that

local bodies need to function effectively and the accountability to ensure that such bodies act in the public interest.

3.30 Four pillars of decentralization

According to Vickers and Yarrow (1988), water decentralization policy implementation in Zimbabwe, as in any other sector or country the world over, comprises the four pillars:

Deconcentration

It is the transfer of authority to lower levels within the central government.

Delegation

Delegation is the transfer of government tasks to autonomous organizations, which may receive public funding and are accountable to the central government.

Devolution

This is the creation of autonomous and independent sub-national units of government, which have the authority to raise revenues and expenditure.

Privatization

Privatization is referred to as the transfer of authority to the private sector.

If successfully implemented, each of these forms of decentralization policy will result in a unique system of finance and municipality service delivery systems (Rondinelli, 1984). However, it is hypothetical that the Zimbabwean Municipality System adopted the household water service delivery system through decentralization policy implementation in order to improve the hygienic water service delivery to the local community. When power is decentralized, the transfer of authority over financial, administrative, or pedagogical matters is permanent and cannot be revoked on a whim (Hall: 2002). In

Zimbabwe, the household water service delivery system in the course of the decentralization process has been carried out through local authority structures such as rural district councils, urban councils, religious organizations and other interest groups (UNESCO, 2000). As a way of improving the scarce hygienic water service delivery system through the decentralization policy implementation, the Ministry of Rural Resources and Water Development has devolved authority to local stakeholders (Zimbabwe National Water Authority Act, 2000).

The government's aim was to wean municipalities off dependency due to financial constraints. The World Bank and IMF supported this strategy which was in line with the economic recovery models they championed during this period, in particular ESAP AND ZIMPREST. The 1990s saw a drastic change of policy orientation. The government's interventionist stance of the 1980s gave way to neo-liberal market orientated reforms whose impact was a total reversal of the impressive strides made in the 1980s. While a number of explanations have been given for the introduction of the Economic Structural Adjustment Programme (ESAP) what is undisputable are its effects. Trade liberalization, budget reforms and public expenditure management, financial sector liberalization and labour market deregulation, which were the central facets of the market oriented ESAP, had far reaching impacts on most African states who embraced these economic reforms.

Further, Zimbabwe's economic problems have largely been attributed to the prescriptions of ESAP. While the negative impacts of ESAP were largely a result of its prescriptions, part of the problem with ESAP was, however, the inconsistencies in the

application of its prescriptions. For example the government totally ignored the reduction of its size, but instead created new ministries in spite of its financial incapability to sustain a bloated bureaucracy. It is therefore perceived that the side effects of ESAP contributed to the underperforming of the water authority in a neo-liberal Zimbabwe.

Nevertheless, this has led to the subsidization of government through taxes which further impact on the “real value” of people’s wages. The shrinking of the state in the provision of essential clean water services, decentralization policy implementation, withdrawal of subsidies and the introduction of user fees in essential services such as water, education and health have resulted in the crumbling and deterioration of sectors. Since the year 2000 Zimbabwe has introduced three developmental programmes aimed at “turning around” the economic fortunes of the country, namely the Zimbabwe Millennium Economic Recovery Programme (MERP) of 2001, the National Economic Revival Programme of 2002 and the National Economic Development Priority Programme (NEDPP) of 2006.

The proliferation of these programmes speaks volumes about their success or lack of it. The period after 2000 has witnessed a number of interesting, and some dramatic, developments in Zimbabwe followed by the implementation of various policies including the Water Decentralization policy. The economic crisis experienced by many African countries from the late 1970s up to the present moment has forced most of them to turn to the International Monetary Fund (IMF) and the World Bank for financial assistance (Sunmonu, cited in Onimode, 2004: 63). The Fund and the Bank obliged, but set their

conditions. Principally, Structural Adjustment Programmes (SAPs) that intended to reorient African economic policies to the market economy model were forced upon governments in spite of the structural rigidities of African political economies.

According to Sunmonu (cited in Onimode, 2004: 65), the main features of the orthodox SAPs of the IMF and the World Bank include the withdrawal of government subsidies on social services such as education, clean water, health, housing, electricity and transport. The Bank and the Fund insist on the payment of 'user fees' for these services, putting them out of reach of the poor who constitute the majority of the African population. It is believed that massive devaluation of currencies was a sine qua non of SAPs. In a number of cases, the devaluations are fifty percent and more and on a continuing basis. These devaluations are arbitrary and implemented without any consideration for the purchasing power parity of the currencies.

It is also perceived that the SAPs include the privatization of state owned enterprises (SOEs), irrespective of whether they are profitable or not, and the utilization of the proceeds not for productive purposes but for consumption. The objective of this neo-liberal economic ideology of the Fund and Bank is to make poor African countries sell their 'family silver' so as to pay mounting external debts, thus further aggravating poverty (Gibbon, 1995). It is further assumed that trade liberalization, imposed by orthodox SAPs on weak African economies, has contributed greatly to the de-industrialization of many African countries. There is no country in the developed world that has fully liberalized its economy. What even the strongest economies do not

practice is what the IMF and the World Bank have been imposing on failing economies since early 1980s (Roux and Eberhard, 1995).

Notwithstanding the above, the government is committed to attaining rapid expansion and enhanced quality improvement of the clean water supply, through the involvement of stakeholders in a decentralized system of planning and management of the fresh water system (Mosha and Dachi, 2000:172), albeit with some form of government intervention. Although some studies on the implementation of a water decentralization policy have been done in the past, this study intends to shed light on the strategies to improve the clean household water service delivery system in Zimbabwe. It is hoped that the study will unearth salient issues concerning participation and involvement of communities in assisting the local water authorities in delivering sanitary water services to the consumers. What triggered this study was the zeal to find out the effectiveness of water decentralization policy implementation in order to promote sanitary water service delivery to the community of Kwekwe Municipality in the Midlands Province of Zimbabwe.

Nevertheless, in this study it is important to also consider how fresh water is used by the end user in order to improve the hygienic water service delivery system in the neo-liberal country. The consumers perceive household water as a basic need that should be used wisely. It is assumed that a lot of domestic water is lost due to poor maintenance of the reticulation network in low class neighborhoods. Potable water for household use is now recognized as a scarce and unevenly distributed national resource that belongs to all the people of the country and that the water collected in the

various rainfall catchment areas (river basins and underground cavities, channels and fractures) and accumulated water resources (such as dams and underground water aquifers) should be managed in an integrated way (Fuggle & Rabie, 2005:293).

The key role-player in this environment is the Department of Water Affairs and Forestry (DWAF). Thus, water conservation and demand management (WC/DM) is an alternative to increase water supply in order to meet the growing demand. The concept of supply and demand is found to be a good theoretical framework to apply in WC/DM studies. It is perceived that a potential exists to significantly improve the clean water service delivery system in Kwekwe urban by instituting WC/DM options that emphasize the efficient use of treated water already harvested. It is also perceived that community awareness campaigns could be implemented in Kwekwe with the aim of promoting efficient clean domestic water usage. A Geographical Information Systems (GIS) and Telemetry system can also be installed so as to allow for immediate notification of household water leakage.

Nonetheless, Zimbabwe is a landlocked country in Southern Africa lying wholly within the tropics. Its average annual amount of rainfall is around 700mm which is below the world average of 860mm (Department of Water Affairs and Forestry, 2004). The rate of evaporation is comparatively high and, as a result, Zimbabwe's water resources are scarce and extremely limited, in global terms. The natural availability of water across Zimbabwe and particularly in the Kwekwe Urban District is equally uneven and compounded by a strong seasonality of rainfall. The matters discussed above are

perceived as factors which contribute to the scarcity of clean water for domestic use in a neo-liberal country.

The transfer of water from areas of surplus to areas of deficit is often perceived as impractical or not economically viable. On the global scale, one third of the human population, mostly in the developing world, is now short of water (FAO, 2000). In areas where food is grown by irrigated agriculture, the demand for agriculture will increase pressure on accessible runoff dramatically, thereby constituting a potential for conflicts over the supply of water within countries (Ohlsson, 1998). Water scarcity is thus a potential source of social and political conflict both within and between countries.

The main societal tool used to implement measures of end-use efficiency is an economic incentive that puts a price on pure water (Ohlsson, 1998). The most appropriate option to meet the growing threat of fresh water scarcity is water conservation and demand management initiatives that discourage water wastage and over-use (DWAF, 2004).The Zimbabwe National Water Act of 1998 and the ZINWA Act of 1998 provide the legal basis for a sanitary water service delivery system, the basic principles of which are equity, optional use, responsibility and accountability (DWAF, 2004). Zimbabwe has in the past relied on large infrastructure projects, such as dams, to ensure sustainable water supplies. However, even though these dams play a vital role in harnessing Zimbabwe's water resources, there is a realization that effective water conservation and demand management measures can avoid the need, in some instances, to construct these dams (Rodkin and Weston, 2003).

The population of Kwekwe Municipality is growing exponentially as new houses continue to be built within the municipality. This tends to put a strain on the treated water resources as more clean water users are added to the landscape. The increase in fresh water demand compels the municipal water authorities in Kwekwe to institute a hygienic water service delivery system strategy and therefore make the same volume of household water available to more users. Water authorities have noted that sourcing, cleaning, pumping and reticulating unsoiled water for domestic use is costly and it is important that all clean water users realize that purified water is valuable and precious and that all water that courses from the point of the catchment all the way to the supply in the tap must be conserved and protected (DWAF, 2004).

The National Water Resource Strategy (NWRS) points out that Zimbabwe's clean water resources are, in global terms, scarce and extremely limited (DWAF, 2004). The country is currently categorized as domestic water stressed with an annual fresh water availability of less than 1 700 cubic meters per capita. The International Water Management Institute (IWMI,1996; cited in Otieno and Ochieng, 2004) estimates that by 2025 the country will be among the countries in the world that will experience a physical water scarcity scenario with an annual fresh water availability of less than 1000 cubic meters per capita (the index for water scarcity).

Currently the country is perceived as facing a household sanitary water deficit where the demands for clean household water exceed the availability. Water demand in Zimbabwe has grown at the rate of 4,5% per annum (DWAF, 2004). Within the next two decades, if current consumption patterns continue, the domestic water scarcity problem in

Zimbabwe could become extremely severe (Schreiner, 1999; cited in DWAF, 2004). It is believed that the increase in completion for water consumption is growing high. Consumers also include the poor who are perceived as being denied access to fresh water because they lack money to pay the water tariffs. Chapman, Manders and Scholes (1995) contend that increasing competition for hygienic water in Zimbabwe is changing the management emphasis from supply to controlling demand. Sustained growth in human populations, economic development and the urgent need to supply basic fresh water services to millions of people has led to an increasing demand for household water estimated at 18 billion cubic meters per annum in 1996 and increasing to 30 billion cubic meters per annum in 2030 (Rodkin and Weston, 2003).

Many of the current patterns of clean water use are still characterized by inequality, inefficiency and inadequacy (Mokgo, Pollard, and Butterworth, 2001). It is stated in the National Water Resource Strategy (NWRS) that with the current high degree of resource utilization in the country, the efficiency of domestic fresh water use must be substantially improved. Worldwide studies on major cities indicate that 35-50 % of hygienic water supplied for domestic purposes is unaccounted for (Rosegrant, Cai and Cline, 2002). All these are pointers to a looming household water crisis internationally, nationally, regionally and locally. It has been suggested that the rising demand for clean domestic water and degradation of its quality, represents the most serious threat to the provision of various goods and services required by society (FAO, 2000).

It is alleged that clean household water scarcity, by definition, entails increased competition for fresh water resources with increased economic value. Attempts to overcome domestic sanitary water scarcities are sought through two distinct mechanisms: supply-side regulation or demand-side regulation (Ohlsson, 1998). It is widely accepted that the effective planning of a household water service delivery system becomes more urgent with each passing year. Some would argue that this need is driven by the increasing size and density of human populations at the catchments and on an urban scale. Others point out that exponential growth in economic output and consumption produces ever-higher demands for domestic hygienic water. Global climatic change will require every society to develop strategies capable of dealing with regional shifts in the mean and variance of hydrological variables such as precipitation (Merret, 2005).

However, access to clean water for domestic use is a human economic good. It is the right of every human being including the poor to have clean water for household use. Levite, Sally and Cour (2003) argue that fresh water for domestic use must be guaranteed to meet the basic needs of the low income consumer and household water cannot simply be allocated to meet the increased demand from agriculture, industry and other productive sectors without also satisfying the requirements of aquatic ecosystems and the environmental reserve. Jewitt (2002) argues that ill-considered responses to the rising demand for domestic clean water could sever ecological connections in the hydrological cycle and alter the quantity, quality and timing of fresh water supplies on which terrestrial, aquatic and estuarine ecosystems depend. Fane (2007) also argued that an effective household water service delivery system is designed to promote

accessibility to its consumers. The consumers are also expected to participate in the process of improving the clean domestic water service delivery system in a neoliberal and democratic Zimbabwe.

Marvin and Guy (1997:21) assert that “Water for household use is the lifeblood central to the socioeconomic structures of society”. There exists a voluminous literature proclaiming water for domestic use as an economic good, access to which should not be subject to monetary requirements (Marvin and Guy, 1997; Mehta, 2000; Black 2004; Bakker 2000; 2002; Bond 2002; Bryce 2000; Ruiters 2002: Huby 2002; Swyngedouw 2004; Jarman 1997). They argue at great length for the decommodification of water to enable poor people to have access to adequate amounts of it for basic life and health. Hence, Jarman (1997:188) states that “Water and sanitation are important pre-conditions for good health, and protecting the health of the poor to reduce their vulnerability”. Chambers (1989) has identified a healthy body as one of the most important assets of poor people: a sick adult moves from being an asset to being a heavy liability who needs to be fed, clothed and housed.

Whittington (2002) argues that the results of a study conducted on household demand for improved clean water services in Kathmandu-Nepal, indicate that people’s willingness to pay for improved household sanitary water services is much higher than their current water bills. Lundqvist and Gleick (1997) make a distinction between needs and demands for household water, and stipulate a basic water requirement (BWR) of circa 50 litres per day, the fulfillment of which must be considered a basic human right. Demands above this level are negotiable. Brooks (2002) argues that universal access

and demand management are considered to be the most important issues in the transition to sustainable domestic pure water service delivery. This issue of observing the ethics of democracy through human participation is descending from a continental level.

It is perceived that Africa decided on its democratic option with the adoption of the African Charter for Popular Participation in Development and Transformation (Arusha, 1990) by the African Heads of States and the Government at the Addis Ababa Summit of the Organization of African Unity (OAU) in July 1990. Paragraph 7 of the Charter reads:

We affirm that nations cannot be built without the popular support and full participation of neither people, nor can the economic crisis be resolved and the human and economic conditions improved without the full and effective contribution, creativity and popular enthusiasm of the vast majority of the people. After all, it is to the people that the very benefits of development should and must accrue. We are convinced that neither can Africa's perpetual economic crisis be overcome, nor can a bright future for Africa and its people see the light of the day unless the structures, patterns and political contexts of the process of socio-economic development are appropriately altered (FAO, 200).

Democracy is defined as 'government of the people by the people for the people' (Sunmonu, cited in Onimode, 2004: 68). It is, however, easy for democracy to be hijacked from the people by the elites, as has been the case in many African countries. The elites are recognized as the few rich people in the community. In this case

democracy becomes ‘government of the people by the elite, for the elite, on behalf of the people’. That is why the African Charter gave a new concept to democracy in Africa, encapsulated in: popular participation; employment of the people; accountability; social and economic justice; respect for human and trade union rights and the rule of law (Ibid). These five pillars of African democracy, enunciated by the Charter, will ensure that governance is of the people, for the people, and by the people, without the usurpation of the poor people’s empowerment by the rich, the military or any powerful elite in the society. Therefore, the people deserve to enjoy their rights through accessing clean water for domestic use at an affordable price.

All that needs to be done in Africa, when talking about democracy and good governance, is to put into practice the African Charter. It is the African holy book for democracy in the continent of Africa. But Africans should be on guard, as some of the language in the Charter has been used to hoodwink African subjects. Two to three years after its adoption in 1990, some international institutions and donors began talks about popular participation of the African peoples in the development process. Deliberately, however, they forgot to add any reference to empowerment of the people as contained in the Charter. The five pillars of the Charter are the answers to democracy and a household clean water service delivery system in Africa, or anywhere else in the world for the matter. It is believed that Africa should not throw away diamonds in exchange for silver, because diamonds are forever. The solutions to Africa’s socio-economic problems lie in the hands of the African government and people not forgetting their low income bracket consumers. Therefore, it is essential for this problem to be addressed through the water reform process.

The Water Reform process which was undertaken to redress past imbalances regarding access, use, control and management of the country's water resources produced an Act which, to some extent, tries to provide clean household water to everyone. Thus, it attempts to promote equity principles. Moreover, the 1998 Water Act tries to involve all stakeholders in the management of water resources. The state as a major stakeholder in the management of water is represented by ZINWA which has to manage the country's water resources on domestic lines. Other water users are supposed to participate in water governance through Catchment and Sub-catchment Councils. All this is a departure from the 1976 Water Act which only accommodated a limited number of stakeholders in the management of the country's water resources. It is perceived that prospects for a better domestic water service delivery system in Zimbabwe are high since there is a framework in place which provides a platform for different stakeholders to take an active role in improving the clean household water services.

Though this is the case, there are a number of challenges which the government and other stakeholders have to tackle in order for effective domestic water service delivery system to be achieved. Firstly, there is need to reconsider the Water Act and see if it really promotes equitable allocation of clean water. Equity can be compromised by the fact that clean household water is now considered to be an economic good. This is a neo-liberal perspective which considers all resources as commodities which have a price attached to them. This perspective goes against the traditional view of considering clean domestic water as a free good. Some stakeholders, especially those who are poor, might not be in a position to pay what could be termed basic charges.

The government is faced with the challenge of ensuring that those communities which cannot pay for water also have access to the resource. According to the Zimbabwe Water Act (1998), the municipality cannot exempt anyone from not paying for clean household water service delivery. It is perceived that a number of residents in Kwekwe have had their water supply disconnected by the water authority after they failed to pay the stipulated household water charges (Kujinga and Manzungu, 2004). This means that, if payments for clean household water become a prerequisite, the resource will become accessible only to those who can afford to pay.

However, the study needs to answer the question; how can the water infrastructure and system be maintained if some consumers are not paying for clean household water expenditure? The government needs to strategize a subsidized system through allocating grants to the poor so that they can also pay the clean domestic water charges like everyone else. The government has the capacity to execute this responsibility because it receives a reasonable figure of money from the taxpayers. The legislation for the fresh water service delivery system also needs to ensure that previously disadvantaged people who want to access clean household water gain this without paying much compensation to someone.

The water Act can be commended for broadening stakeholder participation through the introduction of clean household water user institutions which include Catchment and Sub-catchment Councils. These institutions are a platform on which stakeholders from different sectors can meet and discuss how they can govern household purified water resources in their areas. However, these institutions are still not known by the majority

of people who are those in the communal, resettlement and smallholder irrigation schemes. Where they are known to exist, they have been described as being ineffective (Kujinga and Jonker, 2006). Prospects for increased participation are there as long as people have knowledge and information about the functions of clean water user institutions. The government, together with the responsible water authorities and Catchment and Sub-catchment Councils, needs to disseminate and communicate information about the new Water Act to all user communities so that they can appreciate the role that they can play in a clean household water service delivery system in a neo-liberal country.

The post-independence government has to be commended for reforming the water sector and designing a piece of legislation which highlights issues such as equity, stakeholder participation and recognizes the environment as a water user. The reform process may take longer than desired, but the most important thing is that it is finally expected to happen. It is perceived that the country will have a framework for a good fresh water service delivery system even though there are areas which need attention in order to ensure that all the stakeholders have equitable access to clean household water and that they participate meaningfully in the deliverance of the country's water resources. Equitable access to uncontaminated water resources for domestic use would contribute significantly to the reduction of waterborne diseases and the improvement of sanitation among previously disadvantaged communities. Meaningful stakeholder participation will ensure that the concerns of stakeholders from all sectors are taken into consideration, especially when it comes to household clean water allocation.

3.31 Conclusion

This chapter has shown that the government of Zimbabwe adopted colonial legislation for a household water system which did not promote good delivery of Zimbabwe's clean domestic water resources to the consumers, including low income residents. The 1976 Water Act, which the government decided to keep for close to twenty years after political independence, is perceived as not promoting participatory democracy in clean household water distribution and equitable access of water for domestic purposes. Events which unfolded in the 1980s and 1990s, such as drought, presented the government with a challenge to review and embark on a water reform process. The outcome of this process was supposed to produce legislation that would ensure good delivery of clean water to consumers, particularly the poor. The next chapter, which is the research methodology, is the road map to this study.

CHAPTER 4

Research Methodology

4.0 Introduction

This chapter provides a critical description of the research methodology, design, nature of the sample, the data collection and analysis techniques adopted in addressing the research questions of this study. The chapter also attempts to present and justify the appropriateness of the selected methodology for the study. However, at the same time, it acknowledges its methodological strengths and limitations of the methodology. Research methodology deals with how research should be planned and executed (Mouton and Marais, 1990: 15). Research methodology therefore means the planning of the actual structure and what direction the study takes in order to achieve its intended objectives. It is a perceived plan of action and how that plan of action is to be carried out.

This implies that research methodology focuses on the method, tools and techniques employed to assist in achieving the objectives of the study and answering the research questions that the study seeks to address. The term research methodology is used in this study to refer to the philosophical assumptions, values, and theories which inform and underpin the way in which a particular research method is used. The research methodology and design influence the validity of results. The purpose of this chapter is to discuss, in detail, the underlying principles of the data collection techniques adopted for this study. This chapter scrutinizes the methodology, research design, target population, data collection procedures as well as the philosophical underpinnings that

inform the research designs and strategies for data analysis. This chapter concludes by discussing the ethical issues that direct the entire research process.

4.1 Research paradigm

The online business dictionary defines the term paradigm as “an intellectual perception or view accepted by an individual or a society as a clear example, model or pattern of how things work in the world”. A paradigm is thus a scientific framework or worldview with which to look at reality. Through their paradigms, researchers are able to explain reality and make inferences on the basis of reasoned assumptions. Reality means what things are, as individuals or communities observe or perceive it, within the confines of an intellectual discipline (http:www.businessdictionary.com/definition/paradigm.html accessed 10/12/2009) .Using what he calls the key tenets of the term paradigm, Thomas Kuhn cited in Wikipedia, identifies the following:

What is to be observed and scrutinized?

What are the kinds of questions that are supposed to be asked and probed for answers in relation to the subject?

How are these questions to be structured?

How are the results of these scientific investigations to be interpreted?

(http://www.wikipedia.org/wiki/paradigm accessed 20/12/2009)

Thus, a paradigm is premised on implicit assumptions; accepted definitions and habits; values defended as truths and beliefs projected as reality (Green and South, 2006). Researchers are thus able to make meaning and construct knowledge through their research paradigms.

4.1.1 Permission to conduct research

The research was undertaken within the jurisdiction of the Kwekwe Municipality. Written permission to conduct the research was obtained from the Kwekwe Municipality Town Clerk. The Kwekwe Municipality is the water services authority over the entire City of Kwekwe. The letter granting the permission to carry out the study is attached as Appendix 5 at the end of this study.

4.2 Research Design

In this project, the case study research design was used as the operational framework for data gathering. A research design is a specific and concrete procedure that the study applies in data collection and interpretation. These are sets of rules or guides that enable the study to conceptualize and observe the problem under examination (Babbie and Mouton, 2001). The guides help to control variations and provide answers (data) to questions being researched. According to Kerlinger (cited in Matunhu, 2009: 90), research designs outline which observations to make, how to make them and how to analyze these observations regarding the strategy of rethinking the water service delivery system in order to achieve the best practice in Kwekwe urban. Rubin and Rubin (1995: 79) write that a research design is a blueprint and detailed plan of conducting research from inception until its conclusion.

Hall (1996: 17) postulates that the "'test question for any academic discussion which is based on research findings is whether the conclusions are justified by the research design". A research design is a plan or a 'road map' and structure of the envisaged investigation to be conducted by the researcher in order to obtain data for addressing key research questions. Hence, Hall (ibid) justifiably highlights its centrality in any

research effort. Accordingly, this segment of the study describes how and justifies why the research was conducted. This study generally adopted a case study research design.

4.3 The case study

The case study research method is fundamentally grounded in the interpretive research paradigm. Cohen and Manion (1994) noted that the case study researcher studies by observing the characteristics of an individual unit in order to deeply probe and analyze the multifarious phenomena constituting it, with a view to establishing generalizations about the wider population to which it belongs. A case study is a method or methodology whereby a researcher studies one unique ‘case’ or phenomenon in depth with a view to understanding it. It could be a concept, entity, individual, group of students, or a programme or process (McMillan & Schumacher, 1993).

As a method of inquiry, effort is expended on understanding the unique case through analyzing its multifaceted overt and covert characteristics in specific sites. Case study methods involve an in-depth, longitudinal examination of a single instance or event rather than using large samples and rigid protocols to examine variables. Given that the case herein was human in nature, the focus was on understanding the participants’ perceptions, feelings, belief systems, shared social experiences, aspirations and actions. The use of a common second language, English, formed the praxis of the interaction between the interviewer and interviewees.

4.4 Purposes, strengths and justification of the case study design

Many reasons have been given to justify the use of a case study. McMillan & Schumacher (1993) have argued that it allows the researcher to discover the important questions to ask of a topic and consequently develop a concept or model especially where there has been previous research. Hence, there is need for further inquiry.

Case studies are flexible and adaptable to a wide range of contexts (Peery and Grady, 1999). For instance, very little is known about the service delivery of Zimbabwean municipalities, particularly in the area chosen for this study. Case studies, like any of the other designs, can be used to interrogate the usefulness of government policies and practices in any given social context. It is in this context that McMillan and Schumacher (1993) observed that case studies on policy research frequently focus on processes of policy formulation or implementation to explain public policy outcomes.

4.5 Shortcomings of case study research

Flyvbjerg (2006: 1) is of the view that the perceived shortcomings of case study research are, in essence, misconceptions about the type of research. Five misconceptions or perceived shortcomings were identified as responsible for this scenario. These are that:

Theoretical knowledge is more valuable than practical knowledge.

One cannot generalize from a single case; therefore, the single case study cannot contribute to scientific development. The case study is most useful for generating hypotheses, whereas other methods are more suitable for hypotheses' testing and theory building. The case study contains a bias towards verification. It is often difficult to summarize specific case studies.

The description that follows focuses on the methods (sampling and instruments/tools) used in collecting, interpreting and analyzing data. Research designs fall under two broad categories which are structuralist and post-structuralist. Structuralism a movement, fashionable in France in the 1950s and 1960s, that studied the underlying structures inherent in cultural products and employs analytical concepts from psychology, anthropology and other fields to understand and interpret those structures. The structuralist movement fostered critical inquiry into these structures and emphasized logical and scientific results. Thus, it is descriptive and applies theories to solve problems using quantitative measures. This limitation compelled the researcher to rely more heavily on the post-structuralist theory of research.

The post-structuralist perspective may be understood as an explorative critical response to the basic assumptions of structuralism. The design refers to the intellectual developments in continental philosophy and critical theory of twentieth century French philosophy. The design is explorative which means that it is not locked into a rigid or ultimate outcome. It is this flexibility that makes it more preferable in application to social science inquiry.

Exploratory studies are less structured which permits the study to seek new insights in less developed areas, such as domestic water service delivery to the urban poor. Such designs may result in generalizations, or theories, unlike descriptive designs which start off with theories and work only within the framework of theory. Notwithstanding the

above, it may not be possible to carry out a study without a theoretical base. The two theoretical perspectives tend to complement each other.

The post-structuralist design claims that it is impossible to make grand statements (meta-narratives) about the structures of society. Meta-narratives, in this case, are single explanations about the cause of the poor water service delivery system in Kwekwe urban. The design proposes the existence of theoretical and conceptual binary opposites, often arranged in a hierarchy. Such binary pairs could include rational and emotional; development and underdevelopment; or poor and rich.

Exploratory design rejects the notion of the essential quality of the dominant relation in the hierarchy, choosing rather to expose these relations and the dependency of the dominant term on its apparently subservient counterpart. It further denies claims about absolute ‘truths’ or facts about the social world because the underlying is itself culturally conditioned and therefore subject to a myriad of biases and misinterpretations. To understand the household water service delivery and its relationship with the urban poor in the city of Kwekwe, it was necessary to study both the object itself (household water) and the systems of knowledge or theories which are coordinated in order to produce it. In this way, post-structuralism is a study of how knowledge is produced and applied to solve life situations (Greenshields & Bellamy, 1986). Research methodologies are philosophical assumptions, values and theories which inform and underpin the manner in which a particular study is carried out. On a continuum, social science research can either be quantitative or qualitative. The former is rooted in structuralism and the latter in post-structuralism.

Quantitative methodologists (positivists) rely on pre-defined variables from tightly defined populations. The paradigm attempts to fit individual experiences and perspectives into predetermined response categories, allowing no room for research objectives or variables to help define the direction of the research (Patton, 1990: 14). The paradigm is rigid to the extent that it does not consider any unplanned research eventualities which may have a direct impact on the outcome of the study. Positivists are criticized for being too technical, for controlling and predicting relationships within and between variables and for regarding knowledge as absolute. Yet social reality cannot be measured through single 'objective' and 'value-free' scientific and quantitative methods. Thus, a purely quantitative research methodology may not be appropriate for a social inquiry of this nature.

This study combines qualitative and quantitative approaches. However, the qualitative methodology was more dominant because it dealt with social phenomena comprised of values and perceptions that were not easy to quantify. According to Bell (1993), the study should be qualitative in order to examine, grasp and analyze the wide-ranging perceptions and experiences of respondents. The qualitative research approach was chosen because it enables access to an insider's perspective and captures social action in its fullness within its natural context. The study adopted the neo-liberal and rights-based theoretical frameworks. The conceptual frameworks borrowed ideas from the mindset of political modernization whose empirical studies recommend the use of qualitative research methods.

However, the quantitative method was used to convert data into numerical form in order to subject it to statistical analysis. Further, the study considered the quantitative approach because important aspects of the study concern deemed and actual consumption figures, from which levels and trends could be examined, discerned, compared and analyzed. The expenditure for varied water consumption, based on the block tariff structure and other empirical data, required quantitative approaches.

According to Babbie (2007: 113), the use of several research methods to test the same findings is called triangulation. It is advised that researchers always keep this in mind as a valuable research strategy. Babbie (ibid) further argues that, in Social Science research, triangulation is used to employ the complementary diversity thesis which entails adopting one dominant methodology and borrowing from other methodologies, especially at the stages of data collection and analysis, in order to yield the best results. Therefore, the selected research design should bring more than one research method to bear on the topic.

For the above reason, triangulation of the qualitative and the quantitative research approaches was used in this study. However, a distinct bias towards qualitative methodology is evident in the research. According to Leedy (1980) and Bell (1992), no single social science research methodology is mutually exclusive of the others. In this regard, Cresswell in concurrence with Newman & Benz (1998) has this to contribute:

Quantitative and qualitative approaches should not be viewed as polar opposites or dichotomies; instead, they represent different ends on the continuum. A study tends to

be more qualitative than quantitative or vice versa and a mixed research method resides in the middle of this continuum because it incorporates elements of both qualitative and quantitative approaches (Cresswell, 2009: 3).

Therefore, neither a purely qualitative nor a purely quantitative research design would have been appropriate for this study. The research adopted a concurrent transformative research strategy. According to Cresswell (2009: 215), the concurrent transformative research strategy is based on a theory. This study's worldview is that rethinking water service delivery system is the panacea for the best practice in the City of Kwekwe.

