

MIDLANDS STATE UNIVERSITY



FACULTY OF ARTS

DEPARTMENT OF DEVELOPMENT STUDIES

RESEARCH TOPIC

**THE ROLE PLAYED BY NON-GOVERNMENTAL ORGANISATIONS IN IMPROVING WATER AND
SANITATION IN PERI-URBAN AREAS: A CASE OF ORAP IN UMGUZA.**

BY

SAKHILE S. NDLOVU

R124168V

**DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF THE BACHELOR OF ARTS HONOURS DEGREE IN
DEVELOPMENT STUDIES DEGREE.**

JUNE 2016

Certification
RESEARCH SUPERVISION ACKNOWLEDGEMENT FORM
MIDLANDS STATE UNIVERSITY
FACULTY OF ARTS
DEPARTMENT OF DEVELOPMENT STUDIES

Name	Sakhile S. Ndlovu
REG Number	R124168V
Mode of Entry	Conventional
Supervisor	Mr T Chibanda

RESEARCH TOPIC

The role played by Non-Governmental Organisations in improving water and sanitation in peri-urban areas: A case of ORAP in Umguza.

I, the undersigned do/do not acknowledge that the above student has consulted me for supervision on his /her research project /dissertation until completion. I therefore do/do not advise the student to submit his/her work for assessment.

Signed..... Date.....

Dedication

This research is dedicated to the Ndlovu family for their unwavering support and for teaching me that even the largest task can be accomplished if it is done one step at a time.

Acknowledgements

My utmost gratitude goes to the Department of Development studies staff and lecturers especially Mr T. Chibanda, my supervisor for his patience and encouragement which aided the completion of this research.

I would also like to acknowledge the ORAP staff that assisted me to understand the concepts related to the research. They made it possible for the study to be feasible. Additional gratitude goes to the 40 respondents who responded to the questionnaires, sacrificing their time and for without their cooperation, this research could not have been done.

Most importantly I extend my appreciation to my parents Mr and Mrs Ndlovu for being there for me through thick and thin and for the financial support. I thank my siblings Nichola, Mbongeni and Ayanda for being the best family I ever had, for inspiring me and for giving me the reason to keep on. I would not have made it this far without your support love, and care. And also to all my true friends, who have always been there I appreciate you all.

Above all I thank the Almighty God for giving me strength to accomplish my research and for making all things possible for me and creating a brighter future in me.

Abstract

The study sought to examine the role of ORAP, an operational NGO in improving water and sanitation to the people of Umguza District. The objectives were to explore the water and sanitation situation in the area before the intervention of ORAP and to offer solution on how water and sanitation could be improved in peri-urban areas. Household questionnaires were administered addressing the housing conditions in which the residents lived, water supply and quality, the sanitation situation, refuse or solid disposal and the related diseases. From the targeted 40 households, 83% of the target population are not satisfied with the location of their houses as they are at the peri-urban areas and are mostly affected by the water situation. 17% of the population are satisfied with the housing conditions especially those who can afford drilling boreholes for alternative water source. 27.5% of the population depends on tap water and the majority resort to borehole water (40%) and stored water (32.5%) as alternatives. This is as a result of low water pressure and the poor quality of the water revealing that the residents perceive access to safe water as a challenge. The majority of residents are not satisfied with the sanitation situation as there are blockages and the refuse disposal situation is generally poor. The residents perceive the water related diseases as a threat the dominant being the diarrhoeal diseases. ORAP activities have managed to improve the water and sanitation situation not only in the area of study but throughout the district. Education has improved as the girl children now feel comfortable attending school due to the lavatories made available. It is therefore recommended that the water and sanitation facilities provided should be monitored to maintain the standards.

