

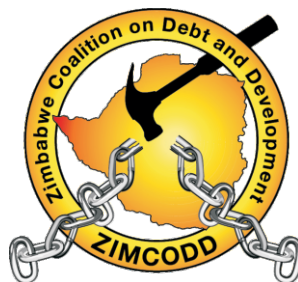
# TOWARDS A PRO-PEOPLE FRAMEWORK IN WATER MANAGEMENT



AN ASSESSMENT OF THE  
POLITICAL-ECONOMY OF WATER SERVICE  
DELIVERY IN HARARE

:

Zimbabwe Coalition on Debt and Development  
Number 5, Orkney Road, Eastlea, HARARE  
Tel: +263-4-776830/1; Cell: +263 775218777, Tel/Fax: +263-9-886594/95  
E-mail: [zimcodd@zimcodd.co.zw](mailto:zimcodd@zimcodd.co.zw) Website: [www.zimcodd.org.zw](http://www.zimcodd.org.zw)



*Investing in People for Social and Economic Justice*

# Table of Contents

<b>ABSTRACT</b>	<b>2</b>
<b>ACRONYMS</b>	<b>3</b>
<b>1 INTRODUCTION</b>	<b>4</b>
<b>2 METHODOLOGY</b>	<b>5</b>
<b>3 THE CURRENT WATER CRISIS IN HARARE</b>	<b>5</b>
<b>4 RESIDENTS COPING MECHANISMS.</b>	<b>13</b>
<b>5 EFFECTS OF THE WATER CRISIS</b>	<b>14</b>
<b>6 HISTORY OF WATER MANAGEMENT IN HARARE</b>	<b>17</b>
<b>7 HARARE WATER INFRASTRUCTURE STATUS</b>	<b>20</b>
<b>8 IN SEARCH OF AN EXPLANATION</b>	<b>23</b>
<b>9 IN SEARCH OF A SOLUTION.</b>	<b>33</b>
<b>10 CONCLUSION</b>	<b>37</b>
<b>APPENDIX A</b>	<b>38</b>
<b>APPENDIX B:</b>	<b>39</b>
<b>BIBLIOGRAPHY</b>	<b>41</b>

## **ABSTRACT**

*The effectiveness of the Harare City Council, HCC in water service delivery has been questioned for the last one and half decades and the sincerity of this local authority to permanently address the current water crisis is so much doubted by the residents. After the Government of National Unity (GNU) formed in February 2009, there was a false hope that Harare would restore its long forgotten “Sunshine City” status especially after the adoption of the multi-currency system of financial transactions. However, today poor service delivery in water and sanitation have resulted not only in the unsightly environment but also in the breeding of vectors whose heinous outcome have been the scourge of communicable diseases like cholera and typhoid between 2008 and 2012. Because of the unresolved water crisis, Harare has lost its lustre of a Capital City. Long winding borehole queues at any time of the day in high density suburbs are the order of the “normal” day, whilst private water suppliers are already making big business in the low density areas. The dismal failure by the City fathers to redress the crisis has exposed a seriously handicapped management system at the HCC, with hidden factors (both the root/structural causes and the accelerating factors) underlying this phenomenon. This study seeks to unpack, analyse and discuss some of those factors, with evidence gathered from both primary and secondary sources of information. Key players in the water sector are revealed and various funded project initiatives elaborated. e-Thekwini Municipality of South Africa has been drawn as a case study for comparative purposes. Recommendations useful to Harare City Council, Harare Residents, central government and Civic Society Organisations (CSOs) are also offered by this study working towards a pro-people framework of water management.*

## ACRONYMS

<b>HCC</b>	Harare City Council
<b>CHRA</b>	Combined Harare Residents Association
<b>HRT</b>	Harare Residents Trust
<b>ZIMCODD</b>	Zimbabwe Coalition on Debt and Development
<b>MLGRUD</b>	Ministry of Local Government, Rural and Urban Development
<b>GNU</b>	Government of National Unity
<b>CSOs</b>	Civic Society Organisations
<b>ESAP</b>	Economic Structural Adjustment Programme
<b>ZINWA</b>	Zimbabwe National Water Authority
<b>IMF</b>	International Monetary Fund
<b>WB</b>	World Bank
<b>IWRM</b>	Integrated Water Resources Management
<b>UCA</b>	Urban Councils Act
<b>EMA</b>	Environmental Management Act
<b>eMA</b>	e-Thekwini Municipality Area
<b>ZIMCODD</b>	Zimbabwe Coalition on Debt and Development

# 1 INTRODUCTION

The effectiveness of the HCC in water service delivery has been questioned in the last one and half decades. After the Government of National Unity (GNU) formed in February 2009, there was a false hope that Harare would restore its long forgotten “Sunshine City” status especially after the adoption of the multi-currency financial transactions regime. Restoration of viable and reliable water supply was a major expectation of a vast majority in the city. However, access to adequate clean water has been under serious threat, with episodes of disease outbreak characterising the last five years. To date, citizens suffer the heavy yoke of water charges in the face of poor water service delivery, characterised by:

- erratic water supply,
- Unavailable water supply
- heavily contaminated water,
- Water disconnections.
- high water bills

The water crisis in Zimbabwe reached its worst levels during the 2008-2009 period when the country’s health, economic and other sectors had almost broken down. During this period, starting from August 2008; Zimbabwe suffered the worst outbreak of cholera on the continent, which caused the deaths of more than 4 000 people from the 100 000 reported cases (VOA, 17/07/09). To add to that, 900 cholera cases and 25 deaths were reported in 2010 (Sokwanele, 15/10/10). IRIN argues that 66% of Cholera cases occurred in urban areas and 34% in rural areas. However, the distribution pattern changed in 2009-2010 with 82% of the cases reported in rural areas as compared to 18% in the urban areas. The cholera outbreak was triggered by poor water and sanitation infrastructure which resulted in authorities failing to provide safe and clean water to the people; residents digging shallow wells to access ground water and sewage flowing in most residential areas, which would sometimes find its way into water bodies. The situation was aggravated by frequent and lengthy power cuts that caused pumps to fail, hence most suburbs became dry (IRIN, 21/01/2010).

HCC’s continual neglect on the water problem has done more harm than good. A growing health disaster is looming in most areas. In 2011, cases of typhoid were reported in New Mabvuku with five lives being lost on one street, that is, Nyamatari Road. In 2008, this suburb was not spared of the scourge of cholera outbreak even though the number of deaths recorded was low as compared to other high density suburbs such as Budiriro. It was noted with concern that the council has in the past been good at mitigatory measures against the symptoms of water problems by providing medical facilities to the sick people instead of addressing the root cause of such a health disaster.

In the face of this current water crisis, Harare residents have witnessed an unwarranted shift by the Harare City Council (HCC) and those in control of the state, from their contractual and social responsibilities of providing enough clean water to the rate payers. Harare is now doomed towards water privatisation and a system of water commoditization, thus further condemning residents into perpetual water woes. This is in diametric contravention of the 2013 gazetted New Constitution of Zimbabwe which provides that *‘Every person has the right to safe, clean and potable water and the State must take reasonable legislative and other measures, within the limits of the resources available to it, to achieve the progressive realisation of this right’*<sup>1</sup>.

It is the premise of this study that water service delivery by Harare City Council has never been adequately attended to. Upon this presupposition, this study aims to bring to the surface the background and extent of the water crisis in Harare with particular reference to a snap survey of selected residential areas as well as key informative interviews carried out. In search of the solution, various recommendations are proffered.

---

<sup>1</sup> Section 77(a) of the Constitution of Zimbabwe

## 2 METHODOLOGY

This study made use of both secondary and primary sources of information, with the aim of getting an insight into the political economy of Harare water service delivery as the Zimbabwe Coalition on Debt and Development (ZIMCODD) mobilises citizens towards a sustainable framework for water services management. Desk research was utilised as a secondary source, where relevant literature was extensively engaged on issues to do with water management history in Zimbabwe and Harare in particular, the role of key players in water supply management, the institutional and legislative framework, and key considerations in the provision of water by HCC.

Primary data was collected through in-depth interviews with various key informants as well as some informal interviews which were held with residents from the randomly selected high, medium and low density suburbs of Harare. Some residents were selected through interception method. Some were selected from the people who were coming to queue for borehole water in various high density areas. Various testimonials were also gathered on people's experiences of critical water shortage in their area. The research capitalised on events such as workshops on water and gatherings organised by the civic society organisations during the period of research. Information gathered from the residents was primarily based on their personal experiences on issues to do with water challenges at their places of residents. Useful information was provided on issues to do with water problems currently faced by residents, their coping strategies, as well as their perceptions on the performance of HCC on water service delivery. Interviews were also conducted with water experts and management and employees of the HCC.

Against such a background, possible intervention strategies for the future are recommended by this study with the view of ensuring pro-people policies in Harare water management, broad participation of residents in HCC decision making and the movement towards a pro-people framework in as far as Harare water management and service delivery is concerned.

## 3 THE CURRENT WATER CRISIS IN HARARE

Water management in Harare has in the past attracted more than its fair share of controversy, with unabated and heated debates coming up on who should be responsible, for the water crisis whose prospects of being permanently addressed remain veiled in obscurity. Responding to a question posed by one Journalist violet Gonda during a live SW Radio debate about Harare water crisis on 10 June 2013 as to when the city was going to see an end to water woes, Harare Mayor, Masunda unequivocally stated,

*“Once all the stakeholders who owe money... ranging from residents, business people, government, the local authorities,...start paying their bills and prioritizing payment of their bills in the same way as they do with their cell phones and DSTV, we'll see a considerable improvement of the situation.”*

Such statements attract more questions than answers but the insinuation by the Mayor thereof points to inadequate funding, caused by water payment defaulters, as the chief reason for the sorry state of affairs in the Harare City Council. On this note, the Mayor narrowly chose to be longer in criticism but shorter in prescription, thus disposing the quandary of poor problem definition that he may be unfortunately trapped in. In fact, the response by the Mayor rings hollow in the light of policy and water management problems that the council has dismally failed to address. In this respect, water governance and institutional dimensions are central to the discussions on Harare water management as these have so much affected the technical performance of the council. There is more to the water crisis of Harare than just an issue of funding as the Mayor would want to suggest. Thus there is a need to unpack this water crisis in the light of its nature, scope, effects as well as root and accelerating contributions.

Harare is built on an area with reliable rain water supply but ironically the city's residents have gone for years struggling with the water crisis.



Private water suppliers are already ‘making a killing out of the residents’ desperation where their hard-earned cash is immediately used for the purchase of the very same water they would have paid for at the city council. Ironically, these residents of Harare get much less for their money, with virtually little or no say with regards to spending priorities as they are excluded when it comes to deciding how the money they pay is supposed to be spent. At the end of the day, the bulk of the money is allocated to salaries for bureaucrats in Harare City Council, most of whom cannot even justify their existence in office in the face of the water crisis among others.

To date, access to clean adequate water has been under serious threat, with episodes of disease outbreak characterising the last five years.



*Cholera Patient in Harare 2008-Reuters*

Water disconnections have frequently been made on defaulters by HCC but the question is on what exactly they will be disconnecting since there is literally no water in some areas. From the general sentiments of the people, most people have not been paying for the water, claiming that there is no motivation to do that. All this is an act of forcing residents to pay for a service they are not provided for; and this is a total disregard for Section 77(a) of the New Constitution of Zimbabwe which upholds the people’s right to adequate and safe water. To get a sense of the state of affairs one needs to look through the lens of the residents of Harare, their coping mechanisms from the survey which was conducted.

### **3.1 Voices on the Water Crisis**

From the interviews conducted with residents from different residential areas, various issues and views emerged regarding their concerns. This study however delves into those issues which were mainly cited and where residents feel short-changed by HCC.

#### **3.1.1 An Unjustified Water Billing System**

Major complaints against the billing system are, unsatisfactory generation of bills; hence the billing system reaping off consumers.



### **3.1.2 Unjustified use of estimates in water billing**

Generally, most people complained about the inaccuracy of the water bills they were receiving. This can be attributed to non-functional meters and poor reconciliations at Harare Water office before bills are produced. According to Gambe (2011), up to 50% of water meters in Harare are non-functional. In this case, a system of “averaging” or use of estimates is being used rather than taking the actual meter reading. It is quite absurd to see that HCC religiously comes to take meter readings and use the so called “estimates” when people in Mabvuku-Tafara are known for using wells as the source of water as a coping strategy.

Civic organisations such as CHRA and HRT complained against use of an Increasing Block Tariff (IBT). The water billing system is reaping off consumers especially those without functional meters. Estimations used do not take into consideration usage of consumers thus bills generated are exorbitant to the extent that most participants cannot afford to pay. Without the knowledge of residents’ true consumption levels, it is possible that the water provider is charging a certain percentage more than their consumption. However it remains to be seen whether the City Council will redress the issue as Mayor Masunda pointed out that,

*‘...with the assistance of Munich and the Federal Ministry of International Cooperation and Development in Germany, the Harare City Council recently had two ICT experts, Shepherd Mushayavanhu who lives in Hamburg and who has done so for about 30 years and Suzanne Smit. They are paid for by the City of Munich and the German government, they’ve been with us for the last three years revamping our billing system.’*

It however remains a mystery as regards to the role these hired experts have played for the last three years they have been engaged because the water crisis is older than their arrival in Zimbabwe and yet nothing tangible has been registered. The question still remains: when are they going to arrest the day light robbery of HCC on its people? The two experts are yet to justify their existence in as far as their mandate is concerned.

### **3.1.3 Forced Payment for No Water Service**

According to Mr Rose, CHRA Ward 20 Coordinator in Mabvuku-Tafara, since 2006, bills were accumulating as people were not willing to pay for no service. In almost all areas, there is a public outcry that water supply is erratic, with some eastern suburbs like parts of Hatcliffe, Borrowdale, Mabvuku-Tafara reported to have gone for more than seven years without a single drop of water. Surprisingly, the HCC unashamedly keeps on coming to collect the estimated bills. Residents interviewed have blasted this practice as extremely odious and unjust, if not immoral on the part of the council. This is why most of the residents in these areas are declining to pay for the accumulating bills. Mr Edson Chiwara, the Vice Chairperson of Stakeholders Association of Mabvuku-Tafara lamented that they are charged as much as US\$50 per month for no water service, with a 10% interest on those that default on payment.

### **3.1.4 Slow updating of paid bills**

It has also emerged that updating of water bills before printing is lacking. Water payments especially those effected at some municipal offices such as Kuwadzana are taking time to reflect on the bills. In some instances, bills are distributed to residents without capturing these previous payments. The reason is manual receipting hence payments take time to reflect on the bills. However, payment made at Rowan Martin offices or other offices around the town with computerised systems do not pose any problems to residents.

### **3.1.5 Inherited debts from the local currency regime**

During the dollarization era, bills were further inflated and residents were left questioning the method of conversion adopted for the switch from local currency to foreign currency. Currently, it has emerged that most people in Mabvuku-Tafara owe between US\$2000 – US\$4000 in water arrears. Responding to questions on how the HCC converted the residents’ Zimbabwe dollar arrears to foreign currency, Councillor Mtizwa, of the Environment Committee pointed out that HCC started from zero on all their billings as they switched to the multi-currency regime and the unpaid figures that are there now for Harare residents are “... just an accumulation plus interest.” This assertion was however diametrically rejected as false by some of the residents interviewed. On a live SW Radio debate with the Harare Mayor on 10 June 2013, the Harare Residents Trust, Precious Shumba, complained that,

*‘... when the US multi-currency regime was introduced in February, the City, the expectations of most citizens is that the City was supposed to start at zero for every household. Unfortunately they used a black market rate to convert the owings of residents. You would realize that if you go to Majubheki right now, most of them have February 2009 bills that indicated that they owed the City of Harare around 53 US dollars. That to us is the ripping of residents and coupled with their initial interest that they charged residents they were using around 51% that they have charged on the Zim dollar, they still continued until around July 2009 they were still charging that as interest. Instead of being per annum, they were doing it per month, meaning to say residents were saddled with huge debts that were not cleared.’*

### **3.1.6 Composite bill of water and house rates**

There is an outcry by residents for the city council to break down water rates separately from housing rates. Residents argue that this will enable them to exclusively deal with water issues separate from other issues. From the people interviewed, it is evident that most people are against a composite water-housing rates bill, hence the call for the city council to revert to the system where they present separate bills for water and rates and supplementary charges. This is the same position that CSOs such as the Zimbabwe Coalition on Debt and Development (ZIMCODD) Water Taskforce comprising of the Combined Harare Residents Association, Harare Residents Alliance and the Community Water Task force are advocating for.