This method regards the researcher as the primary instrument in data collection rather than some inanimate mechanism (Eisner, 1991; Lincolin & Guba, 1985; Merriam, 1988). The method compels the use of questionnaires, observations and focus group interviews as the basic data gathering tools which the researcher, can use. The method is sometimes criticized for challenging the status quo and policies, beliefs and values that are commonly in practice.

This study decided to capitalize on the ethnographic nature of the methodology. An ethnographic study is one in which the researcher draws a picture of what a phenomenon looks like from an insider's account, for an observer who wishes to know about it. The method gives the "I was there" element to the portrayal of the phenomenon being studied (Bhengu, 2005: 61). In concurrence with the view above, Marshall and Rossman (1995: 59) have this to contribute:

The presence of the researcher in the lives of participants invited to be part of the study is fundamental to the paradigm, whether that presence is sustained and intensive as in ethnographies, the researcher enters in the lives of the participants.

A mixture of the qualitative and quantitative research designs goes beyond the establishment of the issue at hand (Matunhu, 2008; Miles and Huberman, 1984). The other strength of blending the two methodologies is that they recommend the use of both primary and secondary data as well as the use of familiar instruments to avoid non-comparability of one's work with that of others in the same field. Qualitative research answers very different questions from those addressed by quantitative research, and some criticisms directed against qualitative research have, at times, failed to take this into account (Barbour, 2008: 11). Although qualitative and quantitative research answers very different questions, researchers are often interested in seeking to understand a particular phenomenon, in which case the two approaches can be complementary. Testing the validity of the research instruments was completed with the help of the supervisor, prior to the fieldwork. The use of validated instruments removes bias from the study and thus guarantees dependable and meaningful research outcomes (Nueman, 1997; Bogdan & Bicklen, 1992).

It can therefore be deduced that the method refers to how data is collected. The explanation of the method enhances the trustworthiness and reliability of the findings. This research focused on Kwekwe Municipality as its case study. The case study is an in depth concentration upon a single phenomenon. Further, it is argued that in a case study, the researcher collects extensive data on the individuals, programs, or events on

which the investigation is focused. According to Robson (2002: 178), a case study is a strategy for doing research which involves the empirical investigation of a particular contemporary phenomenon within its real life context using multiple resources of evidence. This approach often uses data collection techniques such as observation, interviews, documents (e.g. newspaper articles), past records (e.g. previous test scores), and audiovisual materials (e.g. photographs, videotapes, audiotapes) (Leedy and Ormrod, 1993: 149).

This study needed to investigate human actions, feelings and perceptions regarding an urban service delivery system in a natural setting; that is, from the perspective of the Kwekwe residents themselves. According to Jan van Rensburg (2001), by entering their lives (Kwekwe residents), researchers gain in depth knowledge of the issue under investigation. The case study method was therefore considered more appropriate because of its idiographic nature. Instead of surveying large groups, the study took a close look at small groups in their natural setting using in-depth case studies; which called for a strong reliance on qualitative research methods.

Case study research excels at bringing the researcher to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. A case study emphasizes detailed conceptual analysis of a limited number of events or conditions and their relationships. This method has been used, across a variety of disciplines, for several years. Social scientists, in particular, have made wide use of this research method to examine contemporary real life situations and provide the basis for the application of ideas and the extension of

methods. However, this study is convinced that qualitative studies are rather too subjective.

Fundamental to every scientific research is a method which can be explained as a prescribed manner of performing a specific task, with adequate consideration of the problems and objectives (Meiring, 2001: 156). Hofstee (2006: 107) writes that the method is vital to the success of the study because a result can only be accepted, rejected, replicated or even understood in the context of how to get there. It is therefore imperative to adopt a clear method so that the findings are believed and accepted. Korzybski (cited in Hofstee, 2006: 107) likened the method to a map in the following manner: “If a map shows a different structure from the territory represented then the map is worse than useless, as it misinforms and leads astray”.

4.6 Data collection process and instruments

There are two basic approaches to the qualitative data collection process, namely: observation and interview. The former is further divided into ethnography and content analysis. Data was collected from the field through fieldwork. Fieldwork, in this instance, refers to the designing, planning and management of the scientific investigation of problems in real life setting (Marshall & Rossman, 1995). Entrance and acceptance into the field was negotiated through a dialogue with the Kwekwe Town Clerk and the department of the Director of Works. Their permission to carry out the study was granted within a week.

The people who were involved in the ‘entrance and acceptance’ process were excluded from the list of respondants so as to avoid bias. To build a good functional rapport with the Kwekwe community, it was important to use the Shona local language which is commonly used in the Kwekwe area. Using the local language helps build community trust (Prozesky & Mouton, 2001) which is essential in social science research of this nature.

The study used two data collection instruments, namely; interviews and questionnaires. Data collected through questionnaires and focus group interviews can be more objectively and scientifically analyzed (Ary et al, 1990). These instruments were developed in view of the four research questions raised in Chapter 1 of this study. These instruments were moderated by the supervisor before they were pilot tested on 15 respondents who were randomly selected from the Kwekwe urban area. Focus group interviews and questionnaires were used to get deep insight and interpretation into the study. The reason for preferring these instruments was reliability. The use of the above instruments was also inexpensive, practical and less time consuming since it was well planned. Respondents from the pilot study did not participate in the main study so as to avoid the influence of maturity between the pilot study and the main study.

The study administered the data collection instruments both in the pilot and main study with the help of four research assistants. Two of the research assistants were students from Kwekwe Polytechnic College. The other two were also students from the Midlands State University. All the research assistants had passed research methods module and were fluent speakers of both Shona and English.

The research assistants were recruited, shortlisted, hired, inducted and supervised by the researcher. The induction was conducted in two sessions of 5 hours each. The induction process involved

role-playing. In addition to the induction sessions, a fieldwork manual was drafted to assist the research assistants in the field. The research assistants were given airtime so that cellular phones could be used to monitor and help with troubleshooting during their fieldwork.

The possibility of a conflict of interests on the part of the research assistants, both in the pilot study and the main study, was given a thoughtful stand. For instance, the research assistants' interests (such as financial gains) could compete with those of the study. According to Cresswell (2009), conflicts of interests can affect the validity and reliability of a study. The conflict of interests was managed through selecting individuals who were not financially desperate in addition to the application of strict rules and regulations. These operational rules and regulations championed the research interests. The interests of the research assistants were subordinated to those of the study. These rules and regulations were embedded in contracts which were signed by both researcher and research assistants.

Part of the selection criteria was also to recruit research assistants who had an interest in the service delivery system. One research assistant was also carrying out a study on the Zimbabwe Electricity Supply Authority service delivery system. The research assistants were trained to authenticate the data from the respondents. During the data collection process it was also necessary to sample out some of the completed

questionnaires and verified with the respondents. The justification for preferring questionnaires and interviews is presented below.

4.7 Pilot testing

This exercise is crucial to the research process. Pilot tests, or studies, can be undertaken for both qualitative and quantitative studies. Teijlingen and Hundley (2001) view a pilot test, or study, as a mini version of a full-scale study encompassing the pretesting of specific research instruments. A pilot study is not only meant to test the efficacy of the research instruments but also evaluates the feasibility of the main study.

These values are aptly encapsulated by Teijlingen and Hundley (2001: 1) who observe that:

It might give advance warning about where the main research project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated.

Other reasons proffered by the authors are, inter alia:

Developing a research question and research plan.

Convincing the stakeholders that the mini study is worthy of support in terms of funding and feasibility.

Training a researcher in as many elements of the research process as possible (Ibid).

The pilot test of this study was conducted in Zimbabwe, in Kwekwe urban, in January 2010 with a sample that was at least 10% of the envisaged research sample. Four residential areas were visited, none of which participated in the actual study. Prior

permission to conduct this study was obtained from the leadership of Kwekwe Municipality.

This study enabled the researcher to gain insight into topics that the respondents were comfortable with. It also aided in the identification of key issues that would form the cornerstone of the interview and questionnaire schedules. The sequencing and timing of questions for the respondents were also addressed. The researcher noted that it was imperative to start the data collection process by asking biological data and anecdotal questions before delving into questions related to the household water service delivery system.

The piloting presented the researcher with an opportunity to test the audibility of the tape and video recordings as well as assessing respondents' attitudes towards the sound devices. The narratives in the sample gave an indication of the reliability of the instruments due to the consistency and low
intersubjectivity of the data. Hence, the trustworthiness of the data was established. Later, the raw data from the focus group interviews was listened to and transcribed, verbatim, by the researcher. Emerging themes were systematically noted and coded. The transcriptions (see Appendix 7) included not only the words but the respondents' moods, enthusiasm, body language and interruptions.

4.8 Questionnaire

An ideal questionnaire possesses the same properties as a good law (Cohen & Manion, 1994: 92). The pilot study assisted in the reduction of ambiguities. The study used a

combination of close-ended and open-ended questions. Closed-ended questions are structured and their advantage is that they promote objectivity. They are easy to use and are generally less time consuming to analyse. Some of the questions were the 'YES' or 'NO' variety which demanded 'TICK' responses. In some instances, closed-ended questions fail to explore the deeper feelings and perceptions of respondents regarding the issue under investigation.

This study then resorted to open-ended questions in exploratory cases as recommended by Babbie & Mouton (2007). Open-ended questions are unstructured and their greatest strength is that they allow the respondents the opportunity to openly express their beliefs, feelings or recommendations on the subject of the household water service delivery system in the City of Kwekwe. This study realized the need to control the responses, which was achieved through the standardization of questions as explained in the discussion of the research design. The number of open-ended questions was kept low in order to facilitate the compliance of the respondents.

According to Babbie & Mouton (2007), the sequence of questions influences the reliability of the responses as well as the respondent's willingness to cooperate with the researcher. Following the same line of thought, Nachmias & Nachmias (1981: 219) said that "The first questions are likely to be given more attention than those at the bottom when fatigue creeps in". The first questions in this study were deliberately made easy and interesting to put the respondent at ease. Open-ended questions were placed after the closed-ended questions to avoid compromising the respondent's initial motivation to

cooperate. Questions were arranged in a funnel sequence. In such a sequence, each successive question was related to the previous one.

Nachmias & Nachmias (1987: 219) warn that in designing a good questionnaire, the broader questions should come prior to narrow ones. This sequence was adopted in this study because it assists the respondent's recollection of details more efficiently. By starting with broader questions, the interviewer could avoid imposing a frame of reference before obtaining the respondent's perspective.

4.8.0 The advantages of using the questionnaire as a data gathering instrument include:
The simplicity and relevance of the responses needed from the respondents on the problem under review.
Questionnaires facilitate a wider coverage of the research subjects. In this case, 120 respondents took part in this inquiry.
The ability of questionnaires to promote information that could be referred to in its entirety, and
The degree of confidentiality of the questionnaire; based on the fact that respondents remain anonymous since codes were used in place of names.

The limitation of using questionnaires included the fact that the instrument provides no room for the respondents to give as much relevant information as there is on the subject (household water service delivery system) under investigation. The effect of such a scenario is the reduction of the field of coverage.

The data from the field was edited with the help of the research assistants. The editing exercise assisted the elimination of errors that were made by both the respondents and the research assistants. Such errors could have undermined the validity and reliability of the findings. The two central editing tasks included checking for:

Accuracy, to ensure that all the questions were properly answered although there were no ‘right’ or ‘wrong’ answers. Such inaccuracies were the result of carelessness on the part of either the respondent or the research assistant. Cohen & Manion (1994) warn that sometimes a deliberate attempt is made to mislead the study and this could reduce the validity of the data unless the errors are picked up in editing.

Completeness, to ensure that there was an answer to every question. The missing answers were crosschecked with the information from other sections of the study. Each research assistant was able to explain any difficult situations. According to Cohen & Manion (1994), at worst, the respondents could be contacted again to supply the missing information. Fortunately, none of the cases in this study warranted re-contacting the respondents.

4.9 Interviews

Interviews are gathering activities which serve the purpose of finding out what is on the respondent’s mind in relation to a given question. The task of the interviewer makes it possible for the person being interviewed to bring the respondent into his or her world. The quality of the information obtained during the interview is largely dependent on the interviewer. According to Babbie & Mouton (2007), interviews are extremely sensitive devices for the acquisition of reliable and valid data because many people are more willing to talk and verbally and/or non-verbally react than write a response to a question.

Data for interviews consists of direct quotations from respondents about their feelings, experiences, opinions and knowledge (Patton, 1990: 12) about the service delivery system.

Generally, interviews can be carried out on a one-on-one level or on a group level. Focus group interviews enable the study to gather information rapidly and in an economical manner. Such interviews allow respondents to voice their views or feelings in a more public setting. It is for the above reason that this study adopted focus group interviews.

Depending on the preference of the interviewees, the researcher used the face-to-face and the telephonic medium. The teleconferencing medium could not be adopted because of the costs involved. The researcher was guided by an interview guide. The use of an interview guide was an attempt to standardize the questions, but not the responses from the respondents.

Generally, there are two basic procedures for analyzing data collected through interviews (Babbie & Mouton, 2007). According to Patton (1990: 376), “The first decision to be made in analysing interviews is whether to begin with a case analysis or a cross-case analysis”. In this study, data analysis was approached by treating each case as comprehensively as possible on its own. Only then was a cross-case analysis followed.

The cross-case analysis of the interviews was approached using the constant comparison method which involves (Lincoln & Guba, 1985: 338) the growing of answers

to common questions and analysing different perspectives on central issues. The constant comparison method started off by comparing incidents applicable to each category before integrating categories and their properties. According to Goetz & LeCompte (1984: 58), the comparison method “combined inductive category coding with a simultaneous comparison of all social incidents observed”. As social phenomena were recorded and classified, they were also compared across categories. Thus, relationship discovery began with the analysis of initial observations.

The process underwent continuous refinement throughout the data collection and analysis procedures. In this regard, Goetz & LeCompte (1984: 58) made the observation that; “As events are constantly compared with previous ones, new topological dimensions as well as new relationships are discovered”. The process of constant comparison helped stimulate thoughts that led to exploratory categories of the household water service delivery system in the city of Kwekwe.

In dealing with semi-structured interviews, the possibility of limited coverage of the research candidates, bias and inadequate sampling of interviewees could not be ruled out. Despite this problem, interviews were preferred because they provide an avenue for the interviewer to explain the purpose of the study, discuss the interview and respond to any questions that the interviewee might have.

The process of explaining and responding to questions established a rapport, between interviewer and interviewee, which developed into trust and the willingness to

participate. It takes less effort for the interviewee to talk than it does for him/her to read and write. The other advantage of interviews is that the interviewer can read non-verbal cues such as facial expressions and body language. These expressions allow the researcher to decide whether to rephrase a question or follow up on responses.

The study made use of indigenous resources. Gabriel (1988) divides indigenous resources into two: the indigenous technical knowledge and the use of local people as research assistants. The need to use indigenous resources was rooted in the view that urban people frequently possess a wealth of knowledge and insights into their environment that any outsider would lack (Atieri, 1985; Gabriel, 1989). The researcher identified, and made use of, key informants from each residential area in question. The choice of key informants was done in consultation with the research assistants and the leadership within the Department of Works. The key informants were selected on the basis of their knowledge of the household water service delivery system in the city of Kwekwe. In this respect, Gabriel warns that “key informants often need to be powerful, higher income or informed and educated individuals” (Gabriel, 1991: 118).

This study acknowledges the shortcoming that key informants hold a particular image of themselves and their position amongst people and of the domestic water service delivery system. Thus, the researcher tried not to be diverted by such biases through focussing on the issue at hand in addition to showing objectivity during the data gathering process. Despite the well recognized shortcomings, the use of key informants offers a great research instrument in explorative research (Gabriel, 1991: 118).

According to Neuman (1997), semi-structured interviews complement the limitations of questionnaires. It is for this reason that the researcher decided to carry out interviews. The management of interviews was found to be too tedious, time consuming and the possibility of respondents telling the researcher what they thought would please him cannot be ruled out. Despite these limitations, the benefits of using interviews in this study outweigh the limitations because rich insights about the household water service delivery system in the city of Kwekwe were captured from the interviewees.

Tapes and tape recorders were used in the interviews with the prior consent of the interviewees. The purpose of tape recording the interviews was to make matters considerably easier and faster. The advantage of using such technology is that it captures and stores the responses in a verbatim manner. The data can then be referred to in its entirety later. The data collected through the interviews were later transcribed into data sheets for analysis. Emerging themes from both the interviews and the questionnaires were identified. The responses from the participants were corroborated and triangulated to better understand the phenomenon of domestic water service delivery in the city of Kwekwe.

As one of the ethical considerations, interviewees were provided with the opportunity to accept or refuse to be involved in this study. Only two possible interviewees turned down the invitation to participate citing work commitments as the reason for their decision. The researcher quickly sourced replacements from backgrounds that were similar to that of the original choice. Interview dates, venues and times were arranged in consultation with the interviewees.

The researcher drew an interview timetable and adhered to it. Each interviewee was reminded a day before the meeting to check if there were any changes to the timetable. In one case, the interview could not be carried out on the previously scheduled date and time because the respondent had an unscheduled commitment which overrode the interview.

On the day of the interviews, the author was professionally dressed, presentable, punctual and courteous. The researcher took his cue from Babbie and Mouton (2007) and Neuman (1997) who suggest that an executive approach yields a positive and rewarding image to the entire data gathering process. The researcher concentrated on the interview agenda and concluded each interview by thanking every interviewee for the time and effort they invested in the data collection process.

4.10 Validity and reliability of data collection instruments

McNeil (1990:15) defines validity as “the problem of whether the data collected is a true picture of what is studied”. In other words, is it evidence of what it claims to be a confirmation of? Best and Kahn (1993) look at validity as the extent to which an instrument, test or study measures that which it purports to measure. Carmines and Zeller (cited in Baker 1996: 123) argue that validity addresses “the crucial relationship between concept and indicator”. This is to say, does the measurement of concept in fact produce a result that truly represents what the concept is supposed to mean. McMillan and Schumacher (1993; 157) sum the matter up when they claim that “Validity refers to the truth or falsity of propositions generated by research”. A valid statement gives a

true measurement or description of what it claims to measure or describe (Haralambos et al, 1990).

Reliability, on the other hand, implies that if a method of collecting evidence is reliable, it means that “anybody else using this method would come up with the same results” (McNeil, 1990:14). McMillan and Schumacher (1993: 227) believe that reliability “refers to the consistency of measurement, the extent to which the results are similar over different forms of the same instrument or occasions of data collecting”. Baker (1996: 127) simply states that it is the degree to which a procedure for measuring produces similar outcomes when it is repeated.

In order to enhance reliability, the questionnaire used in the study was highly structured with some items assuming Likert-type scales. A straight focus group interview approach, posing the same questions to the group mentioned for validation, was used to ascertain the reliability of the questionnaires. This would make it easier to promote the development of the study in future.

The research methodology employed in this study enhanced both the validity and reliability of the questionnaires through the use of a pilot study of Kwekwe Municipality. McNeil (1990: 15) defines a pilot study as “a small preliminary study conducted before the main research in order to check the feasibility or to improve the design of the research in order to discover problems”. In order to ensure minimal ambiguity, a discussion was held with some of the responsible authorities from the water sector. They have been always willing to support the success of this study through useful

suggestions as indicated by their constructive responses. The supervisor, Professor Thakhathi, and other experts contributed through their useful plans which were incorporated into the final questionnaires and focus group interview schedules.

The questionnaires were pilot tested in some residential sites within Kwekwe urban in order to rephrase some concepts that were deemed inapplicable. In some cases, irrelevant ideas were entirely discarded. The pilot study revealed the significance of the researcher administering the instruments, in person, to the residents of Kwekwe who received informal education. This was done to accommodate those who were informally educated and lacked proficiency in the English Language. In situations where the literate respondents administered the instruments on their own, the researcher stressed the saliency of confidentiality to the respondents. In this way validity, it is hoped, was enhanced. The pilot study thus helped to enhance both the validity and reliability of data obtained.

4.11 Target population and Sample size

The study's target population was the total number of individuals who had either a direct or indirect stake in the domestic water service delivery system in Kwekwe urban. The study could not involve every person in the population frame. This was due to the factors of time, expense and accessibility. Another consideration worth noting in this study was that data was collected from a purposively and conveniently selected sample of 120. The target population for the study shall be 110 residents of Kwekwe urban and 10 Kwekwe City Council Water Authorities from the Works Department. This study will focus on the 4 residential sites of Kwekwe Municipality in the Midlands province of

Zimbabwe. These residential areas will be selected using purposive sampling techniques, wherein the suburbs will be grouped according to the category in which they fit. It is important to note that the households selected in Kwekwe selected would also represent areas that were not selected. The residential areas are categorized according to the social class of the residents. They range from higher density, medium density to low density and then the plots where the rich people reside. Over and above the 110 households, four key informants participated in this study.

The city of Kwekwe consists of 8 established residential areas. Therefore, from the target population, a sample of 4 residential sites will be drawn. Two of these are high density suburbs whilst the other 2 are low density residential areas. Peil (1992: 29) described a sample as “A set of elements which ideally is representative of the population”. It is simply part of the population. Levin and Fox (1994:494) define a sample as “a small number of individuals taken from some population for the purpose of generalizing to the entire population from which it was taken.” Baker (1996) echoed Levin and Fox (1994) by saying that a sample is a selected set of elements or units drawn from a larger whole of all the elements of the population.

Sampling is the process of identifying and selecting a group of individuals who participate in the supply of data. Since this was more of a qualitative study, the question of sample size was not an issue. Actually, there are no rules for sample size in qualitative inquiry. Sample depends on what one wants to know; the purpose of the inquiry; what is at stake; what will be useful; what will have credibility and what can be done with available resources and time. With the same fixed resources and time, a

research may study a specific set of experiences for a large number of people (seeking breadth) or a more open range of experiences for a smaller number of people (seeking depth).

It was pertinent to mention certain challenges relating to the sample. Therefore, the sample size which was carefully selected necessitated caution in the authenticity of the findings. The findings produced should be regarded as tentative in that a bigger sample could have yielded different results. In this study, a larger sample was not used because the focus was on the case study of Kwekwe Municipality. However, room was left for future scholars to replicate this study on a wider scale.

The study was more concerned about depth than breadth. The validity, meaningfulness and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational and analytical capabilities of the researcher than the sample size. Therefore, concepts of representativeness of sample, validity and reliability of research instruments used, as well as obstacles encountered and how they were resolved, were considered.

With regard to the above, Piaget contributed a major breakthrough to the understanding of how children think by observing his own children at length and in great depth. Freud established the field of psychoanalysis based on fewer than ten client cases. Brander and Grinder founded neurolinguistics programming (NLP) by studying three renowned and highly effective therapists. Rickson, Perks and Sartir formulated their widely followed eight principles for organizational excellence by studying 62 companies, a very

small sample of the thousands of companies around the world (Patton, 1990: 185). By taking its cue from the ideas above, the research involved 120 respondents out of the entire population of Kwekwe urban.

A non-probability sampling procedure was applied to choose the participating respondents. The advantage of the sampling procedure is that the respondents are known beforehand (Bailey, 1987; Cohen & Manion, 1994). However, bias and the halo effect are major weaknesses of the approach. These were minimized by the researcher's professionalism. The strength of no-probabilistic (purposive) sampling is, according to Cohen & Manion (1994: 89), that researchers handpick the cases to be included in the sample because of their judgment or their typicality. In this way, researchers build up a sample that is satisfactory to their situational needs. The researcher was aware of the inevitability of the sampling error as demonstrated by the Central Limit Theorem, which is derived from the laws of probability. However, no effort was made to calculate the sampling error because this is an explorative study, which relied more heavily on qualitative data.

The researcher, with the help of the 4 research assistants, administered the questionnaires to all the 110 conveniently selected Kwekwe urban households and 10 Water Authorities personnel. The questionnaires and their corresponding respondents were coded from KRQ 1 to KRQ 120. Those who were interviewed were coded from KRl 1 to KRl 10. The research assistants were not involved in the interviews of the 10 informants and the focus group interviews. It was felt that more revealing primary data could only be obtained when there was a direct interface between the researcher and

the respondents. The data collected was a rich source of descriptions and explanations of the clean domestic water service delivery system in Kwekwe urban. According to Bell (1992), data obtained from a normative study tends to have an inbuilt qualitative degree of undeniability.

4.12 Unit of Analysis

The household water service delivery system has been investigated through reference to many different units. Studies can be carried out at individual, group, district and community, provincial, national or international levels. This study adopted the 'district' as its unit of analysis in determining the efficiency of the clean domestic water service delivery system in the city of Kwekwe. Notions of 'district' have provided a framework for many studies of urban society based on the interaction of people in specific environments (Hillery, 1995). The unit is criticized for being descriptive, static, traditional, unscientific and pre-modern. Despite this criticism, this unit of study was preferred because of its stability and rich source of valuable information on the clean household water service delivery system in Kwekwe urban.

4.13 Data Analysis

There are two broad methods of logical reasoning namely; deductive and inductive. Deductive reasoning operates from the more general to the more specific. It begins with a theory and narrows it down to specific hypotheses that can be tested in order to confirm or fail to confirm a given hypotheses at specified degrees of freedom and levels of significance. Further, deductive reasoning allows researchers to infer the properties of a particular sample or subset of the population (Patton, 1990). Arguments that are

based on laws, rules, or other widely accepted principles are best expressed deductively. The sequence of deductive reasoning in research is illustrated through observation, pattern and tentative hypothesis to theory (Matunhu, 2009: 109).

Inductive reasoning, on the other hand, moves from specific observations to broader generalizations and theories. In inductive reasoning the study begins with specific observations and measures such as the clean domestic water service delivery system in Kwekwe urban through decentralization. When this is done, the researcher detects patterns or regularities then formulates some tentative qualitative hypotheses that can be explored. Arguments that are based on experience or observation are better expressed inductively. The sequence is illustrated as follows: theory, hypothesis, observation cascading down to confirmation (Matunhu, 2009: 110).

Inductive reasoning is more open-ended and exploratory. It uses unstructured questions and moves from the specific to the general. Moser & Kalton (1992) warn that even though a particular study may look purely deductive, most social science research involves both inductive and deductive reasoning processes at some time. It is therefore possible to restructure the sequences above into a single circular one that continually revolves from theories to observations and back to theories. Even in the most constrained experiment, researchers may observe patterns in the data that lead to the development of new theories (Nueman, 1997).

This study adopts a higher concentration of inductive reasoning for qualitative data analysis. Inductive reasoning is a grounded theory in that it builds theories from particular cases. It does not start with a premise such as the method of deductive reasoning. The purposes of using an inductive approach in the urban domestic water service delivery system are:

To compress extensive and varied raw text on a clean household water service delivery system.

To establish clear links between the research objectives and the summary of findings derived from the raw data.

To develop a model or theory about the underlying structure of the socio-economic and urban household water experiences or processes which are evident in the raw data (Hoeverler, 1996).

The inductive approach tends to provide a convenient and efficient way of analyzing qualitative data. This is unlike deductive reasoning which requires that the researcher knows all about domestic water service delivery systems in urban areas before generalizing. The primary purpose of the inductive approach is to allow research findings to emerge from the frequent, dominant or significant themes inherent in raw data, without the restraints imposed on it by structured methodologies.

Grounded theory is also an approach for looking systematically at qualitative data such as transcripts of interviews or protocols of observations which aim at the generation of theory (http://enwikipedia.org/wiki/grounded accessed on 25 August 2010). It is qualitative inquiry that is driven by objective and subjective data using a multiplicity of

examples and inductive reasoning in explaining data. Henning et al (2005: 47) posit that all good interpretive inquiry should theorize, discuss data and conceptualize. It is not much of a method but a tool for constructing substantive theories about the phenomena being studied. The “theory” is developed after data has been, for instance, collected through open or standardized interviews or related methods. Data is therefore coded and categorized for one to see relationships between different categories and themes and to reposition particular data into patterns (Henning, van Resnburg & Smith, 2005).

This study used grounded theory in the theoretical structure, design and analysis of interview data. On the whole, a mixed methodology in data analysis was also adopted. Interview data was transcribed and thereafter analyzed using an interpretive approach. This involved naming, categorizing, coding and comparing the responses of the respondents. Coding data was an important but delicate and painstaking exercise. The study adopted open and selective coding. Open coding involved classifying, naming and labeling data. Selective coding resulted in storyline and theory development (Harchar & Hyle, 1996).

The categories were arrived at after the researcher had asked himself the question suggested by Strauss & Corbin (1998): “What seems to be the main storyline, pattern, theme that is occurring over and over”. In essence, constant comparative analysis was used in identifying patterns, coding data and categorizing findings of the extended interviews and questionnaires. Extreme care was taken in the recording, coding and interpreting of data to ensure projecting an untainted picture. Specific themes emerging from this analysis were identified. Tables and figures were used where appropriate. This

data was complemented by those from documented primary and secondary literature sources. On this basis, a theory describing the domestic water service delivery system was developed. However, the respective research questions were analyzed one after the other.

4.14 Data analysis procedure

According to Bogdan & Biklen (1992: 154), “there are two stages of data analysis: the first stage of analysis occurs as data are being collected, and second stage after data collection has been completed”. The data which was collected from the Kwekwe urban on the clean domestic water service delivery system was analyzed following the stages mentioned above. The study took heed of the advice of Bogdan & Biklen (1992) who warn that researchers who fail to recognize the importance of the first stage of analysis, that occurs during data collection, run the risk of ending up with data that is unfocused, repetitious, and overwhelming in the sheer volume of material that needs to be processed.

The data analysis process started by arranging the question numbers on each research instrument in accordance with the research question it answered. The raw data from respondents was coded so as to come up with data sets. Responses were treated according to the research questions they were responding to and in the process the data sets ‘A’ and ‘B’ emerged. To facilitate the preparation of data sets for the interviews, the study referred back to the transcripts and cut and pasted the data listed under each research question. By so doing, the study was able to compile data sets for

each research question. The study then came up with the inductive themes related to each research question. Finally, there were two data sets showing what respondents said about each research question. The same process was used to analyze data obtained through the use of questionnaires. Data was analyzed manually and in adherence to the Miles and Huberman data analysis tool-kit. The procedure is described below, in the discussion of the 'data analysis framework'.

4.15 Data Analysis Framework

The primary mode of analysis is the development of categories from raw data into a model or framework that captures key themes and processes that are judged to be important to the study. The study analyzed the data according to Miles and Huberman's qualitative data analysis framework, as mentioned above. The data analysis was based on themes that emerged from the raw data from the field. Data was coded using units such as themes and words. After coding the data the researcher subjected the data to a data reduction process.

Data reduction involves selecting, focusing, simplifying, abstracting and transforming raw data from the field notes to make it more manageable and understandable. It is a form of analysis which results in analytical choices. These choices sharpen, sort, focus, discard and organize data from the field in such a way that conclusions could be drawn. Since this is a qualitative research project, data was reduced through selection, summary or paraphrases. By deciding which data to code, which to pull out and which pattern to summarize the researcher were able to carry out data reduction. The process

of data reduction is carried out before, during and after data collection (Miles & Huberman, 1984: 21).

The second stage was the data display, which involved the reorganization of information in a way that enabled the researcher to identify linkages and develop explanations that relate findings to existing theories of clean domestic water service delivery in a decentralized urban system. The study displayed data using tables and figures. Data displays were designed to assemble organized information in an immediately accessible, compact form in order to facilitate the drawing of conclusions. The creation and use of displays cannot be separated (Miles & Huberman, 1984) from data analysis because designing the rows and columns of a matrix and deciding which data, in which form, should be entered in the cells are analytical activities.