Acronyms

WASH	Water and Sanitation Hygiene
WHO	World Health Organisation
NGOs	Non-Governmental Organisations
UNICEF	United Nations Children’s Emergency Fund
UNDP	United Nations Development Programme
MDGs	Millennium Development Goals
IWSD	Institute of Water and Sanitation Development
ORAP	Organisation of Rural Associations for Progress

Table of Contents

Certification	i
Dedication	ii
Acknowledgements.....	iii
Abstract.....	iv
Acronyms.....	v
Table of Contents.....	vi
INTRODUCTION	1
BACKGROUND.....	2
Conceptual Framework.....	5
Statement of the Problem	6
Theoretical Framework.....	7
Objectives	8
Research Questions	8
Significance of the study	8
Limitations of the study.....	9
Research Methodology	9
Data Gathering Instruments	10
Sampling.....	11
Target Population	11
Sampling Method	11
LITERATURE REVIEW	12
Water and Sanitation in Sub-Saharan Africa	12
Water and Sanitation in Ukraine	13
Water and Sanitation in Zimbabwe.....	14
Ethical Considerations	19
CHAPTER 1	19

An Overview of the Water and Sanitation situation in Zimbabwe and the impact of civil society	19
Chapter Summary	19
Water and sanitation situation in Zimbabwe	19
Role of NGOs in improving Water and Sanitation in Zimbabwe.....	30
Conclusion.....	35
CHAPTER 2	37
The Impact of ORAP in improving Water and Sanitation in Umguza ward 7	37
Chapter Summary	37
Water and Sanitation situation in Umguza before ORAP operated	37
Impact of ORAP on water and sanitation in Umguza Ward 7	44
Challenges faced by ORAP in improving Water and Sanitation	50
Conclusion.....	52
CHAPTER 3	53
Enhancing the water and sanitation situation in Umguza ward 7	53
Conclusion.....	55
References	57
Appendices.....	61
Interview Questions for the community members	61
APPENDIX 2.....	64

INTRODUCTION

The Water and Sanitation sector continues to call for great attention in Zimbabwe as the situation is deteriorating and influencing all other sectors including the health sector. Access to clean water and availability of good sanitation contributes towards improving human lives and for the development of every country. Thus the study sought to examine the role played by NGOs in improving water and sanitation in peri-urban areas.

Adequate drinking water, sanitation and hygiene are all essential to ensure human health. The same is true for proper wastewater management, which is a basic requisite for water sources safety and environmental health. WHO/UNICEF (2000) indicates that solid wastes rarely poses a direct threat to health but has been a cause of concern as, it has been proven that, domestic and market refuse may attract flies, rats and dogs. Leachate from solid waste under wet conditions may pollute water sources and run into shelters.

Water and sanitation has been a concern for humanity ever since the beginning of time started living in organized communities. Inadequate water, sanitation, and hygiene are a major cause of diarrhoeal disease, causing 2.2 million deaths and 82 million Disability Adjusted Life Years (DALYs) per year (Pruss et al. 2002). The majority of this DALY burden is from diarrhoeal mortality in children under 5 years of age. Illness caused by helminths (including ascariasis, trichuriasis, hookworm, schistosomiasis and trachoma) account for an additional 5.9 million DALYs and 26,000 deaths (Pruss et al. 2002). Thus poor access to safe water has increased the mortality rate in the developing countries which has undermined development.

Enabor (1998) notes that countries suffering from water shortages, lack of access to safe water supplies and poor or non-existent sanitation are mainly to be found in the developing countries. While water and sanitation coverage in these areas was improved during the Decade, the effects were undermined by population growth and economic problems. In the

Sub-Saharan Africa, for instance, the debt burden and subsequent structural adjustment programs have drastically reduced budgets for what are still regarded as social services. As economies worsened, urbanization has increased and is aggravating the problems of already overburdened local authorities. The issue of inflation also plays a significant role in affecting the budgets in developing countries hence reducing the attention put on the water and sanitation sector.

Sitton (2000) indicates that in countries where the government is a service provider, spending on water and sanitation is an early casualty when national economies are not doing well. Operation of infrastructure has suffered first, followed by cuts in other spending. Where governments have decided to supply water and sanitation on a commercial basis and given the private sector a chance to participate, national economic problems have had less of an effect and there has been an improvement in service. In the economic environment, water and sanitation is also affected by competition from other sectors for available funding. This means that in a tight budgetary situation other sectors are often developed at the expense of water supply and sanitation. NGOs involvement has improved the water situation in peri-urban areas as they have worked with the local authorities in drilling more boreholes and in improving the sewage systems.