### **3.1.7 Expensive Water Charges**

Most people in the high density areas complained that the water charges are unaffordable. On average, people were being charged around \$50 per month and there is an objection that such an amount is extremely high, given that the majority of them are unemployed and coupled with that were rental dues which in most high density suburbs were around \$60 per room and about \$90 in medium density suburbs. Ironically, the HCC boasts of providing water at 'cheapest rate.' According to Councillor Mtizwa, the council water rates are 40 cents per 200 litres and the first 200 litres are for free. However, reconciliations of water payments are not meeting the expectations of residents especially those whose payments are not reflecting on their accounts statements thus it becomes very incorrect and confusing.

### **3.1.8 Threats of Water Disconnections**

Water disconnections in Zimbabwe are a measure used by Harare municipality to control non-payment of water. This measure is used in Harare despite protests by most residents that they are billed for services not rendered or not consumed. These disconnections are in sharp contradiction of national government directives not to disconnect water supplies to residential areas for non-payment. However the municipality has justified this as a means to better service delivery. The council's spokesman was quoted as saying "...people need treated water and for us to offer them treated water, they must fully settle their bills" (IRIN, 21/01/2010).

### **3.1.9 Provision of contaminated water**

Residents have raised some concern that Harare water is not fit for drinking as it is contaminated. This awareness was raised after some sections of the media published that Harare residents are drinking recycled urine.<sup>2</sup>



*Harare Tap Water (Photo taken by Amanda Artwood 2010.)*

Running water from taps is not safe as the water is so contaminated that it is not uncommon for residents to turn on their taps only to collect a brownish, greenish or yellowish liquid. The situation is aggravated by corroded and worn out water distribution system since around 60% of treated water is lost through underground leaks and burst pipes. On this note, most resident interviewed in both low and high density suburbs reported that they would rather use the little water that runs from their taps for washing clothes rather than drink it and risk cholera and typhoid infection.

### **3.1.10 Privatisation and Enterprising from the water crisis**

Most of the interviewed residents complained that Harare's water shortages are coming as a blessing for some enterprising residents, who have opened their own "black" market niche. The short survey carried out by the researcher confirmed that hordes of youths are taking advantage of the situation to make a few more dollars from areas such as Budiro, Kuwadzana

---

<sup>2</sup> <http://www.dailynews.co.zw/articles/2012/12/06/harare-residents-drinking-urine-says-water-expert>, 06-12-12

and Mabvuku of where some youths are taking advantage of the desperate situation to sell water on the black market. In some places visited such as Budiro, Mufakose and Glen Norah where long queues at churches, schools and industrial sites have surfaced, people are selling water at kwaMhishi, which is at the far western end of Mufakose. At a house in Mufakose, water obtained from a fertiliser manufacturing company near the suburb was clearly on the market. Around November/December 2012 water crisis in these same areas, some residents reported that a two-litre container was going for five rand, for 10 litres one has to part with \$2 while 20 litres went for \$4. In Glen Norah, water was on sale at a Zanu PF-aligned cooperative between this suburb and Glen View 1.

Some of the residents in Glenview have reported that they used to buy water from those in the neighbourhood with protected walls. They are charged around \$1 per drum of water, which is approximately 200 litres. Although this seems cheaper than buying water from private companies, not many people can afford. Water woes have also been a blessing in disguise for some Chitungwiza town unemployed youths who are now selling water to those people who do not want to spent a long time in queues<sup>3</sup>. This is common in Chikwanha shopping centre and parts of Zengeza 2, 3 and 4 where a 20-litre container is charged at 3 rand.

Private bigger companies have also flourished in the current period. Many companies are selling both bulk and bottled water.

### 3.2 Survey Observations

(Disigner-These can be spread elsewhere in the publication in boxes or whatever format as captions.)

Below is just but the microcosm of the perpetual water woes in Harare, as compiled from the observations and views gathered during a short field survey carried out in May 2013:

#### MABVUKU-TAFARA

Of the areas so far studied, it seems Mabvuku-Tafara is a proto-type of those areas whose time bomb of a health disaster is ticking towards the worst if necessary measures to address the water crisis are not quickly adopted. There is no water at all in Kugarika Kushinga, Old Tafara and some areas of New Mabvuku which include Hunyani Street, Chitsere, Honde and all the areas that are found on higher ground. However, low lying areas such as Chizhanje and some parts of Tafara and New Mabvuku have low pressure which comes for only a few days per week. Since year 2006, it is reported that in Old Tafara, households that ranged from House No. 1300-1500, including the district office, did not have any water supplies. The period of the inclusive government did not address much of the problem as people are heavily reliant on water from boreholes and wells. It can be noted that some areas in New Mabvuku have gone for close to six years without a single drop of water, for instance, Matongo area (ironically close to the water tank) up to households around Batanai Primary School. Surprisingly, the people in the area do not even trust the safety of the water that comes rarely in some areas (at least once in three weeks). When it is made available, the water is so dirty that the people have to run it for about 20 minutes before it is put to use. Tap water is used for washing whilst water from the wells is trusted for drinking.

#### EPWORTH

Only a few areas such as Overspill and Munyuki have got tap water which comes at least twice per week. Other areas such as Jacha, Stopover, Villapezi, Dombo, Rueben and Chiremba do not have tap water but rely on shallow wells at households, some of which are not even protected. (It is against this background that the researcher recorded the recent tragedy in Villapezi area where two lives of five year old girls were lost successively on 13 and 14 May 2013 after drowning in the wells as they were reportedly drawing water. More so, on the 15th of May 2013, one child was reported dead after drowning in a bucket full of water).

<sup>3</sup> The Herald, "Water Woes a Blessing in Disguise for Chi-town Youths," 03-09-13

## BUDIRIRO

This suburb has erratic water supply with the problem being at its peak between 2007 and 2009. In 2008, the area was the worst affected by cholera, especially Budiriro 1 after they had gone for months without water. Currently, complete water shortage is experienced at least twice per week. Budiriro 4 is the most affected by high gradient. Areas close to Budiriro 1 shopping centre are not much affected but households close to Glenview 3 are critically affected since they are the last to receive water when it comes with low pressure and the first to run dry. Mostly, water in Budiriro is not available during the day but it is made available around 10pm and supply stops early in the morning. In cases of water shortage, there is a wetland between Budiriro 5 and Budiriro 1 from where people used to collect water for domestic purposes since 2008, even though the area is now slowly occupied by stands. Besides wells dug at their homes, people in Budiriro also rely on UNICEF boreholes sunk in 2008 after the cholera scourge. However, some UNICEF boreholes are said to be pumping out rusty water which is not safe for drinking, for example, the one in Budiriro 5 as well as the borehole at the Church of Christ. There is also a well in Budiriro 5 along Jaravaza road at the Church of Christ which provides water to people from as far as Mufakose. There are only three boreholes around Budiriro 1 shopping centre which do not suffice the high population demand for water in the area.

## WATERFALLS:

In the Cheviot area water normally comes during the evening and residents fetch water from this time until 4 am. In **Park town** –There is no water along 6th and 4th street and residents are fetching water from Milford Road since there is no borehole or any other water source at Park Town Shopping Centre. In **Uplands, Derbyshire and Shortson** –Residents only receive water three days a week and water outages are experienced on Fridays and the water is reconnected on Tuesdays. The borehole at Derbyshire is dysfunctional. There is also no running water in taps at Mainway new stands. As a result, most people have their own personal boreholes. In the Zindoga area, water is regularly available but with low pressure.

## MBARE NATIONAL

Tap water is running normally but the water is dirty. Residents experience uninterrupted water supplies most of the time. In case of shortages, though rare, the Mbare residents also use water from Mukuvisi for domestic purposes. Some of the people interviewed in this suburb confided that there is an observable political hand that has ensured that water in Mbare is always available. The area is said to be the abode of ZANU PF Chipangano mafia who are so much outspoken especially those that live close to Stodart Hall and the others that reside in Magaba and Matapi flats.

## SUNNINGDALE 1, 2 AND 3

In 2012, residents reported that there were no water problems unless there was a burst water pipe. However, there are currently some problems even though the water problem is generally better. Water supply is reported to stop in the early hours of the morning and resumes later in the afternoon. Due to high gradient, areas to the south of Sunningdale 2 shopping centre are most affected as they sometimes go for three consecutive days without water. The people from this area fetch water from the district office where there is a burst water pipe. Sunningdale 3 is generally better; hence in times of water cuts, people from Sunningdale 1 and 2 rely on water from Sunningdale 3. There are no public boreholes in the Sunningdale area.

## BORROWDALE

Residents in this area are advocating for a common borehole to save them huge amounts of money they use to buy water from private suppliers. There are some people who are resorting to selling water which they buy from a private supplier at a cost of \$20 per 1000 litres and also sell the same amount of water at around \$70. Council has not provided residents with their plans to address the aged water infrastructure in this area. Residents sometimes go for five days without any water from the taps, hence they also rely on their personal electrified boreholes and they also own water tanks at their homes. There is a stream near Lunar Chickens farm where water is collected by people and used for other domestic purposes.

## HATCLIFFE

There are a total of 20 boreholes in this area and two boreholes need to be repaired while two other boreholes are seasonal boreholes which rely on the level of the water table.

## MOUNT PLEASANT AND AVONDALE

Water supplies have been erratic and these areas receive water occasionally. In Mount Pleasant, water is said to be available only on Tuesday, Wednesday and Thursday. In Avondale North, there is a recurrent pipe leakage along Mendel Road close to Zimbabwe Music Rights Association (opposite Jehovah Witness Church). There are also constant water leakages at a point along Wakefield road (close to Avondale shops). Despite the repairs by the city council, it seems there is no permanent solution for the problem. University of Zimbabwe sometimes goes for more than three days without tap water and the students end up relying on the few boreholes sunk at the premises, which is detrimental to public health at the institution which was once closed for almost six months in 2009 because of water shortages.

## GREENDALE, MANDARA, HIGHLANDS AND CHISIPITE

Water supplies are very erratic. These areas have a record of going for about two months without water supplies especially towards the end of 2012. Water supply is still very low. **In Highlands** –The situation has not changed from the previous state residents are being assisted by well-wishers as Net One had drilled a borehole at Runnville shops in Highlands. Some residents are getting water from their neighbours as well. **In Chisipite**- residents in this community are relying on well-wishers who are willing to share boreholes.

## HIGHFIELD

There is constant water supply with water being made available in the evening till afternoon the next day. High gradient areas like Lusaka (near Methodist church) and Engineering (near the Roman Catholic Church) are most affected, unlike in other areas such as Egypt, Jerusalem and Old Highfield. A new plastic metering system was recently set up in some areas of Highfield. There is somehow reliance on the borehole at the Roman Catholic Church in cases of water shortage for residents in Zororo, Lusaka and Engineering whilst some also travel to get water from the nearby Glen Norah, near Mapuranga.

### **GLEN VIEW 3**

Households along Glen View High 1 School are said to be most affected by water shortage. This is the same with houses along the 12th road where residents reported that there is water shortage at least 2 days per week. These are also high gradient areas as compared to other areas. As coping strategy, people in Glen View 3 rely on borehole water which is available at Glen View 3 shops, ZAOGA church, Glen View High 1 and Glen View 7 primary school.

### **WARREN PARK 1**

There is only one functional borehole at the Roman Catholic Church and another one at Warren Park clinic. Residents reported that the borehole at Warren Park clinic was once contaminated leading to some residents suffering from typhoid in the area between December 2012 and early January 2013. There are constant pipe leakages along Magamba Hall and this problem always takes long to be attended to. Water is not available in Warren Park 1 during weekends; areas around Warren Park police station and Hilltop households are said to be most affected.

Generally, instances of water shortages are not uncommon in high density suburbs of Harare. HCC is failing to meet the 50 litres per day per person minimum requirement for consumption purposes. Drastically low average figures for domestic water consumption in Harare reflect not only lower income but also a huge backlog of unsatisfied demand. Where water reticulation facilities are in place, shortages are sometimes attributed to incapacitated reservoirs coupled with effects of seasonality and inadequate rainfall patterns. HCC has responded to these shortages by rationing available supplies, a move that has threatened health conditions of people mostly in poor suburbs. However, in communities where piped water is not available people have resorted to the digging of shallow wells, especially in unplanned settlements and slums.

## 4 Residents Coping Mechanisms.

Residents of Harare have responded to the Water crisis in a number of ways as they seek to access the precious commodity. The responses are varied depending on available resources and options for possible alternatives with their inherent advantages and disadvantages.

### 4.1 Boreholes and Wells

Due to the water shortages, many people in low density suburbs people drilled boreholes at their housing stands. The people in most Harare high density suburbs are relying on UNICEF boreholes dug during the cholera era in 2008. Other residents have gone to dig wells in their backyards to manage the situation. However, some of the boreholes are dysfunctional due to lack of proper regular maintenance. It has been reported that at least one in every five households in Mabvuku has a well.

*This water is not always safe. Some Glenview residents informally interviewed at UZ, reported that the typhoid case reported in Glenview was out of the contaminated borehole water from a certain school which most of the people in the location relied on. Clr Mtizwa, pointed out, in an interview, that in Harare, borehole water is more unsuitable for consumption health-wise than tap water since most of it is now contaminated by Harare main water bodies which are already contaminated. According to Overman (1968), well-sinking among other disadvantages also poses danger of exceeding recharge rates of groundwater aquifer that can interrupt the hydrological cycle thus creating further shortages.*

*Some of the wells run dry especially during the dry season. The wells have also not provided safe water as they sometimes become contaminated. This has exposed people to health hazards since some of them end up using water from unprotected wells and they have to boil first before drinking.*

*It also emerged that some residents have to endure long distance of more than two kilometres to these wells and boreholes in search of water negatively impacting on the productive time of most of the residents in Harare, especially those who are entrepreneurial.*

### 4.2 Water Harvesting

Some residents have benefited from external aid agencies like USAID which launched a seasonal water harvesting project introduced in the Mabvuku area. The only limitation is that it is only functional for a short period during the rainy season. According to Clr Takura, between 2005 and 2008, USAID used to bring water bowsers to the people but they just stopped leaving people still vulnerable to water problems.

### 4.3 Illegal Connections

Some of the residents in areas where there are erratic supplies of water openly reported that they illegally reconnect themselves in the event of council water disconnections. This is mainly done at night and residents would then disconnect themselves during the day. In the worst cases, some residents have resorted to the breaking of water pipes so that they can desperately benefit from the leakages. This has contributed immensely to the problem of what Sachiti calls non-revenue water (Sachiti, *The Herald*, 21-03-13).

### 4.4 Buying Privatised Water

A number of options for buying water have mushroomed in Harare. Some offer large quantity supplies while others sell bottled water. Many people in low density suburbs rely on bottled drinking water for drinking. This was revealed by the few UZ students informally interviewed who reside in the low density suburb of Mt Pleasant. There is a general belief among these residents that bottled water is safer than water from the HCC. The problem however is that from a comparative stand point, the water is more expensive than using other alternative means. The safety of the water has also recently been a matter of debate in the public domain after HCC had revoked licences of some private water suppliers on the grounds that the water they were commercialising was not safe to drink.

## 5 Effects of the water crisis

The water crisis has affected communities in a variety of ways.

### 5.1 Women and the Water Crisis

This study has gathered that women are the worst victims of the Harare water crisis as compared to males yet they are under represented when it comes to water management issues in Harare. It was observed that there are only three females constituted in the CSOs water taskforces in Harare against more than ten males. Despite being numerically more than men, women in local authorities have largely been discriminated in terms of the real decision making on issues to do with water management. Chirisa in Tolmay and Lowe-Morna (2010:6) notes that at local the government level, in 2010 women made up only 17% of all councillors in Zimbabwe Urban Councils. Against this background, women emancipation remains a dream in Zimbabwean local governance and this leaves a lot to be desired in terms of democratic participation in the local authorities' policy process.

This situation needs to be addressed if democratic participation in water management is to be achieved. This is most probably an effect of the patriarchal nature of our society where the duty to source water is still viewed in some sections as an exclusive preserve of women.

Evidently, large numbers of women were found queuing for water at most boreholes in the high density suburbs whereas only a few men could be found there.



*Water Queue in Kuwadzana-Harare*

Women, children and the working class have also been worst affected by this water crisis. From the testimonials gathered, it was revealed that women spent at least half of the day unproductively with time wasted in queues for water at boreholes. Many of the women are into informal trading as a source of livelihood yet the queues are very long such that a person can take about three hours queuing for water only. Those who go to work in the morning have to wake up as early as 1a.m in the morning to queue for water. This situation worsens during the dry season when wells have dried up and the pressure on the boreholes increases. There have also been reports of regular fist fights among women at these public water points due to misunderstandings over access to this scarce resource. It was also reported by other women respondents in Mabvuku-Tafara that it has of late become difficult to manage the behaviour of children who spend much of their time away from home and become illicit on the pretext of having gone away to source water. As a result, most unwanted pregnancies for young girls in this area have been imputed to the water crisis. Some young girls and boys are also being affected on their study time as most of the time is lost in search of water.