The next stage of the data analysis activity is conclusion drawing and verification. Drawing conclusions involves deciding what the identified themes and patterns suggest about household water service delivery system in the city of Kwekwe. Conclusions were verified as the researcher proceeds. The verification can be as brief as a fleeting second thought (Miles & Huberman, 1984: 22) crossing the researcher's mind during the process of writing, with a short revisit of the field notes. By carrying out the verification process, the researcher managed to test the plausibility, sturdiness, conformability validity of the collected data. This stage involved checking and re-checking the data to ensure that the initial conclusions are realistic, supportable and valid. The researcher guarded against contamination of data by maintaining focus on the themes that emerged from the responses.

Nevertheless, the four streams: data collection, data reduction, data display and conclusion drawing were interwoven to make up the general domain called 'Data Analysis'. The stages formed an interactive and cyclical process. The coding of data, for example (data reduction), led to new ideas on what should go into the matrix (data display). Entering data required further data reduction. As the matrix filled up, preliminary conclusions were drawn, but they led to the decision to add another column to the matrix to test the conclusion. In this sense, qualitative data analysis ended up becoming a continuous interactive process.

4.16 Standards of rigour

In addressing the question of rigour in qualitative research, Denzin and Lincoln put forth the contention that:

The use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question. Objective reality can never be captured. Triangulation is not a tool or a strategy of validation; but an alternative to validation. The combination of multiple methods, then, is a strategy that adds rigour, breadth and depth to any investigation (Denzin and Lincoln, 1994: 2).

The criterion for establishing trustworthiness of the research conducted within one paradigm is different from that applied to research undertaken within the other paradigms. Terms such as credibility, transferability, dependability and conformability are used (Denzin and Lincoln, 1994: 14). The following discussion of the strategies was adopted to enhance credibility, transferability, dependability and conformability of this research so that the reader may assess the rigour that was applied throughout the

course of this research. The researcher dealt with each of the essential elements of trustworthiness as discussed below.

4.17 Credibility

Lincoln and Guba (1985) describe credibility as being parallel to internal validity. In order to enhance the credibility of the research, triangulation and member checks were employed in this study. The researcher attempted to provide triangulation through the use of multiple data sources and data collection strategies. The data collected through interviews, field observations and municipality documents allowed for triangulation by providing a variety of perspectives on the case. By including several respondents from different reference groups within each residence, a diversity of perceptions of constructed realities of each case, were incorporated. The collection of data over a period of two months provided multiple opportunities for triangulation in each case. Data collected over this period reflected the complexities of the case that would not have been perceptible if data had been collected over a shorter period of time and at regular meetings with my supervisor. During data collection, analysis, and the writing of case study reports, patterns of meaning, interpretations and assertions were presented and debated. These attempts to provide for triangulation were undertaken in order to give credence to the interpretations and to demonstrate commonality of an assertion.

4.18 Member checking

Member checking provided for credibility by allowing members of stakeholding groups to test analytic categories, interpretations, and conclusions. According to Lincoln and Guba (1985: 314), this technique is the most important in establishing credibility. It is in

this step that members of the setting being studied had a chance to indicate whether the reconstructions of the researcher were recognizable. Member checks were conducted during the study as follows: Word processed transcriptions from all tape-recorded interviews were returned to respondents for verification and approval before being analyzed. Respondents were asked to note questions, or topics, for further discussion. Respondents were asked to make specific comments on the degree to which the case study reports accurately reflected their perceptions of the case. The feedback from the member check was confirmed as reflecting the respondents' experiences and perceptions.

4.19 Transferability

Transferability is described as being parallel to external validity. It is relative and depends entirely on the degree to which salient conditions overlap or match. This is mostly verified through "thick" description. According to Erlandson, Harris, Skipper and Allen (1993: 33) "effective thick description brings the reader vicariously into the context being described". Before the study was finalized, research results were put through a "consensus stage" where the researcher and the supervisor critically assessed and commented on the result and the format of reporting. It must be remembered that the possibility of generalization is irrelevant in qualitative research because the context of the research is naturalistic and non-repeatable.

4.20 Dependability and confirmability

In order to enhance dependability and confirmability, an on-going audit was conducted as part of the study. As part of the on-going audit, the researcher met regularly with the supervisor during the data collection, analysis and writing stages of the study in order to review decisions made and questions that had arisen. A record of such meetings was kept. The audit trail, “The residue of records stemming from the inquiry” (Lincoln and Guba, 1985: 319), for this study, included the records of activities, decisions and concerns which arose during all the phases of the study. This information was assembled such that it allowed for other audits.

The audit trail, along with extensive member checks, inputs from the supervisor undertaken throughout the data collection, data analysis, and the writing stages of the study, were important techniques to enhance the dependability and confirmability of the study.

4.21 Ethical issues in research

According to Cresswell (1994: 165), a researcher has an obligation to respect the rights, needs, values and desires of the respondents. Before going into the field for data collection, the researcher applied for an Ethical Clearance Letter from the Office of the Vice Chancellor of the University of Fort Hare. The application which included the questionnaire, interview guide, proposal report from the Research and Higher Degrees Committee and the clearance from the supervisor were sent to the University’s Dean of Research as directed by the university procedures in conducting research.

The researcher gave a great deal of attention to the following measures regarding ethical acceptability:

Conduct the research with respect and concern for the dignity and welfare of the informants;

Respect the individual's right to decline to participate;

Ensure that the purpose and activities of the research are clearly explained to the participants;

Ensure that promises and commitments are honoured;

Safeguard participants' identities through assuring anonymity and confidentiality;

Establish clear and fair agreements with regard to the participants' obligations and responsibilities.

The direct personal intrusion of a researcher into the private lives of other people raises ethical dilemmas (Neuman, 1997). Five areas have been outlined as posing a threat to research ethics. Ethical dilemmas revolve around upholding and sustaining confidentiality, deliberately deceiving a client in order to obtain 'unbiased' data, knowingly investigating the poor and vulnerable and whether or not to publish clients' private data which is, inversely, central to the research question.

The researcher needs to make a sound moral decision in a split second especially when in the field. So, as Best and Kahn (1993: 43) advise: "In planning a research involving human subjects, it is important to consider the ethical guidelines to protect your subject".

This study went on to report that Universities have set up human experiment review committees to advise investigators on the appropriate procedures and conformity to respective ethical guidelines. The University of Fort Hare is no exception to this. Hence, pursuant to rule E5 of the University Of Fort Hare Faculty Of Management and Commerce's Post Graduate Qualifications Policies and Procedures (2010) booklet emphasizes the research ethics. The provisions related to research and professional ethics. As a student (researcher) registered in the Faculty of Management and Commerce, these provisions compelled me to sign the professional code of conduct. I also drafted a consent form which I completed and signed as a way of guaranting the respondents' protection. Such contractual obligation enabled the respondents to freely comment on matters under discussion.

In the next chapter, it is observable that the researcher assigned pseudonyms to all the participants and their residents. For instance, the abbreviation KRQ is used for Kwekwe respondents' questionnaires, whilst KRI is used for interview schedules' respondents.

Consequently, the researcher observed the respondents' rights to privacy, anonymity, confidentiality, informed consent and security/protection from physical and mental stress, and knowledge of the outcome. The researcher also adhered to other pertinent professional ethics in research such as a commitment to make the results available to respondents and peers for the verification of accuracy.

The trustworthiness of the collected data was developed from the time the pilot study was conducted. Suggestions for various quarters were incorporated into the instruments after multiple revisions.

Summarily, all the data collected and related to this study was, and continues to be held in strict confidence and used for academic purposes only. It is also available for scrutiny by whoever may want to verify its authenticity. The following specific measures were taken to guarantee the adherence to ethics:

4.22 Informed consent

Before collecting data, every participant was informed of the research study in a way that was assumed to be clear and understandable to them. This was the first item in the research assistants' manual. According to Cresswell (2002), before respondents even agree to participate in a research study or project, they must be furnished with full information on the aims and objectives of the research study as well as the method of research, which is the procedure that will be followed. To achieve these ethical considerations, the researcher crafted and adhered to the strategy outlined in the following paragraphs.

4.23 Termination

In this study, participants were made aware of their right to withdraw if they so wished. The established agreement did not place participants under the obligation to continue participating in the project if they were no longer interested.

4.24 Privacy

All participants in any type of study should have the right to confidentiality. The researcher assured the participants that sensitive data would be held in the strictest

confidence in order to protect their anonymity. In this study the researcher ensured this through using secret codes for all interview transcripts, and the names of the participants were concealed. The researcher used pseudonyms to protect the participating institutions and individuals.

The sample consisted of individuals who are referred to as subjects. McMillan and Schumacher (1993: 159), in this regard, state that “subjects are the individuals who participate in the study, it is from them that data are collected”. Therefore sampling occurs. After grouping these selected areas as explained above, one residential area will be purposively selected from each group for detailed scrutiny and be treated as representative of the entire group. To preserve privacy, the names of the selected areas and participants will not be unveiled in this study. Data was collected from the target population through the selected sample outlined above. The term population, as used in this study, shall refer to the entire group whose characteristics are to be estimated by using a selected group, or sample, whose characteristics are to be measured (McNeil, 1990). Permission to collect the data was sought from the local, responsible authorities of Kwekwe Municipality.

In this case, all the areas selected in Kwekwe represent the widespread populations. Owing to the difficulty and impracticality of attempting to employ the entire population, a sample which is part of a larger population was selected to represent the large population. McNeil (1990: 14) defines representativeness as “the question of whether the group of people or situation that is being studied is typical of others”. In choosing the

four selected residential areas for this study, it was thought that it was representative of the 8 residential areas of Kwekwe.

If the selected sample is typical, McNeil (1990) further argues that what is true of a certain group is also true of others. It thus becomes possible to generalize the results on the entire population on the basis of the sample studied. The sample is deemed representative of the kind, location and type of urban residential areas found in the city even though the sample of the selected areas is drawn from 4 residential areas of Kwekwe. The social structure of the targeted domestic water consumers comprised 2 Low density suburbs and 2 High density suburbs.

The residential areas identified above will be classified on the basis of the social class of the residents. In this study, it was also important to ensure that proper sampling of respondents was executed. This was done as a way of trying to enhance the representativeness of the sample to the target population. A stratified convenient sample was used. It was expedient in the sense that these residential areas were accessible with only a few transport problems. The sample was stratified by type and location of the selected residential areas. This was carried out in a bid to enhance representativeness. The reason for adopting the above sampling procedures was that the location of the selected residential areas, the kinds of the daily activities and the nature of the residents, were key independent variables in this study.

At each residential area, 30 of the selected respondents responded to the questionnaires. Thus, a response was gained from an equal number of selected respondents in the four areas selected. Focus group interviews were also carried out with the 60 residents of Kwekwe and 10 officials from the Kwekwe Municipality in order to complement the questionnaires. Each focus group from the residential areas consisted of 6 residents. The 4 officials from the Kwekwe Municipality were representing the 4 key departments responsible for the water reticulation process. Leedy (1980) affirms that closely allied to the questionnaire is the structured interview. McMillan and Schumacher (1993: 250) claim that “interviews are essentially vocal questionnaires”. Baker (1996: 184) adds that “a questionnaire may be converted into an interview schedule and vice versa”. This study employed document analysis, focus group interviews, questionnaires and observation on the ground in order to come up with triangulation.

Purposive convenient sampling was used during the distribution of questionnaires and conducting focus group interviews. The total number of questionnaires used for the four selected residential areas was 110 plus 10 for the Kwekwe Water Authorities. These questionnaires were distributed to the residents of Kwekwe urban and Kwekwe Municipality officials. The focus group interviews were focused on the 60 residents of Kwekwe and 10 Kwekwe Municipality officials.

4.25 Problems encountered

The problems encountered have been mentioned in this study as they have a bearing on the methodology and, consequently, on the results obtained. It was a challenge to make sure that the respondents under the Kwekwe Urban Municipality in Zimbabwe participate in order to present a balanced report of the effectiveness of the water service delivery system in Zimbabwe. The following aspects were noted in the process of data collection: The researcher had to wait for long periods because most residents in Kwekwe are occupied by either formal or informal employment to earn a living. Some respondents took their time to attend to the researcher.

4.26 Conclusion

This chapter has provided an outline of the methods and methodology adopted for the study. The data collection instruments and the sample characteristics were explained. The chapter ended by pledging to observe research ethics. In a nutshell, methodologies borrow their logic from their philosophical underpinnings. This study is qualitatively biased and is informed by the anthropological views of social transition or change. In this study, data was collected using interviews and questionnaires. This study used the explorative research design to a greater extent. The researcher's involvement with the participants stimulated interest and accelerated discussion. This allowed the researcher to enter into their lives and, in this way, in-depth knowledge was gained. The design was based more heavily on the post-structuralist philosophy which argues that knowledge is not absolute. The philosophy believes in the deconstruction of commonly held assumptions such as the idea that the poor is not primary in the clean domestic water service delivery system in the Kwekwe municipal area of jurisdiction.

The research design was based, to a considerable degree, on the inductive philosophy of reasoning. Inductive reasoning was found to be more suited to the explorative qualitative research as compared to deductive reasoning, which is restricted to preset premises. The fact that inductive reasoning operates from the particular to the general makes it more suited for the case study at hand. The non-probabilistic sampling method was used in singling out the respondents as well as the particular residential areas to be studied. The unit of analysis of this study was the district of Kwekwe. Data were analyzed using Miles and Heberman's qualitative data analysis framework. In this chapter, efforts were made to authenticate the methodology adopted in the study. Accordingly, the first part presented a reformulation of the research questions. Results for each of the four residential sites of Kwekwe urban were presented first. This was followed by a consolidated analysis of the contrasting features of each type of residential area in relation to the main outcome variables identified for this study.

CHAPTER 5

Data Presentation, Analysis and Interpretation

5.0 Introduction

This chapter presents analyses and discusses data collected through interviews with and questionnaires completed by the residents of Kwekwe urban and the water authorities. The purpose of this chapter is to aggregate, summarise and present the data that was collected on the household water service delivery system in the city of Kwekwe. Data presentation and analysis was carried out in respect of the 4 research questions raised in chapter one, as well as the tools used. For easy reference, the broad research question to which each section refers is stated at the beginning of the section. The data collection tools were the interviews and questionnaires.

The research questions are repeated below for the reader's convenience:

Does Kwekwe municipality have the capacity to provide clean household water services to its residents?

Do most consumers afford paying water tariffs to the responsible water authority under Kwekwe Municipality?

Does the water policy in Zimbabwe accommodate the human rights of consumers?

What are possible recommendations to improve the household water service delivery system in Kwekwe urban?

The results presented in this study made it possible to confirm representation of facts over observed trends in relation to the main theories referred to as neo-liberal and the rights-based theoretical frameworks. These two theoretical frameworks were unveiled through the decentralization policy implementation adopted for this study to explain the

effectiveness of the water service delivery system in Kwekwe Municipality. In light of this consideration, the statistics to be presented are solely for the purpose of drawing inferences in relation to the main theories adopted. The above considerations should be borne in mind when assessing issues of sample representativeness and the validity of results to be discussed after data collection from the field.

5.1 Presentation, Analysis and Interpretation of Data collection through Questionnaires (from Consumers).

The findings are presented in respect of the tools that were used by the researcher in collecting the data. The data thus collected is presented separately, beginning with the 120 questionnaires and then the interviews. From the 120 questionnaires, 110 questionnaires were for the residents of Kwekwe whilst 10 questionnaires were for the Kwekwe Municipality Water Responsible Authorities. The themes that related to each other in these two sets of questionnaires were grouped together. However, those themes which are different from others were presented, interpreted and analysed separately. On the data presentation, interpretation and analysis 'n' represents the number of respondents whilst 'KRQ' is the code for Kwekwe questionnaire respondents. Further, 'KRI' is the code for Kwekwe interview respondents.

5.2 Biological -data of Questionnaire Respondents (from Consumers)

The biological-data of the respondents is presented before the presentation and analysis of their responses.

Table 1: Distribution of Respondents by Age group and Gender.

Age Group	Females	Males	Total
20 years and below	15	10	25
21 to 24	5	0	5
25 to 30	10	15	25
31 to 35	18	12	30
36 to 40	10	5	15
41 and above	0	10	10
Totals	58	52	110

The above table indicates that most of the respondents were in the 31 to 35 age group followed by the 25 to 40 age group as well as those ranging from 20 years and below with a similar figure of 25 respondents. The significance of this information is that the researcher is assured of valid and reliable information from the respondents. The advantage of involving a large number of respondents from this age range (20 to 35) is that these people are the most active members of the Kwekwe urban community. This study proclaims that these age groups can make a significant impact on the water service delivery system in the area under the jurisdiction of the Kwekwe Municipality.

The strategies and recommendations for the best practice of a water service delivery system will have to consider a vigorous water service delivery campaign for this age group. The lowest number of respondents are those who are 41 years and older. Their contribution and participation in this study helps provide insights into what the young people, below 20 years, and the elder people, above 25 years, think about the best practice of water service delivery system. The future community leadership comes from

young members of the society and, therefore, it is wise to find out what they think about rethinking the water service delivery system and blend their ideas with those from the older generation. Table 1, above, also shows that there is a balance between males (52) and females (58) who participated in this study. This is likely to yield data and conclusions that are sensitive to and interesting regarding gender divide in the City of Kwekwe.

The issues of gender balance and maturity are important because they promote a responsibility and accountability in the household water resource management. Both men and women use water for domestic use but it is a fact that women execute more domestic duties using water than their male counterparts. Therefore the above table indicates that there is a balance in terms of the number of men and women in the residential areas of Kwekwe. However, this balanced figure does not show that men and women use household water differently. The aspect of age contributes towards water conservation because maturity is related to the idea of reasoning through using household water sparingly. Therefore gender and age group was considered conveniently so that the study receives reliable data. The reliability of the data contributes a lot to the success of the study. However, the adults are expected to also educate their children water conservation skills. This idea may assist the municipality to a greater extent because water service delivery is a two way system. The consumers must also reciprocate the supplier.

Table 2: Distribution of Respondents by Educational qualification and Income.(n=110)

Educational Achievement	Average monthly Net Income Bracket in US dollar					Total
	Above 6000	4800-6000	2400-3600	1200	0-1000	
'O' Level	0	0	0	0	10	10
'A' Level	0	0	0	5	15	20
National Certificate	0	0	0	5	5	10
National Diploma	0	0	0	10	5	15
Bachelors Degree	0	0	0	10	35	45
Post Graduate Degree	0	5	5	0	0	10
Totals	0	5	5	30	70	110

Table 2 shows that 45 out of 110 respondents hold Bachelors Degree qualifications. However, 20 out of 110 respondents had attended 'A' Level. The third highest number (15) of the respondents had 'O' Level and a National Diploma. This group of respondents is likely to generate well informed responses. The assumption is that the higher the educational achievement of an individual the more knowledgeable that person is of social development issues.

Table 2 also shows that the highest number of respondents (45) had an average monthly income of

US$ 0 to US$ 1000 per month. The second highest number (20) also had a monthly income of between US $ 0 and US$ 1000 followed by 15 who earned between US$ 1000 and

US$ 1 200. The least number (10 out of 110) earned between US $ 2400 and US $ 6 000 per month.

None of the 10 respondents with ‘O’ Level education earned more than US$ 1000 per month. Out of the 20 who held ‘A’ Level qualifications, 15 earned between $0 and $ 1000 while another 5 earned $1200 per month. Out of the remaining 10 holding a National Certificate, half earned between $0 and $ 1 000 again while the other half earned a monthly income of $ 1200.

The data above indicates that there is a direct positive relationship between monthly income and educational achievement. This is probably because educated people are more practical; and thus apply their education and training to pay for and consume domestic water sparingly. This observation points to the importance of education and training in the fight against household water scarcity in the City of Kwekwe. This idea indicates that consumers also play an important role in the water service delivery because their attitude determines that altitude of the municipality as a service provider. The municipality must work hand-in-glove with the Kwekwe Residents Association which represents the consumers.

The municipality of Kwekwe needs to carry out constant meetings with the residents associations so that they can identify the areas deserving attention in the household water service delivery. The municipality may also make use of some of these consumers to network with the business community so that assistance to provide clean domestic water may come from the possible donor linked to these influential members of the society. The municipality of Kwekwe does not exist in a social vacuum. It is a

service provider in a particular society and it is the responsibility of this society to plough back.

Table 3: Distribution of respondents by Income and Employment status

Income Range	Employment Status			totals
	Formally employed	Self-employed	Unemployed	
Above US $ 6 000	2	0	0	2
US $ 4 800 to 6 000	7	0	0	7
US $ 2 400 to 3 600	25	0	0	25
US $ 1 200	29	5	5	39
US $ 0 to 1000	17	3	17	37
Total	80	8	22	110

The Table above indicates that most of the respondents (80 out of 110) were formally employed. Twenty-two respondents were unemployed and 8 were self-employed. The table also shows that 17 out of 80 respondents earned less than $ 1 000 per month. Twenty nine of the formally employed respondents earned $ 1 200 per month while 25 earned between $ 2 400 and $ 3 600 and 7 earned between $ 4 800 and $ 6 000. The lowest number of respondents (2 out of 80) earned more than $ 6 000 per month.

Table 3 also shows that 5 out of 8 self-employed respondents earned between $ 1 200 per month while 3 earned between $ 0 and $ 1000 per month. None of the self-employed respondents earned more than $ 1 200 per month. It would be interesting to establish the explanation as to why self-employed persons tend to have low income levels compared to their counterparts in formal employment sectors. Such information

would assist in improving the income levels of self-employed persons in the City of Kwekwe. Chances are that such entrepreneurs are undercapitalized and/or they lack adequate skills for higher output.

The Table also indicates that there are respondents who are not employed but have an income. A total of 17 out of the 22 unemployed earned between $ 0 and $ 1 000 per month. Unemployment in this case refers to those persons who, for one reason or another, are not engaged in any economic activity for survival. Such individuals include pensioners who rely on their pensions and handouts from their children. The unemployed also include the disabled who depend on handouts and social grants from the national government. Five out of the 22 unemployed respondents earned $ 1 200 per month.

The above observation points to the need for savings and social responsibility. Those with a high income are also encouraged to look after the poor members of their community. Nevertheless, such support should be offered in a manner that discourages dependency and laziness amongst the poor residents of Kwekwe urban. The Table also indicates that a number of the respondents (39 out of 110) earned $ 1 200 per month. The distribution of the respondents in this bracket is that 29 were formally employed; 5 were self-employed while the other 5 were unemployed. The second highest number (37) earned between $ 0 and $ 1000 per month. The distribution in this category was that 17 were formally employed; 3 self-employed and 17 were not employed.

The findings above indicate that there are more residents in the City of Kwekwe who earn far less than $ 1 000 per month while few people earn more than that. Some respondents clearly specify that they earn $ 200 per month. The income levels also show that the City of Kwekwe has high poverty levels, especially if one considers that most of the respondents have many dependants who are not employed. This is particularly devastating as the water service delivery system is generally very costly because of the current global economic and financial recession.

Table 4: Distribution of Respondents by Dependants

Number of Dependants	Frequency
0-3	18
4-7	44
8-11	40
12-15	5
16 and above	3
Total	110

Table 4 indicates that many of the respondents (40%) had between 4 and 7 dependants. The second highest category is where 36% of the respondents had between 8 and 11 dependants each. Sixteen percent of the respondents had between 0 and 3 dependants and 5% of the respondents had between 12 and 15 dependants. However, only 3% of the respondents had 16 and above dependants. The reasons for having such big numbers of dependants were extended family and polygamy. In other

situations the respondents were taking care of the children whose parents were victims of HIV/AIDS virus.

The Table above also indicates that many respondents have a number of dependants to look after. The observation points to the need for considering the effect of population growth on the household water service delivery system in Kwekwe urban. Birth control could be one of the issues for consideration in the overall strategy against urban poverty in the City of Kwekwe. This augurs well with the Chenery theory of structuralism and that of Thomas Malthus. The latter is considered the founder of the notion of family planning. According to Malthus, resources should influence the number of children a particular family raises so as to avoid abject poverty (Todaro, 1989).The above idea, by Malthus, augurs well with Feagen (1975: 3) who says, “We challenge the rights of social parasites to breed illegitimate children at the taxpayer’s expense and the right of moral chiselers and loafers to squat on the relief roles forever”. The study went on to bring together raw data on dependants and income. Table 5 below presents the data from the field.

Table 5: Distribution of Respondents by Income and Dependants (n=110)

Average Monthly Income in US Dollars	Number of Dependants					
	Below 3	3 to 7	8 to 11	12 to 15	Above 15	Total
Above US $ 6000	0	3	0	0	0	3
4 800 to 6 000	0	4	2	0	0	6
2 400 to 3 600	0	20	5	1	0	26
1 200 to 2 300	2	12	18	3	3	38
0 to 1000	8	21	7	1	0	37
Total	10	60	32	5	3	110

Table 5 indicates that 60 out of 110 respondents had an average of 3 and 7 dependants each and 32 out of 110 had an average of 8 and 11 dependants each whilst 10 had below 3 dependants each. Nevertheless, 5 respondents had between 12 and 15 dependants each. Last but not least 3 respondents had more than 15 dependents each.

Table 5 also indicates that 38 out of 110 respondents had an average monthly income ranging from $ 1 200 to $ 2 300 each. Two of them had less than 3 dependants and 12 had between 3 and 7. The majority, 18 out of 38, had between 8 and 11 dependants. Three respondents had 12 to 15 dependants and the other 3 had above 15 dependants. The Table also shows that 37 out of 110 respondants earned an average monthly income range between 0 and 1000. Eight out of the 37 respondents had between 0 and

3 dependants. Twenty one respondents had 3 to 7 dependants and 7 had 8 to 11 dependants. However, the remaining 1 respondent had 12 to 15 dependants.

This Table above also indicates that 26 out of 110 respondents earned an average monthly income of between $ 2 400 to $ 3 600 each. The majority of the respondents in this category (20 out of 26) had 3 to 7 dependants each. Five out of the 26 respondents in this category had between 8 and 11 dependants each and only 1 had between 12 and 15 dependants. None of the respondents in this category had below 3 dependants.

Table 5 also indicates that 6 out of 110 respondents earned an average monthly income ranging between $ 4 800 to $ 6 000 each. Four of them had between 3 and 7 dependants and 2 had 8 to 11 dependants each. Three out of 110 respondents had an average monthly income of above US $ 6000 and these respondents had 3 to 7 dependants, respectively.

One observation gleaned from the above data is that a large proportion of the respondents earn more than US $ 3 per day but is experiencing abject poverty. For example, an analysis of the distribution of respondents by income and employment indicates that 60 out of 110 respondents earn $ 120 or more per month, which translates to $ 4 per day. This is twice the UN threshold of US$ 2 per day for human beings classified as moderately poor and four times more than people categorized as experiencing miserable poverty. According to the United Nations' definition, of the 110 respondents more than 60 percent of them were not poor in absolute terms. Nevertheless, what makes them poor in the context of the City of Kwekwe is the number

of dependants they support. The conclusion reached by this study is that the residents of Kwekwe urban experience abject poverty.

The common feeling is that in the city of Kwekwe there is an inverse relationship between income levels and the number of dependants supported by each respondent. Those who earn a lower income per month tend to have more dependants than those who earn more. The miserable poverty in the city of Kwekwe is higher amongst those respondents with a high number of dependants and low incomes. In terms of this study's definition of poverty, these are the people who live under extreme poverty.

5.3 Main Research Questions

The section below presents data that was collected from the consumers through the questionnaires. The data was presented in respect of the four main research questions generated in Chapter 1. It is important to note that, before data presentation, a relevant research question is indicated in bold letters.

Does Kwekwe municipality have the capacity to provide clean household water services to the residents?

Sixty five out of 110 respondents acknowledged that Kwekwe Municipality was failing to provide clean household water to the consumers. However, 40 out of 110 respondents confirmed that there were some improvements in the water service delivery system in comparison to previous years, especially 2007 to 2009. Accordingly, respondent KRQ12 cemented the above idea as follows: "*It is copying up though in the years 2008 and 2009 there were times when we would get raw water. The reason being that, the*

Municipality does not have money to purchase chlorine to purify the water". Only 5 respondents out of 110 were of the opinion that the water service delivery was excellent in the city of Kwekwe.

The data presented above shows that a number of residents in the city of Kwekwe are not satisfied with the capacity of Kwekwe Municipality to provide clean domestic water service delivery to the residents. Kwekwe Municipality is also affected by urban poverty due the economic crisis in the country. However, there is a significant difference between those who are not satisfied (59%) and those who are satisfied (41%). This indicates that the ability of Kwekwe Municipality to provide clean household water service delivery to its residents is slightly below average. This does not mean that the water service delivery system in the city of Kwekwe can be regarded as the best practice. The residents have become accustomed to the worst conditions of accessing domestic water. Thus, they appreciate this slight improvement, but they did not confirm that it is the best practice. Kwekwe Municipality still has a challenge of improving the household water service delivery system. Therefore, one of the findings drawn in this study is that there was a slight improvement in the household water service delivery system in the city of Kwekwe.

This small improvement is related to the commissioning of the United States of America's dollar currency for use in Zimbabwe. This, in addition to other multiple currencies from South Africa (the Rand), Botswana (the Pula) and Britain (the Pound Sterling). This marked a notable difference when compared to the situation that prevailed during the era of the Zimbabwean dollar. Thus, domestic water service

delivery in Kwekwe urban can be referred to as improving but slightly below average. Hence, Kwekwe Municipality has proven that it has the ability to provide water for domestic use to the consumers but is being obstructed by urban poverty.

Respondent KRQ 99 said that, “The water supply was very poor during the early part of 2010, but has improved greatly over the past 6 months. The pressure level of the water supply has also improved”. Suffice it to say that the domestic water service delivery system in Kwekwe urban is not quite bad since they only cut the supply on rare occasions. However, the Kwekwe Municipality can improve the water service delivery system to greater heights if the hurdle of urban poverty could be removed. Later in this chapter, this study establishes the main factors to consider in re-thinking the water service delivery system in the city of Kwekwe.

Nevertheless, the view above shows that there is a need to re-think a better strategy to improve the water service delivery system in the city of Kwekwe, from its current situation. This can be done through considering the reliability of the domestic water service delivery system; the problem of erratic water shortages through uninformed water cuts; the cleanliness of water and the problem of waterborne diseases in the city of Kwekwe. The data captured indicates that 75 out of 110 respondents acknowledged that the domestic water service delivery system in Kwekwe was not reliable, whilst 35 out of 110 question the reliability of this precious basic need.

In support of the above opinion, respondent KRQ 53 said that, “As I mentioned above, it is not reliable. We spend 2 to 3 days without regular supply of water or even worse to some residential areas”. This quotation and the above data confirm that the household

water service delivery system in the City of Kwekwe is not 100% reliable because, sometimes, the residents spend the entire day without water. Further, reliability depends on the location where one is situated because some suburbs have a constant water problem due to the negligence of the water authorities. Therefore, respondent KRQ 23 argued that, “It has been unreliable over the past 5 years and this resulted in some consumers drilling boreholes in their areas. Only those who afford drilled the boreholes at their households”.

From the data gathered through observation, it is evident that more males claim that the water service delivery system is reliable in comparison females. The reason for this could be that very few males fetch water at home because they find everything prepared by the females. Further, most of the domestic duties which need water are performed by the females. Some respondents who confirmed that the water service delivery system was reliable could be those located in the lower areas where they have a constant supply of water through the force of gravity due to the steep gradient. Thus, those in high lying areas are most affected due to the low pressure. The unreliability of the domestic water service delivery system could be that the pressure of the water is very low due to high demand which is caused by the increase in population and built up areas. This normally happens during the day when the water usage is high in every residential area.