BACKGROUND

Upon gaining its independence, Zimbabwe inherited a well-developed urban sector and neglected the rural sector. In the first 20 years of Zimbabwe's Independence water and sanitation coverage improved. Overall water coverage increased from 32% to 56% while sanitation access increased from 28% to 55%. By 1990 urban water and sanitation services were pegged at 97% and 99% respectively a trend that declined to 60% and 40% respectively by 2008 (CSO Report: 2010). The urban water supply comes from piped water whereas the rural Zimbabweans rely on wells and boreholes which contain non-potable water that needs

to be decontaminated and some of them malfunction. Though the urban dwellers get their water supply from the piped water, it is sporadic and sometimes unclean.

Urbanization is one of the major contributing factors to water and sanitation problems in developing countries. The urbanization process was also observed in Zimbabwe where most urban centres experienced large population increases which resulted in the mushrooming of informal settlements which were however destroyed in the 'Operation Murambatsvina' (Makoni, 2001). When the country got its independence great strides were made in improving water supply and sanitation for both rural and urban areas. However increasing pressures from rapid urban growth and the economic constraints have resulted in the decline of water and sanitation (Tauya, 2009). This implies that in Zimbabwe while most centres are connected to water supply and sewer systems, it does not solve the problems of water and sanitation related diseases. Makoni (2001) propounds that although Zimbabwe made remarkable progress in providing water and sanitation services to most rural populations, not much was done to most poor peri-urban communities which live in poor health life threatening conditions. Most urban areas were meant to cater for a few people, those who had come to the cities for employment. However because of urbanization, most families came to the cities in their numbers thus overloading the water and sanitation facilities which are now failing to contain the number of people in the cities.

Urban services in Zimbabwe were built to high standards and by the late 1990s had achieved a high level of coverage. According to Luthi (2010), the implosion of the economy collapsed the public sector investment and limited external financing from 2000 has meant minimal new investments. The failure to maintain or repair an already aging infrastructure has led to severe decline in services. Lack of water flow causes frequent sewer blockages. It is also noted that trends in Zimbabwe water supply coverage 1990-2010 estimates shows limited progress in drinking water supply over the whole period and a decline in piped supply access.

The intermittent power supply to water services is a major contributing factor (UNICEF, 2010).

Therefore, in an effort to manage the country's water and sanitation system, the Zimbabwean government came up with a number of legislative measures as framework. The framework and national strategy for wastewater management is governed by several pieces of legislation that are the responsibility of different Government ministries and Agencies. The Environmental Management Act 20:27 of 2002 attempted to bring the Public Health Act and the Water Act Chapter 20:13. These regulations generally set for the basic framework for wastewater management in Zimbabwe.

According to Nhapi (2004), in terms of the Zimbabwean law in the form of Urban Councils Act, Chapter 29:15 and Regional Town and Country Planning Act Chapter 29:6, all households are compelled to have an acceptable sanitation system before an occupation certificate is issued. This has led to the high sanitation coverage in Zimbabwe urban centres. However, the challenges in maintaining wastewater infrastructure mean that water is channelled away from the households and industries but could fail to get adequate treatment before re-entering the water courses or being used for irrigation purposes.

Due to financial constraints and other competing demands, the government has failed to fully provide safe water for the people in the peri-urban areas thus NGOs have come in and complimented the works of the state by being actively involved in the water and sanitation sector through improved sanitation and hygiene education promotion campaigns. NGOs have been most known for service delivery in the country. In rural areas like Tsholotsho, Binga and Nkayi they have drilled boreholes for safe drinking water sources. This has promoted good hygiene practices amongst community members. Not only have NGOs been active in

rural areas only but in urban areas like Bulawayo and Harare and peri-urban areas like Umguza.

NGOs have held seminars and workshops whereby they educate people on the importance of good hygiene practices and access to safe drinking water. These seminars have brought about knowledge to people on the detrimental effects that poor sanitation has on the human well-being. Through these seminars, health clubs have been established that help with the monitoring of the water sources. Not only do these health clubs help with the monitoring of the water sources but they have also promoted participation of community members in the decision making of water and sanitation projects.