Preliminary evidence shows that local authorities in Zimbabwe are dominated by men and this is a cause for concern especially to women on issues to do with water management, yet they bear the primary responsibility for supplying household water and are often primary producers as well. As a result, women remain under-represented as participants and decision makers. Women are informed decision makers about the priority uses, quantities, and quality of local water resources. Yet generally speaking, neither traditional nor modern institutions prioritize women's voice in regulating water. While claiming to promote women's participation in decision making, modern institutions do not necessarily recognize their unique knowledge and experience, hence the need for Integrated Water Resources Management (IWRM) to pursue the democratisation of water resources through stakeholder participation where women's considerations are seriously noted.

Admittedly, the City has a lot to do in order to address the current gender imbalances. Notably, out of a full complement of fifty seven (57) councillors, only four (4) are women and none of them is a chair-person of a committee. There is also one female director out of ten directors. This current gender status calls for a need to gradually address the imbalances that exist. In an attempt towards this gradual process, Council recently put in place a gender management structure comprising



gender focal persons representing departments and an overall gender focal person for the City. In addition, following a workshop on Gender mainstreaming held in Kadoma from 23 July to 24 July 2012, Council moved with speed and approved its Gender Policy and the gesture to appoint women as tipper operators is a step in the right direction by the City. However, there is need for equal representation on the water task forces so that whatever decision that address the water situation in Harare are also reflective of the needs and plight of females and males as well.

## 5.2 Impact on Industry

The Harare water crisis has not spared businesses as reported in May and June 2013 that some of the businesses in the Central Business District had to send their employees back home after the CBD had been hit by a weeklong water shortage<sup>4</sup>. Businesses have reported that the current water crisis in Harare has cost the productive industry thousands of dollars in potential revenue there by affecting the workers downstream. It is noted that several firms, mainly in manufacturing, beverages and food processing have been prejudiced of production worth thousands of dollars. This calls for a meeting between HCC and the business community to try and find a lasting solution to the crisis which has adversely affected firms in the Graniteside, Msasa, Lytton and Southerton industrial areas. The Business Council of Zimbabwe (BCZ) executive secretary, Mr John Mufukare admitted that the water problems led to a decline in production at the end of 2012. If the water problems persist, Zimbabwe's industry which is also reeling under electricity shortages and funding challenges is projected to lose more production. At the end of the day, it is the residents who will bear the brunt of the crisis through loss of employment as well. The big industry and business have other ways of dealig with the water problems, through sinking of boreholes and buying bulk water from other sources.

## 5.3 Hospitals

Recurrent water shortages have crippled operations at Harare Central Hospital, a development which has affected departments such as the maternity ward and the section that carries out post mortems. Water is at the core of its operations of operations for a big institution such as Harare Central Hospital.



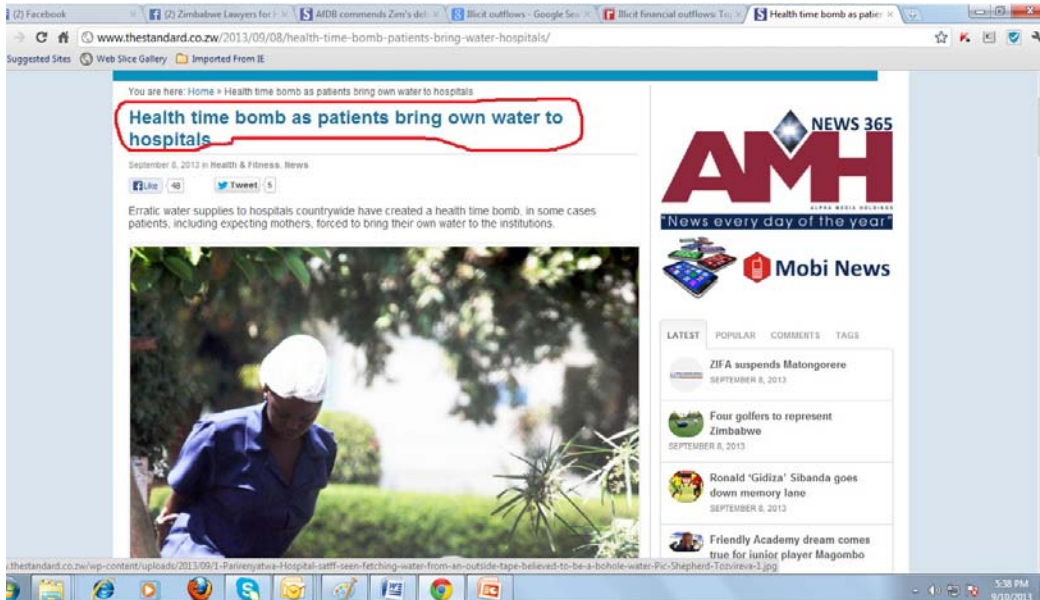
*Nurses at Paraerinyatwa Drinking water from a garden tap- Standrad*

However, the medical institution has been hit by recurrent water shortages resulting in a pathetic situation where pregnant women are now bringing their own water to use after delivering. Early 2013, the institution is said to have been hit by a water shortage and corpses which were waiting to undergo post mortem had to wait as doctors could not carry out the exercise without the precious liquid. Insiders at the referral health institution confirmed that there was no water and that

<sup>4</sup> allAfrica.com, Zimbabwe: Water Woes Continue in Harare, 05-06-13

some burials had to be deferred due to this anomaly. Despite having placed some reservoirs at the institution, it seems the water problem is still persistent as the stored water is not enough.

Parirenyatwa General Hospital (PGH), the country's largest referral centre, sometimes goes without running water for weeks as Harare's water supply problems continue<sup>5</sup>. Units most affected by the problem include the intensive care and paediatric sections with nurses telling patients to bring their own water to the hospital. After a whole week without water at the end of May 2013, one nurse at PGH who chose not to be named lamented, "We are telling patients to bring their own water for use. We are even requesting them to bring it so that we put some in the life supporting machines serving their relatives." Another nurse added: "Parents with their babies admitted here have already been told to bring their water. We need water to put in sterilisers as well as for the toilets."



Such is the level of crisis at the hospital and even though a number of boreholes are there as a back-up measure, they have proved not to be enough to salvage the water crisis. Such pathetic scenarios at hospitals makes one to wonder whether Harare City Council ever made such considerations before it announced its seven month long maintenance of Morton Jeffrey water works as an excuse for erratic water supply.

<sup>5</sup> [www.newzimbabwe.com](http://www.newzimbabwe.com), Harare's Water Woes Hit Parirenyatwa, 26-02-13

## 6 HISTORY OF WATER MANAGEMENT IN HARARE

When tracing the evolution of the history and politics of water development in post-independence Zimbabwe from 1980 to 1990, it can be noted that the central government had a long-standing commitment to water development with a specific emphasis on the rural areas. This can be attested by the introduction of the Transitional National Development Plan in 1980 where the government declared the provision of clean water and sanitation to rural communities to be one of its principal priorities<sup>6</sup>. The period 1990-2000 was a decade of neo-liberal reforms in which the Economic Structural Adjustment Programme (ESAP) was introduced, implemented, and abandoned however with some residual if not full-fledged inclination to neoliberal models of social services management. The imperatives for water reforms in Zimbabwe lie within the broader objectives of ESAP and these reforms led to the promulgation of the 1998 Water Act, replacing the 1976 Water Act, as well as the introduction of a new legislation, the Zimbabwe National Water Authority Act of 1998, which gave rise to a parastatal, by the same name, the Zimbabwe National Water Authority (ZINWA) established in 1999. There was also a major development in this period of the cabinet directive to the City of Harare in 2005 to hand over its water and sewer infrastructure to ZINWA whose performance was detested by residents even in Bulawayo where it became operational. The year 2009 to date then saw the transfer of water management back into the hands of the Harare City Council from ZINWA, yet the City Council could not distinguish itself as a better entity either since water service delivery in Harare remained on its critical downgrade.

### 6.1 Colonially Inherited Water Management Problem

The colonially inherited problem of water imbalances has run throughout the water management history in Zimbabwe to date. It seems as if the current problems affecting HCC water service delivery management are clearly traceable to the colonial period in Zimbabwe. To this day, the 1998 Water Act is a graduation from the Water Act of 1976 which had its fair share of weaknesses that include: The issue of all water rights was centralized at the Water Court in Harare; a water right was issued in perpetuity on a first-come-first-served basis (Musemwa, 2008). This meant that when water resources were fully allocated, no further water rights would be issued, regardless of the need. Also, the 1976 Water Act was silent on water quality and factors relating to the environment. There was little consideration given to groundwater supplies. The Secretary of Water had to be informed if a deep borehole was drilled, but there was no control on the amounts of groundwater pumped, or the number and spacing of such boreholes. On this note, the Water Act (1976) was mended several times, and global modern trends pushed for a review of existing approaches to water management in Zimbabwe. This led to the complete overhaul of the Water Act (1976), which was replaced with the Water Act (1998) and the Zimbabwe National Water Authority Act – which were passed to put an end to the colonial legacy of water, conforming to global trends and addressing pressing national issues.

According to Musemwa (2008), the colonial government bequeathed to Zimbabwe a dual and unequal property regime structured along racial lines. On one hand, there was commercial land which was predominantly occupied by European settlers under private tenure. On the other hand, the majority of the African population resided on marginal lands known as reserves or tribal trust lands [renamed 'communal areas' after independence] but could not buy or sell them as they were subject to customary tenure. This inequitable division of land simultaneously mirrored the unequal distribution of, and rights to, water between African communal areas and white commercial farms, as codified in the 1976 Water Act (Hellum and Derman, 2005). The postcolonial state's determination to eradicate the inequalities inherent in water allocation by introducing a just system of water allocation was, in part, an expression of its commitment to the establishment of a socialist and egalitarian society underpinned by social justice for all.

### 6.2 The Introduction of the Transitional National Development Plan

Makumbe (1996:80) notes that the government introduced the *Transitional National Development Plan* as part of a wider government community development strategy designed to guarantee the improvement of living standards for the marginalized rural people, especially women and children, 'through increased access to safe and reliable water and sanitation facilities and improved health and hygienic practices'. There is no doubt therefore that the new government was overtly pro-rural in its redevelopment and reconstruction goals. The government's rural bias was premised on both historical and political considerations from which it derived its legitimacy. It was historical because of the government's conscious desire to redevelop rudimentary rural infrastructure in most of Zimbabwe.

---

<sup>6</sup> *Transitional National Development Plan*, pp. 61-62.

### **6.3 The Dilemma of Economic Structural Adjustment Programme (ESAP)**

Thereafter, a series of negative factors such as the global recession which led to falling commodity prices, unequal terms of trade, a two-year drought, and mounting pressure from the International Monetary Fund (IMF) and the World Bank (WB), compelled the government to change course from its developmental agenda between 1983 and 1984. Notably, state interventions in, and fiscal support for, the water sector was severely curtailed. By the end of the 1980s, Zimbabwe was in a deep economic crisis.

The ESAP came into play as a means to eradicate the interventionist orthodox of the government which had always believed in the “big government” where it had absolute controlling powers in the economy which it maintained mostly through subsidies until it landed itself in heavy debts and arrears with the Brettonwood institutions (Masunungure and Zhou, 2006). In 1991, the government moved swiftly to adopt the IMF and World bank sponsored Economic Structural Adjustment Programme (ESAP) to rekindle investor interest and eradicate constraints on growth. ESAP stripped the state of its controlling powers in the economy and relegated it to the role of creating an enabling environment in which market forces, and not the state, would reign supreme (Dansereau, 2004).

According to Masunungure and Zhou (2006), the privatisation policy prescriptions were embraced in Zimbabwe and other African countries in the 1990s largely as conditionalities for accessing balance of payment under ESAP. Their adoption and implementation represents a paradigmatic shift in the role of the state from a protective, populist and human welfare state to a mechanical, minimalist state. Masunungure and Zhou (2006) further note that given the prevailing socio-economic realities in the post-colonial state, such a shift constitutes an unwarranted and silent surrender by the state and those in control of the state, of their contractual social responsibilities not only to defend the interests of its citizens, but also to advance them.

Rural water and sanitation provision did not escape the corrosive impact of ESAP as resources once committed to water programmes simply dwindled. For example, dam-building projects in Mashonaland West, Matabeleland South, Manicaland and Masvingo ran out of funds to complete the second-phase of connecting irrigation infrastructure. The imperatives of ESAP forced the government to embark on a new development curve in the 1990s to foster sustainable growth in the water sector – resulting in the revision of the 1976 Water Act among other changes.

Thus, the IMF and the World Bank were the prime movers behind the revision of the Water Act. In addition, the Rukuni Commission of Enquiry into Appropriate Agricultural Land Tenure Systems (1993) also gave impetus to the need for a coherent national water resources policy guide. The Commission forcefully argued that the land tenure system needed to be reformed in tandem with water, as the two resources were inextricably linked.

The severity of the 1992 drought left the government in no doubt that the repeal of the 1976 Water Act had to be effected forthwith, resulting in the promulgation of the Water Act in 1998. Unlike the old Water Act, a central precept of the new Act was democratisation of the management of water by ensuring that all competing users of water would be involved in making decisions pertaining to its usage. Under the old Act, voting rights were exclusive only to water right holders who happened to be commercial, primarily white, farmers. The new Act was inclusive of representatives from communal, small-scale commercial and large farms, mines, urban representatives from industry, manufacturing and municipalities.

### **6.4 The ZINWA Fiasco**

Simultaneously with the Water Act of 1998, a new Zimbabwe National Authority Water Act (1998) was passed to provide for the formation of ZINWA. It was mainly to take over all former government owned dams and waterworks outside of urban areas. ZINWA was vested with powers to oversee the development and management of national water resources. ZINWA had to operate on a viable commercial basis (i.e. sale of raw water, clear water and provision of engineering services) and become self-financing. For what all these water reforms were worth, their implementation coincided with the rise of political conflict between the state and civil society from 2000 onwards. Contrary to the ethos of the 1998 Water Act, namely to create an equitable access to water for the black majority, ZINWA’s seizure of urban water management responsibilities, at the behest of the state, have diminished, rather than enhanced, urban people’s access to water.

Muchemwa (2008) points that the urban water ‘crisis’ in Zimbabwe owes its genesis to the central government’s pervasive politicisation of most decisions affecting the municipal provision of water and sanitation in the country’s cities and towns.

This process was given expression by the government's directive to ZINWA to take over the management of urban water supply and sanitation and from all the urban local authorities in Zimbabwe. Since then the government of Zimbabwe was treating ZINWA as an extension of itself, financially propping it up, and defending it to the hilt even in the face of palpable operational deficiencies to further its political objectives. The government claimed that ZINWA was in a better position to take over such functions than urban councils since it had the financial capacity to do so.

However, it can be argued, on the basis of media evidence that the real motives of government's action under ZINWA were: the desire to weaken the financial base of the increasingly popular opposition-controlled urban councils so that they would become irrelevant in the eyes of the electorate since the ruling party would continue to dominate in matters of urban governance; and also depriving the opposition-controlled urban councils of the opportunity to prove that they were more competent than the ruling party in service delivery, which would further increase their popularity among the electorate. The Harare City Council, under Elias Mudzuri (MDC) had already shown to the public its efficiency in service delivery. Unfortunately, Mudzuri was later dismissed by the Minister, and replaced by the Makwavarara Commission under what was perceived as unclear political circumstances.

Since the late 1990s the city of Harare in particular, and other surrounding towns in general, had experienced severe water shortages, blamed on drought and increased consumption levels by the Commission-led council, which was forced to introduce a water rationing programme. This took place against the background of a general culture of mismanagement at Harare Townhouse. Harare, which once boasted of being 'the cleanest city in sub-Saharan Africa', had, over the years, progressively lost its sparkle.

Apart from the decrepit water purification machinery, the quality of the water increasingly became a problem. Although reports about the levels of pollution in Harare's two main reservoirs, Lakes Chivero and Manyame, date back to the 1960s and 1970s pollution worsened over the years largely because of the location of the reservoirs. Both reservoirs are located downstream from the city's sewerage works and to agricultural runoff. Because the lakes lie within the same catchment as the city of Harare which it supplies, Harare, therefore, takes some 95% of its water from the same body into which its waste products are discharged.