However, 102 out of 110 respondents indicated that they experience water cuts without being informed. The remaining 8 out of 110 respondents confirmed that they were informed prior to the dates of water rationing or water cuts. The data above portrays the

feeling that most of the residents of Kwekwe urban suffer the problem of erratic water cuts. The uninformed water cuts range from an average of 3 days to one week without water. Some of the water shortages could be the results of burst pipes or water rationing from the Kwekwe Municipality. Respondent KRQ 47 said that, *"The household water is not available from 3 to 4 days a week or at times it can be the whole week. The water supply is on and off, but has been available as from May to July 2010. We hope it will remain that way".*

The finding drawn from the above situation is that the water cuts may be the result of power cuts since the water supply in Kwekwe urban relies on the input of the Zimbabwe Electricity Supply Authority (ZESA). Therefore, the electricity deficiency can lead to water cuts without notifying the consumers. Further, the shortage of household water could be the result of pipes which cannot yield the same pressure to all residential areas because they were constructed a long time ago when the population of Kwekwe urban was very small. The pipe leakages also promote the water cuts without notifying the consumers.

Therefore, the Kwekwe Municipality can improve its water service delivery system through constant communication with ZESA so that they may know, in advance, the dates of the power cuts and notify the consumers prior to this time. Moreover, there is a need to renovate the old pipe system and construct new ones. This can reduce the chances of water leakages. Residents must also hastily advise the Kwekwe Municipality of any water leakage in the area. If the Kwekwe Municipality has the normal water rationing programme, the consumers must be informed in time in order to prepare for

the possible water shortage. This may assist in further improving the current water service delivery system in the city of Kwekwe. Notices related to this matter can be displayed on the notice boards within the reception area of the Municipality or at retail outlets and also on posters around the city.

Nevertheless, the researcher observed that notices were only given to the residents of low density suburbs where residents of the upper social class reside. The issue was raised with the Kwekwe Water Authority management and they promised that they were going to notify all residents of any disruption of water service delivery in the area. During the process of data collection the residents of 2 high density residential areas, where the poor reside, confirmed that they received notices in the form of posters or announcements from the radio/television. Some posters were distributed to the nearby schools so that the students could carry the message home. Therefore, this study also contributed to the improvement of services through notifying residents of any water problem in advance. However, the question arises, 'is this water clean?'

Eighty five out of 110 respondents acknowledge that the water is clean enough for human consumption whilst 15 out of 110 respondents confirm that the water is dirty. Eight out of 15 respondents cite cases of diarrhea and cholera outbreaks in their areas during the period between 2007 and 2009. Most of the residents in their areas were affected by two waterborne diseases. Only 10 out of 110 were not sure of the cleanliness of water in their area. Respondent KRQ 62 said, *"It looks clean in the human eye".*

The above data can be interpreted as suggesting that most consumers acknowledged that the water was clean but others indicated that it was too dirty for human consumption. Respondent KRQ 113 stated that, *"Sometimes the water comes out very dirty with mud or brown like particles especially during weekends".* Therefore, the study found that the water is not 100% clean due to the various facts raised above. Chances are that the Kwekwe Municipality is experiencing a problem in acquiring the water purification chemicals ,such as chlorine, due to urban poverty and the economic crisis which is affecting the whole country. When the researcher raised the issue of water purification chemicals to the Sable Chemicals Company, its management promised to sponsor the Kwekwe Municipality if they forward a request. This was because most of their workers reside in Kwekwe urban. The study also found that the problem of urban poverty greatly affects Kwekwe Municipality in its delivery of domestic water services to the consumers.

Do most consumers afford paying water tariffs to the responsible water authority under Kwekwe Municipality?

Seventy five out of 110 respondents acknowledged that they have no idea about the main source of water supply in the City of Kwekwe. Only 35 out of 110 indicate that Sebakwe River and Sebakwe Dam are the main sources of water supply to the City of Kwekwe. The interpretation of the data above is that the majority of residents do not know the main source of water supply in Kwekwe. This clearly shows that they lack some geographical knowledge of their city which causes some of them to indicate that the main source of water was the tap. This is like believing that the main source of milk is the bottle.

Thus, when residents lack knowledge about the source of water chances are that they may not use it with caution. They just expect it to come out from the taps and if it fails they blame the Kwekwe Municipality which is also struggling due to urban poverty. The Sebakwe is a seasonal river which can also run dry during the course of the year which is why the dam wall was constructed to harvest the water. However, the water from Sebakwe River is reliable because the dam has the capacity to supply water to the City of Kwekwe for the entire year overlapping into the next rainy season. Therefore, it is necessary to educate the residents of Kwekwe urban that water is a scarce commodity which also needs to be preserved. Water is life. This line of thought can be linked to the number of liters consumers use per day in any given household.

One hundred and five respondents out of 110 indicated that they consume above 25 liters per day, per household. However, only 5 out of 105 also specify that that they use more than 100 liters of water per day, per household. The remaining 5 out of 110 indicated that they had no idea of the total amount of water which they use per day, per household. The interpretation of the data above could be that the greater number of respondents uses more than 25 liters of water per day per household. Therefore, the total amount of water consumed per month, per household, by the majority of consumers is between 750 and 1000 litres. This is a lot of water and the residents need to use water sparingly because it is a scarce commodity. Those who do not know the quantities of water consumed per day, per household, could be using either more or less litres of water per day as compared to the majority of the respondents.

Fifty out of 110 respondents indicated that their monthly water tariffs range from $ 5 to $ 15, whilst 55 out of 110 also acknowledged that their monthly water bills are between $ 16 and $ 30 per household. However, the remaining 5 out of 110 respondents confirmed that their water bills per month, per household, ranges from $ 40 to $ 100. The interpretation of this data could be that those paying monthly water bills between $ 5 to $ 15 are from high density suburbs whilst those paying water bills ranging from $ 16 to $ 30 are from the low density residential areas. Those paying monthly water tariffs ranging from $ 40 to $ 100 were from the residential plots (also categorized as low density) whose rate of water consumption is above the other two residential areas.

Nevertheless, only 18% of the respondents indicated that they were able to pay the above water tariffs. The rest, 82% of the respondents, acknowledged that they found it challenging to pay the above water bills. This suggests that the majority are not able to pay the water tariffs because they also have to incur expenditures from paying the rates and education levy to the Municipality. The other factor could be that most of them are earning an average figure of $ 200 which is far below the datum line of poverty. The datum line of poverty is currently pegged at $ 550. The introduction of the foreign currency is another hurdle which affects a large number of the respondents. Therefore, the majority cannot afford to pay the water tariffs. Respondent KRQ 33 said that, *"Previously it was affordable but there is a time when tariffs just escalated and residents could not get the foreign currency being used at present in Zimbabwe".* The minority who indicated that they are able to pay could be those who are rich and also earn above $1 500 per month.

It is therefore necessary, in this study, to identify the measures being taken against those in arrears. All of the respondents, 110, indicated that the Municipality Water Authorities normally disconnect the water services of those in arrears. One hundred out of 110 indicated that the readings on the invoices from Kwekwe Municipality were not tallying with the actual meter readings. The interpretation of the above data could be that all respondents were aware that the water authorities always disconnect the water services of those in arrears. However, the water authorities cannot just disconnect the water services of those in arrears without giving a grace period. The residents are given the monthly water bill through invoices from the municipality. The problem arises with the idea that some of the water bills indicated on the invoices do not correspond with those on the water meters.

This could be because the Kwekwe Municipality has limited personnel to read the meters regularly, on monthly basis, due to urban poverty affecting the system. The other problem could be the mode of transport, as meter readers always ride their personal bicycles when going for meter readings. Therefore, they resort to estimating some water tariffs for certain months and only give correct readings after some time. This confuses the consumers since they base their expenditure on the meter readings and the issue of estimating is not well communicated to them.

Further, the consumers who are in arrears were unable to communicate with the water authorities so that special arrangements could be made in order for them to settle their balances without disconnecting the water services. Some respondents could have water meters which were no-longer functioning, but failed to report this to the water

authorities. These multiple problems end up affecting the water service delivery to consumers due to the urban poverty also affecting Kwekwe Municipality. However, some respondents lack the knowledge of what to do when the meter readings are different from those on the invoices received from the municipality. But there are some who could present their case to the municipality and got charged on the correct meter readings. Respondent KRQ 69 said that, *"I have to record the readings myself and then go with them to the municipality so that they can give me the correct water bill".* During the course of data collection some residents adopted the advice from this study to visit the Kwekwe Municipality and rectify the problem. A reasonable number of them were attended and the errors were corrected so that they were to pay the water bills which correspond with the meter readings instead of the estimated one.

The following question arises from the above problem: Is it a solution to disconnect water services to those who are in arrears? Sixty five out of 110 respondents indicated that it is not a solution to disconnect the water services of the consumers who are in arrears. The remaining 45 respondents acknowledged that it is a solution because some residents only respond to disciplinary measures. The data presented above has caused a great debate. More respondents claim that it is not a solution to disconnect water services of the consumers in arrears because closing water supplies does not make the water bills more affordable. However, the other group of residents feels that it is a solution to disconnect water services to the residents in arrears because the Kwekwe Municipality needs to use the money to improve the services it provides to its customers.

Therefore, the study can conclude that the municipality of Kwekwe must find a better way of making consumers pay the tariffs because a good water service delivery system goes hand-in-hand with the concept of consumers paying for the services. This is in line with the neo-liberal line of thought even if it is the right of every human being to access water for domestic use. These human rights are not supposed to be enjoyed free of charge. Further, the idea of making consumers pay for their services introduces the aspect of responsibility and accountability to the residents of Kwekwe urban.

The study noted that 90 out of 110 respondents indicated that they were having other problems related to the water service delivery system of Kwekwe Municipality. The remaining 20 out of 110 also indicated that they were not experiencing any other problems besides domestic water scarcity. The interpretation of the above data could be that the majority of the respondents had other extra problems related to water supply. They complained that the Kwekwe Municipality charged for refuse collection and an education levy on top of the water bills. This is not well explained to the consumers. The other problem was the introduction of multiple foreign currencies and the backdating of the arrears which were quoted in the Zimbabwean dollar but which consumers are now expected to pay in foreign currency. Some indicated that their salaries were as low as $ 100 per month such that if they subtract $ 30 for water tariffs, they will be only left out with $ 70 between themselves and poverty. The study found that the water tariffs for the residents of Kwekwe are too high for the poor to afford to pay them. Further, the Kwekwe Municipality is also displays the signs and symptoms of urban poverty.

Does the water policy in Zimbabwe accommodate the human rights of the consumers? This study observed that 40 out of 110 respondents were of the opinion that it is proper to introduce a policy comprising a free household water service delivery system to the poor. However, 70 out of 110 respondents acknowledged that it is improper to introduce a policy consisting of free domestic water services to consumers not specifically the poor, and that the word “free” must be avoided at all costs. Therefore, the majority of the respondents agreed that consumers need to pay the water bills regardless of their financial status. The data presented above can be interpreted as a claim that the majority of the respondents, whether poor or rich, appreciate the idea of introducing a water service delivery policy which accommodates the poor who must pay a subsidized amount.

They were considering sustainability and maintenance of the water service infrastructure as well as the cost of purifying water incurred by the Kwekwe Municipality. Respondent KRQ 117 said that, *“It is not proper for the poor to access domestic water free of charge because the municipality need some money to repair the facilities so the poor should have to pay even half of the amount”*. This is in line with a neo-liberal theoretical framework which is the basis of this thesis. Kwekwe Municipality is also poor, as earlier discussed, but it does not access raw water free of charge from the Zimbabwe National Water Authority. The municipality also has to pay for water purifying chemicals and for electricity from the Zimbabwe Electricity Supply Authority. Therefore, the study can conclude that it is a right of every human being to access water for domestic use through paying their water tariffs to the municipalities. There is nothing for free even if it is a human right to get it. Consumers must also remember that it is also the right of the

municipality to demand the money for water tariffs from those who are in arrears. For instance, the Kwekwe Municipality is also in arrears and experiences some urban poverty as indicated earlier in that its staff members go for meter readings using their personal bicycles.

From a total number of 110 respondents, 103 acknowledged that they have some gardens and they use a hosepipe to water the gardens. They also indicated that they use hosepipes on an average of 4 times a week and they were not clear on the aspect of monitoring the connected hosepipes. Only 7 out of 110 confirmed that they do not have gardens and but they use hosepipes to wash cars. The interpretation of the data presented above could be that the majority of respondents use hosepipes to water their gardens and the minority also uses hosepipes to wash cars. The use of hosepipes is not economical and does not correspond to the rules and regulations of municipal water rationing and conservation. A lot of water can be lost through hosepipes, some of which are just connected and left unmonitored. The idea of having gardens and washing cars is noble because it promotes heath and sanitation, but it is very costly when achieved through the use of hosepipes. The study can conclude that the water policy must have a section concerning the use of hosepipes in order to use this precious commodity sparingly.

What can be the possible recommendations for improving the household water service delivery system in the city of Kwekwe?

The respondents volunteered different opinions concerning feasible recommendations to improve the domestic water service delivery system in the city of Kwekwe. Eighty out of 110 respondents indicated that consumers need to pay their tariffs so that the

municipality continues to maintain its water system and improve service delivery. However, 20 out of 110 respondents were of the idea that the government, nongovernmental organizations, other companies and the business community need to intervene in this regard so that they can assist the Municipality of Kwekwe in improving the household water service delivery system. The remaining 10 out of 110 showed that the Kwekwe Municipality must provide domestic water services to its consumers at an affordable price.

The interpretation of the data above could be that there is a need to re-think the best practice so as to improve the household water service delivery system to the consumers in the city of Kwekwe. The majority of the respondents were of the idea that the consumers must pay their water bills regularly in order to receive better domestic water services. This is related to the neo-liberal theoretical framework which promotes the ability to pay in order for the consumers to receive quality service delivery. Respondent KRQ 22 said, *"All consumers of water from Kwekwe Municipality should pay the stated tariffs in order to improve the Council's service delivery system".*

Further, Kwekwe Municipality does not exist in a social vacuum. It is surrounded by a number of companies such as Sable Chemicals, ZIMASCO, Steel Makers and the Globe and Phoenix Mining Company. According to the data above these companies have the potential to help the Kwekwe Municipality through the procurement of water purifying chemicals. Respondent KRQ 111 stated that, *"The Kwekwe Municipality must liaise with the local companies so that those companies could assist with the chemicals used to purify the water".*

It could be inferred, from the last part of the data presented above, that the consumers want the municipality of Kwekwe to charge affordable water tariffs which tally with the meter readings. In line with this notion, respondent KRQ 17 said that, *"The Council must make the water to be affordable to everyone at a reasonable rate".* This indicates that there exists a need to revisit the water charges at Kwekwe Municipality so that consumers can pay tariffs which correspond with what they have consumed.

The study found that consumers must be able to pay the water tariffs for the water service delivery system to be sustainable. It is a fact that these tariffs provide the money that the municipality uses to improve the service delivery system. Therefore, consumers must pay the tariffs to allow the municipality to improve the household water service delivery system. The ability to pay tariffs enables the service delivery team to acquire enough raw materials, like water purifying chemicals, and to ensure that clean water reaches each household. Therefore, consumers need to pay tariffs in order to sustain service delivery. Thus, water should be affordable. Reasonable charges should apply so that everyone is able to access clean water for domestic use. The government should also intervene and pay subsidies for these services in order to reduce urban poverty.

Nevertheless, poor consumers and poor service providers such as Kwekwe Municipality deserve to be at the centre of the debates in order to propose the way forward. It is the poverty of both the municipality and the consumers which have a significant impact on the household water service delivery system. In order to assist the Kwekwe Municipality in this poor environment the following was proposed as the way forward:

There are big companies in Kwekwe like ZIMASCO, ZISCO STEEL, Sable Chemicals, and National Breweries which consume large quantities of water in their processes. These companies should be levied a certain percentage that will cater for the poor (Respondent KRQ 06).

The government should help the Kwekwe Municipality to sink boreholes for the poor who can not afford to pay the tariffs.

The Kwekwe Municipality must seek donations from nongovernmental organizations in addition to a subsidy from the government. Generally, water tariffs should be subsidized so that they can be affordable to everyone who stays in urban areas.

The Kwekwe Municipality must work together with the government of Zimbabwe by including the poor in income generating projects in order to help them boost their income.

Kwekwe Municipality must be able to fight its own poverty in order to provide clean domestic water service delivery to the consumers.

Water tariffs must be realistic and affordable. Municipality authorities must put cost cutting measures, like reducing unnecessary expenditure, in place to provide water at affordable prices.

5.4 Presentation, Analysis and Interpretation of Data collection through Questionnaires (from Water Authorities).

5.4.0 Bio-data of Questionnaire Respondents (from Water Authorities)

The biological-data of the respondents (Water Authorities) is presented before the presentation and analysis of their responses.

Table 6: Distribution of Respondents by Age group and Gender (n= 10)

Age Group	Females	Males	Total
20 years and below	0	0	0
21 to 24	1	0	1
25 to 30	0	3	3
31 to 35	1	2	3
36 to 40	0	1	1
41 and above	0	2	2
Totals	2	8	10

Table 6 above indicates that there were no respondents from the age group of 20 years and below. The age groups ranging from 25 to 30 and 31 to 35 recorded the highest number of 3 respondents each. Females were considerably outnumbered by males in these categories. This was followed by the group who were 41 years and older, which only had 2 male respondents. The remaining figure of one respondent per age group was recorded in the age groups ranging between 21 and 24 as well as 36 and 40. There were no female respondents in these two age groups.

The data above suggests that the Municipality of Kwekwe is male dominated. The reason for this could be that most of the jobs are too technical and can be regarded as blue collar jobs. The females normally want white collar jobs even though there is a policy of women empowerment in all sectors. Women are naturally smart and they want to be associated with smart jobs like secretarial work and accounting at the male dominated work place like the Kwekwe Municipality.

The majority of respondents range between 25 and 35 years of age. These are the graduate engineers from the Institutes of Higher Learning in Zimbabwe. Their age indicates that these are grown and experienced employees who can provide reliable and relevant information concerning the water service delivery system in the city of Kwekwe. The number of respondents decreases with age because most of these technical engineers leave Kwekwe Municipality looking for greener pastures.

Nonetheless, 8 out of 10 respondents had work 6 to 10 years of work experience. The remaining 2 respondents, out of 10, have 3 to 5 years work experience. Further, all the respondents had a Bachelors Degree and only 1 out of 10 respondents had a Masters Degree. The interpretation of the above data could be that the majority of respondents were well educated and experienced in their work. These were identified as a reliable source of information. Therefore, the poor service delivery of household water could not be a problem related to expert knowledge, but motivation through the nature of remunerations. This could have been made worse by the economic crisis which prevailed in the country between 2007 and 2009. The issue of multiple currencies works but it is also a barrier to Kwekwe Municipality which is experiencing urban poverty.

5.5 Main Research Questions

The section below presents data that was collected from the questionnaires completed by the Water Authorities. The data was presented in respect of the four main research questions that were generated in Chapter 1 and highlighted earlier on in this chapter as

well. The 4 questions are repeated as headlines of relevant paragraphs in this section of the study.

Does Kwekwe municipality have the capacity to provide clean household water services to the residents?

It is interesting to note that 10 out of 10 respondents acknowledged that Kwekwe Municipality has the ability to provide water for domestic use to its residents. One could interpret this as the pronouncement of respondents who wanted to defend their company since most of them occupy very senior positions within Kwekwe Municipality. However, they deserve to give this response because according to KRQ 9, *"Kwekwe was rated the best provider of clean water among the local authorities in the country under this economic crisis".* To support this respondent KRQ 3 said that, *"Yes. The water treatment capacity is 90 Mille liters per day which is against the demand of 53 mille liters per day".* However, this contradicts the service delivery to the consumers since the residents of Kwekwe experience erratic and uninformed water cuts. The reason could be that the water authorities only inform the companies and the business community through loose minutes or formal letters. This can be exemplified by the Kwekwe Municipality (Director of Works) letter dated 2 July 2010 which was directed to the Production Manager Chibuku Breweries indicated as Appendix 6, to this study. The letter is entitled: **DISRUPTION OF WATER SUPPLY**.

However, 7 out of 10 respondents indicated that Kwekwe Municipality does not have adequate capital, equipment or manpower to execute its responsibility which is to provide good household water service delivery. Only 3 out of 10 respondents

acknowledged that Kwekwe Municipality has average resources to deliver services to the consumers. The data above suggests that the majority are of the feeling that the situation at Kwekwe Municipality is not yet back to normal even though there are signs and symptoms of improvement. In this regard, respondent KRQ 5 said, *"No. Not yet for now though signs are that things are improving. The cash flow is not yet steady for development".* The minority who said the situation is under control could have based their arguments on the recent renovations of water pipes, but these were not done in all areas of Kwekwe urban.

The study also revealed that 10 out of the 10 respondents confirmed that the domestic water service delivery system from Kwekwe Municipality to its residents is reliable. Furthermore, all ten respondents acknowledged that Kwekwe Municipality has a consistent water service delivery system. They also indicate that they do not experience erratic water shortages in Kwekwe urban. It is also
thought-provoking to find that all ten respondents indicated that there is no waterborne disease which is common in Kwekwe.

The interpretation of this data suggests that it is difficult for the water responsible authorities to accept the problem of the water service delivery system in Kwekwe. They defended their system in order to preserve their reputation and reliability. The consumers indicated the degree of water scarcity in the city of Kwekwe and it is therefore surprising to observe that all the water authority respondents were positive in their responses. However, this is expected because they cannot shoot themselves on the foot. They tried their best to support their system. Respondent KRQ 10 said that,

“We have enough raw water from Sebakwe dam and also have more than enough water treatment capacity at our Dutchman’s Pool treatment plant. This alongside with the Zimbabwe Electricity Supply Authority makes our water supply consistent”.

All 10 respondents affirmed that the relationship between the Zimbabwe National Water Authority (ZINWA) and Kwekwe Municipality is that the former supplies raw water to the city of Kwekwe. This could be interpreted as a statement that ZINWA owns the source of water particularly the dams and rivers. Respondent KRQ 6 stated that, *“ZINNWA owns all the water under the ground, on the earth’s surface and even the human tears”.* It is the board responsible for and in charge of all the raw water which is not accessed free of charge. The Kwekwe Municipality buys raw water from ZINWA and then sells it to the consumers after treatment. Therefore, it is the right of the consumers to access clean water but they also need to incur some costs in the process. Water is not freely accessed from the source and does not become free after treatment. This is in line with the neo-liberal theoretical framework which promotes good services through the payment of some tariffs.

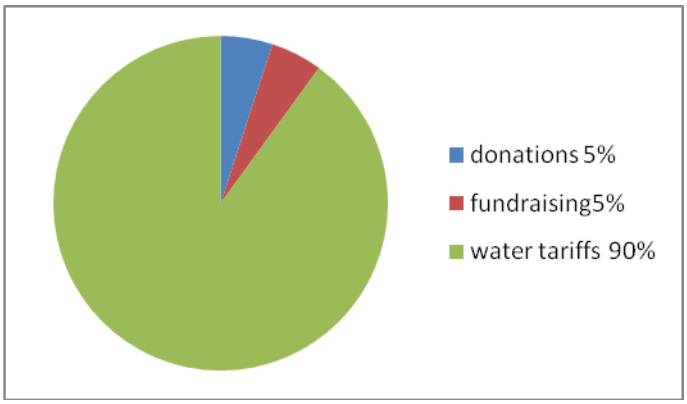
The respondents also listed some common roles and responsibilities of Kwekwe Municipality in terms of a domestic water service delivery system to the consumers. The roles and responsibilities of the Zimbabwe National Water Authority were also included during the data collection process. The consolidated list of these is as indicated below:

Table 7: Roles and Responsibilities of Kwekwe Municipality and ZINWA

Kwekwe Municipality	Zimbabwe National Water Authority
Purify raw water	It owns all raw water and underground water
Supply treated tapped water to the consumers	Provide raw water to the local authorities
Pumping and reticulation of water	Looking after the dams
	Construction of water reservoirs

This data suggests be that it is a long and arduous process for consumers to access clean household water. Therefore, the problems affecting the service delivery system of ZINWA may also cascade down to the municipalities. The municipalities receive raw water from ZINWA at a cost which differs from one city to another. Water is not accessed free of charge. Therefore, the study found that for consumers to get satisfactory clean domestic water service delivery they need to pay the water tariffs.

Figure 2: Distribution by the initiative to raise funds



Ninety percent of the respondents from Figure 2, above, indicated that Kwekwe Municipality raised funds through collecting water tariffs from consumers. However, 5% of the respondents also acknowledged that the municipality accesses donations from other organizations. The remaining 5% of the respondents confirmed that fundraising was another initiative used by Kwekwe Municipality to raise funds.

The data presented above intimates that Kwekwe Municipality relies much on the water tariffs paid by the consumers. Therefore, if the consumers are in arrears the municipality will not be sustainable. This will make it difficult to pay its workers, purchase water purifying chemicals and to maintain the water infrastructure system. Very little money is raised through sourcing donations and fundraising activities. This situation highlights that Kwekwe Municipality is not well connected to the business community and other organizations that are willing to assist, especially the non-governmental organizations. The study can therefore conclude that Kwekwe Municipality fails to deliver satisfactory domestic water service delivery due to urban poverty.

Do most consumers afford paying water tariffs to the responsible water authority under Kwekwe Municipality?

One hundred percent of the water authority respondents indicated that consumers struggle to pay the water tariffs due to the current economic crisis. Respondent KRQ 8 said that, *"No. They are victims of the economic situation. More of the residents of Kwekwe are failing to pay their monthly water bills regularly because of the cash problem affecting the country".* The interpretation of the above data could be that the consumers are economically crippled by urban poverty to such an extent that they cannot afford to honour their debts. The study can therefore deduce that the Kwekwe

Municipality is likely to take measures against those in arrears. Below is a consolidated list of the possible measures taken by the 10 respondents regarding those in debt:

Send reminders to those in arrears.

Get into a payment plan to liquidate the arrears.

Partial payments after agreeing on the payment plan.

In extreme cases disconnect the water of the culprits.

Respondent KRQ 2 supported the last point concerning closing the water system off to those who owe: “Yes, household water costs and it has to be paid for. However, closing the water system is the last resort after all other variables have failed”. The interpretation of the data above could be that the water authority considers the consumers to some extent. They do not have an attitude of just disconnecting the water to those in arrears. It is a process from the warnings and reminders. They also make efforts to create a payment plan for individual consumers after considering their individual situations.. Therefore, the issue of disconnecting the water is the last resort to be pursued only after exhausting all other positive avenues. Most of the affected consumers are those which did not have constant communication with the water authorities concerning their problems. They just kept quiet. Silence is a bad way of communication. The bottom line is that the consumers have to settle their debts within a stipulated time frame.

Nevertheless, all 10 of the respondents indicated that the readings on the water meters did not always tally with what was written on the monthly invoice. The interpretation of the above data could be that Kwekwe Municipality is so poor that it cannot afford to

send out enough manpower to get the correct meter readings. The researcher had the opportunity to interview one of the meter readers who was delivering the monthly invoices whilst travelling on his old bicycle. The question was why is it that the meter readings are not tallying with the monthly invoice? The respondent acknowledged that, “The Municipality is in ‘red’. We are only two. There is severe shortage of manpower and transport that is why I am opting to use my bicycle, but I am not able to visit every household door to door. At times we end up estimating the figures. The consumers with the problems concerning this must come to the office and talk to our bosses”.

Therefore, the study found that urban poverty is a great obstacle which affects Kwekwe Municipality’s service delivery. It is this hurdle which needs serious attention so that the municipality is able to improve its service delivery system in a neo-liberal environment where everything demands money for the best practice to unfold. Further, the water authorities must have the consumers at heart through accepting errors from the meter readings and rectifying them in a satisfactory approach.

Does the water policy in Zimbabwe accommodate the human rights of the consumers? Seven out of 10 respondents indicated that the water policy accommodates the consumers because every municipality has a Client Charter driven from the water policy. Only 3 out of 10 respondents indicated that they were not sure. The interpretation of the above data could be that the water policy incorporates the consumers but is silent on those who find it difficult to pay the water tariffs. The respondents who said they were not sure may not be familiar with the water policy. This portrays a picture of some office bearers who have no idea about the contents of the

water policy. The water policy clearly states that water service delivery must be done at a reasonable fee. This is related to the neo-liberal theoretical framework which emphasizes a good service delivery system at a certain fee.

However, it does not specify how reasonable this fee is. The study deduces that it is the right of every human being to access domestic water. However, in no way is it a right to get purified household water free of charge. Respondent 8 said that *"It is tantamount to theft. They have to relocate to rural areas because in urban areas there is nothing for free even the word of God is not for free".* However, this response was a bit harsh but attempts to address the notion that municipalities deserve to recover the incurred costs through collecting revenue from the consumers in the form of water tariffs. This is part of the money being used for the renovations and maintenance of the water system infrastructure of Kwekwe Municipality.

Further, 6 out of 10 respondents indicated that there were some improvements in the water service delivery system for the past ten years. The remaining 4 out of 10 respondents show that there was no significant improvement in the household water service delivery system for the past ten years. Respondent KRQ 5 said that, "*There is no improvement. The depreciation of the service delivery was caused by the economic hyper inflationary environment which was not favourable to development*".

The interpretation of the above data could be that there is a thin line between the majority and the minority concerning the improvement of domestic water service delivery for the past 10 years. This small difference shows that the improvement is there

but it is still below average. The problem of poor water service delivery is caused by the bursting pipes which are caused by high pressure from water works. These bursting pipes remain this way for a long period of time without being repaired. On the other hand, the slight improvement in household water service delivery, though insignificant, has been noted due to the introduction of the multi-currency early 2009 in Zimbabwe. This is observed as an improvement in the water service delivery system when compared to previous years. Respondent KRQ 2 stated that, *"There had been a breakdown of the service especially in 2006 to 2008 because of the economic situation which prevailed during this period".* All these conflicting debates indicate that the consumer is not considered as the center of the discussion, and yet; consumers are the most important key players in any type of discourse concerning household water service delivery system.

Table 8 : Distribution by knowing the policy documents

	Those aware of the policy documents	Those unaware of the policy document	total
Water policy	2	1	3
Water statutory instruments	3	1	4
Water acts	2	1	3
Total	7	3	10

Table 8 above indicates that 7 out of 10 respondents are aware of the water policy documents. The remaining 3 out of the 10 respondents revealed that they were not aware of the policy documents. The interpretation of the above data could be that the

majority of the respondents are aware of the water policy documents whilst the minority is not aware of these documents. Those who are aware of the documents could be the most experienced workers who received induction and orientation during their first days of employment. Those who are unaware of the water policy documents could be novice employees of Kwekwe Municipality who unfortunately did not receive proper induction and training because of urban poverty caused by the economic crisis in Zimbabwe. This shows that there is a training gap for some of the employees of Kwekwe Municipality. This could be solved through conducting training workshops or attending seminars with other African municipal authorities and even going beyond the country's borders.

What are possible recommendations to improve the household water service delivery system in the city of Kwekwe?

The respondents came up with a number of recommendations and a way forward concerning improving the household water service delivery system in Kwekwe urban. Five out of 10 respondents recommended that there is a need to refurbish the water infrastructure which is now too old to offer satisfactory household service delivery. The other 3 out of 10 respondents recommended that Kwekwe Municipality upgrade the water reticulation system. The remaining 2 out of 10 respondents recommended that the municipality improve water measurement and improve leak detection.

The interpretation of the above data could be that there is a need to renovate the water infrastructure including the sizes of the water pipes in order to improve water pressure. However, it is now costly to repair the water infrastructure system. The upgrading of the water reticulation system demands a lot of expertise and money. Therefore Kwekwe

Municipality need to improve its financial capacity in order to upgrade the water reticulation system. Residents must contribute on the leak detection by reporting any suspected leaking pipe to the municipality within 24 hours. All this is an attempt to lead this study on the way forward.