ORAP's intervention in providing water source facilities to the community improved the people's access to clean and safe water. Boreholes were rehabilitated, replacing worn out parts which reduced the risk of cholera outbreaks and diarrhoeal diseases. ORAP realised that without water being available to the residents at all times, no meaningful development would take place. They drilled and equipped boreholes to provide people with potable water sources. As a result people now had safe and clean water for domestic use. The burden of having to stand in long queues for hours to fetch water was lessened. With availability of boreholes near their homesteads, people no longer have to walk long distances to access water.

Conceptual Framework

Peri-urban area is defined as an area between consolidated urban and rural regions. The peri-urban groups are sometimes regarded as citizens with basic entitlements such as the right to water. Access to water supply and sanitation is generally less in peri urban areas. These generally poor groups of an area need better allocation of resources. These urban areas in the periphery are usually neglected and this may result in a national health disaster if not

addressed. Hazards can be physical, microbiological, biological or chemical agents of disease. NGOs provide support undertake the examination of the cultural social and health aspects and preferences in diverse geographical areas.

Sanitation refers to the hygienic means of improving health through the prevention of human contact with the hazards of wastes. Research and innovation by NGOs allows sanitation promotion and marketing in order to recognise the critical importance of education and behaviour change to sustainable sanitation outcomes. This creates and builds partnerships and promotes networking between stakeholders.. The conventional centralized approaches to waste management have generally failed to address the needs of communities for the collection and disposal of domestic wastewater from on-site. Access to improved water supply and sanitation is distinctly less in areas at periphery.

Therefore NGOs intervene to facilitate a rapid increase in water and sanitation investments in peri- urban areas to improve water, sanitation facilities, and hygiene practices in less developed urban areas and reduce illnesses such as diarrhoea among others.

Statement of the Problem

Peri-urban areas in Umguza District are facing severe water problems because they have not been considered a priority in water provision. The modernization theory states that inequality in welfare between country and city increases rural to urban migration and thereby expanding urbanization. Urbanization has brought the need to provide water facilities for the people. The water and sanitation issue has not only impacted on the health sector but the education sector as well. Lessons are cancelled if water is not available which affect the attendance levels of the children. Girls in the area study would hardly attend school due to the poor sanitation facilities. Water, sanitation and hygiene play a crucial role in development. Failure to provide adequate water and sanitation hinders the attainment of the Millennium

Development Goals which include universal primary education, improving health and combating malaria and other diseases.

Theoretical Framework

Concept of Sustainable Development

Sustainable Development defined by the Brundtland Commission as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The satisfaction of human needs and aspirations is the major objective of development. The essential needs of vast numbers of people in developing countries for food, clothing, shelter, jobs- are not being met and beyond their basic needs these people have legitimate aspirations for an improved quality of life. Sustainable development calls for a convergence between 3 pillars of economic, social equity and environmental protection.

“the “environment” is where we live and “development” is what we all do in attempting to improve our lot within abode. The two are inseparable.” The concept insists upon the environment being something beyond physicality. The key concept of sustainable development is the concept of “needs”. Thus the theory is relevant to the study in that water is treated as a basic need in human lives. According to WHO (2010), every human being needs about 15 litres of water per day for use and consumption. It is important for people to have access to water at all time to full fill their basic needs.

The theory also emphasises on environmental protection which is relevant to the study as the environment is considered as a water source itself. To improve the water sources, it is necessary to protect the environment from being polluted. Not only does a contaminated environment affect people’s water sources, availability and access but it also affects the people’s economic activities exposing them to poverty. Thus there is need for environmental protection in Umguza to maintain their water sources.

Objectives

1. To explore the water and sanitation situation in Umguza ward 7 before the intervention ORAP.
2. To examine state intervention on water and sanitation in peri-urban areas in Zimbabwe.
3. To offer solution on how water and sanitation could be improved in peri-urban areas.

Research Questions

1. What was the water and sanitation situation like in Umguza ward 7 before the intervention of ORAP?
2. What is the extent of state intervention on water and sanitation in peri-urban areas in Zimbabwe?
3. What is the solution on how water and sanitation could be improved in peri-urban areas?