Given the severity of the water shortages and pipe bursts in the city, expectations among residents within the low and high-density suburbs of Harare that ZINWA would fix the problems were quite high. But within two years of assuming its new functions, ZINWA was under attack from various quarters as it failed to stop water shortages because of constant breakdowns of the waterworks. To raise funds to meet its operational costs ZINWA increased rates ten-fold, yet taps went dry, while water borne diseases, especially cholera, broke out regularly in Mabvuku and Tafara which bore the brunt of water shortages more than any other township in Harare. The problem ZINWA faced from the beginning was that it did not have adequate funds and equipment to carry out its cabinet-sanctioned mandate.

Such was the enormity of the problem confronting ZINWA that its sponsor, the Minister of Water Resources, defended the water authority and admitted that ZINWA had neither the funds nor adequate equipment to deliver water supplies in urban centres: 'We have a dedicated manpower which is committed to deliver, but there is a critical shortage of equipment to carry out the task', said Minister Engineer Mutezo. ZINWA's operational deficiencies, lack of financial and technical capacity to deal with the problems obtaining in just one urban area raised doubts about its professed competencies as reflected in the Minister's confidence in the water authority.

## **6.5 Retransfer of Water Service Management to HCC**

After an outcry by citizens on the failure of ZINWA to improve on service delivery, the HCC took over from the organisation. The problem that stands out though is that HCC is yet to distinguish itself as better than ZINWA since it took over, faced by serious challenges which are expatiated in this study.

## **7 HARARE WATER INFRASTRUCTURE STATUS**

Water management in Harare has in the past attracted more than its fair share of controversy, with unabated and heated debates coming up on who exactly should be blamed for the water crisis whose prospects of being permanently addressed remains in obscurity. However, a projected outline of the background and current water infrastructure may help to rouse this debate from an informed position, with view of tracking the specific root of the problem in order to find the possible alternatives towards the pro-poor framework as is the major thrust of this study.

### **7.1 Water Sources and Supply.**

According to the Harare city Council:

HCC owns 83% of Lake Chivero, 83% of Lake Manyame, 100% of Seke Dam and 100% of Harava Dam.

The daily water demand in Harare has increased from 850 megalitres per day in August 2007 to 1 200 megalitres during cold season, and 1 400 megalitres during hot season to date.

The increase in water demand has not been matched by the supply whose capacity is at 704 megalitres per day where it is estimated that Morton Jeffray has a capacity of 614 megalitres per day and Prince Edward water works has a capacity of around 90 megalitres per day.

Substantial percentage (60%) of the 704 megalitres is lost through leaks in both the treatment and distribution systems.

#### *Boreholes*

With the help of UNICEF, borehole water is also provided by HCC. . According to Harare Water monthly report of December 2012, there are 236 boreholes in areas that include Budiro, Glenview, Glen Norah, Dzivarasekwa, Kuwadzana, Warren Park, Westlea, Kambuzuma, Mufakose, Mbare, Hatcliffe, Mabvuku, Tafara, Mabelreign, Malborough, Greendale, Highlands, Mount Pleasant, Borrowdale, Waterfalls and Sunningdale. In the report, Harare Water Director Mr C. Zvobgo said that of the 236 boreholes in these residential areas, 179 were working while 57 were malfunctioning. A total of 30 had been repaid in areas that had been hit by typhoid during that time. Of the 236 boreholes, 19 were contaminated and disinfected by super chlorination. Such a situation is indicative of great challenges still ahead of HCC in water service delivery management.

### **7.2 Water Treatment**

Currently, treatment and distribution of water is managed by Harare Water, a department under the HCC. The city started extracting water from Cleveland Dam in the 1920s when it was still a dormitory town. This was followed by the installation of the Morton Jeffray water works in 1953 which was meant to meet the demands of a growing population of about 350 000 people. According to Councillor Mtizwa, Morton Jeffray Water Works was later upgraded, with the last phase commissioned in 1994 to supply 1, 5 million people. However, the population, which has been the main driver of demand, has been increasing and is currently estimated at 4,5 million people, with Harare having 3 million people and an estimated 1,5 million from the other four local authorities that the council serves with water, e.g. Norton, Ruwa, Chitungwiza and Epworth. Unfortunately, this is failing to match with the capacity of Harare water reticulation system which is in an obsolete state. According to the city council, no much upgrading of pipes has been done to keep up to the level of tremendous increase in Harare population growth.

### **7.3 Pumping System**

Current water production output for Harare is 450-500 ML/day compared to the normal average of 600 ML/day.

Pump availability is currently (June 2013) 60% but with very low reliability. The frequency of breakdowns is high and this is affecting production. Morton Jeffray currently (June 2013) has 6 out of 9 duty pumps. All the standby pumps are down and an estimated US1, 5 million is required to repair the pumping plant and increase production to 600 ML/day. Warren Control, the main distribution pump station is also operating with 6 pumps out of 14. According to the city council, the operating pumps are also unreliable and require maintenance and replacement.

It can be said that as Harare continues to work on the rehabilitation of pumping plant to increase plant availability and reduce supply disruptions, it is however no longer cost effective to maintain some of the pumping equipment due to its age.

## Summary of Harare Water Infrastructure

- *There are two treatment works with combined capacity of 704 megalitres (ML),*
- *15 booster pump stations,*
- *28 reservoirs with 850 ML capacity,*
- *6 000 km of water distribution mains with diameters ranging from 50 mm to 1 500 mm and there are 200 000 customer connections as well 236 boreholes. I*
- *there are 5 waste water treatment works with capacity of 219 ML per day,*
- *5 raw sewage pump stations, and*
- *5 000 km of sewage collection network with diameters ranging from 100 mm to 1 400 mm.*

Assessing the current infrastructure, it is noted that HCC can only provide 20% of the population around the clock with water, 38 percent for between three and five days a week and 25 percent on two days per week which is not justifiable (Chideme in *The Herald*, 26-02-13). Thus more than half of the population in Harare has no water yet an entity such as eThekweni Municipality of South Africa manages to give its 3.8 million residents water daily with only 900 million litres per day.

### 7.4 Key Players in the Water Sector

The water supply system in Harare is currently dominated by 5 main players namely, the Central Government, the City Council, International Donors, Private water dealers and the citizens of Harare.

#### 7.4.1 The Central Government

The Ministry of Water Resources Development and Management is the lead Ministry in water management in Zimbabwe. Various structures were formed in 2010 after a Ministerial Committee convened to discuss the roles and responsibilities for the key players in the water sector. All the reporting channels in the water sector end at the Presidium level which is headed by the Deputy Minister of Infrastructure Cluster. All external stakeholders involved in the management of water fulfil a number of important functions in the planning and operation of a water supply institution which include; policy making, ownership, regulation, demand for service or entitlement to receive services; and financing or authority to secure financing in both debt and equity. Thus it is important to have these structures in place as they promote accountability within the institutions running the water supply systems in urban areas. Coordinated efforts also come from the Ministry of Local Government and Rural Development, Ministry of Health and Child Welfare as well as Ministry of Finance.

#### 7.4.2 Harare City Council

Harare City council is the main player on the ground management of the water resource. It is responsible for monitoring water supply, quantity and quality in areas under its jurisdiction.

#### 7.4.3 International Organisations

International organisations, through their NGOs, have always been crucial in intervening in the providing of water services through local authorities to the residents. These include international organizations such as USAID, UNICEF, ICRC and WHO. USAID introduced a programme called "PROOF" which has helped most local authorities including Harare. USAID's PROOF program is run by NGO International Relief and Development (IRD) on behalf of USAID's Office of U.S. Foreign Disaster Assistance (OFDA). The initial phase of the program focused on the high density suburbs of Harare and Chitungwiza. In June 2010, it expanded its activities to Mutare and Buhera in south eastern Zimbabwe. To date, PROOF has installed 805 rain water collection systems serving 2,653 households and eight schools with 26,321 beneficiaries in total. All components of the rain water harvesting (RWH) systems are manufactured in Zimbabwe, creating jobs and a nascent rain water collection industry in the free market.

Rain water collection systems consist of roof gutters and a water storage tank. The equipment provides abundant clean water during the rainy season, when the highest incidents of waterborne diseases, such as cholera and typhoid fever, are recorded. With regulated consumption and sufficient water storage capacity, these rainwater collection systems can provide clean drinking water all year round. In addition to improving access to clean water, the PROOF Rainwater Harvesting program also engages communities in water, sanitation and health activities, and serves as an example of

rainwater collection for other NGOs and local institutions. In addition, all parts of the rainwater harvesting system are manufactured in Zimbabwe and the project has generated work for 16 teams of builders and 8 teams of plumbers. All equipment used by the PROOF program was manufactured at four local factories.

Various other international organisations have played significant roles in water supply preceding, during and after the cholera epidemic period. ICRC is one of the organisations whose interventions started well before the cholera outbreak and UNICEF has been very helpful in complementing government efforts to contain the disease.

#### **7.4.4 Citizens.**

Citizens play a critical role in water provision as they mobilise resources for alternative sources and invariably cooperate in circumstances of shortages. Many households have dug wells in their backyards while some have sunk boreholes.

#### **7.4.5 Private companies.**

Private water providers have grown and these supply both bulk and bottled water for domestic and commercial consumption.

### **7.5 Harare Water Projects Funding**

The funding of infrastructural projects by Harare is met with its own challenges. Currently projects are being funded through borrowed money and other non state sources. According to Harare Mayor, Masunda, the City council does not get any allocation from central government; hence it has always paid independently footed its own bills and also financed its own projects.

According to the Mayor, funders currently engaged include:

World Bank: it has put US\$500 million to solve water issue

GIZ: it has put 500 000 Euros on the table to help sort out service delivery in Harare.

Bill and Melinda Gates Foundation has put US\$20 million dollars for housing, and in the process water issues in the selected sites will be sorted out.

The China Export and the Import Bank (Eximbank) facility pledged US\$144 million dollars which is expected to provide replacement plant and equipment at the water and sewage treatment plants.

African Development Bank: has granted a facility of US\$9,5 million to Harare for the rehabilitation of plant and equipment at the water and sewage treatment plants.



## 8 IN SEARCH OF AN EXPLANATION

An attempt to proffer an explanation to the water woes of the city can be aided by critically looking at the crisis centres as seen through the eyes of the citizens, city fathers and the technical aspects of research findings.

According to the Harare Mayor, Harare City Council owed around US\$300 million in unpaid rates this year, an increase from November last year's US\$250 million (Herald, 20-02-13). In this case, residents owed the city US\$80 million, government ministries and departments owed US\$120 million and the private sector owed US\$100 million.

The revenue for Harare Water has dropped from US\$6 million to below US\$4 million per month. Collection efficiency dropped from 63% to about 42% and this has negatively affected the operations and maintenance programs of the department. Reports show that the low revenue inflows have forced Harare Water to scale down on the projects being funded from revenue. These include Firle Sewage Works rehabilitation, Dzivarasekwa pump station, and the water and sewage pipe replacement project. Despite the slow progress, the plant at Firle Sewage Treatment Works is now treating 100 ML/day from zero in 2009. \$15 million has been invested in the treatment of the plant.

As Harare continues to work on the rehabilitation of the pumping plant to increase plant availability and reduce supply disruptions, it is however no longer cost effective to maintain some of the pumping equipment due to its age.

More so, it is already given that these loan facilities taken will be repaid by the residents of Harare, yet they were not consulted on the matter. It also brings into question how the water revenue generated by the residents is used. To what extent are they directing that money towards upgrading of water reticulation systems and ensuring that citizens at least have water in their households? There is now a tendency by HCC to just borrow without full justification, and it may leave the next regime to inherit these heavy debt burdens just as this current management claims to have also inherited the debts of the previous management. The interest rates for money borrowed are not even given to public consumptions and there is a great danger that residents shall be left only exposed to huge debts brought on by these underhand borrowing transactions shrouded in secrecy. Are there no any other alternative approaches to raising funds and dealing with this water crisis by the Harare City Council?

### 8.1 HCC Failure to Address the Challenge of Obsolete Water Infrastructure

It has been cited that the city has a backlog of about 200 burst pipes and an average of 25 new reports are made each day (Musarurwa in *The Sunday Mail*, March 31-April 6 2013). According to Harare Mayor, Muchadeyi Masunda, about US\$2 million is currently needed to replace pressure valves. The distribution system has been affected by wear and tear. Since the system is now old, and most of the pipes were mainly iron and steel, rust has corroded a significant portion of the pipes.

Of late, the HCC embarked on a project of replacing old water pipes in the city centre (*The Sunday Mail*, 2013 March 31-April 6). The pipes which are being replaced are called rigid asbestos cement pipes and have a weakness of cracking due to ground movements. Although this pipe replacement project seems noble, questions are now being asked as to wherewithal to complete the exercise. Harare Water has already indicated lack of adequate funding to finish the project since they are only relying on council coffers which are not enough to hire contractors to help in the project. Initially their target was to replace 150 kilometres of the pipes. Investigations revealed that of the 150 kilometres, council has so far managed to replace only a kilometre of piping. Such is an exhibit of the lack of craft competence by HCC in as far as water projects are concerned. It is an example of a lack of serious planning by city authorities on how best they can undertake water projects for the benefit of the residents who need value for the money they pay for water rates.

The problem of obsolete pipes has affected water supply in almost all areas in Harare. Some of the infrastructure in use dates back to the 1920s yet the City council is always taking a fire-fighting approach of repairing the infrastructure rather than purchasing new equipment. Affected most by this problem are the Eastern suburbs like Mabvuku-Tafara, Chisipite, Hatcliffe, Highlands, Borrowdale, among others which do not rely on gravity for effective distribution of water. In western suburbs of Harare, water flows by gravitational force, hence the water supply challenge is lower than in eastern suburbs. Repairing the infrastructure is not a permanent solution since the same problems have always been recurring especially the issue of water leakages.

According to Clr Takura, the water problems in areas like Mabvuku-Tafara even date back to the time before 1996. From the perspective of engineers, Clr Takura posited that the area is said to be on the highest point in Harare such that the

HCC's obsolete pumping system has always had great difficulty in distributing water to the area since water there is pumped against gravity. The pumps are failing to effectively pump water from Letombo pumping station to Donnybrooke pumping station from where water has to be distributed to the Mabvuku-Tafara area. Increase in population in the area (now approximated at around 80 000 people) has meant higher water demand, yet the pumps are not upgraded to the level of water demand that is increasing with the continuous allocation of stands in the area. For instance, Kugarika Kushinga Housing cooperative now has more than 3000 housing units, Mafaro Housing Cooperative now has more than 1000 housing units and Cabs Project now has close to 2000 housing units. This continuous increase in population has also meant a greater burden on the already strained piping system in the area. The situation is however said to have exacerbated between 2006 -2009 where only low lying areas were receiving water.

Non-functional meters are also a major contributor to the loss of precious water. Engineer Muserere said a recent survey by e-Thekwini Municipality in Mabereign, Ashdown Park, Avonlea, Bluff Hill, Emerald Hill, Haig Park, Meyrick Park, Monavale, Sunridge and St Andrews showed that there were 4 494 residential properties of which 4 399 are fully developed. Of the properties, 4 448 had water meters while 1 360 of the meters were non-functional. Engineer Musere said 120 properties had leaks that occur after the meter, while 34 were leaking before the meter in the surveyed area. This study by e-Thekwini Municipality of South Africa suggested that the city could be producing enough water for reticulated households but could also be losing it through leaks.

Considering universal technological advancements, the billing system is lagging behind. Manual meter readings done by Harare Water are possible sources of inconsistencies in the bill figures thus resulting in lack of motivation amongst residents to settle their bills. Along this line, it has emerged that only 180 000 households in Harare out of 400 000 households are being billed for water consumption. More so, a pilot audit carried out in Budiro in February 2013 found out that only 11 833 out of a total of 23 820 properties at various levels of development are being billed. The implication is that estimation on those being billed will be so high since the council will be in a drive to compensate for those who are systematically defaulting from paying.

As has been previously alluded to, the water demand of Harare is now between 1200 and 1400 mega litres against a supply capacity of 704 mega litres. However, of the 704 mega litres produced, 60% of that is lost as hence only 360 mega litres is water that reaches residents and is billed. There is a big gap between water demand and water supply. The causes behind this scenario are physical water losses in the network, non-functional meters and illegal connections.

## 8.2 Slow Response to Burst Pipes

Harare Water's response to burst pipes does not meet the expectations of residents in most residential areas. The officials are taking too long to respond and fix burst water pipes. As a result treated water is seen gushing out of burst pipes for days without being attended to. In addition, there is no system used to detect leakages in possible areas of leakages. As alluded by the World Bank, some parts of the system were built in the 1950s and they were past their design life<sup>7</sup>. Urban planners and engineers have been blamed for lacking a replacement mechanism.