The respondents proposed a variety of advances towards assisting the consumers since access to clean household water is perceived as their human right. Five out of 10 respondents proposed that the municipality should charge their consumers the correct water tariffs and the consumers must have the capacity to pay their water bills in order to improve the service delivery system. Two out of 10 respondents proposed that Kwekwe municipality must get connected to some companies and a business community with the potential to assist, in cash or in kind, so that urban poverty is reduced. The remaining 3 out of 10 respondents proposed that the municipality must improve the water meter readings and that consumers must report the broken water meters within a week. However, most of the respondents held a common belief that the state and the NGOs must intervene in order to address the problem of urban poverty which affects the household water service delivery system.

The interpretation of the above data could be that Kwekwe Municipality is faced with a number of challenges which can be solved through applying some of the above opinions as a way forward. Consumers should be able to settle their debts so that the municipality can survive as well. The issue of charging consumers the incorrect water tariffs must be corrected through distributing water invoices with the correct meter readings. Kwekwe Municipality must have some networking with other municipalities in

Africa and even outside Africa in order to access assistance in the form of donations from NGOs and the international business community. This could improve the quality of household water and service delivery to consumers through ensuring that the water purification chemicals are reachable. The meter readings may be improved through motivating Kwekwe Municipality management to increase the number of qualified and well trained manpower.

Most of the respondents said that they wanted the NGOs to offer support because they had always been involved in poverty alleviation. Nonetheless, the respondents were hastening to point out that what they wanted was poverty reduction and not poverty alleviation. Accordingly, much more needs to be done in the interest of poverty reduction in the city of Kwekwe. According to respondent KRQ 8, "*the business community needed to assist in the fight against urban poverty because it created part of its wealth from the consumers in the city of Kwekwe and it was fair for the business fraternity to plough back into the city as part of a social responsibility*".

The general interpretation of the responses above is that urban poverty reduction in the city of Kwekwe requires team work between various stakeholders. These include the government of Zimbabwe, NGOs, Business Community and the city of Kwekwe community. Nevertheless, most respondents were not clear about how these stakeholders could work together harmoniously, considering that they have different goals to meet. Respondent KRQ 4, said that, *"I do not know how these institutions can be made to cooperate in the fight against urban poverty, but it is important that they work together. Poverty must be a community problem not an individual problem".*

What is required is to establish how these organizations can work together considering the fact that business is capitalistic and capitalism is about profit making and not urban poverty reduction. The state may not see poverty reduction as its role but as that of the poor municipalities themselves with the help of the business sector. On the other hand, the poor municipalities may look up to both the government and other private sectors for support. These contesting views further complicate the issue of urban poverty reduction in the area under study. This study encourages further research into the specific roles of the state, the City of Kwekwe and the private sector in urban poverty reduction.

The above idea shows that the city of Kwekwe community has a section that is poor and unproductive. The old and the weak, the unemployed, those with severe physical illnesses and the orphaned minors constitute this sub-community of the poor in the city of Kwekwe. Perhaps, this is a group that deserves social welfare grants for the purposes of meeting their basic needs including clean household water service delivery.

5.6 Analysis, Presentation and Interpretation of Data collected through interviews

The following section presents and interprets the primary data that was collected from the field using interviews. As in the previous sections, the bio data of the respondents is presented first.

5.6.1 Biological data of the Interview Respondents

The matter below relates to the source of the data. The validity of the findings can also be inferred from the data source. It was therefore felt necessary that the bio data of the key informants be provided in advance. After the presentation of the bio data the section

proceeds to present the data in respect to the four research questions that were generated by this study.

Table 9: Distribution of Respondents by Age group and Gender

Age Group	Females	Males	Total
20 years and below	0	0	0
21 to 24	0	0	0
25 to 30	1	2	3
31 to 35	1	1	2
36 to 40	1	2	3
41 and above	1	1	2
Totals	4	6	10

Table 9 above indicates that 3 out of the 10 respondents were 25 to 30 years of age and 2 were between 31 to 35 years old. Further, 3 out of 10 respondents ranged from 36 to 40 years of age. The remaining 2 out of the 10 respondents were 41 years and older, but below 60. The respondents were mature enough to provide reliable information about re-thinking water service delivery in the city of Kwekwe. Table number 9, above, also shows that there was a balance between the number of males and females who participated in this study. Gender sensitivity may have allowed a balanced set of opinions from both sexes.

Table 10: Distribution of Respondents by Educational qualification and Income.

Educational Achievement	Average monthly Net Income Bracket in US dollars					Total
	Above 6000	4800-6000	2400-3600	1200	0-1000	
'O' Level	0	0	0	0	1	1
'A' Level	0	0	0	0	1	1
National Certificate	0	0	0	0	1	1
National Diploma	0	0	0	1	3	4
Bachelors Degree	0	1	1	0	0	2
Post Graduate Degree	0	1	0	0	0	1
Totals	0	2	1	1	6	10

This Table indicates that the least educated, 3 out 10, respondents had attained educational qualifications ranging from 'O' Level to National certificate. In terms of income, the respondents earned an average of US$0 to US$ 1000 per month. The Table also shows that 4 out of 10 respondents held a Diploma certificate. Two out of 10 respondents had Bachelor's degrees and their incomes range from US$ 2400 to US$ 4800. Only one out of the 10 respondents had a postgraduate degree and earns an average income of US$ 4800 to US$ 6000.

The profile above gives the impression that the respondents were generally well educated. The assumption is that these respondents gave more reliable data on rethinking household water service delivery in the city of Kwekwe. This section presents analyses and discusses qualitative data collected through interviews. The process of analyzing qualitative data requires analytical craftsmanship and the ability to capture an understanding of the data in writing (Henning, et al, 2005). This process is performed within the confines of the methodological design and other procedures. Themes emerging from the interviews were coded and appropriately analyzed. Henning (2005) has postulated that after data transcription, qualitative data is to be 'worked' by being analyzed through open coding in order to get a global impression of the content. Open coding is the 'naming and categorizing of phenomena through close examination of the data' (Henning, et al, 2005: 131). Codes are thereafter discerned to drive coherent meaning from the transcriptions. The codes are translated into categories to enable the researcher to create themes.

After carefully following this procedure, the researcher identified specific themes from the interviews with the residents and water authorities of Kwekwe urban. The presentation, interpretation and analysis of the bio data directed this study into greater heights through focusing on the major research questions.

5.7 Main research questions

The major research questions of this study can be repeated as shown in bold letters before the presentation, interpretation and analysis of relevant data. The questions are repeated for convenience in order to keep the reader of this study on track. In this case,

a research question can be regarded as a north star which guides a traveller to reach the destination with minimum of fuss.

Does Kwekwe municipality have the capacity to provide clean household water services to the residents**?**

The capacity of Kwekwe Municipality to provide clean household water service delivery to the consumers.

The interviewees also agreed that Kwekwe Municipality has the potential to provide clean water for domestic use to its consumers. However, it is obstructed by the economic crisis and urban poverty. Respondent KRI 4 had the following to share, *"Yes, we have the capacity to produce 53 to 90 mega liters of water per day. We had a gathering of six ministers here in Kwekwe in year 2006 and we were endorsed as city which supplies the cleanest water throughout the country".* The interpretation of the above ideas could be that the respondents based their arguments on the previous years when the country was not suffering from the economic crisis. The fact that the municipality was recognized as the city supplying the cleanest water in 2006 is valid and it shows that the municipality has the potential to do even better. However, this may not be the case during this current period characterized by urban poverty.

Effects of the relationship between Kwekwe Municipality and the Zimbabwe Electricity Supply Authority (ZESA) towards service delivery.

According to the ZESA Act of 2002, ZESA is an independent parastatal. However, the Zimbabwe Urban Councils Act (Chapter 29:15) states that there is a relationship between Kwekwe Municipality and the Zimbabwe Electricity Supply Authority because the Municipality gets electricity from ZESA at a nominal fee. The Kwekwe Municipality is

the consumer of energy from ZESA and it uses this energy to pump water so that it can be delivered to the residents in the form of tapped water. All the respondents believe that if ZESA fails to provide electricity to the municipality of Kwekwe it may not be able to offer household water service delivery to the consumers. The interpretation of the above opinion is that the respondents are aware that Kwekwe Municipality depends upon ZESA for the water reticulation process to be complete. The impression given by the above notion is that Kwekwe Municipality must construct big water reservoirs, so that household water supply will be consistent such that it may not be affected by the Zimbabwe Electricity Supply Authority load shedding. The best practice should be that the Kwekwe Municipality must have reservoirs with the capacity to store water for at least 4 days. Alternatively, the municipality could install automatic generators which can supply energy to the water pump when there is no electricity.

Do most consumers afford paying water tariffs to the responsible water authority under Kwekwe Municipality?

Household water as a human right.

The study found that there is no subsidy for consumers who cannot afford to pay the water tariffs since the local authority operates on the revenue paid by the consumers. Therefore, it can be deduced that the service delivery for household water cannot be executed free of charge. This view augurs well with the neo-liberal theoretical framework of development which forms the theoretical base of this study. It is interesting to note that the majority of the respondents hold the opinion that clean household water should not be provided free of charge.

The following are statements from some of the respondents which confirm this:

> *Aha, no; that is, we don't agree because there is nothing free of charge. The national policy is in such a manner that although yes we need health, yes we need clean water, but the National Legislature is in such a manner that there is no subsidy for people who can not pay for water. Actually the local authority operate from revenue paid by the people, that is to say we sale the water. Yes, so we cannot give water free of charge.*

The interpretation of the above data could be that household water is a precious, expensive commodity which cannot be delivered free of charge from the supplier to the consumer. The system incurs a lot of expenditure during the process of pumping raw water from Sebakwe Dam and the purification process at the Dutchman's Water Plant in Kwekwe urban. Thus, is it imperative that the consumers pay the water tariffs so that the system can recover its costs.

The opinion above is supported by one of the respondents who made the following comment:

I can only take you back to question 5 for some clarifications. I would say water is a basic right to every human being which must not be sold to anyone, it is like air which must just go for free, but how do we get the water. Someone must provide a service, for you to get your water we are now telling the residents to pay for the service (the office telephone rang). So we are now telling the residents to pay for the service so that they will be able to access their right so they are not paying for water but, for the services

(there was laughter followed by the office telephone interruption). I can also say that water is a human right but there are also some costs behind that service delivery.

5.7.2.2 Action taken against consumers who are in arrears.

The interviewees also agreed that some arrears are dated back to two years ago when the Zimbabwean dollar was the official currency. The tariffs accrued were converted to the current value of the multiple currencies which is why most consumers fail to pay their water bills. The above opinion agrees with the idea of most questionnaire respondents who hold that such bills have accrued to approximately a thousand dollars over the previous months. The respondents' view is summed up by the following narration by respondent KRI 6 who believed the following about the action taken against those in arrears:

> *What actually happens is that at the end of the month we write invoices to remind those who are in arrears so that they can respond. In some case we have to go and cut the water, but that is the last resort that we can use for them to respond. Water connections would be disconnected to consumers in arrears. We will disconnect everyone with outstanding water bills as long as they do not arrange payment plan. However, because the majority of the people were finding it difficult to make the down payments, Kwekwe Municipality had opted to introduce a payment plan. According to the Combined Kwekwe Residents' Association, disconnecting water supplies is illegal and cannot be used to coerce residents to pay. They believe that water is life and cannot be withheld from the consumers for whatever reasons.*

The interpretation of the above data could be that the majority of the consumers in Kwekwe have accrued alarmingly high water tariffs which were converted from the Zimbabwean dollar to the value of the current multiple currencies. However, it is not an offence to be in arrears but it becomes an offence when one fails to pay the water bills and also fails to communicate with the water authorities. The study found that the municipalities give notice to those in arrears through monthly invoices even though some of them do not tally with the correct meter readings. The study can conclude that those in arrears can make a plan to settle their water bills without employing the corrective measure of cutting off the water supply.

5.7.2.3 Method used to charge the water tariffs

During the interviews with the water authorities, it emerged that it is a requirement for everyone who wants to extract water from Kwekwe Municipality's reticulation system to have a meter so that the system is able to measure the amount of water to be consumed. So, against the unit rate the system may now be able to state the consumed water over a certain period through the process of people who read meters; meter readers. From these meter readers the water authorities also get the quantity of consumed water and then convert this into a monetary value after which they give invoices to all water output stakeholders.

Below are some of the views of the responding water authorities on the subject at hand:

What happens is we have a budget. We know the cost of water. The cost of our water is actually thirty one cents per kilolitre, that's the input we put into water. That's the cost and now what we can do we have actually the cost for the low density and the cost for the high density; and the cost for industry and commerce. What we do against is for the

high density we charge them the low cost because we charge them twenty five cents per kilolitre and the low density we charge them fifty one cents; and industry and commerce sixty cents.

The interpretation of the above data could be that municipalities have established a certain procedure for use as a method to charge water tariffs. The water bills are scaled and increase according to the type of residential area. The above stated water charges were reached after the budget. The meter reading system outlined above proves to be difficult to implement because of the shortage of manpower and the transport problem caused by urban poverty. Further, the data above revealed that water for household use and that of industry and commerce comes from one water reservoir of Kwekwe Municipality. This finding inspired the researcher to come up with a model for the best practice of a domestic water service delivery system. The model is revealed towards the end of this study.

5.7.2.4 The relationship of the meter readings with the monthly invoices of the consumers

In an attempt to verify the validity of the claims made by the responding consumers, it became prudent that the water authorities be asked to provide their views on the same issue. The situation was that the readings on the monthly invoices were not tallying with those on the actual meter readings for a number of households. This problem is fueled by the inadequacy of manpower and transport in this area of water service delivery and monitoring. Nevertheless, the water authorities accept complaints from individual consumers so that they can rectify the problem.

The respondents' view is summed up by the following narrations of 2 respondents (KRI 7 and KRI 8) who had the following to say concerning meter readings:

> *Like anything else which you know we can't be hundred percent correct. In some cases they don't correspond, but what happens it that, if a consumer comes and queries we send one of our meter readers to check so that we get the correct meter readings (KRI 7). I think to add onto that, before my colleague speaks so that he can also appear into that disc (people laughed), the idea is that, eehe, all the water meters which we use to measure the water to be consumed, they have got a design period and what it means is there was going to be, there is supposed to be a mechanism or it was supposed to be included in the statutory instrument for us to be able to say the local authority must recommend that other water meters have out-lived their design life span. And therefore we can not continue to rely on them on the measurement. That is not there because of the poor technological advancement. So the issue of measurement of water is still an issue to be pursued actually in the performance of all local authorities. There has been little focus and follow up on the accuracy of water meters to measure the consumption of water that I also leave my colleague to add (KRI 8).*

The interpretation of the above data could be that, water meters are machines. They are not one hundred percent accurate. Further, some of the water meters are no longer functional and others have out-lived their design life span. The study also found that the issue of human error cannot be ruled out. The situation is made worse by the economic crisis which promotes urban poverty as evidenced by the shortage of manpower to read the meters and transport problems. The above opinion agrees with the idea which most

questionnaire respondents hold: that meter readers were using subserviced bicycles as a mode of transport.

5.7.2.5 The capacity of residents of Kwekwe to pay the water tariffs

The respondents felt that the majority of the residents of Kwekwe lack the capacity to pay their water bills due to the economic crisis. Respondent KRI 10 had the following to contribute:

> *That capacity, actually to some extent yes. Our problem now is we have very big number of people who are not able to pay because of inflation; actually it's a national problem. The economic crisis is making us not collect what we are supposed to collect under normal circumstances. We have an economic crisis and the consumers also need to pay other rates to the municipality, electricity bills from ZESA, telephone bills and school fees.*

The above responses show that the majority of consumers do not have the capacity to pay the water tariffs due to urban poverty. The above view agrees with the ideas of most questionnaire respondents which hold that, the consumers fail to pay their water bills because of the accrued credits from the period of the Zimbabwean dollar when converted to the current situation of the multiple currencies. Further, the economic crisis is a national problem which is also an obstruction for the consumers to pay their water tariffs.

Does the water policy in Zimbabwe accommodate the human rights of consumers?

Accountability for the water lost through bursting pipes

The interviewees all agree that they had an appropriate mechanism to account for the water lost through burst pipes. There is a similarity in the view of the questionnaire and interview respondents in that it appears that all the respondents in this study indicated the following:

> *On this one we have got our water meters which are able to collect the data of how much is the water which would have been delivered to consumers for use and then at the water works we have some water measurements which quantify how much water has been pumped into the reticulation system. So the difference between how much water has been pumped and how much has been consumed will give us the loss of none revenue water which has been used. So with the range of water which gets lost due to water pipes bursting or leakages through fittings is between 17 to 28 percent per month. When water is purified we know how much water has been purified and how much has been pumped and at the end we have meters again we know how much we have charged to our consumers, so the difference there, they cater for the loss.*

The interpretation of the above data could be that the water authorities know how to account for the water lost through the burst pipes. However, they were clear that the lost water expenditure should, indirectly, be paid by the consumers.

In your own opinion who should pay for this loss?

When water is lost through burst pipes the municipality shifts the responsibility of payment to the consumers which is very unfair. The consumers do not cause this problem of water leaking, so why should they pay? This is a decision taken by the municipality due to their failure to rectify the problem on their own, which can be ascribed to urban poverty. The following comments were made by some of the interviewed respondents:

> *In my own opinion, I do not feel that the question of who pays for the expenditure of the water lost through bursting and leaking pipes has been answered. The person who pays for the expenditure of water loss definitely there must be someone because for us what is lost there is purified water and the person who buys the chemicals are the rate payers or the consumers of the water to purify the water so if purified water has been lost definitely what we mean is that the input of the chemicals is just gone out and that the consumers themselves are the ones responsible for paying the lost water*.

The interpretation of the above data could be that, this is what is causing the household water to be more expensive because if the infrastructure was in a good condition and there was no loss, the water was going to be cheaper than the current rates. The consumers are indirectly paying for the water lost through burst pipes and leakages. This is evidenced by the exorbitantly high water tariffs charged by the water authorities in order to recover the costs, at the expense of the consumer. The study can conclude that the water authorities do not accommodate the consumers as the most important

person in the water service delivery business. The consumer must be at the centre of the debates concerning the service delivery system.

Giving notice to the consumers before water disruptions.

The interviewees also agree that notices were given but inconsistently because, naturally, the municipality administrators would concentrate on the business community at the expense of ordinary consumers. To support this idea, respondents had the following to share:

Yes, we sometimes give notices but on other situations the notices are only distributed to the big companies like Chibuku National Breweries and Sable Chemicals.

The above opinion agrees with the idea of most questionnaire respondents who hold that written communication was directed at the big companies and very few ordinary consumers could access this information. The interpretation of the above data could be that the municipalities are not giving equal attention to its customers because some are treated according to their elevated financial status. The study suggests that all consumers must be given notices before water disruptions so that they can prepare for these in advance.

What are the possible recommendations for improving the household water service delivery system in Kwekwe urban?

Some recommendations concerning the best practice of a water service delivery system in the city of Kwekwe.

It is interesting to note that the majority of consumers hold the opinion that they were not happy with the household water service delivery. All respondents concurred that this was an area where the municipality must direct its attention in order to improve the household service delivery. However, the water authorities shared a different opinion concerning the matter under discussion. Most of the participating water authorities expressed satisfaction with the way in which service delivery was conducted.

The Kwekwe Combined Residents Association indicated that the domestic water service delivery system needs a rethinking approach which would adopt the approaches used by other countries. In addition, it was pointed out that the water authorities were required to meet with the Kwekwe Combined Residents Association so as to come up with the best practice of the household water service delivery system. The respondents concluded that factors contributing to the best practice can be summed up in the following three points:

Accuracy of water measurement

Costing exercise

Cost of inputs

The interpretation of the data above could be that, the household water service delivery system can be improved through considering accurate water measurements and cost recovery. The Kwekwe Combined Residents Association felt that it needs to be involved in the formulation of the household water service delivery policy because it, rather than the water authorities, is the very institute which interacts with other community members. The study holds the opinion that the approach must be biased towards decentralization, neo-liberalism and the rights-based perspectives.

The renovations of the water infrastructure (pipes and water plant) in Kwekwe.

The piping system used to deliver household water is now over aged, whilst the pumping system is still in a good condition. The study found that the water infrastructure, particularly the pipes, is very old. Renovations were last conducted on it during the 1970s. The respondents' view was that:

> *On this one we have a fire fighting kind of approach in which if there is a burst pipe, we remove that burst pipe and put a new pipe. It was a requirement as I have earlier on said that every reticulation system like as we say we mean the components in the reticulation system e.g. the pipes and the accessories have got a design life, but ever since independence nobody has looked at whether the system has out-lived the design life or not. We only rush to where there is a burst pipe so as we attend and restore water to the affected small section (interrupted by the ringing office telephone). Just hold on hallow (the respondent answered the phone and he told the person who had phoned to phone back after ten minutes). So the issue of us having a revamp of the whole system has not been looked at due to the financial constraints which we have for now*.

The impression given by the above data is that, the water authorities are aware that their reticulation system, especially the pipes and the accessories, have got a design life span. They have devised the fire fighting approach for emergency cases such as the bursting of pipes. The study therefore recommends the renovation of the water reticulation system in order to improve the household water service delivery system.

Comment on the relationship between the size of water pipes and the increase in population in the city of Kwekwe.

The study found that the Kwekwe Municipality may not have exhausted the capacity of the pipes or their limit to supply water to the residents. Therefore, they may not have a problem in this area. The respondents' line of thinking is summed up below:

> *On that one our piping system is in such a manner that it covers a wide range of the development capacity of the city and it's in such a way that the pressures in the pipes and the diameters of the pipes will go a long way in covering the bigger demand of water. On that I think we do not have a problem. We have a planning section and engineering section to cater for the proper designs of water supply to any residential suburb of any water outlet in the city.*

The above responses show that the municipalities do not have a problem regarding the size of the previously constructed pipes. It is the duty of the planning and engineering sections to make proper designs for the water supply outlets in all corners of the cities. The pipes are laid down with enough allowance to compensate for their use for centuries to come. The study can conclude that the pressure of the water is not affected by the size of the pipes because they can still accommodate more people to come. Something could be wrong with the reticulation system rather than the size of the pipes. It is recommended that the planning and engineering sections discover the problem affecting water pressure in the reticulation system.

The government of Zimbabwe must intervene through releasing the taxpayer's money so that it can be used to improve the household water service delivery process. The poor can also be given social welfare grants such that they are able to pay the water tariffs on their own and the municipalities may recover their costs. It should be noted that the provision of welfare grants is not a solution to end urban poverty. However, clean water for domestic use must not be too expensive since it is a human right. It should be subsidized to accommodate every consumer without considering social class.

Further, the government should find a way to reduce urban poverty because it seriously affects the progress concerning the water service delivery system. The above responses show that respondents do not see welfare grants as a way out of poverty. This view concurs with that of the questionnaire respondents who believe that welfare grants should not be an end in themselves but should be the means to a sustainable poverty reduction strategy.

Three respondents, out of 10 key informants, were indifferent about the efficacy of value addition as a way of fighting urban poverty. They felt that chasing a number of objectives at the same time could affect the ability to achieve any one of them. In their opinion, it would be difficult to conclude whether or not it would help the fight against urban poverty. The respondents felt that, they need support to fight urban poverty. The interpretation of the ideas above is that the respondents had an idea of the exact support that they need in the fight against poverty and this response agrees with that of the questionnaire respondents. It is easier to assist people who are clear about what

they want to do as opposed to those who are not clear about what to do and how to do it.

The interviewees identified government, NGOS and the business community as major entities that should participate in the fight to support the poor in the water service delivery system. This view agrees with that of the questionnaire respondents. There is a similarity in the views of the questionnaire and interview respondents. The general idea is that the success of urban poverty reduction initiatives, in the city of Kwekwe, will depend on the support of various stakeholders. The respondents did not mention any international monetary institution as a possible source of aid. The chances are that the respondents may have confidence in the national market's capacity to raise the required funds without involving the international community. It could also be that they felt that it was the responsibility of the government to consider whether or not to involve the international community in sourcing aid for urban development.

The interpretation of the idea above is that some key respondents have faith in the mission and purpose of the NGOs. It is necessary to establish how these institutions can move from poverty alleviation strategies to poverty reduction strategies, in the city of Kwekwe. The sentiments above demonstrate that the key informants realize the significance of finding a way to reduce urban poverty. Viewed from this perspective, the government of Zimbabwe has a stake in the fight against water scarcity amongst the urban poor in the city of Kwekwe. The sentiments above suggest that the respondents have an idea for a strategy to reduce urban and improve house water service delivery system. Generally, all the respondents agreed that Kwekwe municipality must improve

domestic water service delivery through implementing some of the recommendations provided in this study.

5.8 Conclusion

This chapter presented, analysed and interpreted data that was collected from the field through the use of questionnaires and interviews. Data presentation, analysis and interpretation was done with respect to the four research questions that were raised in Chapter one. Questionnaires were administered to 110 purposively selected residents of Kwekwe and 10 purposively selected water authorities from the city of Kwekwe. The sessions of focus group interviews were carried out with the key informants. Generally, the findings confirmed this study's claim that reducing urban poverty is the panacea to the best practice of a household water service delivery system in the city of Kwekwe and the whole of Zimbabwe. The respondents felt that rethinking the household water service delivery system would be successful if the urban residents, government, NGOs, industry and commerce participated in the agro-based initiatives. The other factor that emerged is that of forming associations so that urban residents in the city of Kwekwe share the benefits of a common purpose and action. The following chapter provides a theoretical discussion and interpretation of the major findings that emerged from this chapter.

CHAPTER 6: Discussion of Data

6.0 Introduction

The purpose of this chapter is to critically analyze, interpret and discuss the findings of the previous chapter in relation to the literature reviewed for this study. The main objective of this chapter is, therefore, to bring the findings into the fold of the existing knowledge concerning the household water service delivery system of Kwekwe Municipality. The domestic water service delivery system holds a challenge and promise for the city of Kwekwe and water supply strategies should encompass economic, social, political and institutional aspects. This chapter discusses the data with respect to the four research questions that were generated in Chapter one. The discussion was mainly centered on these research questions. The responses from the field were discussed in the following paragraphs.

6.1 Does Kwekwe municipality have the capacity to provide clean household water services to the residents?

The generality of the respondents (59%) proclaimed that they are not satisfied with the household water service delivery system offered by Kwekwe Municipality. It was found that the municipality does not have money to purchase water purifying chemicals. Global discourses on water management are currently centered on how to most effectively deliver water services; how the water sector can successfully generate its own funding and decrease reliance on national governments; and how to price water and create markets that reflect the “true” value of water as a scarce economic good while ensuring that all people are guaranteed the right to a minimum amount of water to

fulfill their basic needs (Walker, 2006: 1). The respondents also believed that Kwekwe Municipality is affected by urban poverty due to the economic crisis in the country. A key point to remember is that the problem of urban poverty greatly affects Kwekwe Municipality in delivering domestic water services to its consumers. This finding augurs very well with Masunungure and Chimanikire (2007: 15) who argue that parastatals were created to ensure the delivery of affordable essential services, but most parastatals made huge losses in their operations. The commercialization of municipalities resulted in a massive increase in water tariff rates as a way of cost-recovery beyond the reach of most people.

The water service delivery system was confirmed unreliable because consumers, at times, spent 2 to 3 days without water. One of the residents of Kwekwe was quoted as saying that, “It is increasingly frustrating having to go without water and without warning from the municipality” (http://www.ipsnews.net Zimbabwe Situation accessed on 23 March 2010). The study confirmed that there still remain no alternative water sources for domestic use. The residents of Kwekwe complained of constant and prolonged household water shortages. The municipality cited lack of resources as the stumbling block in the provision of clean water for domestic use. The unreliability of domestic water service delivery could be that the pressure of the water is very low due to a high demand caused by the increase in population and built up areas. This problem forced rich customers to drill boreholes and the poor to dig up unprotected wells at their households, as an alternative way to access water for domestic use. However, this solution could bring another problem to the low income consumers because unprotected wells are very dangerous to livestock and human beings, especially

children. The study found that Kwekwe Municipality still has a challenge to improve the domestic water service delivery system. This shows that the ability of Kwekwe Municipality to provide household water to its consumers is slightly below average.

This study holds that the household water cuts may result from power cuts since the domestic water service delivery in Kwekwe urban relies on the competency of the Zimbabwe Electricity Supply Authority's input. The finding drawn from this study was that the electricity deficiency has cost the efficacy of Kwekwe Municipality in the provision of household water service delivery. This finding augurs very well with the problem of consumers experiencing uninformed domestic water cuts. The majority of participating consumers were of the opinion that the situation at Kwekwe Municipality is not yet back to normal even though there are some signs and symptoms of improvement. Thus, the urban residents fail to access water for household use.

The above finding is supported by Ashton (2003) who stated that, "For example, some 109.6 million (54.4 %) of the 201.5 million residents of the 12 mainland Southern African Development Community (SADC) states lack access to an improved water source. Of the 109.6 million people lacking access to improved water supplies, approximately 21.9 % (24 million) are urban residents whilst the remainder (78.1%; 85.6 million) live in more remote rural areas (Ashton, 2003). In addition, 35 percent of Ghanaians lack accesses to safe drinking water, yet poor households in several communities in Ghana spend up to 25 percent of their earnings on drinking water (Olowu, 2008: 70). The above illustrations indicate that the problem of poor household water service delivery not only affects Zimbabwe but also impacts on other Africa countries.

Further, the study indicates that most urban consumers also suffer the problem of erratic water cuts through routine water rationing and burst water pipes or leaking pipes. Water pipe breaks result not only in disrupting service but also in the significant loss of water, which could otherwise have been delivered to the consumer (Sinske and Zietsman, 2004: 71). In countries where water is scarce, such as Zimbabwe, water losses are detrimental to the standard of living of the people. Water pipe breaks can also cause extensive damage to nearby lower lying properties. The available existing decision support systems in the field of water distribution system maintenance mainly focus on leak detection and pipe rehabilitation or replacement strategies. These existing systems, however, do not address the actual causes of pipe breaks.

This study reports on the development of a spatial decision support system (SDSS) for pipe break susceptibility analysis. The SDSS can identify pipes that are susceptible to breaking and therefore promote more informed decision making on preventative maintenance measures to be taken and their prioritization. The rate of pipe breaks in a water distribution system can thus be reduced. The SDSS design is based on the concepts of information systems theory, fuzzy logic, object oriented modeling and pipe break theory. The model has been successfully tested and calibrated (Sinske, 2002) by comparing the model results with the actual pipe break occurrence data collected and made available by the Paarl Municipality, Western Cape Province, South Africa.

The SDSS has special functions and operations to support the pipe break susceptibility analyses, which include pipe age, air pocket formation and damage to pipes by tree roots. At this stage, with the available digital data on the study area, only these three important pipe break causes can be modeled accurately with the SDSS. The SDSS has,

however, been designed in such a way that it can easily be extended to model most of the other pipe break causes such as corrosion, aggression, low/high temperature, temperature differentials, differential settlement, external impact and pressure surges (Morris, 1967; Bohm, 1993; Sinske, 2002).

The SDSS pipe break susceptibility analyses which take into account the effects of pipe age, air pocket formation and tree roots will be discussed in turn. The pipe break susceptible analysis due to age is a very straightforward analysis especially when digital records are available on the pipe installation and replacement dates. Two categories should be sufficient since age is only a general indicator for pipe break susceptibility (O'Day, 1983). Pipes can be considered old if they are older than 25 years.

This should not be taken as a fixed rule and is largely dependent on the type of environment the pipes have been in contact with. If digital records on pipe age are not available then the year in which the residential areas in which the pipes are located should be established. This can be used to estimate the pipe age. The value of the pipe age attribute can be derived from the age of the residential area via a GIS overlay operation or a spatial selection operation (Sinske, 2002). The results from an age analysis should always be used in conjunction with other pipe break susceptibility analyses, since age alone is not an accurate indicator of pipe break susceptibility.