Significance of the study

This research was motivated by the desire to explore the relevance of water and sanitation to development as it has been included in the Millennium Development Goals. Goal 7 seeks to reduce by half the water and sanitation in the world by the year 2015. Thus research on the efforts by the Government and NGOs to improve the water and sanitation situation in urban and rural areas has been carried out. NGOs have been actively involved in the service provision of the water and sanitation but not much research has been carried out in this regard. Research was conducted in Umguza ward 7 as the area has experienced severe water problems mainly because it is at the periphery of the urban areas. The research therefore sought to offer solutions on how water and sanitation could be improved in peri-urban areas. Findings aided further research on the water and sanitation situation by other researchers. The

study has served as a guide to Governments and NGOs on what policies to implement to improve water and sanitation in peri-urban areas.

Limitations of the study

The researcher encountered limitations of financial constraints in terms of transportation to the area of research. Some respondents were not willing to give out information as they wanted financial benefits to give out their information. However, despite the challenges encountered, the study was conducted.

Research Methodology

Qualitative research approach was used in data gathering as these allow for the obtaining of the needed information easily. According to Mounton J. (1996), qualitative research aims at gaining the subject's first-hand experience using flexible methods such as interviews and questioners. The researcher acted as the research instrument thus the research was built from the ground upwards. This triangulation helped in assessing the necessary concepts related to the study and in bringing an understanding of what was on the ground basing on the residents and the ORAP staff. Qualitative data analysis validates the data because it consults participants to verify data and provide feedback. It makes references to data extracted as it is without any alterations. This helped in bringing us to an understanding of a complex issue and added strength to what was already known through previous research. The researcher chose the design because it is a good source of ideas about behaviour, good opportunity for innovation, good method to study rare phenomena and it is a good method to challenge theoretical assumptions. The qualitative analyses aimed to capture the real activities that are employed by the ORAP resolve the water problems in Umguza. It is through this research method that the researcher was able to measure what has been done, with real evidence on the group, for the case of Ward 7.

Data Gathering Instruments

INTERVIEWS

Rubin and Babbie (1993) posits that the key informant approach utilizes questionnaires or interviews to obtain expert opinions from individuals presumed to have special knowledge about the population's problems and needs, as well as the current gaps in service delivery to that population. The specific instruments for data collection included interviews and field observation. White (2000) notes that open-ended questions are flexible and they enable the interviewer to explain some unclear issues even in vernacular language and it enhances flexibility that allows the researcher to get an in depth understanding of the interviewee's response and therefore develop the themes as they arise. According to Babbie (1992) open ended questions help the respondents to explore issues in greater detail without them being limited. They enabled the researcher to probe for more information thus getting the needed information. However they are sometimes complicated to answer and are time consuming. The structured personal interview with both open-ended and closed ended questions will be used for the respondents. This gave some direction to the research and gave both sides an opportunity to ask and answer questions as a face to face relationship will be created. A great deal of information was obtained because the researcher herself administered the questionnaires.

Desktop Research

This refers to the collection of secondary data from internal sources, internet surfing, libraries, government agencies and published reports. Desktop research was also used by the researcher as it enabled the researcher to acquire broader statistics and find the knowledge gap. Therefore it helped the researcher to see if more costly primary research is justified.

Sampling

According to Tochim (2006), sampling is the process of selecting units (for example people or organisations) from a population of interest so that by studying the sample one may generalize results back to the population from which they were chosen. The main purpose of sampling is to ensure that the study is feasible in terms of time, effort and cost considerations as identified by Reider and Smith (1981). With the vast population in Umguza, it is difficult to interview every household hence only a sample size of 20 households was used as a representation of the whole of Umguza. The sample size was manageable and it saved time and resources during research.

Target Population

Nachimias and Nachimias (1981) define a population as the aggregate of all cases that conform to some designated set of specifications. A target or study population, thus, consists of elements that a researcher wants to study on. Therefore, a total of 100 households in Umguza ward 7 constitute the targeted population in the study and only 40 people were used including men, women and children in the area. This study population comprises of men, women and children who are residents of the study area whose perceptions are a matter of concern in the study.