Such a scenario does not reflect the financial resources channelled in water purification and supply. This results in lack of motivation amongst residents to report burst pipes. However some fail to report incidences of burst pipes because they do not know who to approach and which telephone numbers to use. Lack of urgency in fixing water burst pipes has been attributed to shortages of resources in the form of finances, vehicles, and in some instances, personnel. However, the council has been involved in an exercise which commenced in October 2009 of replacing these iron pipes with plastic ones. On this note, the Harare City Council in February 2013 negotiated a US\$80 million loan with a Chinese bank to overhaul water treatment plants and replace ageing pipes to ensure at least 80% of the city receives constant supplies. The money is meant to replace leaking pumps (at a projected cost of US\$14 million), some as old as 60 years (Herald, 20-02-13).

## 8.3 Contaminated Water

Water quality in most locations is very poor. The major issues arising include the taste of water, colour and sediments in the water. As CHRA alluded to, the water is smelly and if left in a container to settle, algae can be seen collecting at the bottom of the container. This is attributed to the purification process which is considered not thorough and the fact that 85% of the water used in Harare is recycled, hence the quality of water produced is unsatisfactory. Apart from that, a greenish colour and a cloudy and dark colour is noticed when the water comes out of taps. Furthermore in some instances the water comes out of the taps with sediments. In worst case, some of the residents interviewed in the process of this study shockingly revealed that in areas like Crowborough, Dzivarasekwa and Glen Norah, Budiro, residents have had the occasion to witness *sadza* and vegetable particles coming out their taps, raising genuine fears of the quality and suitability of the city's water for human consumption. These problems have resulted in household level disinfection methods which include boiling the water, using purification pills and water purification chemicals sold in retail shops such as Water Guard.

---

<sup>7</sup> Institute of Development Studies: University of Sussex, Research Paper 20, Dec. 2003, pp. 1-27.



*Poster emphasizing the critical state of water potion in the city of Harare*

It is alleged that the frequently breaking down and overloaded waste treatment plants in Harare are inefficient and as such discharge effluent in a state that the natural environment cannot bear to self-purify (Magadza, 2003). The resultant effect has been nutrient enrichment and subsequent overgrowth of algae and water hyacinth, which now covers 40% of the Lake Chivero surface. Madungwe and Sakuringwa (2007) observed that the secondary effects of water hyacinth invasion in the eutrophic Lake Chivero include increased cost for water treatment due to the poor quality of the water. Other problems include poor sedimentation, clogging of filters, disorder in colour, smell and taste, increasing pH, alkalinity and low turbidity.

As a consequence, there has been a higher cost of purifying the water to drinking quality standards and reduced qualities available for the demanding users (ibid). The factors outlined above can be expected to cause domestic water scarcity. In Harare, Zimbabwe, water supply operations are interrupted by frequent backwashing necessitated by high concentrations of algae in raw water (Mckendrick, 1982, Nhapi et al, 2004). This is exacerbated by pumping problems, resulting in more high elevation areas like Mabvuku, Greendale and Tafara area receiving erratic supplies of water (Nhapi et al, ibid).

The raw water quality has continued to deteriorate leading to higher water treatment expenditure. The current cost of chemicals is at US\$100 000/day or \$3.1 million per month. The power consumption of the treatment and pumping processes is consuming an average of \$1.0 million per month. Besides increasing the cost of water treatment, quality of raw water affects throughput as there is a high rate of filter clogging which requires more frequent backwashing. It is reported that the current backwashing wastes 105 ML/day of treated water instead of 17ML/day.

The water sources of Harare are heavily contaminated, hence the need for the construction of more sewerage treatment plants and water sources as long term solutions to the water woes. However, in the short term, there is need for collaboration between the water users (residents) and the City governors (council) to combat pollution of water resources, which is one major cause of water shortages in Harare. Residents should play their part by not polluting the water system. This can be made possible by implementing proper methods of disposing waste. The result will be reduction of the number of chemicals needed to treat water thus reduction of treatment costs. The Council's critics have argued that there is need to scale up awareness efforts on pollution issues. Because Harare is within the catchment area of its major sources (Lake Chivero and Lake Manyame), it is easy for waste especially raw sewage to find its way into the dams, hence awareness efforts on pollution are very important (Nhapi, 2009).

## **8.4 Weak Water Legislative Framework in Zimbabwe**

To assess performance versus set targets for water supply institutions, a review of legislation governing the water supply systems of Harare is to be done. Different legislations applied in Harare water service management include The Water Act of 1998, the ZINWA Act of 1998, and the Urban Councils Act Chapter 29:15. These however have their own inherent weaknesses which have greatly militated against effective water service delivery in local authorities.

### **8.4.1 The Urban Councils Act Chapter 29:15**

The Urban Councils Act Chapter 29:15 governs the management of urban areas in Zimbabwe. Part XIII: 183 of the above named Act applies to water supply services in urban areas. The clause specifies the responsibilities of the council concerning the provision and maintenance of supply of water within or outside the council area. However, a weakness of the Urban Councils Act is that it does not give sufficient guidance for the management of urban water supply services.

According to Musemwa (2008), the Urban Councils Act is a large document but has a very small clause on water yet water issues are pertinent to every sector. The clause does not give details of how the urban water management should be done. Issues such as water tariff setting procedures are not addressed in the Act. There is no clear designation of who should regulate water management in urban areas. Notably other Southern African countries such as South Africa and Zambia, have Urban Water and Sanitation Acts which are specific to the water supply and sanitation in urban areas. These clearly stipulate the institutional arrangements that should be in existence in urban areas and their roles in the management of water services. Also worth noting is that Zimbabwe does not policy on urban water services. The urban water policy was drafted in 2004 and amended in 2007 but never finalized and thus the country does not have a water policy document.

### **8.4.2 The Water Act of 1998**

The Water Act governs the use of water in Zimbabwe. Until the recent revision of the Water Act (1998), the prevailing act was the Water Act of 1976. The Water Act addresses the issue of waste management in Section 68 (1) where it prohibits the discharge or disposal of any organic and inorganic matter into any surface or groundwater, either directly or indirectly so as to cause pollution of the water. This is important, as it ensures that whoever disposes of waste, including local authorities, should do so in a manner that does not cause pollution to surface and groundwater b sources. Local authorities are required to construct and manage waste disposal sites so as to avoid causing pollution. The Act requires polluters to pay the costs of cleaning up polluted water resources. Some local authorities in the country have already been fined for contravening sections of this Act, while others have pending court cases.

The reservation that can however be raised is that this Water Act is not deterrent in the way it treats offenders. The fines are still low to the extent that the crime of water pollution on water bodies is taken lightly, yet residents are suffering because of that. This clearly shows that the problem is one of inadequate enforcement rather than the absence or ineffectiveness of the laws. The City of Harare, with its fairly comprehensive by laws to complement the national laws still faces an acute water pollution problem. There is a strong need to put in place strict enforcement provisions for ensuring that the current legislation is enforced for the purpose of ensuring that the water bodies are at least safe from pollution.

According to Musemwa (2008), although a number of aspects of the 1976 Water Act relating to water governance were repealed, two fundamental changes in the 1998 Water Act have unfortunately dispossessed urban residents of their right to free water. First, the Act recognized water as an 'economic good' and not a 'social good' as previously held by the government. Secondly, the Act provided for the decentralization of water management institutions and the adoption of new concepts of integrated water resources management. The Act recognized the principle, the 'user pays' in line with the prescriptions of the ESAP. This applied to commercial water as opposed to primary water which could not be priced. The creation of catchment and sub-catchment councils under the Act ushered in a new decentralized management system intended to give basic-level functions for issuing permits thereby establishing an effective user-management interface. The emphasis on fee collection however gave rise to a new institution – ZINWA – whose functions would, in due course, metamorphose from being a mere parastatal, organization to a political instrument of the state which it used to dispossess urban areas of their water supply responsibilities.

### **8.4.3 The Zinwa Act of 1998**

The ZINWA Act of 1998, which was extracted from the Water Act of 1998, is an organizational based legislation. It mostly refers to catchment management rather than to urban water management in towns. The ZINWA Act however does not clearly stipulate the role of ZINWA as far as the management of urban water supply systems is concerned. Specific issues of how domestic water tariffs should be set and the processes involved are not specified in the Act. Another weakness of the Act is that, in cases where ZINWA is managing urban water services; there is no other body to regulate its operations, which suggests that ZINWA can regulate itself.

Simultaneously with the 1998 Water Act, a new Zimbabwe National Authority Water Act (1998) was passed to provide for the formation of ZINWA. ZINWA was vested with powers to oversee the development and management of national water resources. ZINWA had to operate on a viable commercial basis (i.e. sale of raw water, clear water and provision of engineering services) and become self-financing. For what all these water reforms were worth, their implementation coincided with the rise of political conflict between the state and civil society from 2000 onwards. Contrary to the ethos of the 1998 Water Act, namely to create an equitable access to water for the black majority, ZINWA's seizure of urban water management responsibilities, at the behest of the state, have diminished, rather than enhanced, urban people's access to water.

## **8.5 The Problem of Exclusionary Governance in Harare Water Management**

Despite the poor quality and affordability of water being unreachable to the poor, participation by residents in Harare civic affairs has been limited. The need to draw municipalities closer to their stakeholders was emphasized by world leaders at the 1992 Rio Earth Summit which endorsed the Local Agenda 21. The Local Agenda 21 highlights the need for people from all sections of the community and from all parts of the world, to take joint responsibility for development decisions. However, in Zimbabwe, legislative constraints also limit civic participation at municipal level. Zinyama (2012:10) observes that sections 88 and 122 show that the Urban Councils Act does not provide for the input from residents associations. As a result local authorities tend to be averse to cooperate with such associations.

In Zimbabwe, it is vital to improve information dissemination and unpacking of environmental problems to avoid solving wrong problems or proffering wrong solutions to problems. Thus there is need to clearly understand the nature of problems, extent, impacts and processes involved before proffering solutions. Stakeholder involvement is recognized as an important factor in the successful implementation of water management plans, particularly when efforts are made to resolve competing and conflicting demands in areas facing water scarcity (Gerasidi *et al.*, 2009). Involving stakeholders enables, first, a better understanding of different parties that have an interest in water management problems; second, the

process can articulate more clearly the context of agreements and disagreements; and finally it can also significantly contribute to conflict management or conflict resolution (Becker, 2009).

The relationship of CSOs with HCC has never been cosy. In Harare, various CSOs have stood up to challenge HCC on its water service delivery systems. These organisations include Harare Residents Trust (HRT), Combined Harare Residents Association (CHRA), Zimbabwe Coalition on Debt and Development (ZIMCODD), Community Water Alliance (CWA), Zimbabwe Lawyers for Human Rights (ZLHR), among others. These have somehow been very instrumental in raising awareness to residents on water as a right to citizens, lobbying for policy changes to HCC on water issues as well as defending the rights of residents in cases of unfair treatment by the city council on service delivery. For instance, in 2011 - 2012, CHRA intervened through a legal course on behalf of residents in Mabvuku-Tafara after they were given summons for property attachment for defaulting on their water payments. CHRA was successful in this battle; successfully stopping the HCC from attaching any property belonging to defaulters. According to Mr Rose, a member of CHRA, incidences like this have only managed to create a polarised relationship between HCC and CSOs such that HCC is now 'only good at listening rather than acting upon the proposals advocated for by CSOs.' Even when dialogue meetings between HCC officials and residents are arranged, Mr Rose noted that the council deliberately sends low profile people (especially those at the district level) who cannot even give sufficing answers being demanded by citizens on water issues.

. Participatory budgeting is a process of democratic deliberation that allows citizens to identify, discuss and prioritise public spending projects ([www.wikipedia.org](http://www.wikipedia.org)). According to Zinyama (2012), the sad story today is that Harare has experienced unprecedented decline in infrastructure, financial mismanagement, poor service delivery and dictatorial tendencies during budget making process. Residents' priorities and preferences are not considered during the budget formulation. Harare City Council views residents as users of services not as makers and shapers of decisions at the local level. Participation by Harare residents in budget formulation is very weak. Residents are generally dissatisfied with local services, but they do not trust they can shape them or that Harare City Council can do anything about the problems they face. The question that comes then is whether the pre-budget consultations purported to be done hold much water or are just treated as a formality. This is articulated by the CHRA Membership Chairperson, Neta Ndaba (The Zimbabwean, 05-03-2013) who complains that:

It is always a pain to go to a budget process that you obviously know that what you are planning is simply building castles in the air.

This reflects the lack of people involvement in the water service delivery management and it brings into question whether the pre-budget consultations are seriously made or whether the resources actually made available resemble agreed allocations (Moyo, 1992:3). Consequently, citizens are even resorting to the system of defaulting their bills payments and this has adverse effects to the operations of HCC which claims to be operating on a shoe-string budget, with a huge debt of around US\$300 million in unpaid rates this year, (Herald, 20-02-13).

According to Zinyama (2012:2), the sad story today is that Harare has experienced unprecedented decline in infrastructure, financial mismanagement, poor service delivery and dictatorial tendencies during budget making process. He notes that:

Residents' priorities and preferences are not considered during the budget formulation. Harare City Council views residents as users of services not as makers and shapers of decisions at the local level. Participation by Harare residents in budget formulation is very weak. Residents generally are dissatisfied with local services, but they do not trust they can shape them or that Harare City Council can do anything about the problems they face.

The question arises as to whether the pre-budget consultations have much substance beyond symbolism. This is well answered by Ms E. Masaraure, Sunningdale Ward Coordinator (The Zimbabwean, 05-03-2013) who laments:

The budget issue is something that we have been attending since I joined CHRA in 2003. What really shocks me is that we go there but come implementation there is nothing that really reflects what we would have had agreed at our meetings. I also am tempted to think that these meetings are just a mere window dressing event that is meant to silence our continued noise and demand for civic engagement.

Since local government is just a creation of the central government, it means that it shares a lot in common with the national government, hence it has been noted that most of the challenges of HCC are somehow extensions of the ineffectiveness of national systems whose effect resultantly feeds into local government systems. In other words, problems of participatory budgeting in all Zimbabwean local authorities are largely traceable to the ineffectiveness of the same model at national level.

According to the Commonwealth Foundation (in Zinyama 2012:1), the aspect of participation in governance for a good society requires direct connection between citizens and the state but this interface has been neglected in the past by HCC. Along this line Moyo (1992:3) noted that the political content of Zimbabwe's budgetary process even at national level tends

to be driven by a top-down approach with politicians basically telling everyone what they think is good for the country. Moyo (1992) further points out that such a scenario reduces budgeting to a mere accounting process of facilitating and implementing policy whims and caprices of the government officials without considering fundamental value questions such as the need for full stakeholder participation in budget formulation. Consequently, local authorities, as mere creations of the state, cannot resist the pervasive influence of the national budgetary decisions, even against the will of the locals. As such, lack of constitutional provision on local governance has also meant overdependence on central governance even for financial support and this has reduced self-determination on the budgetary process of local authorities, thus impacting negatively on the quality of water service delivery and also on the locals as the HCC tends to over-rely on the consumer for revenue generation.

In this light, it appears that participatory budgeting is given lip-service by Zimbabwe's local authorities and this leaves a lot to be desired on grounds of democratic participation in the policy process for purposes of effective water service delivery. Thus poor water service delivery has remained a perpetual problem.

## **8.6 The Ignored Ravages of Privatization in Urban Water Management**

There is a dangerous tendency that HCC is seemingly leaving out its core competence of water provision to market forces. Historically, the state's minimalist role in the provision of water was fortified by the neoliberal ESAP which demanded that the Zimbabwe government must remove subsidies on services such as water and cease to treat it less as a social good and more as an economic good – i.e. on that was to be priced, sold and generate profits – and this was to be best achieved through privatization of water. ZINWA was thus created as a demonstration of the government's commitment towards commercialization and for a while its boundaries and activities remained confined to dealing with bulk projects whilst ensuring that it would be run as an independent commercial concern. Eventually, the period after ZINWA still saw the perpetuation of the same elitist approach of water privatisation, much to the detriment of the welfare of the poor majority in Harare.

Privatization of water services has often led to increased tariffs largely unaffordable to poor households. In low density areas like Borrowdale, there is a growing trend of people selling water bought from a private supplier at a cost of \$20 per 1000 litres while selling the same amount of water at around \$70. HCC has left private companies to provide bottled water. Currently more than 40 water bottling companies have been operating in the country. Reports indicate that some of the bottled water being sold is below standard, posing a health threat to residents. The government laboratory examined samples of bottled water from several suppliers following an inquiry by NewsDay and exposed that seven of them were unsafe for drinking. Bottled water being sold under the trade names Ad Life, Well Pure, Aqua Crystal, Century and Revive had harmful organisms and was not safe for drinking, while that sold under the names LeauChoisie and Aqualite had high chemical compositions. The tests were done by a laboratory that falls under the Ministry of Health and Child Welfare and is responsible for all the tests required at government health institutions, and is accepted as reliable. The laboratory is also responsible for administering the Food and Food Standards Act and is a National Regulatory Food and Water Testing Lab whose operations are benchmarked to ISO170725 standards for testing laboratories.