The SDSS is equipped with special query functions and manipulation operations to support pipe break susceptibility analysis based on seven different types of air pocket formations in a network, *viz*:

At long pipes with flat slopes.

At pipes with blank ends.

At pipes with changes in diameter.

At nodal high points.

At nodal low points.

At high points along pipes.

At low points along pipes (Lescovich, 1972; Kottman, 1995; Sinske, 2002).

The SDSS is further equipped with special query functions and manipulation operations for pipe break susceptibility analysis with regard to damage to pipes by tree roots. The tree size and its distance away from the pipe are the two important factors that must be taken into account when analyzing pipe break susceptibility caused by trees. The findings indicate that pipe break seldom occurs as the result of a single cause and that there is usually a combination of pipe breaking causes responsible for the break.

The SDSS described in this study is a very useful tool to model the complex pipe break phenomena in a municipal water service delivery system. The SDSS pipe break susceptibility results (especially those obtained via calibration with the actual pipe break occurrences) can give a municipality valuable insight into the specific pipe break causes in their water network. Using this model, preventative maintenance can be carried out more effectively and an appropriate maintenance strategy can be planned and implemented. The pipe failure rate can thus be reduced which would save the municipality pipe repair costs, which could otherwise amount to large annual expenditures. Given this mindset the study may conclude that the water infrastructure

under Kwekwe Municipality deserves a complete renovation process. According to Sinske and Zietsman (2004: 71), municipal water distribution maintenance is very important for sustainable urban development.

The study also found that there were some respondents who confirmed that domestic water service delivery was reliable in their residential area. These could be those respondents located in the lower areas where they continue to have a constant water supply due to the steep gradient. One of the findings being drawn from this study is that there was a slight improvement in the household water service delivery system in the city of Kwekwe. This was related to the commissioning of the use of multiple currencies. The study found that there was a slight improvement in the water service delivery but this was still below average. The consumers were accustomed to the worst practice of accessing household water. There is a slight improvement in service delivery compared to the year 2008 and those preceding it. Therefore, the consumers appreciate this slight improvement but they did not confirm that it is the best. The findings discussed above reflect that Kwekwe Municipality proved that it has the ability to provide water for domestic use to the customers but is being obstructed by urban poverty. Thus, the desire is high but the performance is poor. This suggests that there is a need to rethink the best practice concerning the household water service delivery system in Zimbabwe.

The study established that the water problems primarily affect women because they execute a number of domestic duties which their male counterparts do not. The study also found that the majority of women spend more hours at home performing domestic duties such as cooking, washing, cleaning and irrigating the gardens. What is striking

about water management during this century is that women are no longer perceived, by donor agencies, as central to water management. Today, discussions and policy documents have a tendency to neglect the importance of women as water users. This omission significantly limits the potential effectiveness of water policy reform (Derman, Ferguson and Gonese, 2000). Moreover, a lot of literature is largely silent on establishing women's independent water rights, which are believed to enhance the well-being and bargaining position of women, thereby increasing efficiency and productivity in the water sector (Zwarteveen, 1997).

The above finding also recognizes that gender equality will be essential to achieving a sustainable water service delivery system. The role of women as water resource managers needs to be stressed, and women's knowledge and experience brought into wider decision making (Department for International Development, 2000: 45). The water reform process in Zimbabwe provides an opportunity to examine how gender has been incorporated, by the government and donor agencies, into the water reform process and what changes to water management will mean for women's access to the use of water, given women's importance in the execution of domestic duties. Women are identified as domestic water users which highlights their responsibility for cooking, washing and caring for children. Women are managers of community water resources, and responsible for food preparation, washing clothes and family hygiene.

Nonetheless, emphasis is placed on mainstreaming women's participation in water management based on their managing water for domestic use. Water privatization raises a number of important issues regarding women's access to water. The

commodification of water has the potential to “erode people’s informal rights to free water” (Mehta, 2003: 565). Women are generally allocated usufruct rights and must rely on social relations with men to gain access (Lastarria-Cornhiel, 1997: 1318).

Several countries such as Malawi, Mozambique, South Africa, Zambia and Zimbabwe have taken steps to reform the management of water and the Southern African Development Community (SADC) drafted a protocol (The Protocol on Shared Water Courses), which outlines guiding principles for fostering the cooperation and coordinated management of the region’s shared river basins (SADC,2000). Water will continue to be an important issue in the region as governments; the private sector and development organizations promote their competing visions of sustainable water management under predictions of population increase and a growing water scarcity (Chenje and Johnson, 1996).

Shifts to water privatization in West Africa have produced mixed results. Bayliss (2001) examined the outcomes of water privatization in Guinea, Senegal and the Ivory Coast, concluding that privatization has improved the collection of fees by government and lowered tariffs, but high water prices and disrupted services have hit the poorest segments of the population the hardest. In the case of Guinea, the government’s influence over the firm managing water remained quite influential in how water pricing was negotiated between the two parties and the willingness of the private company to disconnect water services (Bayliss, 2001: 8).

Mainstreaming gender in water management institutions received some attention in the above discussion. This involves incorporating women into decision making processes

and giving women the opportunity to fully participate in the discussions over water management. In theory, Zimbabwe's Catchment Councils offer an equal opportunity for catchment residents to participate but, in practice, women face a number constraint that may limit their participation. Women's water needs should be incorporated at all levels of policy formation and practice in order for water management to be effective and equitable (Zwarteveen, 1997: 1336).

This study has attempted to summarize some of the global debates around water policy reform and examine their implications for women's participation and access to water. Global discourses on water management frame this issue in terms of neo-liberal economic thinking within broader concerns of human rights and poverty alleviation. Furthermore, the emphasis on water as an economic good, and thus subject to the rules of the market, will undoubtedly have important implications for women.

The attention given to women's participation in water management is necessary, but not adequate, for ensuring greater equity in access to water resources and decision making. More emphasis needs to be placed on how to translate this discourse on women's participation into practice. As Hellum (2001) argues, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) represents the most important human rights framework for addressing women's access to water and participation in water management. If policy makers are sincere about incorporating women into decision making and policy practice, then human rights frameworks such as CEDAW must be incorporated into policy documents. The institutions responsible for managing water should also ensure that women's interests and participation are translated into action.

The study believes that there is a need to improve the household water service delivery system through consistent water resources management and the construction of a dam. Concurring with the above notion, the World Bank argues that the positions in a number of studies are consistent with the global consensus that water resources be managed holistically and sustainably, respecting subsidiary and ensuring participation, and treating the resource as an economic as well as a social good (World Bank, 2003: 29). Even though water is argued to be an economic as well as a social good, the World Bank's emphasis on the intensification and increased productivity of water through privatized urban water supplies and increased dam construction suggests that the economic value attached to water far outweighs its social significance.

However, the study also found that water authorities were of the opinion that the household water service delivery is satisfactory. They based their argument on the fact that Kwekwe was recognized as the city supplying the cleanest water in 2006. They therefore believe that the Kwekwe Municipality has the potential to perform its duties better within a conducive economic environment. The above finding shows that the water authorities contradicted the responses of the consumers. Consumers were of the idea that Kwekwe Municipality provides poor domestic water service delivery to its clients. The water authorities could have been forced, by the nature of their job and status, to defend their system in order to preserve their reputation.

The study found that Kwekwe Municipality has the potential to provide clean water for domestic use to its consumers, but it is obstructed by the economic crisis and urban poverty. The study provides evidence that Kwekwe Municipality was once rated the best

provider of clean household water among the local authorities in the country under the economic crisis. Nevertheless, it was the best under the worst situation. They argued that the household water treatment capacity is 90 mille liters per day which is above the demand of 53 mille liters per day.

However, this contradicts the current household water service delivery to the consumers since the residents of Kwekwe experience inconsistent and uninformed water cuts. The study further argues that the water authorities were biased towards confirming that Kwekwe Municipality had the capacity to offer household water to its consumers. The study found that they had no option but to defend their system so that they could preserve the reputation of the municipality.

The study found that it is a long and arduous process for consumers to access clean household water. Therefore, the problems affecting the service delivery system of the Zimbabwe National Water Authority may cascade down to the municipalities. Furthermore, the study found that for consumers to get satisfactory clean domestic water service delivery they need to pay water tariffs. Thus, Kwekwe municipality relies heavily on the revenue received from the water tariffs paid by the consumers. Therefore, it will not be sustainable if the consumers are in arrears. The study further confirmed that Kwekwe Municipality is also in arrears as it owes the Zimbabwe Electricity Supply Authority $ 50 000 in unpaid electricity bills (The Herald, 7 January 2010, accessed online on 07 January 2010). The current crisis related to this idea is that consumers can go for days or weeks without power and load shedding happens in

a very haphazard way with no published timetables. If ZESA fails to provide electricity to the municipality of Kwekwe, it may not be able to offer household water service delivery to consumers. Therefore, Kwekwe municipality turned to diesel generators after ZESA switched off electricity supplies for more than 3 weeks. The non-availability of water for weeks has seen the municipality introducing “the bucket system” in its toilets.

The study also established that very little money is raised through donations and the fundraising activities. Global discourses on water management are currently centered on how to most effectively deliver water services; how the water sector can successfully generate its own funding and decrease reliance on national governments; and how to price water and create markets that reflect the “true” value of water as a scarce economic good while ensuring that all people are guaranteed a right to a minimum amount of water to fulfill their basic needs (Nemarundwe, Nontokozo and Kozanayi, 2003).

These debates have also involved national governments, non-governmental organizations, bilateral and multilateral development organizations, the United Nations, and the European Union in shaping and reforming water management policies. The United Nations Children’s Fund has since responded by giving the city water treatment chemicals in an effort to improve water quality (http://www.ipsnews.net Zimbabwe Situation accessed online on 23 March 2010). The study established that the Kwekwe municipality lacks adequate budgetary support from central government to fix water problems. The respondents indicated that this has meant residents turn to sources like burst water pipes to scoop water for home use.

6.2 Do most consumers afford paying water tariffs to the responsible water authority under Kwekwe Municipality?

The study found that the majority finds it challenging to pay their household water bills. They are not able to pay the water tariffs because they also incur expenditures from paying the rates and education levy to the municipality. Most consumers earn an average figure of $ 200. One of the main grounds of criticism was that the tariff hikes following water privatization were not affordable to low-income consumers (Olowu, 2008: 69). The introduction of multiple currencies is another hurdle because this is foreign currency which is difficult to access. The study concludes that this problem was fueled by the backdating of the arrears which were quoted in the Zimbabwean dollar, but are now expected to be paid in foreign currency. The rich minority are, however, able to pay the water tariffs.

The privatization model, which is prevalent in much of Africa, comes under critical review bearing in mind the contextual global challenges that reflect the continent's particularly precarious position on the issue of human access to safe and adequate water. It should be remembered that in 1977 delegates from most of the world's governments had expressed their commitment to ensuring that everyone would have adequate water by 1990. Since this goal failed to materialize, another target was set in 1990 to achieve universal access to safe water by 2000. By 2000, it was obvious that this goal was not achievable sequel to which the goal date was shifted to 2015. This time it was relabeled as a Millennium Development Goal (MDG) targeted at halving the proportion of people without sustainable access to safe drinking water all over the world by this future date (Olowu, 2008: 71). Having laid the premise for the interjection of the

global water agenda by the water governance crisis in Africa, the inevitable question to ask is whether African states are on a progressive path towards the realization of the above mentioned goal.

The study found that consumers pay different household water tariffs depending on the type of residential areas in which they reside. The study concludes that those from low density suburbs pay more water bills than those from high density suburbs. Those from high density suburbs are charged twenty-five cents per kilolitre and low density consumers pay fifty-one cents whilst industry and commerce pay sixty cents. The study concludes that the municipalities have a certain established procedure to charge the water tariffs. The study found that the consumers have the capacity to pay the water tariffs but are affected by accrued debts.

It is worth mentioning that, as far back as 1994, the World Bank had vehemently posited that the use of prepaid water meters by which end-users pay upfront for water consumed, and invariably, the privatization of water services, was the most cost-efficient way of ensuring the delivery of water services to large populations (Olowu, 2008: 70). While the World Bank's contention sounded plausible, it had later been proven to miss a number of collateral issues. For one, this method of service delivery was essentially detrimental to the poorest individuals with a low and irregular income and who therefore were often unable to pay upfront for household water services to which access must be guaranteed on a daily basis.

The study also found that the meter reading system proves to be difficult to implement because of the shortage of manpower and the transport problem caused by urban poverty. The study can conclude that the municipality cannot be one hundred percent correct when it comes to meter readings. The study further observed that the water meters have outlived their design life span. Therefore, the study can conclude that water meters cannot be the sole item upon which the measurement relies. Water meters are just machines which are not one hundred percent accurate. The study also found the issue of human error cannot be ruled out. The study again found that the majority of the consumers lack the capacity to pay the water bills due to the economic crisis. A large number of the consumers are unable to pay the water tariffs due to inflation. This is a national problem. The study can conclude that a number of consumers had no capacity to pay the water bills because of urban poverty.

The study found that correctional measures of disconnecting household water services were taken against consumers who were in arrears. The Kwekwe Municipality water authorities always disconnect the water services of those in arrears through giving grace periods and warnings in the form of monthly water bills and invoices from the municipality. While judicial decisions concerning water as a human right are scarce, the courts in India, Argentina, Brazil and South Africa have, in some cases, reversed decisions to disconnect water supply to poor people who could not afford to pay (Olowu, 2008: 80). This is immensely instructive for African states. The study can conclude that most of the consumers could not afford to pay the water tariffs to the responsible water authority under Kwekwe Municipality. The above opinion is supported by Latham (2002) who states that one of the objectives of a water service delivery system is to regard

household water as an economic good and ensure that water tariffs take cognizance of those unable to pay for the full price of water.

The study established that the readings stated on invoices from Kwekwe Municipality did not correspond with the readings on the meters. This finding corresponds with the idea that Kwekwe Municipality has limited personnel to execute the task of reading meters regularly, on a monthly basis, due to the urban poverty affecting the system. The other problem observed could be the mode of transport of the meter readers as they always ride their personal bicycles when conducting meter readings. They therefore resort to estimating water tariffs for certain months and provide the correct meter readings after some time. This lack of consistence on the side of the municipality confuses the consumers since they base their expenditure on the meter readings and the issue of estimating is not well communicated to them. The study concludes that it is due to this problem that consumers accrue very high debts which they are not able to settle.

The study revealed that the consumers in arrears failed to communicate with the water authorities so that special arrangements could be made for them to settle their balances without disconnecting their water services. Some respondents had malfunctioning meters which they did not report. Some customers have no idea of the procedure to follow when the meter readings do not correspond with those on the invoices. Others presented their cases and errors were rectified. The study also found that disconnecting water services is not a solution but merely served as a correctional measure because a number of customers respond to disciplinary measures. However, the study concludes

that closing water supplies does not make water bills affordable but consumers must be encouraged to pay their water bills. The issue of failing to pay promotes the problem of domestic water scarcity.

The study established that Kwekwe Municipality also suffers from urban poverty. Further, Kwekwe Municipality needs to use the money to improve its services to customers. A good domestic water service delivery system goes hand-in-hand with the concept of consumers paying for the services. This is in line with neo-liberal ideology even though it is the right of every human being to access water for household use. Human rights are not supposed to be enjoyed free of charge. The idea of making consumers pay for their services brings the aspect of the responsibility of the residents of Kwekwe urban into view.

The study confirmed the view that consumers were struggling to pay the water tariffs due to the current economic crisis. The consumers are economically challenged, by urban poverty, to such an extent that they cannot afford to honour their debts. However, the study concludes that measures should be taken against those in arrears. According to the responses given in this study the following possible measures are taken against those in debt:

Send reminders to those in arrears.

Get into payment to liquidate the arrears.

Partial payments after agreeing on the payment plan.

In extreme cases disconnect household water services to the culprits.

The study found that the issue of disconnecting water services is the last course of action taken after exhausting all other positive avenues. Most of the affected consumers are those who did not have constant communication with the water authorities concerning their problems. Generally, the final decision was that consumers have to settle their debts within a stipulated time frame. Under the Zimbabwe Water Act of 1998, consumers must have the capacity to pay tariffs to the water authorities. This legislation is in line with international neo-liberal thinking which regards water as an economic good (Global Water Partnership, 1999).

The argument which has been used by neo-liberals in support of water as an economic good is that the sustainability of water supply and delivery systems depends on generating enough funds to cover the administration, operation, maintenance and replacement of water system facilities. Since the water reform process was financed by international organizations which hold neo-liberal views, this clause had to be adopted by the government of Zimbabwe, even though some water users are unable to pay what could be termed basic water charges (kujinga, 2002). Most of the consumers resist paying water tariffs to the municipalities. Their argument is that water is a natural resource that comes from God and not from the municipalities.

One can say that prospects for better household water service delivery in Zimbabwe are high since there is a framework in place which provides a platform for different stakeholders to take an active role in the water service delivery process. Although this is the case, there are a number of challenges which the government and other stakeholders have to tackle in order for effective water service delivery to be achieved.

Firstly, there is the need to reconsider the Water Act and see if it really promotes the equitable allocation of water.

Furthermore, equity can be compromised by the fact that household water is now considered an economic good. This is a neo-liberal perspective which considers all resources as commodities which have a price attached to them. This perspective goes against the traditional view of considering water as a free good. The government is faced with a challenge of ensuring that those consumers who cannot pay for domestic water also have access to the resources. According to the Zimbabwe Water Act of 1998, the water authorities cannot exempt anyone from not paying for water.

Evidence obtained in this study shows that Kwekwe Municipality was so poor that it could not afford employing adequate manpower to execute the duty of reading meters. The two meter readers employed by the municipality use their own malfunctioned bicycles as a mode of transport. They are not able to visit every household, in a door-to-door manner, and they therefore end up estimating the figures. From the data provided in Chapter five, it was noted that urban poverty is a great obstacle which affects the service delivery of Kwekwe Municipality. It appears that the water authorities accepted the correction of errors from the meter readings and rectified them in a satisfactory approach. According to Kujinga (2007: 142), parastatals in Zimbabwe have a history of under-performing and municipalities have not been far from that.

A critical analysis of the data provided in Chapter five also showed that no subsidy exists for the consumers who cannot afford to pay the water tariffs since the local

authorities operate from the revenue paid by the consumers. The study concludes that service delivery for household water cannot be executed free of charge. The consumers must pay for these services. This opinion is supported by the neo-liberal theoretical framework of development. The study can conclude that domestic water is a valuable and costly resource which must not be delivered free of charge from the supplier to the consumer. The study confirmed that the municipality wants to recover the costs incurred during the purification and service delivery process.

The study therefore concludes that consumers do not pay for the water because it is their right. However, they are paying for services since they do not have a right to access these services for free. The services are not natural resources but they constitute a process which costs money. The study found that the water bills have accrued to thousands of dollars over the recent months. These figures are alarming. The study can deduce that it is not an offence when a consumer fails to pay the household water tariffs, but it becomes a cause of concern when one fails to communicate with the water authorities. The study found that the municipality gave notice to those in arrears through monthly invoices even though some of them do not tally with the correct meter readings. The study can conclude that those in arrears can make a plan to settle the water bills without employing the corrective measure of cutting off the water supply.

6.3 Does the water policy in Zimbabwe accommodate the human rights of the consumers?

This section of the study looks at the extent to which the legal frameworks for water governance in Zimbabwe enhanced or constrained household water service delivery. Based on the empirical evidence and the review of related literature, this study found that the problem of poor household water service delivery system was deep rooted and multifaceted. The findings indicate that the majority of respondents agreed that consumers need to pay their water bills in order to access quality service delivery. The data analyzed in Chapter five established that the consumers (both rich and poor) appreciated the notion of introducing a water service delivery policy which accommodates the poor, but they must pay a subsidized amount as compared to the rich. They were considering sustainability and maintenance of the water service infrastructure as well as the cost of purifying water incurred by the Kwekwe Municipality.

Further, the study holds that repairing the facilities, paying for raw water from ZINWA, buying purifying chemicals and paying for electricity from ZESA requires money. Therefore, the study can conclude that it is the right of every human being to access household water through paying their water tariffs to the municipalities. No doubt, infrastructure services such as electricity, telecommunications, transportation, water and sanitation play a critical role in a country's development and are both directly and indirectly linked to living standards and economic growth (Olowu, 2008: 65). It is interesting to note that nothing is for free in this paradigm shift era.

The study concludes that the human rights do not mean access to these services free of charge. The municipality has a duty to perform and it is the right of the consumer to complement or reciprocate that duty through the payment of tariffs. The study confirmed that the municipality is also in the red, financially, due to urban poverty. Furthermore, pricing and water rights should be organized with principled pragmatism. This entails ensuring that users take financial and resource costs into account when using water and realizing that solutions need to be tailored to specific, widely varying natural, cultural, economic and political circumstances (World Bank, 2003: 22).

During interviews with the water authority, it emerged that the use of hosepipes for gardening and car washing is not economical. It does not correspond with the rules and regulations of the municipality water rationing and conservation policy. The study also observed that a lot of water is lost through some hosepipes which are connected and left unmonitored. This promoted a high rate of water consumption. Therefore, the more water consumed the greater the tariffs to pay.

The study found that the water policy accommodates consumers in theory because every municipality has a client charter from the water policy. The problem is to practice it through recognizing the millennium development goals (MDGs). However, the MDGs fail to recognize that poverty is a function of human rights violations; such as the lack of access, discrimination and inequality (Cullet, 2006). For the purpose of this study, the MDGs conceive of access to water not as a non-negotiable and universal right, but as a “need” to be met. The study holds that the water policy incorporates the consumers but is silent on those who find it difficult to pay the water tariffs.

The study concludes that the water policy accommodates the human rights of the consumers to a measurable extent. The study holds that the water policy clearly states that water service delivery must be done at a reasonable fee. The word reasonable implies something affordable, which means that it should accommodate the human rights of the consumers to access water at an affordable price. The study deduced that it is the right of every human being to access domestic water. This position is supported by both implicit and explicit pre-existing human rights documents already acknowledged by the international community (Gleick, 1999).

Several covenants and international agreements, such as the 1948 Universal Declaration of Human Rights; the 1966 International Covenant on Economic, Social and Cultural Rights; the 1966 International Covenant on Civil and Political Right; Inter-American Convention of Human Rights; the Declaration on the Right to Development; the 1989 Convention on the Rights of the Child, and the European Convention on Human Rights suggest that water is a fundamental resource necessary to guarantee rights to water, food, human health and development (Gleick, 1999: 490).

By recognizing access to water as a fundamental human right, states and governments are obligated to take positive action to ensure that citizens are entitled to and receive the minimum amount of water for drinking, cooking and domestic use (Gleick 1999; Mehta, 2003). Although various narratives express how water should be conceptualized, managed and allocated most water management documents and policy papers offer a synthesis of access to water as a fundamental human right and water as an economic good. This generally entails liberalizing the water sector and pricing water

to reflect its market value while creating targeted subsidies to provide a minimum amount of water to meet the basic needs of the “poor” (Walker, 2006: 2).

The above discussion is also a reflection of the principles agreed upon at international conferences concerning environment and development, such as the Rio Declaration on Environment and Development of 1992, Agenda 21 of 1992, and the Dublin Statement on Water and Sustainable Development of 1992. The Dublin principles are particularly important, as numerous water policy documents reference them: water should be seen as a social and economic good; water management should be decentralized and user based; water should be managed within an integrated framework, drawing a balance between efficiency, insurance of basic needs, and environmentally sound management; and women’s central role as water managers and water users should be recognized. These principles reflect an attempt to balance liberal economic thinking on international development policy voiced by international actors like the IMF and the World Bank with broader human rights concerns (Hellum, 2001: 2). However, according to Mehta (2003: 567), powerful actors shaping global water policies tend to reject conceptualizing water as a human right. Accepting water as a human right implies that it is a global public good and not a narrowly defined commodity. Additionally, “water rights” require governments and donor organizations to guarantee a minimum amount of water to meet the basic needs of its citizens.

However, water as an economic good is not antithetical to water as a human right. Cosgrove and Rijsberman (2000), attempts to raise global awareness of the water crisis and potential solutions for addressing it. The objective of integrated water management

is to empower communities to negotiate access to safe water. In order to accomplish this objective, there must be a shift to allow for the full pricing of water and, because of its scarcity, water must be treated as an economic good (Cosgrove and Rijsberman, 2000: 3). Regardless of the emphasis placed on stakeholder involvement, the World Water Vision (WWV) implies that water users do not value water. Subsidized services, in particular, encourage users to devalue and subsequently waste water (Cosgrove and Rijsberman, 2000: 6).

Nonetheless, subsidies obscure the high value of water and do not give users the proper incentives to conserve it (Cosgrove and Rijsberman, 2000: 19). This argument rests on weak assumptions that economic incentives are the only mechanisms motivating people's behaviours. Furthermore, this line of argument is often used by numerous actors to promote the "enclosure" of common-pool resources through privatized ownership, which is believed to provide the proper incentives for managing and conserving the resource.

Nevertheless, it is not a right to get purified household water free of charge. The municipalities deserve to recover the incurred costs through collecting revenue from the consumers in the form of water tariffs. The money is used for the renovations and maintenance of the Kwekwe Municipality water system's infrastructure. The study also established that the economic crisis affected the degree of attention to be given to the consumers. The harsh economic situation affected the client charter because consumers were no longer considered the centre of discussion. Yet, the consumers are

the fundamental main players in any type of discourse concerning household water service delivery system.

The study further confirmed that there has been a breakdown of service delivery, especially between 2006 and 2008, because of the economic crisis which prevailed during that period. Zimbabwe is a water scarce country. The ongoing reforms in Zimbabwe reflect an attempt to merge neo-liberal economic philosophies with concerns of human rights and equal access to water (Derman, Ferguson and Gonese, 2000). This reflects the government's dilemma of financing the water sector while ensuring people receive water for basic needs. As Hellum (2001: 10) contends, "the right to livelihood in terms of water for basic needs is given high priority in Zimbabwe's new water act". Under Zimbabwe's new Water Act, water for domestic purposes is classified as primary and thus entitled to everyone.

The study believes that a training gap exists within the water authorities because they indicated that they were not familiar with the water policy. The study holds that this could be solved through conducting training workshops and seminars with other African municipal authorities, and even extends this beyond the country's borders. The training should include the basis for a rights-based approach to water governance in Africa. In a definition that encapsulates some of the more fundamental elements of the rights-based approach, the Overseas Development Institute (ODI) proclaims that:

A rights-based approach to development sets the achievement of human rights as an objective of development. It uses thinking about human rights as the scaffolding of development policy. It invokes the international apparatus of human rights accountability in support of development action. In all of these, it is concerned not just with civil and political rights, but also with economic, social and cultural rights.

In another comprehensive definition, the United Nations Development Programme (UNDP) posits that:

> *A rights-based approach is based on the values, standards and principles captured in the UN Charter, the Universal Declaration of Human Rights and subsequent legally binding human rights conventions and treaties; civil and political rights and social, economic and cultural rights should be simultaneously advanced in a rights based approach to poverty alleviation (United Nations Development Programme, 2004).*

There is thus an unmistakable consensus among the various theories on the rights-based approach that the full realization of human rights should be a vital goal of all development efforts. The approach canvassed in this study, therefore, perceives human rights as essential components of development programs and policies. They must necessarily be integrated in all processes designed to deliver the promises of global development, including access to safe domestic water in the context of the MDGs. Taken together with, the rights-based approach which has been articulated contemplates human-centred modalities for water governance in ways that emphasize equality and non-discrimination; accountability and transparency; and popular

participation (Olowu, 2008: 77). The right to water applies primarily to water of acceptable quality and quantity for personal and domestic use, whilst placing emphasis on an affordable water supply. For many reasons, the rights-based approach is crucial in defining the benefits of rights-holders and in identifying the obligations of duty-bearers.

The rights-based approach works in tandem with international initiatives and other development efforts by focusing on the twin issues of equality of access and sustainable development. With regard to water resources, all human rights are to be perceived as components of a holistic response to the pressures of economic globalization, without compromising the interest of future generations. It would seem appropriate to explore some practical experiences of human focused water initiatives and popular participation in water governance. Even though the rights-based approach remains a largely theoretical concept which is confined to mainstream development discourses; the positive realities in its application to several social spheres, in different national contexts, cannot be overemphasized. In Ghana, the rights-based approach places particular emphasis on the involvement of human beings in the processes through which policy goals are determined and implemented, and could help in eliminating conflicts among stakeholders in the water sector (Olowu, 2008: 82). The rights-based philosophy for water use implies that the people themselves have the democratic authority to make decisions about water.

The data provided in Chapter five indicates that the water authorities know how to account for water lost through burst pipes. They were clear that it should be paid by consumers indirectly. The study confirmed that when water is lost through burst pipes the municipality shifts the responsibility of payment to the consumers. The perspective of the study is that this is not fair. The point is that consumers do not cause this problem of water leakage. It is therefore surprising to learn that they are now required to pay. The study reveals that this decision is taken by the leadership of the municipality due to their failure to rectify the problem on their own due to urban poverty.

According to the responses from the water authorities in Chapter five, the chemicals used to purify the water are purchased using the ratepayers' or the consumers money. Therefore, if the purified water has been lost indefinitely what it means is that the input of the chemicals has just gone out and that the consumers themselves are the ones responsible for paying for the lost water. The study concludes that this is what causes the household water to be very expensive because if the structure was in a good condition and there were no losses then domestic water would be cheaper than the current rates. This finding augurs well with the idea that consumers are indirectly paying for water lost through burst pipes and leakages.

The findings of the study are evidenced by the exorbitant household water tariffs charged by the water authorities in order to recover their costs at the expense of the consumers. The study concludes that the water authorities do not accommodate the consumers as the most important participants in water service delivery. The consumer

must be at the centre of the debates concerning a good household water service delivery system.

The study established that consumers were given notice before domestic water disruptions, but the notices were inconsistent when given to ordinary people. The municipal administrators would concentrate on the business community at the expense of the ordinary consumers. The study concluded that written communication was given to the big companies such as Sable Chemicals and Zimbabwe National Breweries. Therefore, very few ordinary consumers could access this information. Furthermore, the study holds that the water authorities are not giving equal attention to its customers because others are treated according to their status. The study can deduce that all consumers must be given notice before household water disruptions, so that they can prepare for it in advance.

The general observation is that respondents believe that domestic water must be accessed by every human being as a human right. At least 165 states have signed declarations recognizing the right to water. The 118 members of the Non-Aligned Movement and the 47 members of the Council of Europe have recognized the right to water in international declarations (Louka, 2006). As Africa, East and South Asia and Latin America contain the vast majority of people lacking access to basic water, it is important for all states to support efforts towards international recognition of the rights to water. Such international recognition will facilitate international cooperation to support national efforts to realize the rights of those denied access to water.

According to Sano (2000), the same conclusion was reached by the higher echelon as evidenced by the list of declarations and recommendations below:

The 1996 Habitat Agenda adopted by consensus of all 171 participating States at the Second United Nations Conference on Human Settlements (Habitat II), Istanbul, recognized in paragraph 11 that “Everyone has the right to an adequate standard of living including adequate food, clothing, housing, water and sanitation”

In the Abuja Declaration adopted at the First Africa-South America Summit (ASA) in Abuja, Nigeria, on 30 November 2006, 53 African and 12 South American States committed to “promote the right of our citizens to have access to clean and safe water and sanitation within our respective jurisdictions.”

At the 1st Asia-Pacific Water Summit, held in Beppu, Japan, 3-4 December 2007, 37 States from the wider Asia-Pacific region unanimously adopted the “Message from Beppu”, which recognizes the “people’s right to safe drinking water and basic sanitation as a basic human right and a fundamental aspect of human security.”