It is however of note that different water service providers operate under different legislations and this can have an effect on the management approaches used to provide water services to residents. It should however be stressed that in water provision, the pricing should not exceed the payment ability of those needing water, including the poor, because in a certain sense, water is a social good or a basic human right. In this light, it can be bemoaned that privatisation and commoditization of water in Harare has meant that water is no longer equally accessible to the poor and marginalised groups of the society. This is an affront to sustainable development and poverty alleviation in Harare.

What is disturbing is that the government has endorsed the operations of private water suppliers. The government in March 2013 ordered suppliers of bulk water for domestic use to register with the Ministry of Health to ensure their water is quality tested, or risk prosecution. The ministry decided to intervene following a proliferation of private water suppliers, especially in Harare where the city council has failed to adequately supply residents with clean water. Companies or individuals supplying water in volumes above 20 litres are considered bulk water suppliers. Suppliers are first expected to register with the Zimbabwe National Water Authority to obtain water extraction permits in their catchment areas and then invite the local authority's health inspectors to conduct water tests in conjunction with the Government Analyst Laboratory.

However, the privatisation of water has jeopardised the social welfare of residents, most of who are wallowing in abject poverty, reportedly living on \$2 per day. Even the MUNICH mayor Councillor, Hep Monatzeder warned Harare City Council against privatisation of its water services saying such a move would disadvantage residents in the long-term. He made the remarks during the signing of a co-operation agreement in October 2009 between the two cities and promised that Munich would continue assisting Harare. Clr Monatzeder said in the short-term, privatisation of water would relieve the city of a great burden but in the long run residents would lose out. "They would be at the mercy of commercially oriented enterprises, instead of being in the hands of a city administration, which is obliged to act in a socially responsible manner," he said. Clr Monatzeder also said Harare should learn from the experience of other countries that took the same route. He also observed that some of the problems faced by Harare and the country were self-inflicted.

This is the same predicament the metropolitan municipalities of South Africa are going through after they corporatised their water supply (Greenberg, 2006). Management of the Johannesburg water utility was contracted to a French multinational water company, Suez Lyonnaise des Eaux on a 5-year contract in 2001 as part of the iGoli 2002 Plan (Harvey, 2005:122). A process of commercialisation of Cape Town's water sector took place between 1997 and 2001 in preparation for the corporatisation of water services in the metro in 2004. It included the outsourcing of non-core services as well as meter-reading, water cut-offs, maintenance and construction work. This process unfortunately resulted in the tight credit control methods that included water cut-offs to non-paying households regardless of why they did not pay.

This was the same case in Nelspruit where the municipality signed a contract with Greater Nelspruit Utility Company, giving the company responsibility for managing and developing the water and infrastructure of Nelspruit town and other areas. Although the concession resulted in improved quality and level of service to residents, it exposed serious weaknesses in municipality capacity to monitor compliance and to regulate the concession. Sharp tariff increases made payment for poor households more difficult. The company responded by implementing harsh credit control measures that were used to enforce payment, including water cut-offs, removing meters and portions of pipes to prevent illegal connections, reducing 24-hour supply to intermittent hours throughout the day and night, and installing flow restrictors (Greenberg, 2006). Water services have also been corporatised in eThekweni Water Services. However in no case except Johannesburg are water and sanitation services truly stand-alone and ring-fenced activities.

CSOs in Harare have however raised concern against the privatisation of water. According to a CWA member, Mr Bonongwe, privatisation deprives the rights of the people, especially the poor to safe water. He branded it as a capitalist approach that only enriches the rich people in society who can afford the water. Mr Rose (of CHRA) also added that under the new constitution, water is a right and a basic good, thus it is illegal to let it be controlled under market forces through privatisation. On this note, it would be very illegal for HCC to forget its social responsibility of water service provision on the pretext that there are other players in the water sector. Privatisation in its very nature is too elitist and never pro-poor, hence it would be very criminal of HCC to short change the payers of water rates by leaving them in the hands of private players in water provision. By reason of charging water rates to residents, the city authorities should be equal to the task of providing safe and reliable water in all corners of Harare.

## **8.7 Corruption, Economy of Affection and Politics of Patronage**

It is alleged and some episodes have been reported, that Harare City Council is riddled with corruption, mismanagement and lack of leadership, vices that have negatively affected service delivery. From the interviews carried out with one of the key HCC officials who declined to be named, there are some recent allegations that an amount of about US\$4.1 million recently went missing and the case went unreported. There are also reports of clear and palpable corruption of councillors especially when it comes to awarding tenders and approval of deals. This is characterised by an economy of affection and politics of patronage. According to Clr Magwaliba (in Herald, 16-04-13), there was concerted effort to push donor-funded projects to the detriment of the internally funded programmes. He accused "individuals" within council of trying to impress donors by accounting for the funds. Most housing co-operatives in Harare, he said, were fronted by councillors. Clr Lisbon Marufu also said most of the co-operatives that were being given land were illegally connecting municipal water causing shortages to residents who pay for the service. Such is the dilemma that Harare residents face in the wake of perennial corruption at the HCC.

This problem of corruption in the HCC is explained by the Harare Residents Trust Chairman, Precious Shumba who lamented that:

"When most of the councillors were elected into office, the majority of these councillors had nothing. They got donations of suits and shoes from the Mayor and other party officials to enable them to attend meetings of council, but now the same have become flamboyant, imitating Nigerian dressing, and trying to compete with salaried senior managers in terms of the things they can afford. We question the source of that money, and why some have relocated from their original bases of residence, away from the people who voted them into office. Councillors earn an allowance of around US\$200, raising suspicions about their income generating activities, which only began after being elected into office, or after serving council in a certain committee."

Allegations of corruption are levelled against Harare Water and the division of funds to other uses especially salaries. Apart from that, a long history of poor service delivery that does not end easily and poor management systems are some of the complaints raised by residents thus despite possible improvement of water revenue it is difficult for water supply to improve. Lack of accountability and transparency can also be noted. Harare Water is accountable to politicians rather than to the water consumers they are serving. Information concerning water supply is not adequately disseminated so that water users have full knowledge of the developments taking place in water supply.

There is also a general complaint by residents that most of the projects are much politicised despite that the people are in the GNU. This is what has been the case in the Makwavarara Commission era where most of the boreholes are said to have been drilled in Zanu-PF dominated areas. There is also a problem of residents sabotaging themselves on some projects for

political reasons. For instance, Clr Takura reported that there was a borehole drilling project by MDC-T secretary general, Biti in Ward 46, Old Tafara where some Zanu-PF supporters are alleged to have massively vandalised the boreholes to discredit the project on political grounds. It is only recently that a security guard was employed to secure the area. In this case, HCC can be blamed for being more retroactive than proactive.

More so, the issue of tenders by HCC has been too politicised. The arrest of Alex Mashamhanda (who is said to be an MDC-T affiliate) on allegations of providing poisonous chemicals is a clear testimony of the pervasive influence by central government as well as corruption in the tendering process. As a result, confusion now surrounds the procurement of goods and services for local authorities as the State Procurement Board has begun advertising tenders for some councils three months into the year. Hardest hit is the procurement of water treatment chemicals, with local authorities being forced to buy on an ad-hoc basis instead of a long-term tendering process. President of the Urban Councils Association of Zimbabwe and Masvingo Mayor Alderman Femias Chakabuda said his council was still using its own procurement procedures, three months after Government ordered that all local authorities procure through the State Procurement Board (Herald, 20 March 2013). The confusion comes as Harare’s water treatment chemical stocks are dwindling because the city does not have binding contracts with suppliers for 2013.

This is evidence of how residents’ money is being abused instead of being used productively to mend broken pipes and address water woes in Harare. Corruption has become rampant and unchecked; turning into a cancer in the operations of HCC such that productivity has become a dream. The plight of poor residents of Harare has largely been ignored in the face of self-aggrandisement by city authorities.

### 8.8 Failure to effectively execute policies

A case in point is the adopted Water Demand Management System by HCC which has remained a myth. This is the water rationing policy which was aimed at ensuring that all the high density areas receive water 7 days/week and that all medium and low density areas receive water for a minimum of 2 days/week.

This system has dismally failed. Councillor Mtiswa pointed out that there are several reasons why the results of that policy are still far from being achieved. Firstly, he blamed excessive electricity break outs, pointing out that power cut for an hour affects two days’ supply to build the volume back. Secondly, water quality in the main water source, Lake Chivero, is said to be very much contaminated such that it requires clarifiers to be constantly backwashed every two hours instead of the normal backwash of after every 48 hours. Consequently, the quantity of purified water is reduced therefore compromising the supply. The third challenge he pointed out is unavailability of water chemicals which have to be exported from Mozambique, South Africa and India. Right now, Harare needs US\$3.1 million every month to buy a cocktail of at least nine chemicals for water treatment. Lastly, Councillor Mtiswa lamented the obsolete piping system which leaks almost 60% of the purified water, thus making the adopted Water Demand Management System just but a dream. All this exposes the weaknesses of HCC in lacking craft competences, thus condemning the residence to perpetual health risk of typhoid, cholera and other water borne diseases, yet they keep on demanding water rates from the same residents.

### 8.9 Poor Prioritisation

The problem with HCC has also been of poor prioritisation where the water crisis is not given the attention that it deserves. Harare Water is the major contributor towards the city budget yet the council salaries constitute the greater part of the city’s expenditure. It seems more money is going towards employment costs to pay bureaucrats, some of whom cannot even justify their existence in office. For instance, of the \$291 million budget for 2013, Harare Water’s revenue contribution is estimated at \$117 million. There have also been some reports that of the estimated \$58 million dollars that they collected in 2013 between March, April and May, nearly 52% of that amount was used towards payment of salaries and allowances for their senior managers.

Harare Council is yet to achieve the instructive ratios set by the Ministry of Local Government, Rural and Urban Development of 30:70 between employment cost to service delivery. Employment costs have notoriously defied the 30:70 prescription with the city council choosing to blame the current economic landscape which they say is more suited for the utilization of human labour because of the non-availability of investment funds. While Council continue to strive towards the achievement of the mandatory 30:70 ration, it should be noted that employment costs continue to exhibit a downward trend as follows;

**Employment Costs against Service Delivery Costs by HCC**

	2009	2010	2011	2012
Employment Costs	96%	73%	65%	55%
Service Delivery Costs	4%	27%	35%	45%

(Source: 25 October 2012 Budget Speech and Proposals Report)



It should however be emphasised that since Harare water is the main contributor in the city budget, more money raised should also be channelled towards addressing the current water budget. It is quite unfair that of the US\$178 million anticipated as at 31 December 2012, about fifty five percent was to go towards employment costs while forty five percent was to fund other projects. The City council in its budget presentation defended this position as having been occasioned by the payment of arbitral awards to some members of staff arising from labour disputes. To be just, residents should see more resources being channelled towards the provision of services, especially water services in the face of the current water crisis.

## **8.10 Unabated human resource conflict**

The current Harare Water employees were transferred back from the Zimbabwe National Water Authority (ZINWA) in February 2009 to the City of Harare, and were placed under Harare Water. Approximately 2 000 workers were transferred who include permanent and contract workers. Workers were transferred with their conditions of service and were assured that the City of Harare will give them their salaries and allowances. These included allowances for housing, water and education. These were key agreements under an agreement signed between the National Employment Council (NEC), City of Harare and the representatives of the workforce.

According to the Harare Residents Trust (28 November 2011), ever since this transfer, there has been no implementation of the key agreements made. Employees have been given several false promises that senior council management who include the Town Clerk and the Human Resources Director were looking into the case. Workers have also had their long service awards withdrawn under unclear reasons. Upon transfer, Harare Water employees noted that workers from all the other council departments were receiving monthly electricity, education, housing and transport allowances. In addition to this, they were receiving a 13th check- a bonus. This has continued until today where workers are still disgruntled because of the treatment by City of Harare.

Research by the HRT revealed that there is serious confusion among employees as to where they belong or who their real employer is. Such controversy is attributed to the fact that basic salaries and allowances differ remarkably with those of employees under other council departments such as that of Waste Management. A grade 16 (lowest grade) employee from Harare Water gets \$166.00 per month whilst the same grade in another council department gets \$179.00 per month. Workers feel that they should be treated the same or even better given the nature and importance of their work to the City.

Harare Water employees are usually the last batch of workers to receive their salary slips from the City Treasury's department. Workers are also questioning why the department is housed at Old Mutual Building while other departments are housed in council buildings such as Remembrance House where the Housing and Community Services Department is housed, Trafalgar Court where the Municipal Police is based, Rowan Martin where the City Treasury is housed and Cleveland House which accommodates the Waste Management and Engineering departments. Old Mutual is very expensive with each office reportedly going for at least US\$1 500 per month, translating to around US\$30 000 in rentals every month for the 20 offices occupied at Old Mutual. The financial burden is on Harare Water account and is shouldered by the ratepayers.

There is a serious lack of transparency and accountability in the recruitment of employees in Harare Water. Some employees are performing tasks they were not trained to perform. Countless, fruitless debates between senior council management and Harare Water representatives on the way forward concerning the salaries, allowances and general welfare of the workforce has drained the rate payers' account and demotivated the workforce. A frustrated and demotivated workforce has been the product of these fruitless debates and with this Harare Water cannot perform according to expected standards.

There have been several workshops held with the Town Clerk, Chamber Secretary, Human Resources Director, councillors, and representatives from Harare Municipal Workers Union (HMWU), Water Authority Workers Union of Zimbabwe (WAWUZ). To date three workshops to try and address the situation have been held at luxurious venues in Nyanga, Kadoma, Hwange and Victoria Falls. It is a culture that participants get hefty fuel and attendance allowances while the condition of the employee is not improved. Senior management sees it logical to debate such critical issues in hotels while avoiding direct engagement with employees, who are the pillars of Harare Water.

There are unconfirmed allegations that the Harare Water account is abused by senior council management officials who withdraw money for entertainment allowances ranging from \$1 000.00 upwards each week. Harare Water employees are the least paid workers in the council but surprisingly the most crucial for the functioning of the city. This is disturbing as Harare Water employees are involved in the most health risky work in council, that is, sewerage and water treatment. There are fears that workers may be sabotaging council in water treatment. The recent outbreak of typhoid, water borne disease in Dzivarasekwa clearly shows that water is not being properly treated. There is a danger that the City of Harare will not meet the water demand situation in Harare.

## 8.11 The 'Invisible and Observable' Political Hand in the Harare Water Management

From this study, it can be noted that national politics has in a way shaped water management system in Zimbabwe. To this effect, this hand of politics has had its pervasive influence on water service delivery especially in the GNU. Thus failures of water service delivery in both Harare and Zimbabwe's history of water management can at best be understood and explained in the context of the politics of that particular time. It is not only about the lack of resources as always purported; it is also about the political dynamics of the time from the colonial period to the present day as this study outlines

The current urban water 'crisis' in Zimbabwe also owes its genesis to the central government's pervasive politicisation of most decisions affecting the municipal provision of water and sanitation in the country's cities and towns. This process has been given expression by the government's directive to ZINWA to take over the management of urban water supply and sanitation from all the urban local authorities in Zimbabwe. Since then the government of Zimbabwe has continued to treat ZINWA as an extension of itself, financially propping it up, and defending it to the hilt even in the face of palpable operational deficiencies to further its political objectives. This strategy, it can be argued, perfectly fits into ZANU-PF's broader strategy of debilitating the MDC to compel it to loosen its grip on the urban areas so that it could regain lost control and influence over urban areas, once again.

After an under-performance by ZINWA and the subsequent transfer of water management to Harare City Council, Harare is still proving to be the principal site of the intense city-state struggles, where water has been used as a political trump card. It is also speculated that, the City Council has in the bigger picture continued to experience the wrath of the government personified by the Minister of Local Government, Dr. Ignatious Chombo who has taken it upon himself to ensure that the Movement for Democratic Change-Tsvangirai (MDC-T) party was completely incapacitated where water shortages have instrumentally been used by ZANU PF to wrestle control of the city from the MDC-T party. The government sought to use water in the same way in which it had used land in the hope of gaining 'legitimacy and consensus' especially in the forthcoming elections. Much to the ZANU PF expectation, the MDC led council has also failed to deliver as water issues in Harare seems far from being solved.