The Final Document of the XIV Summit Conference of Heads of State and Government of the Non-Aligned Movement in Havana, Cuba, 11-16 September 2006, recognized the importance of water as a vital and finite natural resource, which has an economic, social and environmental function, and acknowledged the right to water for all.” An identical provision was included in the Final Document of the 15th Ministerial Conference of the Non-Aligned Movement, Teheran, 27-30 July 2008.

A long outstanding proposal to recognize the right to water as a basic universal human right is threatening to split the world's rich and poor nations. Overall, water and sanitation are such critical issues that we must work towards consensus on this resolution. Anything less than consensus would undermine the very importance we attach to them. But, in 2010, it is not an exaggeration to say that the lack of access to clean water is the greatest human rights violation in the world. The findings of this study concur with the views of the UN independent expert that the right to water is a component of the rights to an adequate standard of living and that these rights are protected under Article 11 of the International Covenant on Economic, Social and Cultural Rights. The world is more on track to reach the Millennium Development Goals on access to water.

This study demands that the language of the resolution remains strong and leaves no doubt that water and sanitation are human rights. When the 1948 Universal Declaration on Human Rights was written, no one could foresee a day when water would be a contested area. But in 2010, it is not an exaggeration to say that the lack of access to clean water is the greatest human rights violation in the world. In addition, this is getting worse as the world runs out of clean water. A new World Bank report says that by 2030, global demand for water will exceed supply by 40 percent, a shocking prediction that foretells of terrible suffering (Barlow, 2010). For several years, international and local community groups fighting for water justice have been calling for a binding UN convention that clarifies, once and for all, that no one should be denied water for life because of an inability to pay, especially in light of the water markets now being set up that allow the wealthy to appropriate dwindling water supplies for private profit. In poorer

countries, where there are deep access inequities, a convention on the right to water would give local communities a tool to demand water justice, challenge the existing privilege of the rich and demand public rather than private water services.

However, consumers must also remember that the issue of failing to pay water tariffs is not a human right. They have to pay the revenues in order to get satisfactory water service delivery because there is nothing free of charge in this world. This view agrees with the doctrine of the neo-liberal theory of development. The objective is always to balance socio-economic interests and legality to produce developmental efficacy.

6.4 What are the possible recommendations to improve the household water service delivery system in the city of Kwekwe?

The generality of the respondents proclaimed the view that consumers need to pay their tariffs so that the municipality can recover the costs and continue to maintain its household water system and improve service delivery. The study holds that consumers must pay their regular water bills in order to receive better domestic water services. This augurs well with the neo-liberal theoretical framework which promotes the ability to pay in order for consumers to receive quality service delivery. The consumers, through the Combined Kwekwe Residents Association, request the municipality of Kwekwe to charge affordable water tariffs which tally with the meter readings.

The study recommends that the municipality of Kwekwe make the water affordable to everyone at a subsidized rate. Therefore, Kwekwe municipality should provide domestic water services to consumers at an affordable rate. Household water should be

subsidized to accommodate every consumer without looking at the social class. Poor consumers can be given social welfare grants so that they are able to pay water tariffs on their own in order for the municipalities to recover their costs.

The study recognizes that there is need to revisit the water charges at Kwekwe Municipality, so that the consumers can pay water tariffs that are in line with what they have actually consumed. The study can conclude that for the household water service delivery system to be sustainable the consumers must be able to pay the water tariffs. The capacity to pay household water tariffs promotes the ability to offer a quality domestic water service delivery system. It is recommended that household water is a basic resource and a human right which must be made affordable to everyone. The study holds that reasonable charges should apply so that every consumer may have access to water for household use. Generally, water tariffs should be subsidized so that they are affordable for every consumer who stays in urban areas. The study further recommends that Kwekwe Municipality charges the consumers for correct water tariffs and that consumers have the capacity to pay their water bills in order to improve service delivery.

Nevertheless, the issue of charging consumers the incorrect water tariffs must be corrected through distributing water invoices with the correct meter readings. The meter readings may be improved through motivating the Kwekwe Municipality leadership to increase its qualified and well trained manpower. The study recommends that Kwekwe

Municipality improves meter readings and that consumers report the broken water meters within a week.

The study believes that the government of Zimbabwe, non-governmental organizations (NGOs), other companies and the business community need to intervene in order to assist the Municipality of Kwekwe in improving the household water service delivery system. The perception of the study is that there is a need to rethink the best practice to improve the household water service delivery system for the consumers in the city of Kwekwe. The study established that, Kwekwe Municipality must liaise with local companies so that they could assist with the supply of water purification chemicals.
The study further confirmed that big companies such as Sable Chemicals and Zimbabwe National Breweries should be levied a certain percentage that will cater for the poor. Having said this, the study therefore recommends that poor consumers and poor service providers such as Kwekwe Municipality deserve to be at the centre of the debates in order to propose a way forward.

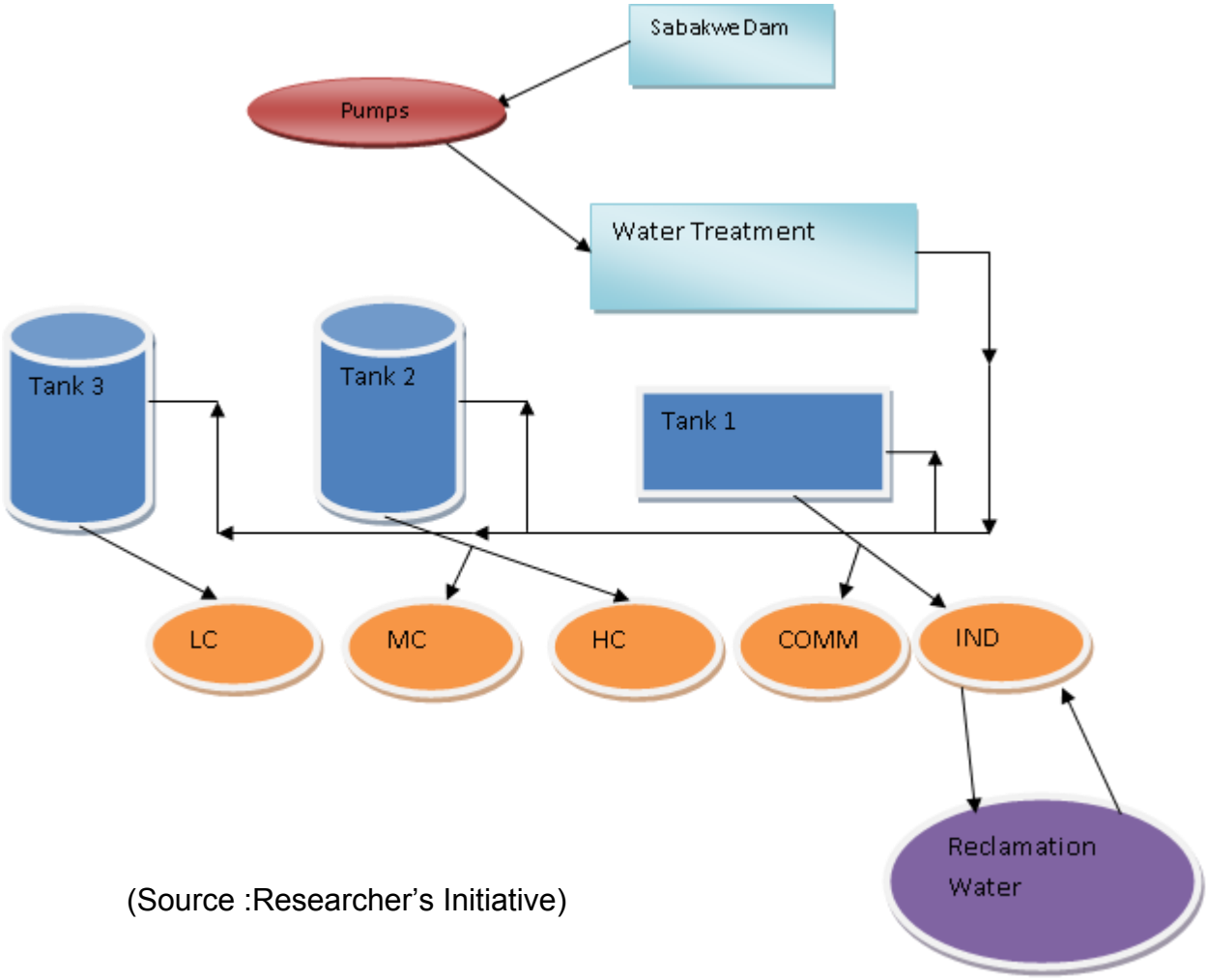
This opinion concurs with the idea that the government of Zimbabwe should help the Kwekwe Municipality to sink boreholes for the poor who cannot afford to pay tariffs. In addition to this, the study holds that the Kwekwe Municipality must work together with the government of Zimbabwe towards finding income generating projects which would help boost their income. It is recommended that Kwekwe Municipality give assistance, in the form of a loan, to the poor so that they can start their own business and are able to raise the funds needed to pay the water tariffs. The study found that the Kwekwe Municipality must choose a course of action to fight its own poverty in order to provide

clean domestic water service delivery to its consumers. The study also recommends that the Municipal authorities put cost cutting measures like reducing unnecessary expenditure in order to provide satisfactory household water services at affordable prices.

The study recommends that the Kwekwe Municipality must look for a source of money to refurbish the water infrastructure which is now too old to offer satisfactory household service delivery. The study further suggests that the Municipality of Kwekwe improves its financial capacity in order to upgrade the water reticulation system. The study can therefore recommend that there exists a need to renovate the water reticulation system in order to improve the household water service delivery system. The study also confirms that there is need to renovate the household water infrastructure including the sizes of the water pipes in order to improve the water pressure.

This line of thought deserves to be complemented by the study model which shows the water distribution from the plant to the users in the city of Kwekwe. The researcher is of the opinion that the household water service delivery system in Kwekwe urban can be improved through rethinking a better water reticulation system. Therefore, the study recommends that the model (Figure 3) below be adopted by Kwekwe Municipality in order to provide quantity and quality household water service delivery to its consumers.

Figure 3: The study model showing the water distribution from the plant to the users



(Source :Researcher's Initiative)

The interpretation of the above model is that the number of water tanks can be increased because Kwekwe Municipality currently has one water tank for all households (low cost, medium cost and high cost consumers as well as industry and commerce). This model strives to increase the number of tanks so that consumers can access the water supply from specific respective water tanks. In addition, the reclamation of industrial water for cooling systems can be used for cleaning and irrigation purposes. This study regards the model above as a great contribution to the existing knowledge to ensure that water reservoirs store an average of 4 days worth of water which cannot be done with the single water reservoir which is currently used by the Kwekwe Municipality.

It is recommended that the planning and engineering section identify and fix the problems affecting the water pressure in the reticulation system. The study demonstrates that the Government of Zimbabwe must intervene through releasing the taxpayers' money so that it can be used to improve the household water service delivery process. Notwithstanding the above, the municipality also needs to improve the household water measurement and leak detection mechanisms. In support of the above, the residents of Kwekwe urban may contribute to the leak detection by reporting any suspected leaking pipe to the municipality within 24 hours.

It was also found that Kwekwe Municipality must have some networking with other municipalities in Africa and even outside Africa in order to access assistance in the form of donations from

Non-governmental organizations and the International Business Community. Data further demonstrated that most respondents had a common idea that the state and non-governmental organizations must intervene in order to address the problem of urban poverty which affects the household water service delivery system. The study therefore recommends that Kwekwe Municipality gets connected to some companies and the business community that could potentially assist in cash, or in kind, so that urban poverty is reduced.

The study holds that the business community needs to assist in the fight against urban poverty because it created part of its wealth from the consumers in the city of Kwekwe. Literature has shown that it was fair for the business fraternity to plough back into the city of Kwekwe as part of its social responsibility. The study confirmed that urban

poverty reduction in the city of Kwekwe requires team work between the various stakeholders. This study encourages further research into the specific roles of the state, local authorities and the private sector in urban poverty reduction. The study recommends that the unemployed, the disabled and the orphaned constitute a group that deserves social welfare grants for the purposes of meeting their basic needs which includes clean domestic water service delivery.

The study further recommends that Kwekwe Municipality pays attention to the area of household water in order to improve its service delivery. Evidence obtained in this study also shows that the Kwekwe Combined Residents Association was of the opinion that the domestic water service delivery system needs considerable rethinking. It was confirmed that the water authorities were required to sit down with the Kwekwe Combined Residents Association so as to come up with the best practice of the household water service delivery system. The Kwekwe Combined Residents Association felt that it needs to be involved in the formulation of the household water service delivery policy because it is the very institute which interacts with other community members, as opposed to the water authorities. The study also recommends that the household water service delivery system can be improved through considering accurate water measurement, costing exercise, cost of inputs and cost recovery.

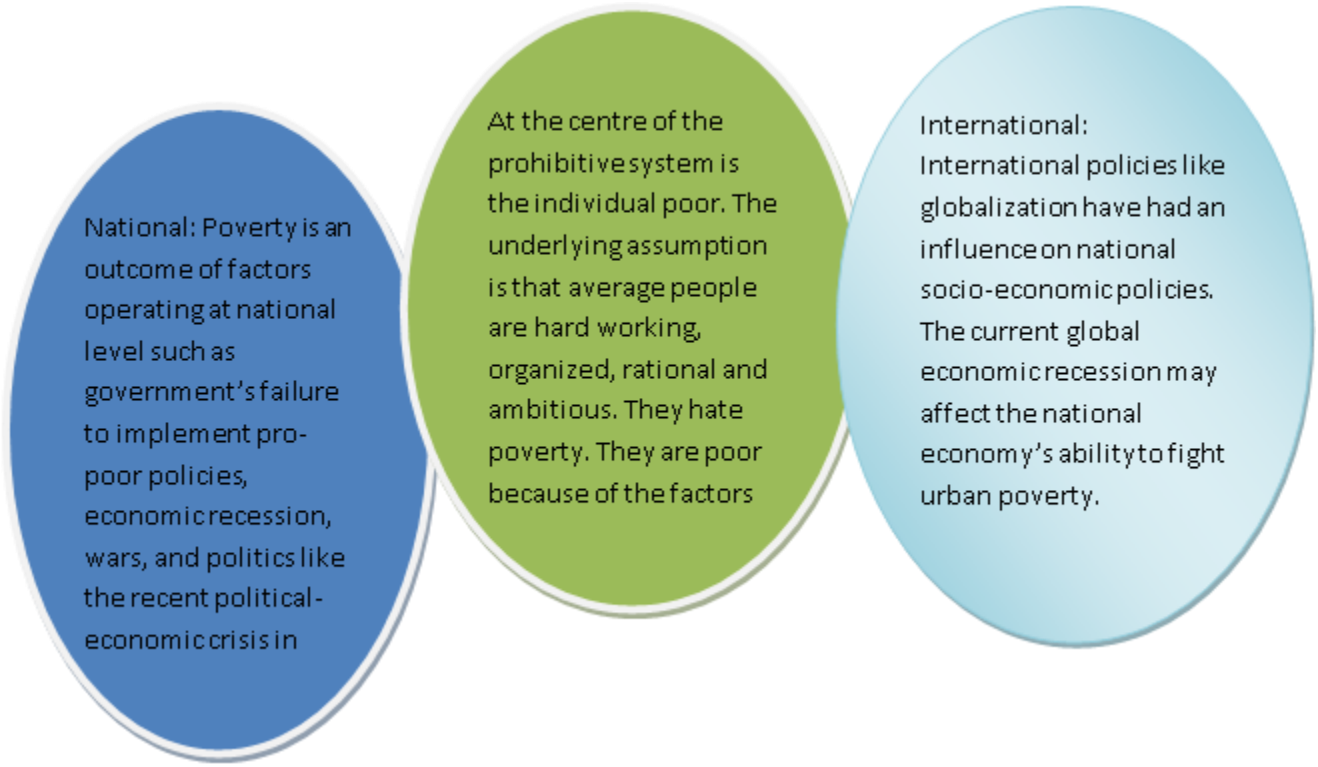
The study holds that none of the really poor people in the city of Kwekwe sit in parliament to create national and provincial policies. Even if the poor people in the city were elected to represent their fellow poor in parliament, they would also join the ranks of the rich. Their interests and ambitions would vary from those of the electorate. They would begin to chase other interests. Technically, the poor remain unrepresented as

long as the policy making body is associated with riches and privileges that go beyond those of the voters.

The study's perception is that within a well supervised civil society, politicians in the city of Kwekwe would be obliged to be more accountable to the electorate. To this end, Vanhaven (1990: 8) argues that, "The powers of the rulers and policy makers must be limited. Law and policies must be responsible to the people. Ordinary citizens must exert a relatively high degree of control over leaders". Such a relationship between leaders and the residents of Kwekwe would help manage the principal agent problem which is the poor household water service delivery system.

The above mentioned problem is resultant of politicians making decisions which seek to further their own interests at the expense of those members of the electorates in the city of Kwekwe. When the interests of the politicians differ from those of the poor, urban poverty reduction strategies in the city suffer a setback. The above notion concurs with Khothari's (1993: 3) and Pillay's (2000: viii) assertions that urban poverty is a result of a socio-politico-economic system that makes it difficult for the poor to ascend their situation. The study believes that the prohibitive system in the city of Kwekwe has subsystems, which are national and international, as illustrated below:

Figure 4: Generic factors promoting poverty



(Source: Researcher's own initiative)

An analysis of the above factors indicates that fighting urban poverty in the city of Kwekwe is a complex matter that would require a comprehensive strategy. The success of the strategy would depend on its ability to deal with interactive factors that may be at play at every level. The poor must be at the centre of discussion in order to reduce urban poverty. When urban poverty is reduced consumers may have the capacity to settle their household water tariffs with minimum fuss.

The study holds that decentralization is a key point to remember when engaging in water service delivery debates. Broadening the range of providers and allowing providers to adjust service delivery to local circumstance is easier if decision making is

decentralized. Users and providers can then adjust the form of service delivery and the type of service to be delivered to local needs and conditions. There is now an emphasis on decentralizing authority over water management and promoting public or private partnerships in operating water infrastructure and delivering water services. The guiding principle behind these policy shifts is that water is a scarce commodity and no longer a free public good (Cleaver and Elson, 1995: 3).

Therefore, users are required to pay for water services even though development agencies have given some attention to providing targeted subsidies to meet the water needs of the poor. According to the Department for International Development's (DFID) position, if water is provided freely it will not be conserved and users will not maintain water infrastructure or facilities. Therefore, economic incentives must be used to encourage people to invest in the conservation and use of water resources (DFID, 2000: 32). The state still has an important role to play in protecting its citizens' rights of access to equal services. In addition to strong public or private partnerships, there must also be strong relations between the central government, lower tiers of government, and administration (DFID, 2000: 37).

The findings fail to fully endorse the researcher's qualitative hypothesis which cited bad governance, investment attitude and population growth as some of the factors that militate against urban poverty reduction in the city of Kwekwe. In the respondents' opinion a proper management of Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome (HIV/AIDS), corruption and social policy would create and increase the economic opportunities of the urban poor in the city of Kwekwe. This study

concurs with the above notion because, when urban poverty is reduced, the chances that many consumers are able to pay the water tariffs may increase. It is alleged that, flowing from the ZINWA Act is the National Water Pricing Strategy, financial charges may be supplemented with an economic charge in water scarce catchments and thus promote the efficient allocation and beneficial use of domestic water (ZINWA, 1998). The National Water Pricing Strategy is underpinned by the theory of supply and demand. It is perceived that, in areas where meter readings are done, some of the residents complain that the readings are not done regularly and consumers are sometimes sent estimated invoices.

These estimated invoices include the poor consumer who always struggles to raise money for normal water charges. Pre-paid water meters (PPWM) have had devastating social consequences in Britain, for example, where they were subsequently banned in 1998 (Drakeford, 1998). This raises an important question: if these meters were found to be harmful to public health in Britain, based upon concrete empirical evidence where the poorest are better off than the poor in Kwekwe, is it not possible that they may pose a serious threat in the Kwekwe area, especially against the background of worsening socioeconomic conditions over the past decade (UNDP 2003; SSA 2002).

Moreover, some of these water meters are estimated to be over 70 years old. According to the Kwekwe Municipality maintenance officials (2010) these meters are expensive to maintain especially during this period of economic crisis in Zimbabwe. It is also reported that vandalism of meters is common and meter boxes need to be installed. This implies that the price of domestic water is assumed to be relatively higher in clean water-

stressed areas than in areas of abundance. Plumbing works and maintenance of the reticulation systems should be of the required standards to avoid hygienic water wastage through leaks and bursts (DWAF, 2004).

The household water leaks at the reticulation network deserve to be fixed as soon as they occur. Most leaks appear to have been going on for a long time. This study will also confirm the durability of the plumping materials used in the drainage system of the houses of Kwekwe residents. It is also perceived that late water cuts had become a common phenomenon in Kwekwe Municipality. It is also recommended that the residents of Kwekwe urban are well-informed of the potential benefits of being involved in the management and monitoring of the domestic fresh water service delivery system.

First-rate water service delivery encourages consumers to pay their rates on time. These economic charges of clean water reflect the long-run marginal cost of supply and distribution, and prevent household water from being overused by those fiscal sectors that add relatively little subsidiary economic output (DWAF, 2003). Zimbabwe is heading towards a situation of absolute domestic clean water scarcity by 2025 to 2030 (Crafford, 2004). Supreme scarcity is perceived as a situation where water demand for household use exceeds the rate of supply. Kwekwe municipality is believed to be struggling to meet the household water service delivery needs and demands of its residents, especially the urban poor.

It appears that, the consumers need to treat domestic water as a basic commodity with input costs. Government can then, at a later stage, gradually pull out of the subsidy. Since 1998 most of the subsidies have gone towards extending basic clean water services to previously disadvantaged communities who were excluded from such a service in the past. District Councils ensure that funds are raised for the household water development needs of more than one local authority. Local authorities focus particularly on the metering and management of pure water within municipal boundaries (Crafford, 2004).

It is assumed that, the consumers comprising both poor and rich must pay for access to clean water for domestic use. Shulze and Perks (2000) argue that market based allocations are able to respond more rapidly to changing conditions of supply and also tend to lower the water demand, conserve fresh water for household use and consequently increase both the robustness and resilience of the household water supply system. Document analysis from ZINWA Head Office proved that most of its research is conducted in the two large cities, Harare and Bulawayo, where resources are concentrated at the expense of small cities like Kwekwe. The poor are not able to access consistent domestic water services because the water authorities sometimes disconnect the water system if they are in arrears. It is therefore important to complement the arguments above with a discussion of social policy.

6.6 Social Policy

Social policy, like social justice, stands at the heart of this study. “Social policy needs to be in touch with the common concerns of citizens as they live their daily lives,” (Cahill 1994:5). It is water for household use, due to its fundamentally necessary and non-

substitutable features, which lies at the centre of social policy concerns in this study. It also explores, by virtue of these same characteristics, the fact that “Broadly speaking, the study of social policy is the study of the role of the state in relation to its citizens” (Holden, 2005: 174). Lavalette and Pratt (1997) assert that Social policy can be seen as an intensely political project and, as such, an immensely important area in which competing ideologies clash.

As a result, politics matter a great deal and political activity is afforded no little importance in the policy making process, in particular, and the shaping of social policy, in general (Lavalette, 1997: 5). The study will briefly analyse the various aspects of social policy pertaining to household water services, such as the *Reconstruction and Development Programme* (RDP), the *Constitution* of the *Republic of Zimbabwe* (Zimbabwe, 1998), the *Water Services Act* (1998), the *Municipal Systems Act* (2000). Together with this, will experiences elsewhere also be analysed in order to investigate what appears, from the literature review, to be the potentially dangerous social and health consequences of the Pre-paid Water Meter system (PPWM) in poor communities.

It is an ironic fact that the post-colonial government of Zimbabwe did not take steps to curtail supply and enforce various potentially unsafe cost-recovery measures. Based on this study the PPWM appears to be the starkest manifestation of neo-liberal cost recovery in the poor communities. After over three centuries of systematic oppression and exploitation – when ‘freedom’ held the prospect of a changed and better life – PPWM have caused the poorest in many communities to literally ‘beg, steal and borrow’

for water that is inseparably connected to life itself (Barlow and Clarke, 2000; Public Citizen, 2004; APF, 2004; Deedat, 2001; Deedat and Cottle, 2000). PPWM are a very important social policy issue in contemporary Zimbabwe. In Kwekwe a great and dramatic struggle has been fought between an impoverished community fighting for access to household water, and a municipality that appears to be preoccupied with forging a 'world class status' (CoJ, 2002). This same municipality, in the meanwhile, is determined that poor citizens must pay for water above a small and insufficient 'lifeline' supply.

Nevertheless, from a rights-based approach this discourse invites the following question: Are PPWM the most invasive, incisive and exploitative technological device capitalism has ever produced to exploit the most essential daily need for cost recovery and a profit? After witnessing the experience of PPWM in Hermanus this is how Deedat (2002) captures the problem:

> *I would like to say how disillusioning it is to see local authorities perpetuating the inequalities of the colonial regime against communities who over the past 40 years were already subjected to third-class services. The goal has become balanced budgets rather than improving the lives of citizens they serve (Deedat, 2002:154).*

In their quest to recover, costs councillors and officials from the water sector go against the grain of inequality and redress enshrined in the Constitution of Zimbabwe. These are rights which are given to every Zimbabwean irrespective of class, race or gender.

But in communities such as those researched here, these rights are eroded with every tick of the pre-paid meter.

Social policy should be geared to usher in the best possible socio-economic conditions for poverty reduction in the city of Kwekwe. To achieve this end, the policy should address the structural irregularities in wealth and the means of production and distribution in the economy. The most probable effect of such a policy is the protection of the most vulnerable economic groups in the city. Apparently, social policy interfaces with the public through welfare programmes such as the Zimbabwe European Union Micro projects in Zimbabwe, Reconstruction and Development (DRDP) in South Africa; Accelerated and Shared Growth Initiative for South Africa (ASGISA), PROGRESA in Mexico, FONCODES in Peru, IRD, in Nicaragua and PREVIDENCIA RURAL in Brazil. The main objective of these programmes is to cover the basic needs of vulnerable members of the community. The study further argues that decentralization is a central component in giving the poor greater voice in policy decision-making and making institutions more accountable.

The process of policy formulation and implementation needs to use information from the changing situation on the ground. State institutions dealing with poverty need to transform themselves into learning institutions and make knowledge management a central part of the way they conduct their day-to-day operations. Nonetheless, the transfer of knowledge and experience is not simple, because poverty is first and foremost a local phenomenon and the starting point for the management of this knowledge must be local, indigenous knowledge. As knowledge is tailored to the

specific local circumstances from which it emerged, this knowledge needs to be transformed to become relevant in a different setting. Consequently, effective knowledge management requires mechanisms that turn experience gained in one location into new knowledge and new solutions that can respond to specific circumstances in another location.

This study believes that any strategy for the identification of good practices and their dissemination and replication must focus on transferable tools, skills and procedures. Transfer of the practice as such does not suffice. However, key aspects of the institutional environment in which the practice emerged also need to be covered, because understanding these conditions would be needed for possible replications. It is vital that the analysis of good practice covers not only the results, but also the critical processes through which those results were achieved. People are likely to learn more from “how it was done” than from “what was done”. The objective of transferring a practice is to produce a solution to a problem in a new location under different conditions; and this could be better achieved by adapting the processes to new conditions rather than by trying to produce exactly the same result.

Knowledge generation needs to be accompanied by developing the capacity of different stakeholders, in particular the poor consumers themselves, to take advantage of the tools, skills, experiences and processes that are being transferred and transformed. In this respect, it must be recognized that the replication of good practices in urban areas presents unique challenges, given that the population in small cities like Kwekwe often lack even the most basic services which could assist in capacity building.

6.7 Conclusion

This chapter discussed the data that was presented, analyzed and interpreted in Chapter 5 of this study. In this chapter, the major findings that emerged from Chapter five were critically analyzed and interpreted in relation to the literature reviewed for this study. The discussion was centered on the four research questions of the study which have been unfolded in the previous chapters. Generally, this study's perspective that household water is a human right, but should not be accessed free of charge, was confirmed through the use of the lenses of neo-liberal and rights-based theoretical frameworks. The chapter established that implementing domestic water service delivery strategies in the city of Kwekwe requires resource commitment. The next chapter provides a summary of the whole study, the major conclusions that were drawn from the study as well as the recommendations that could be adopted by policy makers in an effort to arrest the problem of poor a household water service delivery system.

CHAPTER 7

Summary, Conclusions and Recommendations

7.0 Introduction

In this concluding chapter, a summary of the major findings of the study are presented. This is followed by a general summary and conclusion. This study investigated the efficacy of municipalities in a household water service delivery system under the title, ***Rethinking the water service delivery system in Zimbabwe: A case study of Kwekwe Municipality.*** This chapter is divided into four distinct subsections which are; summary of findings, conclusions, recommendations and suggestions for further research. Furthermore, the conclusions drawn from the mass of data obtained through empirical evidence, and buttressed by the literature review, are given.

Based on the major findings and conclusions of the study, the researcher provides a comprehensive list of recommendations that policy makers and planners could adopt in their attempt to improve the household water service delivery system. This is done as logically as possible. A comprehensive list of findings is given first. These are findings of the study that sought to investigate the capacity of Kwekwe Municipality to offer household water service delivery to consumers. Findings which centered on research question one are presented first. The findings have economical and administrative implications, and will be drawn on the basis of available evidence. Recommendations provide a platform for the reconceptualization of domestic water service delivery issues peculiar to municipal organizations and research. The chapter ends by highlighting

some grey areas requiring further research in the household water service delivery arena within the Zimbabwean context.

7.1 Summary of Findings

The study, which sought to establish the competency of Kwekwe Municipality in providing household water service delivery and the impact this had on the consumers, came up with far reaching findings, specifically guided by the 4 research questions. In essence, the 4 research questions served to buttress the main question contained in the research problem. The study was informed by the neo-liberal and rights-based theoretical frameworks.

As regards how Kwekwe Municipality perceives itself as a competent service provider in Zimbabwe:

The data revealed that Kwekwe Municipality does not have money to purchase household water purifying chemicals. The data showed that Kwekwe Municipality is affected by urban poverty caused by the economic crisis in the country. This further affects its capacity to deliver quality household water services to the consumers. The study revealed that the household water service delivery system was confirmed to be unreliable because the consumers, at times, spent 2 to 3 days or even more days without water.

Another important finding was that the Kwekwe Municipality still faces the challenge of improving the domestic water service delivery system. The water problems primarily affect women because they execute a number of domestic duties which their male

counterparts do not. The consumers experienced inconsistent and uninformed water cuts. There is, therefore, a need to improve the household water service delivery system through upgrading the water reticulation system as indicated in Figure: 3 in this study.

The results further show that the ability of Kwekwe Municipality to provide household water services to its consumers is slightly below average. However, there was a slight improvement in the household water service delivery which did not affect the average rating of this service. Another finding related to this one was that the electricity deficiency cost the efficacy of Kwekwe Municipality to provide household water service delivery. The problems affecting the Zimbabwe Electricity Supply Authority and the Zimbabwe National Water Authority may cascade down to the municipalities. It is a long and arduous process for customers to access household water. For customers to access first rate household water services from the municipalities, they need to pay water tariffs.

Further, the data showed that most urban consumers also suffer the problem of erratic water cuts through routine water rationing and the burst or leaking pipes. Consumers were given notices prior to domestic water disruptions, but the notices were not consistently provided to the ordinary consumers. It was also noted that the use of hosepipes for gardening and car washing purposes is uneconomical since some consumers leave the connected hosepipes unmonitored.