The GNU, has been affected by an invisible political hand which had a pervasive influence on the water service delivery and management in Harare. There has been a certain level of uncertainty created by the GNU since 2009 which sapped the Councillors of Harare (as policy makers) of the will to make long term plans on water service delivery. Elections dates were always hanging in uncertainty during the GNU period, hence this study is of the view that this move has in a way pushed the councillors in to a mode of wealth accumulation, rather than being focused on developmental issues as they feared going out of office empty handed. The GNU has not created unity of purpose among the 46 councillors and there was perpetual conflict of interest, much to the detriment of effective water service delivery.

To this note, it seems the ZANU PF side, personified in Minister Chombo, has worked daylight to discredit the MDC led Harare City Council as underperformers, hence there was no financial support of the local authority from the central government. The Minister of Local Government has for the whole GNU era been in the business of firing MDC-T councillors on allegations of corruption, something which was construed in various sections as an attempt to expose the MDC-T in bad light in the forthcoming elections. Addressing a ZANU PF meet-the-people gathering at Pandhari Lodge, Chombo said he was having a difficulty administering the Urban Councils Act because of the poor calibre of MDC-T councillors he was working with and he then called for people to vote ZANU PF councillors in power for effective service delivery (The Herald, 23-05-13). Such a statement reflects the ugly face of politics in Harare City Council due to conflict of political interests much to the detriment of effective water service delivery as well.

## **9 IN SEARCH OF A SOLUTION.**

In search of a solution, a number of recommendations have been developed for the Harare City Council, Central government, Civic Society Organisations and Harare residents.

### **9.1 Capacity Expansion**

For future developments, there is need for new water supplies to augment existing ones which have shown to be inadequate for the ever growing population. In this case, the development of Kunzvi and Musami Dam projects at a cost of about US\$539 million and US\$886 million respectively will give an additional 720 mega litres/day. There is also the Mazoe Dam scheme which can provide 1200 mega litres per day. This can put to rest the water quality and quantity problem in Harare. Regrettably, the projected idea for Kunzvi dam construction has remained a dream of 30 years since the idea was mooted. In this case, while the public sector should continue to dominate water provision operations, there must be an increasing role for private sector in the building and operations of water treatment plants.

### **9.2 Leakage Control**

There is need for urgent action on addressing the issue of water leakages as this will go a long way in improving water supplies in Harare. According to Harare Mayor, Muchadeyi Masunda, during a public meeting organised by the ZIMCODD and its partners to engage City Council on the Water Crisis, on 15/05/13 at Ambassador Hotel, issues of leakages can be addressed by: 1) Procurement and installation of 47 pressure reducing valves (PRV) at a cost of \$2 million. This will reduce burst pipes by 50%. 2) Replacing key sections of the distribution network – about 150 km of piping at a cost of \$14 million. This will avail water to over 60 000 households in Harare. It should be noted that Harare city council has the capacity to fund the replacement and maintenance of the infrastructure and can even supply 80% of the population reliably but without PRVs in place, there will be more incidences of burst pipes.

### **9.3 Accuracy of water bills**

Manual meter readings should be replaced with a computerised system. Smart water metering system is an alternative. Manual receipting at any municipal office should be replaced with a computerised system. In that way all payments made by residents are easily captured and updated on their water accounts. The water user's accounts should be managed in a transparent manner which meets their expectations so that residents are motivated to settle their accounts. More so, the use of averaging system or estimations in the charging of bills should be abolished as it is unjust. Billing system has to be solely based on the actual readings and any dysfunctional meters should be quickly attended to. The system of combining house rates with water bills should be discouraged. There should be a separation of these costs so that water problems are addressed exclusively without undue implications on housing issues.

### **9.4 Consumer Involvement and Consultation**

A participatory budget framework should be created to allow for residents to demand service from the water provider. In addition, water committees should be created in different areas of residence which will act as the water provider's contact units with residents. These committees can also brainstorm ideas that can be forwarded for consideration to HCC.

### **9.5 Response systems to customer complaints**

A system of receiving and acting upon residents complaints should be created. This can be in the form of a customer services department that is solely created to receive complaints and channel them to respective departments and quickly give feedback to the concerned residents. There should also be a 24 hour reaction unit that is solely created to fix burst pipes in-order to address the problem of non-revenue water.

### **9.6 Transparency and accountability at HCC**

External auditors should be constantly hired so as to minimise the problem of abuse of funds that is on the increase at HCC. The tender and procurement process should not be centralised as it erodes transparency which is only achieved through the openness of the process. At some point in time, there is need for all HCC officials and councillors to have asset disclosure for the purpose of answerability on each and every asset they would have acquired in their period of tenure.

### **9.7 Other Alternative Sources of Revenue**

Instead of over-relying on cash-strapped water consumers, Harare City Council should seek alternative revenue sources, even from the government.

### **9.7.1 Use of Natural Wealth**

The city council should engage the government and take advantage of mineral deposits in the country such as diamonds, gold, platinum and other minerals. This would go a long way in settling the debts that the city council also has. There should also be engagements with private partners, as long as this does not translate to managing water issues on a business model as is the current scenario. As reported by the Harare Mayor (during a media conference at Ambassador Hotel on 15-05-13), the city currently runs 32 primary schools, two hospitals and 12 polytechnics. Moreover, the HCC has got five farms with 6 000 to 7 000 cattle. These are some possible sources of revenue that should be utilised instead of just relying on residents in its revenue generation.

### **9.7.2 Need for Tax Justice**

There is need for HCC to ensure that the water rates they are charging are commensurate to the water services they provide. This is because there is a general complaint among residents that through the system of using estimations instead of actual readings in households where meters are non-functional, there is a tendency by HCC to overcharge residents. This was outlined by Joseline Manyeruke (Combined Harare Residents Association- Ward Chair) who posits that when it comes to tax issues; Zimbabwe is in need of a total system overhaul which begins with transparency as its core value. She said that as a country we can never have development unless all the systems are coherent and adhere to the standards of transparency.<sup>8</sup>

## **9.8 Transparency on the Terms of Contracts for Sourced Funding**

There is need for transparency relating to the deals of borrowing money that the HCC is making with other players such as World Bank, AfDB, GiZ, amongst others. The city council should bear in mind that taxpayers have a right to know the financial transactions carried out by the council as they are the ones who ultimately bear the brunt of every tax burden accrued in the process. CSOs should have easy access to the terms of contract in funding sourced so that the debt implications to the ordinary residents can be assessed. Such a system would be a possible remedy to the cancer of corruption that has seriously gripped HCC, to the effect that rate payers' money is continuously misappropriated and abused in unaccountable circumstances. In a way, it would also encourage responsible borrowing by the HCC since that would mean every borrowing done would have to first be justified and also accounted for. There should be a ceiling as to how much should be borrowed within any given year. The consumers should also know what they are paying for with transparency in information sharing, production of annual reports including publishing of accounts, and so on.

## **9.9 Water Disconnections**

The system of water disconnections on water defaulters should be rendered illegal. This is because of the health threats it poses on the 'third party' who would have even paid up their bills. When water supply is disconnected, it makes not only the defaulter vulnerable to diseases like typhoid and cholera but the neighbours will be affected as well. On this note, the HCC should perhaps resort to other legal measures of enforcing payment rather than water disconnections. A basic minimum free quarter supply of water to households should be guaranteed.

## **9.10 Bills for Water and Rates**

As has been raised by the residents in the course of this study, HCC has to do away with composite bills and ensure that there are separate water bills from house rates. This, as is the general consensus by CSOs, will enable the water issue to be dealt with separately from other issues for purposes of giving it full attention. A review of the Bills after the adoption of the multicurrency regime is paramount.

## **9.11 Water Browsers**

In the short term, the City of Harare must be making available water browsers in some of the areas that were hardest hit during the cholera outbreak of 2008 to early 2009 that is Budiro, Kuwadzana, Dzivarasekwa, where residents have a water reservoir that has remained dysfunctional for a very long time despite repeated promises from the municipality.

## **9.12 Ring-fencing the Water Account**

The HCC has to make sure that revenue generated from water supply is exclusively directed towards water works. This is in cognisance of the fact that the department of Water Works has the greatest contribution to the city budget. It is an injustice to use money generated from water supply in other departments whilst neglecting water infrastructure which is in an obsolete state.

---

<sup>8</sup> <http://www.zimcodd.org.zw>

### **9.13 Revise Water Legislative Framework**

The Ministry of Water Resources Development and Management should craft a water policy framework that allows local authorities to better service delivery. This is through analysing available policies and modifying them or crafting new policies. There should be harmony on existing legislations such as Environmental Management Act (EMA), ZINWA Act, Water Act and the Urban Councils Act. The Water Policy should also be urgently adopted so that the problem of water is given national recognition and the seriousness that it deserves.

### **9.14 Creation of Political Certainty**

Though this assertion may be controversial, this study has however established a close link between national politics and water service delivery at HCC. There has been a certain level of uncertainty created by GNU since 2009 which sapped the Councillors of Harare (as policy makers) of the will to make long term plans on water service delivery. The GNU did not create unity of purpose among the 46 councillors in Harare with perpetual conflict of interest, much to the detriment of effective water service delivery. The holding of national elections will mean the demise of GNU, hence new plans and new strategies under a one party led government that will hopefully address the water situation in Harare.

### **9.15 Reverse the privatisation approach to water**

Since water is a human right that should be accessible to everyone, the concept of privatisation and commoditisation of water should be discouraged at all costs. Privatised water, as a complementary measure, has tempted the city council to relax in the face of water crisis and in a way absolve itself from the responsibility of fairly distributing water to all areas of Harare. To effect this, residents should take it upon themselves to denounce the practice and capitalise on various media as a systemic agenda setting tactic until the issue becomes an institutional agenda at a national level. Silence on the part of residents is in a way the normalising of the abnormal.

### **9.16 Avoid too much interference in HCC affairs**

The central government should have some administrative control over local authorities as it were, but there should not be excessive interference that hampers operative autonomy. The major disadvantage of the Harare municipal system is that it is liable to constant political interference at the expense of efficiency, effectiveness and transparency in service provision. It must be realized that efficiency is a must, because poor performance only hurts the poor as the rich have other coping mechanisms. Also, whatever the institutional arrangement; service provision must be subjected to regulation, which is often difficult when the central government is in charge. Utilities must therefore be accountable to the people they serve and not to political interests.

### **9.17 Declare Water Crisis as a National Disaster**

All CSOs should demand that the government declare the water situation in the country a national disaster. This should prompt the international community to help. The City of Harare loses half of its water through leakages, gets 50 percent of its revenue from water but does not have a long term plan to solve the water crisis. And this issue has taken a national dimension and the government must help with strategic planning to arrest the problem. This can only be achieved if all stakeholders call with one voice for the government to treat the water crisis as a national issue to be urgently addressed.

### **9.18 Total Debt Cancellation for Residents**

There is greater need for CSOs to intervene on the debt crisis that residents are wallowed in by HCC. CSOs should engage the HCC and find a common ground for the total cancellation of all debts that the residents have accumulated. This will act as an incentive that will encourage residents to own up in the payment of their bills. The city council has announced the cancellation of 30% of utility bills but this is not enough some residents are already around US\$4 000 in debt which is way beyond their ability to pay. CSOs should be a voice of the people on this matter and should be up for this task until the HCC agrees to cancel the debts.

### **9.19 Awareness Campaigns**

The biggest mountain faced by CSOs on issues of water has been ignorance by residents, hence there is need for CSOs to conscientise residents on their right to access water as a social good rather than an economic good. The residents are not quite aware of the essence of access to water as an inalienable right that need not be trampled upon. There is greater need for CSOs to raise awareness for residents through seminars, workshops, distribution of pamphlets, internet, finding space in newspapers, radios, television and even door-to-door campaigns. A website can also be created so as to act as an interactive forum between CSOs and residents. This will enable residents to keep CSOs abreast of water crisis in their areas, as well as giving CSOs the opportunity to offer residents advice on appropriate steps to take in the face of stated water crisis. On this note, CSOs should also be up to the task of providing legal representation for residents in cases of unjust treatment over water issues from council.

There is need for residents to co-operate with CSOs. It was noted with concern that in workshops held during the period of this study there was low attendance by residents themselves during water campaigns. A case in point is campaign organised by s ZIMCODD in conjunction with CHRA which was held to commemorate International Water Day in March 2013 where just a few people attended despite the meeting attracting high profile figures such as Minister Sekai Holland. It is necessary for residents to treat all water workshops by CSOs with the respect that they deserve as such meetings are crucial for information dissemination as well as registering their concerns about the extent of water crisis in their respective areas. Without the support of residents, CSOs are unable to justify their actions, let alone their existence.

### ***9.19.1 Residents Passive Resistance***

In order to counter the day light robbery where the residents have been subjected to 'taxation without representation', there is need for spirited efforts by the residents to sabotage the 'payment for no water service' especially in areas such as Mabvuku-Tafara. This calls for community mobilisation through water taskforces to come to a common understanding and unity of purpose that come down to the passive resistance through sabotage of the whole payment process. There is surely no moral justification why residents have to bear costs of a resource they are not using at all. In areas where water is available, the quality is compromised, thus the HCC should even be held accountable for the deaths that have been a result of the contaminated water it is supplying. By refusing to pay the utility bills, it is an agenda setting tactic that is meant to attract the attention of relevant authorities at both local and national level. (Passive resistance effectively works in this environment where demonstrations have been criminalised through the promulgation of the current draconian Acts such as Public Order and Security Act (POSA)).

## **10 CONCLUSION**

This study has managed to bring to the surface the background and extent of water crisis in Harare with particular reference to the snap survey of some few selected residential areas as well as key informant interviews carried out. Major problems cited include obsolete water infrastructure, weak water legislative framework, ignored ravages of water privatisation, corruption, exclusionary water governance, among others. Key players in the water sector have also been revealed and various funded project initiatives elaborated. E-Thekwini has been drawn as a case study for comparative purposes. In search of the solution, various recommendations have been proffered, which include capacity expansion, leakage control, total debt cancellation, use of alternative sources of revenue by Harare City Council, revision of water legislative framework, among other solutions.

# Appendix A

## REGIONAL CASE STUDY: ETHEKWINI MUNICIPAL AREA

South African local authorities have shown excellence in water management. As has already been mentioned in this study, eThekweni Municipal Area (eMA) is a good example. The Harare Mayor has also reported that they are having some strategic partnerships with e-Thekwini Municipality on issues of water management. This case study therefore is given for purposes of comparative analysis with the Harare City Council so that some comparisons and contrasts can be drawn, with the view of learning something.

### Background Information on eMA Water Infrastructure

eThekweni Municipal Area (eMA) is located on the eastern seaboard of South Africa within the Province of KwaZulu-Natal and covers an area of 2 297 square kilometres. While the total area of the EMA is only 1.4% of the total area of the province, it contains just over a third of the population of KwaZulu-Natal (approximately 3.6 million people) and 60% of its economic activity<sup>9</sup>. The eMA was formed in December 2001. The boundary of the eMA increased the boundary of the previous Durban Metropolitan Area by 68% whilst increasing the population by only 9%. Some 35% of the eMA is predominantly urban in character, with over 80% of the population living in these areas. The remainder is rural in nature. Note that extensive peri-urban districts of the municipality are semi-rural in character, with low population density (in other words, the municipality extends beyond the urban area).

The eMA is characterised by diverse topography, from steep escarpments to the west to a relatively flat coastal plain in the east. Climate is humid subtropical. Flooding sometimes affects some settlements, but is not a severe problem. Industrial activity is extensive and diverse. There is significant agricultural activity within the metropolitan area, which includes low-density semi-rural districts. A significant proportion of the population lives in low-income townships, including informal settlements.

This makes it difficult to identify the exact number of households within the Municipality and numbers are estimated based on the aerial photography. A survey carried out in 2011 (EWS, 2011 page 21) identified the presence of just over 912 400 households within the EMA consisting of formal houses (54%); informal settlements including backyard shacks (34%); and rural households (12%).

### Overview of eMA Water Resources and Supply Management

Water comes mainly from dammed rivers. Bulk water is purchased from Umgeni Water and distributed to customers by EWS. EWS relies extensively on geographic information (GIS) system to record the extent and details of all water services. A water distribution network point is effectively available within 200 metres of each resident. In addition to the three water treatment plants operated by Umgeni Water, EWS operates four water works and a wastewater recycling plant which has the capacity to treat approximately 40 Ml/day of wastewater and treats it to near potable standards for industrial use.

EWS provides water to consumers via a number of different means depending on access and the type of sanitation system supplied. These include standpipes, ground tanks, semi pressure roof tanks, full pressure systems, or community ablution blocks. Free basic water was introduced in 2000 and was initially set at 200 litres per household per day (based on 25 litres per person per day for 8 person household as a WHO minimum requirement). This later became national policy from July 2001 whereby all municipalities were directed by the Department of Water Affairs to make provision for this free basic water supply.

Within EWS, the decision was taken to provide this free basic water to all consumers due to the difficulty in identifying only the poor households. Based on feedback from consumer forums, this free basic water allowance was increased to 300 litres/household/day in July 2008. Within the poorer communities, water supply was restricted via ground and roof tanks to this volume, while other consumers were charged based on a rising block tariff depending on the volume of water used. Further changes to this policy was made in July 2012, whereby only those properties with a rateable value of less than R 250 000 (USD 30 000) have access to free basic water, with all other households being charged on the rising block tariff.

A survey of households carried out in 2011 (EWS, 2011 page 31) identified that 65% had access to water via a standard water connection; 23% access via a standpipe or community ablution block; 5% access via ground tanks; and that there is an 8% backlog in water provision. Of these households, 37% are provided with free basic water of up to 9kl/month.

---

<sup>9</sup> <http://www.iwawaterwiki.org/xwiki/bin/view/Articles/14%29+DURBAN+THEKWINI>.



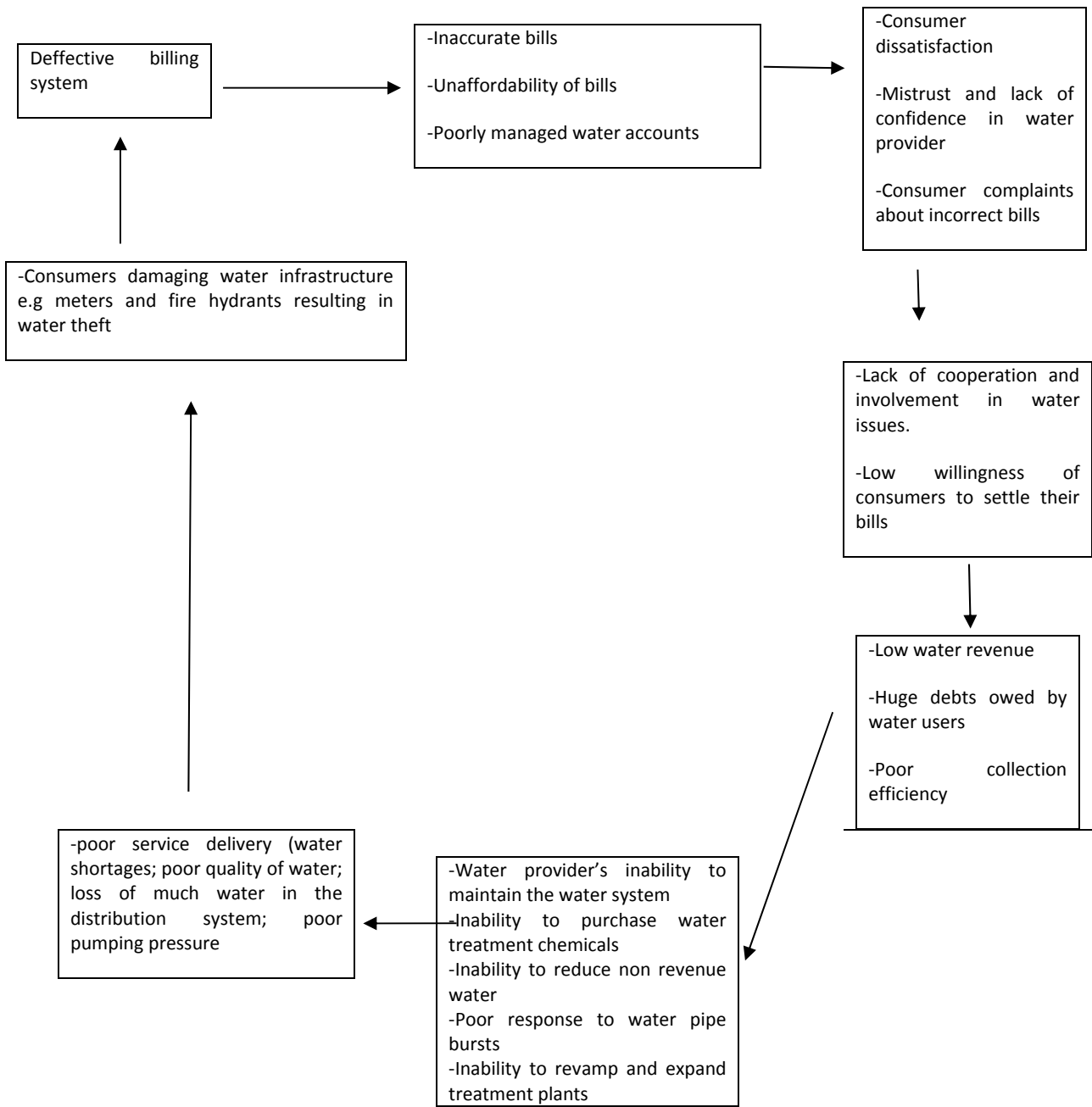
## 10APPENDIX B:

**Table 1: Roles Played by International Organisations in Water Supply (Before, During and After Cholera Outbreak) in Zimbabwe**

Organisation	Roles played	Impacts
<b>United Nations Children Education Fund (UNICEF)</b>	<ul style="list-style-type: none"> <li>Sunk more than 200 boreholes in different areas in Harare that had no running water for a long period of time.</li> <li>Provision of safe water through water trucking to different communities since 2007 to supplement water supplies in Harare. More than 500 000 litres of water were delivered to different communities in Zimbabwe. In addition made available water treatment tablets to various communities.</li> <li>Rehabilitation of water supply and sanitation system in urban cities, small towns and growth points, and enhancing the capacity of urban and rural councils in the operation and maintenance of the water works.</li> <li>Distribution of non-food items and borehole rehabilitation in 20 high risk districts.</li> <li>Supporting safe water and sanitation facilities in rural schools through distribution of 5 300 hygiene kits in Zimbabwe's primary schools.</li> </ul>	<ul style="list-style-type: none"> <li>The cholera epidemic was successfully contained.</li> <li>There was improvement of water supply in various suburbs.</li> <li>Sanitation facilities also improved.</li> </ul>
<b>International Committee of the Red Cross</b>	<ul style="list-style-type: none"> <li>From November 2007, ICRC started collaborating with ZINWA (then managing water supply in Harare) in the rehabilitation of Morton Jaffrey treatment plant. It has donated essential water pumps, testing equipment and tools. In addition, ICRC offers technical assistance and expertise to the maintenance workshop serving the plant and the central water distribution system. 6 truck loads of supplies were donated containing essential dosing and transfer pumps, laboratory equipment, steel and plastic pipes, etc</li> <li>Co-ordinating its activities with the Zimbabwe Red Cross, International Federation of Red Cross and Red Crescent Societies and emergency response units of national red cross, the ICRC supported the health authorities societies which assisted people affected in different parts of the country during the cholera outbreak. It has also distributed drugs and medical materials to 8 poly-clinics in congested suburbs of Harare.</li> </ul>	<ul style="list-style-type: none"> <li>The epidemic was contained.</li> <li>There was improvement in the quantity of water supplies.</li> <li>Improvement in the quality of water was also experienced.</li> <li>Health centres were able to assist many patients as compared to the period before aid was given.</li> </ul>
<b>World Health Organisation (WHO)</b>	<ul style="list-style-type: none"> <li>Started training community cholera surveillance teams in 2009 which will assist in early detection and response to the cholera epidemic in case of another attack</li> </ul>	<ul style="list-style-type: none"> <li>Locals are benefiting from the program which is useful in case of another outbreak.</li> </ul>

Sources: UNICEF (2010).

**Figure 1: Vicious Cycle of Poor Water Billing and Service Delivery in Harare City Council**



# BIBLIOGRAPHY

## Books:

- Greenberg, S. (2006), *The State, Privatisation and the Public Sector in South Africa*, SAPSN/ZIMCODD, Cape Town
- Harvey, E. (2005), 'Managing the Poor by Remote Control: Johannesburg Experiments wit Pre-paid Water Meters' in McDonald, D. and Ruiters, G. (eds) *The Age of Commodity: Water Privatisation in Southern Africa*, Earthscan, London.
- Moyo, J. N. (1992), *Politics of The National Purse: Public Budgeting as Policy in Zimbabwe*, SAPES, Harare.
- Mubvami, T. (1997), *Urban Environments and the Governance Challenge*, University of Zimbabwe, Harare
- Nhapi, I. (2009), *The Water Situation in Harare, Zimbabwe: A policy and management problem*, *Water Policy* 11 (2009) 221-235.
- Zinyama, T. (2012), *Participatory Budgeting in Zimbabwe: Experiences and Reflections from Harare City Council*, Lambert Publishers, Germany
- B. Mbiba, 'Communal Land Rights in Zimbabwe as State Sanction and Social Control: A Narrative', *Africa: Journal of the International African Institute*, Vol. 71, No. 3 (2001), pp. 426-448.
- A. Hellum and B. Derman, 'Negotiating Water rights in the Context of a New Political and legal Landscape in Zimbabwe', F. Von Benda-Beckmann and K. Von Benda-Beckmann, and A. Griffiths (eds.) *Mobile People, Mobile Law: Expanding Legal Relations in a Contracting World* (Aldershot: Ashgate Publishing Company, 2005), pp. 181.
- Government of Zimbabwe, *Growth with Equity*, February 1981.
- Transitional National Development Plan, pp. 61-62.
- J. Mw Makumbe, *Participatory Development: The Case of Zimbabwe* (Harare: University of Zimbabwe Publications, 1996), p. 79-80.
- Government of Zimbabwe: Ministry of Rural Resources and Water Development, *Towards Integrated Water Resources Management: Water Resources Management Strategy for Zimbabwe*, 2000, p. 16: See also Government of Zimbabwe: *Water Resources and Development: (Ministry of Energy and Water Resources and Development) Functions, Objectives and Policy*, Seminar for Provincial Governors, Heads of Ministries (2 May 1984).
- Davies, Sanders, and Shaw, 'Liberalisation for Development', p. 155.
- Lan, *Guns and Rain: Guerrillas and Spirit Mediums in Zimbabwe* (James Currey, 1985).
- WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation Coverage Estimates, 1980-2000: *Access to Drinking Water Sources, Zimbabwe*, (2001). Cited in A. Nicol and S. Mtisi, 'The Politics of Water: A Southern African Example', *Sustainable Livelihoods in Southern Africa: Institutions, Governance and Policy Processes* (www.ids.ac.uk), (Institute of Development Studies: University of Sussex, Research Paper 20, Dec. 2003), pp.7-8.
- S. Dansereau, 'Between a Rock and a Hard Place: Zimbabwe's Development Impasse', H. Melber (compiler) *Zimbabwe-The Political Economy of Decline*, Discussion Paper No. 27 (Uppsala: Nordic Africa Institute, 2004), p. 9.
- B. Derman, A. Ferguson and F. Gonese, 'Decentralisation, Devolution and Development: Reflections on the Water Reform Process in Zimbabwe', *Broadening Access and Strengthening Input Systems Collaborative Research Programme (BASIS, CRSP)*, 9 August 2000.
- Institute of South Africa, 2003), p. 98. P. Alexander, 'Workers, the MDC and the 2000 Election', 27, 85 (September, 2000), pp. 385-406; and E. Masunungure, 'Travails of Opposition Politics in Zimbabwe since Independence,' in D. Harold-Barry (ed), *Zimbabwe: The Past is the Future*, pp. 147-192.
- 112 Kamete, 'The Return of the Jettisoned,' pp. 255-271.;

- C. Rakodi, Harare: Inheriting a Settler-Colonial City, Change or Continuity? (Chichester: John Wiley and Sons, 1995), 9; T. D. Gwebu, 'Urban Water Scarcity Management: Civic vs. State
- 39 S. Colquhoun, 'Present Problems Facing the Harare City Council', L. Zinyama, D. Tevera, and S. Cumming (eds.) Harare: The Growth and Problems of the City, (Harare: University of Zimbabwe Publications, 1993), pp. 35-36.
- E. Manzungu and R. Machiridza, 'An Analysis of Water Consumption and Prospects for implementing Water Demand Management at Household Level in the City of Harare, Zimbabwe', Physics and Chemistry of the Earth, 30 (2005), pp. 928-929.
- R. W. Tomlinson and P. Wurzel, 'Aspects of Site and Situation', G. K. and M. Smout (eds.) Salisbury: A Geographical Survey of the Capital of Rhodesia (London: Hodder and Stoughton, 1977), p. 10.
- N. A. G. Moyo, 'Introduction', N. A. G. Moyo (ed.) Lake Chivero: A Polluted Lake, (Harare: University of Zimbabwe Publications, 1997), p. viii. See also C. H. D. Magadza, "Water Pollution and Catchment Management in Lake Chivero, N. A. G. Moyo (ed.) Lake Chivero: A Polluted Lake, (Harare: University of Zimbabwe Publications, 1997), pp. 1-2.
- L. Sachikonye, 'Whither Zimbabwe? Crisis and Democratisation', Review of African Political Economy, Vol. 91, 2002, 13. See also A. S. Mlambo, The Economic Structural Adjustment Programme: The Case of Zimbabwe, 1990-1995 (Harare: University of Zimbabwe Publications, 1997).
- Towards Integrated Water Resources Management: Water Resources Management Strategy for Zimbabwe, 2000, p. 18.
- Pan African News Agency, 7 November 2003: 'Zimbabwe: Authorities Tighten Control on Harare Water Supply'.
- E. Manzungu and Collin Mabiza, 'Status of Water Governance in Urban Areas in Zimbabwe: Some Preliminary Observations from the City of Harare', Physics and Chemistry of the Earth 29 (2004), p. 1169.
- Masunungure, E. and Zhou, G. (2006), An Analysis of the Objectives and Effects of Privatisation on the Public Sector and the Role of the State in Zimbabwe, ZIIMCODD and SAPSN, Harare.
- Nicol, A. and S. Mtisi, 'The Politics of Water: A Southern African Example', *Sustainable Livelihoods in Southern Africa: Institutions, Governance and Policy Processes* (www.ids.ac.uk), (Institute of Development Studies: University of Sussex, Research Paper 20, Dec. 2003), pp. 1-27.

## Newspaper Articles

- The Herald: Business News, 'ZINWA Out to Tame Harare's Water Woes', 14 February 2007.
- The Herald, 11 May 2005. See also The Standard, 27 March 2005: 'Water Shortage Hits Harare Suburbs'.
- The Herald, "Water Woes a Blessing in Disguise for Chi-town Youths," 03-09-13
- The Zimbabwe Independent, 'Harare and Bulawayo: A Tale of Two Cities', 6 June 2003
- The Financial Gazette, 5 December 2005: 'Who Will Address Harare's Sorry State of Affairs?'
- Mail and Guardian (South Africa), 'Bulawayo Faces Water Crisis', 16 September 2007.
- (2004), p. 366.
- The Herald, 'Council gets US\$80 million to rehabilitate Water System.' 20 February 2013.
- The Herald, 'City owed US\$300 million.' 20 February 2013.
- The Herald, 'City spares Water Bill Defaulters.' 25 February 2013.
- The Newsday, 'HRT warns of looming health disaster.' 08 January 2013.

## Internet Sources

Inter-Press News Service (IPS): [www.ipsnews.net](http://www.ipsnews.net) Tonderai Kwidini, 'Zimbabwe: Good Intentions plus Poor Communication Equals Dry Taps', 30 December 2007.

[www.wikipedia.org/wiki/Participatory\\_budgeting](http://www.wikipedia.org/wiki/Participatory_budgeting) (accessed: 03 March 2013)

[www.sokwanele.com/thisiszimbabwe/achives/6106](http://www.sokwanele.com/thisiszimbabwe/achives/6106) (accessed: 03 March 2013)

<http://irinnews.org/Report.aspx?ReportId=87828> (accessed: 03 March 2013)

<http://ipsnews.net/news.asp?idnews49168> (accessed: 03 March 2013)

allAfrica.com, Zimbabwe: Water Woes Continue in Harare, 05-06-13

[www.newzimbabwe.com](http://www.newzimbabwe.com), Harare's Water Woes Hit Parirenyatwa, 26-02-13

## List of Interviewees:

-Mr Muchadeyi Masunda (The Mayor of Harare).

-Mrs Mapindani who is in the Engineering department from the Ministry of Water Resources Development and Management,

-Mr Sahondo, who is a Harare City Council official at Harare Water,

-Councillor Takura (for ward 20, Tafara);

-Councillor Mtiswa who also doubles as the Chairperson of the Environmental Management Committee in Harare whose core competences are on developmental issues in Harare where water management is part of its functions.

-Mr Rose (Combined Harare Residents Association representative);

-Mr Bonongwe (Community Water Alliance representative); and

-Mr E. Chiwara, who is the vice chairperson of Stakeholder Association in Mabvuku-Tafara.