According to this study, the water authorities were of the opinion that the household water service delivery is satisfactory which is contrary to the beliefs of the consumers. The consumers were of the opinion that Kwekwe Municipality provides poor household water service delivery to its customers. Nevertheless, Kwekwe Municipality has the potential to provide clean household water to customers but this is obstructed by the economic crisis and urban poverty.

The data from the study reveals that the majority of consumers find it challenging to pay the water bills due to the economic crisis and urban poverty. The water authorities charge exorbitant water tariffs in order to recover their costs at the expense of their consumers. The study also indicated that consumers were paying different household water tariffs depending on the type of residential areas they reside.

The results showed that the meter reading system proves to be difficult to implement because of the shortage of manpower and the transport problem caused by urban poverty. The correctional measures of disconnecting household water services were considered a last resort against consumers who were in arrears. The study further found that the meter readings noted on the invoices from Kwekwe Municipality did not correspond with the readings on the meters. It was also found that consumers who were in arrears failed to communicate with the water authorities so that special arrangements could be made for them to settle their balances without disconnecting their water services.

7.2 Conclusions

In view of the findings, this study concludes that although the provincial government in the Midlands Province has a pro-poor social policy, and urban poverty reduction programmes are in place, these remain relatively ineffective in reducing urban poverty in the city of Kwekwe due to their failure to avail the necessary human and non-human resources that are akin to the implementation of effective anti urban poverty reduction strategies. This inquiry concludes that value-addition is an essential activity to consider in the fight against urban poverty in the city of Kwekwe. However, value-addition to a household urban water service delivery system calls for institutional innovations and smart subsidies by Kwekwe Municipality, the state and NGOs for improving the service delivery. The study therefore concludes that poor consumers and poor service providers, such as Kwekwe Municipality, deserve to be at the center of household water debates in order to reach the best practice.

The study also concludes that the Kwekwe Combined Residents Association needs to be involved in the formulation of the household water service delivery policy because it is the very institute which interacts with other community members rather than the water authorities. Therefore, the approache to the domestic water service delivery system needs to be reconsidered. The issue of charging consumers incorrect water tariffs must be corrected through distributing water invoices with the correct meter readings.

Generally, domestic water tariffs should be subsidized so that they are affordable to every consumer who resides in the urban areas. Further, the study can conclude that, for the household service delivery system to be sustainable, the consumers must be

able to pay. The consumers must have the capacity to pay their water bills in order to improve the household water service delivery process. The consumers, through the Kwekwe Combined Residents Association, request the municipality of Kwekwe to charge affordable water tariffs which tally with the meter readings.

7.3 Summary of contributions

In summary, it must be remembered that the study fundamentally investigated a rethinking strategy concerning the improvement of the household water service delivery system in Zimbabwe, a case study of Kwekwe Municipality. The study was informed by the neo-liberal perspective, which proposes the payment of water tariffs on the part of the consumers in order to receive quality service delivery. The rights-based theoretical framework was also adopted to complement the neo-liberal theoretical framework. The literature reviewed in this study recognized that consumers must have the capacity to pay the water tariffs in order to access quality service delivery.

The study adopted a case study research design, grounded in the interpretive research paradigm, by investigating household water service delivery in Kwekwe Municipality in the Midlands Province of Zimbabwe. Data was collected from the four selected residential areas of Kwekwe and also from the Kwekwe Municipality's water authorities. The choice of the data collection instrument was influenced by a neo-liberal theoretical framework which encourages consumers and suppliers to tell their stories particularly on issues that affect them, as well as their visions. The collected data was analyzed using both qualitative and quantitative analysis techniques. Pertinent conclusions were arrived at inductively and these are presented below:

As a prelude to the conclusion, it is noted that data from the narrations and demographic survey of respondents in Kwekwe urban showed that they were:

All mature adults over the age of 20.

Some were married whilst others were single.

They were highly educated academically and professionally. All possessed the ‘O’ Level certificate, others ‘A’ Level certificates, some professional certificates/Diplomas, some Bachelors degree and a few post graduate degrees.

The data therefore revealed that these were educated adult respondents who had the capacity to provide the researcher with reliable information.

7.3.1 The contributions to the body of knowledge on the urban household service delivery system

The study contributed a model showing the water distribution process from the plant to the users for in the city of Kwekwe. The model is presented as Figure 2 in the course of this study.

This inquiry also contributed a business approach to the household water service delivery system in Kwekwe urban. In this case, the Municipality of Kwekwe needs to adopt the principles of business management into notion of poverty reduction in order to provide constant household water service delivery to its consumers.

7.4 Practical implications of the contribution

The Midlands provincial government, Kwekwe Municipality, NGOs, the business community and residents in the city of Kwekwe need to invest much more time and monetary resources in its urban household water service delivery system. The reason for involving the business community is based on the assumption that business cannot succeed in a society that fails to deliver services. Through corporate social responsibility, corporate bodies are charged with the responsibility of integrating the three Ps (people, planet and profits) that constitute the business environment.

The above recommendations augur well with the views of Adam Smith (the father of modern economics) who emphasized that economic transactions were premised on a range of ethical assumptions and foundations. Thus, bodies corporate are expected to contribute in removing the obstacles to the improvement of household water services in the city of Kwekwe. These obstacles include inter alia, the lack of capital and technology, inaccessibility to clean domestic water, and the high prevalence of HIV/AIDS and corruption cases in the city. Therefore, the current norm in which the Kwekwe Municipality looks after its consumers is not sustainable and may not be the best practice. A state where everybody in the city of Kwekwe pays reasonable water tariffs and accesses a clean household service delivery system is advisable.

7.5 Recommendations for implementation

This research has established that there is a dearth of literature in the area of domestic water service delivery in Zimbabwe, in particular, and within the SADC region and Africa in general. Except a few baseline surveys, very little academic research has been

carried out in Zimbabwe in relation to the household water service delivery system. While this study attempts to cover a wide spectrum of issues pertaining to domestic water service delivery from municipalities in Zimbabwe, it should be viewed as an exploratory study or a stepping stone in this particular field. Since the researcher touched on a number of issues, some areas were not thoroughly covered. There are many grey areas that could be fertile ground for further study which include the suggestions listed below. In the interests of according Kwekwe Municipality the capacity and space, it may be necessary for stakeholders to consider the adoption of the following general suggestions:

Service delivery training programmes may be embarked upon to capacitate the water authorities for competency.

More studies seeking to interrogate the domestic water service delivery system of Zimbabwean Municipalities should be embarked upon by the state.

For the sustainable household water service delivery system to succeed, this study recommends a strong partnership between the Midlands provincial government, civil society, NGOs and urban poverty in the city of Kwekwe. The partnership could be embedded in the post-colonial Comprehensive Water Support Programme in Chapter 4.

It is further recommended that social welfare grants are gradually tapered off, particularly for the able-bodied persons. Instead of grants, agro-based business loans should be substituted for residents of the city of Kwekwe. Part of the grants could be converted as part of investment so that the poor in the city of Kwekwe participate in the equity market.

Further, the study proposes the following recommendations:

Kwekwe Municipalities should directly own raw water in their jurisdiction in order to avoid the expenditure of buying raw water from ZINWA.

Consumers should be taught household conservation skills such as ensuring that the hosepipes in use are monitored all the time.

Consumers have to rectify leakages within their households as soon as they occur.

Municipalities must improve the monitoring of water pipes such that leakage detection which can be done at an early stage.

Municipalities have their own reserves and generators for emergency cases during electricity power cuts.

Every time the water reservoirs must have 4 days water capacity.

Municipalities must carry out an audit of water meter readings and also confirm that all water meters are functional.

Manpower to read correct meter readings should be increased in number and must have reliable transport.

Further studies should be conducted in this area because it is insufficiently researched.

The consumers should be placed at the center of household water debates when policies, rules and regulations of the water service delivery system are formulated.

The household water service delivery system can be improved through considering accurate water measurement, costing exercise, cost of inputs and cost recovery.

The municipality of Kwekwe must revamp the entire water reticulation system.

The government of Zimbabwe should have the capacity to establish industries for manufacturing water related equipment.

The municipalities must reevaluate the error which was done at independence. At independence, emphasis was on certificate employees and thus disregarded experienced workers with hands-on experience but little academic qualifications.

7.6 Conclusion

The final chapter provides a synopsis of the entire study. It highlighted the fundamental issues that came out of the study with regard to the root causes of a poor household water service delivery system from Zimbabwe's municipalities. A wide range of mitigation measures were suggested. These were directed at the major stake holders in the household water service delivery system, namely: the Zimbabwe Government, municipalities, Zimbabwe National Water Authority, the United Nations, SADC regional countries, African Union and the Zimbabwean academics (both at home and in the Diaspora). As has been demonstrated by the study, the problem of a poor household water service delivery system is a challenge for Africa. It is serious enough to require sober contemplation by all those concerned. It is hoped that the matter will be given the urgent attention that it deserves for the good of Zimbabwe and the whole of Africa and other developing countries.

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APPENDIX

Appendices 1

University of Fort Hare
Together in Excellence

Water Authority Questionnaire

My name is Wiseman Mupindu, from the University of Fort Hare in the Department of Development Studies pursuing a Doctor of Philosophy in Social Science Degree. I am conducting a study on a thesis entitled Rethinking water service delivery system in Zimbabwe: a case study of Kwekwe Municipality. You are assured that the data received in this study will be used for scholarly purposes only. Your responses are confidential and will not be disclosed to anyone. Please, note that no answer is regarded as correct or wrong. Your co-operation determines the success of this study.

Instructions:

A. You can comment freely on the space provided for open-ended questions.

B. Indicate your answer by marking with an X in the box provided.

SECTION A: BIOGRAPHICAL INFORMATION

1. Gender

Male	
female	

2. Age

20 years and below	
21- 24	
25-30	
31-35	
36-40	
41 and above	

3. Appointment in the organization

……..

4. Work experience

21 and above	
16-20	
11-15	
6-10	
3-5	
2 years and below	

5. Highest Academic Level of Education

……

SECTION B: CAPACITY OF KWEKWE MUNICIPALITY TO PROVIDE DOMESTIC WATER TO THE RESIDENTS

6. Does the Kwekwe Municipality have the ability to provide water for domestic use to its residents? Give your own opinion.

……

……

……

……..

7. Does Kwekwe municipality have the capital, equipment and manpower to execute its responsibility? Give reasons to your response.

……

……

……

……

8. How reliable is the domestic water service delivery system from Kwekwe Municipality to its residents?

(Explain)……

……

……

9. Do you have consistent water service delivery system at Kwekwe Municipality? Give reasons to your response.

……

……

……

……

……

10. Do you experience the problem of erratic water shortages in Kwekwe urban?

Yes	
No	

11. If yes, how many times per week do you experience domestic water cuts in your area?

Once per week	
Twice per week	
Three times per week	
Other specify	

12. Are there any water-borne diseases which are common in Kwekwe due to the problem of scarce household water supply? (Please state if any)

……

……

13. What is the relationship between the Zimbabwe National Water Authority and Kwekwe Municipality?

……

……

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……

.....

14. Outline the roles and responsibilities of Kwekwe Municipality in terms of domestic water service delivery system to the consumers

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15. What are the roles and responsibilities of the Zimbabwe National Water Authority?

……

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……..

16. What are the achievements made by the Zimbabwe National Water Authority (ZINWA) since its inception in 1998?

.....

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.....

17. Which initiative is used by the water responsible authority to raise money towards providing clean household water to its residents?

Fundraising activities	
Running money making Projects	
Sourcing donations	
Other (Specify)	
None of the above	

SECTION C: AFFORDABILITY OF THE RESIDENTS OF KWEKWE TO PAY THE WATER TARIFFS

18. What is the main source(s) of supplying water to the City of Kwekwe?

……

19. How reliable is this source(s) of water?

Excellent	
Good	
Average	
Below average	

20. On average how many litres of water are consumed by each household from the following residential areas per month?

High density	
Medium density	
Low density	

21. How much is the total cost of water tariffs per month for the residential areas listed below?

High density	
Medium density	
Low density	

22. Are the poor affording to pay these domestic water tariffs? Give reasons to your response.

……

……

……

……..

23. What measures are taken to those in arrears?

……

……

……

……..

24. Do you agree that closing the water system is the solution to those who owe?

(Give reasons to your answer)

……

……

……..

25. Are the readings on the water meters always tally with what is written on the monthly invoices?

Yes	
No	

26. If “No” how do you normally solve the problem?

……

……..

27. List some of the problems experienced by the poor concerning the payment of water tariffs?

……

……

……..

Section D: Policy Documents and Implementation.

28. What does the water policy say concerning water service delivery system to the

poor who find it difficult to pay the water tariffs?

……

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……

29. Is it the right of every human being to access water without paying? Give reasons to support your response.

……

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……

……

30. Where do you get money for the renovations and maintenance of the water system infrastructure of Kwekwe Municipality?

……

……

……

31. There was proper handover and takeover of the resources in between the government and the Zimbabwe National Water Authority. What is your comment concerning this statement?

……

……

……

……

32. There are some cases of mismanagement of resources at Kwekwe Municipality.

Yes	
No	

33. If yes indicate how?

……

……

……

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……

……

……

34. There are some improvements in the water service delivery system for the past ten years. What is your point of view concerning this statement?

……

……

……

……

……

33. There is the problem of household water service delivery system within Kwekwe Municipality? Give reasons to your response.

……

……

……

……

……

34. Are you aware of these documents?

	Yes	No
Water policy documents		
Water statutory instrument documents		
Water acts		

35. Do you also have copies of these policy documents?

Yes	
No	

36. If yes, what is your comment concerning their contents?

Easy to comprehend	
It takes time to comprehend	
Difficult to comprehend	

37. There is enough evidence at Kwekwe Municipality that these policy documents and statutory instruments are implemented. What is your comment concerning this statement?

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Section E: Recommendations to improve the household water service delivery system

38. What do you recommend being done in order to improve the service delivery system of clean water for domestic use in Kwekwe urban?

……

……

……

39. What do you propose to be the way forward towards assisting the poor since access to clean household water is perceived as their human right?

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40. For the water service delivery system to be sustainable the consumers must be able to pay the tariffs. Give reasons to your response.

……

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41. Does Kwekwe municipality have the some links with other municipalities in the SADC region and outside Africa?

Yes	
No	

42. If yes, explain the nature of help it is receiving (e.g. accessing chemicals to purify water for domestic use).

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Thank you very much for your co-operation.

Appendices 2

University of Fort Hare
Together in Excellence

Kwekwe Residents Questionnaire

My name is Wiseman Mupindu, from the University of Fort Hare in the Department of Development Studies pursuing a Doctor of Philosophy in Social Science Degree. l am conducting a study on a thesis entitled Rethinking water service delivery system in Zimbabwe: a case study of Kwekwe Municipality. You are assured that the data received in this study will be used for scholarly purposes only. Your responses are confidential and will not be disclosed to anyone. Please, note that no answer is regarded as correct or wrong. Your co-operation determines the success of this study.

Instructions:

A. You can comment freely on the space provided for open-ended questions.

B. lndicate your answer by marking with an X in the box provided.

SECTION A: BIOGRAPHICAL INFORMATION

1. Gender

Male	
female	

2. Age

20 years and below	
21- 24	
25-30	
31-35	
36-40	
41 and above	

3. Occupation

……..

4. Approximately what is your income per year?

Above US $6000	
US $ 4 800 to 6 000	
US $ 2 400 to 3 600	
Below US $ 1200	
Other specify	

6. Highest Academic Level of Education

……...

SECTION B: CAPACITY OF KWEKWE MUNICIPALITY TO PROVIDE DOMESTIC WATER TO THE RESIDENTS

7. What is your comment concerning the ability of Kwekwe Municipality to provide water for domestic use to the consumers?

……

……

……

……

8. Does Kwekwe municipality have the capital, equipment and manpower to execute its responsibility?

Yes	
No	

9. How reliable is the domestic water service delivery system from Kwekwe Municipality to you?

(Explain)……

……

……

……..

10. Do you experience the problem of erratic water shortages in your area?

Yes	
No	

11. If yes, explain your response above

……..

……

……..

12. Do you experience the problem of household water cuts at your place?

Yes	
No	

13. If yes, how many times per week do you experience domestic water cuts in your area?

Once per week	
Twice per week	
Three times per week	
Other specify	

14. What can you say about the cleanliness of water in your area?

……

……

……..

15. Do you experience the problem of water borne diseases in your area?

Yes	
No	

16. If yes, which water-borne diseases are common in Kwekwe due to the problem of scarce household water supply?

……

……

SECTION C: AFFORDABILITY OF THE RESIDENTS OF KWEKWE TO PAY THE WATER TARIFFS

17. What is the main source(s) of supplying water to the City of Kwekwe?

……

18. How reliable is this source(s) of water?

Excellent	
Good	
Average	
Below average	

19. On average how many liters of water do you consume at this household per day?

10 liters to 25 liters	
Above 25 liters	
Other specify	

20. How much do you normally pay as water bill per month at this household?

US $ 5 to 15	
US $16 to 30	
Other specify	

21. Are the poor affording to pay these domestic water tariffs? Give reasons to your response……

……

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……

22. What measures are taken to those in arrears?

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……..

23. Do you agree that closing the water system is the solution to those who owe?

(Give reasons to your answer)

……

……

……..

24. Are the readings on the water meters always correspond with what is written on the monthly invoices?

Yes	
No	

25. If “No” how do you normally solve the problem?

……

……

……

……..

26. Do you have any other problems related to the payment of water bills?

Yes	
No	

27. If yes, list some of the problems experienced by the poor residents of Kwekwe concerning the payment of water tariffs?

……

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……..

SECTION D: POLICY DOCUMENTS AND IMPLEMENTATION.

28. Do you agree that it will be proper to introduce a policy comprising free water

service delivery system to the poor? Please, explain your response.

……

……

……

……

29. Is it the right of every human being to access water without paying? Give reasons to your response.

……

……

……

30. Where do you get money for paying the water tariffs to Kwekwe Municipality?

……

……..

31. The poor residents of Kwekwe find it very difficult to pay the water bills.

Strongly agree	
Agree	
Strongly disagree	
Disagree	
Uncertain	

32. Do you have a garden at your place?

Yes	
No	

33. If yes, do you use the hosepipe to water the garden?

Yes	
No	

34. If yes, how often (specify)

……

……

……

……

35. There are some improvements in the water service delivery system for the past ten years.

Strongly agree	
Agree	
Strongly disagree	
Disagree	
uncertain	

36. There is the problem of household water service delivery system within Kwekwe Municipality? State some reasons to your response.

……

……

……

……

Section E: Recommendations to improve the household water service delivery system

37. What do you recommend being done in order to improve the service delivery system of clean water for domestic use in Kwekwe urban?

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……

……

38. What do you propose to be the way forward towards assisting the poor since access to clean household water is their human right?

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39. For the water service delivery system to be sustainable the consumers must be able to pay the tariffs. Give reason to your response.

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Thank you very much for your co-operation.

Appendices 3

University of Fort Hare
Together in Excellence

Interview questions for the Water Authority

My name is Wiseman Mupindu, from the University of Fort Hare in the Department of Development Studies pursuing a Doctor of Philosophy in Social Science Degree. I am conducting a study on a thesis entitled Rethinking water service delivery system in Zimbabwe: a case study of Kwekwe Municipality. You are assured that the data received in this study will be used for scholarly purposes only. Your responses are confidential and will not be disclosed to anyone. Please, note that no answer is regarded as correct or wrong. Your co-operation determines the success of this study.

1. Can you describe the link between the capacity of Kwekwe Municipality to provide domestic water to the consumers and the input from the Zimbabwe Electricity Supply Authority (ZESA).

2. Does Kwekwe Municipality have the capacity to provide household water service delivery to the consumers?

3. Does Kwekwe municipality supply consumable water to its residents?

4. If no what measures do you always take to access water which is suitable for human consumption?

5. Does your source of water have industrial pollutants?

6. Do you agree that clean water for domestic use is a human right which must be accessed free of charge by the consumers?

7. How much do you charge per kilolitre?

8. What determines the cost of water service delivery system?

9. What action do you take to those who are in arrears?

10. Explain the method you use to charge the water tariffs? (through estimation or meter readings)

11. Do the meter readings always correspond with your monthly invoices to the consumers?

12. Do you think the residents of Kwekwe have the capacity to pay the water tariffs?

13. When were the renovations for the water infrastructure (pipes and water plant) last done in Kwekwe?

14. How do you account for the water lost through bursting pipes?

15. In your own opinion who should pay for this expenditure?

16. Do you give notice to the consumers before water cut offs or disconnections? Explain your response.

17. What is your comment concerning the capacity of pressure pipes to deliver water services to the residents of Kwekwe considering the increase in population and more houses being constructed?

18. What recommendations can you give to bring the best practice of water service delivery system in the city of Kwekwe?

Thank you for your co-operation.

Appendices 4

University of Fort Hare
Together in Excellence

Interview questions for the residents of Kwekwe

My name is Wiseman Mupindu, from the University of Fort Hare in the Department of Development Studies pursuing a Doctor of Philosophy in Social Science Degree. I am conducting a study on a thesis entitled Rethinking water service delivery system in Zimbabwe: a case study of Kwekwe Municipality. You are assured that the data received in this study will be used for scholarly purposes only. Your responses are confidential and will not be disclosed to anyone. Please, note that no answer is regarded as correct or wrong. Your co-operation determines the success of this study.

1. Do you afford to pay the water tariffs? Give reasons to your response.
2. Is the water suitable for human consumption?
3. If no, give reasons to your answer.
4. What is your comment concerning the consumers accessing water as their human right?
5. Support your view from the response concerning the question above.
6. What action is normally taken by the Municipality of Kwekwe to those who are in arrears?
7. Do the meter readings always correspond with the monthly invoices to you as the

customer? Explain.

8. Are you satisfied by the water service delivery system provided by Kwekwe Municipality? State the reasons for your response.

9. Do you experience erratic water cuts in your area? Explain your response.

10. Are you given a notice as the consumers before water cut offs or disconnections? Give reasons to your response.

11. How do you participate in the way household water is delivered?

12. How often do water authorities seek your input in the delivery of water?

13. How do you access the municipality leadership if you do not have water in your area?

14. In your own opinion what should be done to recover the costs of the water lost through bursting pipes? Give reasons to your response.

15. Explain the method being used by the Municipality of Kwekwe to charge the water tariffs (through estimation or meter readings)?

16. What recommendations can you give to improve the water service delivery system in the city of Kwekwe?

Thank you very much for your co-operation.

Appendix 5

University of Fort Hare
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Mrs Nkatsi

University of Fort Hare
Together in Excellence

Approved
Management

2 mr Mutandwa
kindly assist as requested
Mke 28/06/10
1. MT Mluke
please assist

KWEKWE MUNICIPALITY RESPONSIBLE AUTHORITY

Dear Sir/Madam

This is to certify that Mr Wiseman Mupindu is a full-time student studying a Doctor of Philosophy Social Science Degree in the Department of Development Studies, University of Fort Hare. On 21 May 2009, Mr Mupindu successfully defended his thesis proposal before the Faculty Research and Higher Degrees Committee: Management and Commerce.

At present he is writing his dissertation entitled: **"RETHINKING WATER SERVICE DELIVERY SYSTEM IN ZIMBABWE: A CASE STUDY OF KWEKWE MUNICIPALITY".** In order to successfully complete his research project, he has to carryout extensive field and archival research in Zimbabwe. This office will be grateful if you could allow him to also collect data within Kwekwe urban through questionnaires and interviews with the water authorities and residents of Kwekwe. I would also be grateful if you could kindly provide him with the water sector official documents like minutes of meetings, circulars and other water policy documents. This office will highly appreciate if you can kindly give him access to your Municipality/library/archive in this regard. The information and data that Mr Mupindu will collect will be used strictly for scholarly purposes only. I would like to assure you that the information to be collected will remain confidential.

Your cooperation will be highly appreciated by the Department of Development Studies, Faculty of Management and Commerce as well as by the University of Fort Hare.

Yours sincerely,

Professor R Thakhathi

UNIVERSITY OF FORT HARE
FACULTY OF MANAGEMENT AND COMMERCE
Private Bag X1314
ALICE
5700

Signature: .....
Date: .....

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Appendix 6

Appendix 7
Water authority transcribed interview

Question 1: Can you describe the relationship between Kwekwe Municipality and the Zimbabwe Electricity Supply (ZESA)?

Respondent A: According to the ZESA Act, ZESA is an independent parastatal, but the Urban Councils Act states that there is a relationship because the Municipality gets electricity from ZESA at a certain fee. The Kwekwe Municipality is the consumer of energy from ZESA and it uses this energy to pump water so that it can be delivered to the residents in form of taped water. Therefore if ZESA fails to provide electricity to the municipality of Kwekwe it may not be able to offer the household water service delivery to the consumers.

Question 2: Does Kwekwe Municipality have the capacity to provide clean household water service delivery to the consumers?

Respondent B: Yes, we have the capacity to produce 53 to 90 mega liters of water per day. We had a gathering of six ministers here in Kwekwe in year 2006 and we were endorsed as city which supplies the cleanest water throughout the country.

Question 3: Do you agree that clean water for domestic use is a human right which must be accessed free of charge by the consumers?

Respondent C: Aha, no; that is, we don't agree because there is nothing free of charge. The national policy is in such a manner that although yes we need health, yes we need clean water, but the National Legislature is in such a manner that there is no subsidy for people who can not pay for water. Actually the local authority operate from revenue

paid by the people, that is to say we sale the water. Yes, so we can not give water free of charge.

Question 4: What action do you take to those who are in arrears?

Respondent D: What actually happens is that at the end of the month we write invoices to remind those who are in arrears so that they can respond. In some case we have to go and cut the water, but that is the last resort that we can use for them to respond. Water connections would be disconnected to consumers in arrears. Some arrears dated back to two years ago. We will disconnect everyone with outstanding water bills as long as they do not arrange payment plan. Such bills have accrued to thousand dollars over the previous months. However, because the majority of the people were finding it difficult to make the down payments, Kwekwe Municipality had opted to introduce a payment plan. However, according to the Combined Kwekwe Residents' Association, disconnecting water supplies is illegal and cannot be used to coerce residents to pay. They believe that water is life and can not be withheld from the consumers for whatever reasons.

Question 5: Explain the method you use to charge the water tariffs?

Respondent A: What happens is we have a budget. We know the cost of water. The cost of our water is actually thirty one cents per kilolitre, that's the input we put into water. That's the cost and now what we can do we have actually the cost for the low density and the cost for the high density; and the cost for industry and commerce. What we do against is for the high density we charge them the low cost because we charge them twenty five cents per kilolitre and the low density we charge them fifty one cents; and industry and commerce sixty cents.

Respondent B: Yes, I think to add on that we have got meters. It is a requirement that, everyone who wants to extract water from our reticulation system must have a meter so that we can be able to measure the amount of water to be consumed. So against the unit rate we are now able to say you have consumed so much water over a certain period and then we also a system of people who read meters, meter readers. From these meter readers they also get how much you would have consumed and we then convert that to money and we give invoices to every water output stakeholders.

Question 6: Do the meter readings always correspond with your monthly invoices to the consumers?

Respondent A: Like anything else which you know we can't be hundred percent correct. In some cases they don't correspond, but what happens it that, if a consumer comes and queries we send one of our meter readers to check so that we get the correct meter readings.

Respondent B: I think to add onto that, before my colleague speaks so that he can also appear into that disc (people laughed), the idea is that, eehe, all the water meters which we use to measure the water to be consumed, they have got a design period and what it means is there was going to be, there is supposed to be a mechanism or it was supposed to be included in the statutory instrument for us to be able to say the local authority must recommend that other water meters have out-lived their design life span. And therefore we cannot continue to rely on them on the measurement. That is not there because of the poor technological advancement. So the issue of measurement of water is still an issue to be pursued actually in the performance of all local authorities.

There has been little focus and follow up on the accuracy of water meters to measure the consumption of water that I also leave my colleague to add.

Respondent D: I can only take you back to question 5 for some clarifications. I would say water is a basic right to every human being which must not be sold to anyone, it is like air which must just go for free, but how do we get the water. Someone must provide a service, for you to get your water we are now telling the residents to pay for the service (the office telephone ringed). So we are now telling the residents to pay for the service so that they will be able to access their right so they are not paying for water but, for the services (there was laughter followed by the office telephone interruption). I can also say that water is a human right but there are also some costs behind that service delivery.

Question 7: Do you think the residents of Kwekwe have the capacity to pay the water tariffs?

Respondent E: That capacity, actually to some extent yes. Our problem now is we have very big number of people are not able to pay because of inflation; actually it's a national problem. The economic crisis is making us not collect what we are supposed to collect under normal circumstances.

Respondent F: We also get into this; we all need our voices to be heard so I will give time to my colleagues.

Respondent G: We have an economic crisis and the consumers also need to pay other rates to the municipality, electricity bills from ZESA, telephone bills and school fees.

Question 8: When were the renovations for the water infrastructure (pipes and water plant) last done in Kwekwe?

Respondent H: On this one we have a fire fighting kind of approach in which if there is a burst pipe, we remove that burst pipe and put a new pipe. It was a requirement as I have earlier on said that every reticulation system like as we say we mean the components in the reticulation system e.g. the pipes and the accessories have got a design life, but ever since independence nobody has looked at whether the system has out-lived the design life or not. We only rush to where there is a burst pipe so as we attend and restore water to the affected small section (interrupted by the ringing office telephone). Just hold on hallow (the respondent was answering the phone and he told the person who had phoned to phone after ten minutes). So the issue of us having a revamp of the whole system has not been looked at due to the financial constraints which we have for now.

Respondent J: The piping system used to deliver household water is now over aged, but the pumping system is still in condition (telephone interruption).

Question 9: What is your comment on the relationship of the size of water pipes and the increase in population in the city of Kwekwe?

Respondent K: On that one our piping system is in such a manner that it covers a wide range of the development capacity of the city and it's in such a way that the pressures in the pipes and the diameters of the pipes will go a long way in covering the bigger demand of water. On that I think we do not have a problem. We have a planning section and engineering section to cater for the proper designs of water supply to any residential suburb of any water outlet in the city.

Respondent D: Maybe we may not have exhausted the capacity of the pipes or their limit to supply water to the residents.

Question 10: How do you account for the water lost through bursting pipes?

Respondent C: On this one we have got our water meters which are able to collect the data of how much is the water which would have been delivered to consumers for use and then at the water works we have some water measurements which quantify how much water has been pumped into the reticulation system. So the difference between how much water has been pumped and how much has been consumed will give us the loss of none revenue water which has been used. So with the range of water which gets lost due to water pipes bursting or leakages through fittings is between 17 to 28 percent per month.

Respondent A: When water is purified we know how much water has been purified and how much has been pumped and at the end we have meters again we know how much we have charged to our consumers, so the difference there, they cater for the loss.

Question 11. In your own opinion who should pay for this loss?

Respondent E: In my own opinion, I do not feel that the question of who pays for the expenditure of the water lost through bursting and leaking pipes has been answered. The person who pays for the expenditure of water loss definitely there must be someone because for us what is lost there is purified water and the person who buys the chemicals are the rate payers or the consumers of the water to purify the water so if purified water has been lost definitely what we mean is that the input of the chemicals is just gone out and that the consumers themselves are the ones responsible for paying the lost water.

Respondent A: In other words that makes our water more expensive because if our infrastructure were in condition and there was no loss, the water was going to be cheaper than the current rates. Our consumers indirectly are paying for the water lost through bursting pipes and leakages.

Question 12: Do you give notices to the consumers before water disruptions?

Respondent K: Yes, we sometimes give notices but on other situations the notices are only distributed to the big companies like Chibuku National Breweries and Sable Chemicals.

Question 13: What recommendations can you give to bring the best practice of water service delivery system in the city of Kwekwe?

Respondent C: The best practice can be summed up in the following three points:

i. Accuracy of water measurement

ii. Costing exercise

iii. Cost of inputs