Sampling Method

Purposive sampling was used for the collection of data. Babbie (1993) defines purposive sampling as the selection of a sample on the basis of one's knowledge of the population, its elements and the nature of the research aims. Thus, it is all about one's judgment and the purpose of the study. Therefore the study area was chosen basing on the criteria that (1) the area represents different experiences that most of the peri-urban areas in Bulawayo

experience (2) the area is one of the smallest sectors in Bulawayo thus it is a workable area (3) the local authorities will accept the research.

Purposive sampling helps to identify the key informants. Key informants include, City Council Department of Water and Sanitation, Department of Waste Management and the Department of Housing. These have been selected by the researcher as she knows that these were well versed with the study area in terms of water and sanitation as they are the service deliverers.

LITERATURE REVIEW

Water and Sanitation in Sub-Saharan Africa

Luthi (2010) revealed that Water and sanitation in Sub-Saharan Africa is an extremely challenging issue. Millions of people do not have enough water to sustain their livelihoods. This has led to poverty which affects people's health, basic needs and food security. Katyal (2001) alluded that the terms of trade have been unfavourable and the export prices have since fallen thus reducing the availability of funds to spearhead the water and sanitation sector. This implies that a lot of problems have hindered the meeting of water and sanitation needs and people continue to lack access to water and sanitation.

Water scarcity has not been entirely blamed due to natural phenomena but due to exploitation of water resources and underdevelopment. This is so because governments in Sub-Saharan Africa are overburdened hence water and sanitation facilities remain dilapidated. Responsibilities in water and sanitation remain in the hands of several ministries whose efforts towards the sector must supplement each other. Luthi (2010) propounds despite these responsibilities, sanitation, in particular, has been adversely affected by the lack of

interactions between ministries. This means that the ministries' contributing factors to the most efforts towards water and sanitation improvements are not yielding much result because of coordination between the ministries in Sub-Saharan Africa. Therefore, in the cities, for instance, a small portion is covered by the ministries thereby leaving a lot of people without access to safe water and sanitation.

Luthi (2010) revealed that African governments face a lot of challenges in addressing water and sanitation issues due to lack of resources, civil wars, climate changes, global warming, for instance and a lot of other challenges have worsened the water and sanitation situation since a lot of funds have been channelled to other pressing issues and ignoring the water and sanitation sector. Nevertheless in an attempt to address the water and sanitation problems facing most African nations, scholars like Booth, 2001 notes that most African countries have embarked on a relatively firm policy of decentralization of water services, transferring certain State service responsibilities to the communes. However, it is noteworthy that this decentralization has not been backed by the increase in resources hence they still cannot meet the demands by the sector as this transfer is therefore sometimes seen as the State "jettisoning" a service it could no longer afford to provide (IWSD, 2001).

Water and Sanitation in Ukraine

Governments have faced a lot of challenges in addressing water and sanitation issues due to the prevalent civil wars, lack of resources and climate changes. Such is a case of Ukraine as the water situation still seems to be deteriorating due to the prevalent civil wars. Funds have been channelled towards the war repercussions ignoring the water sector. UNICEF (2015) stated that "after more than a year of conflict in Ukraine, up to 13 million children and adults are facing a serious water crisis, due to damaged or destroyed water lines and acute water shortages. The water problems had always been there in the country but the wars worsened the situation. The inadequate water supply significantly impacts on the health of children and

mothers. During maternity women suffer from infections and sicknesses from viruses due to poor hygiene. The poor water and hygiene conditions in Ukraine have placed a risk not only on the mothers and the newly born babies but on the wider community as well.

Water and Sanitation in Zimbabwe

The WASH sector has a proud tradition in Zimbabwe with significant investments in water storage, irrigation, urban water and sewer services and rural water and sanitation facilities and the sector is supported by key legislation including the Water Act Chapter 20:29, Public Health Act, Environmental Management Act, Rural District Councils Act and the Urban Councils Act (UNICEF 2005-2010). The government with help of NGOs has endeavoured to make strides towards rehabilitating boreholes and constructing toilets so as to deal with water and sanitation related diseases like the cholera epidemic which hit the country in years 2008 and 2009. However, despite these efforts, the water and sanitation sector remain wanting as other related diseases like heal typhoid continue to pose a threat on the health and lives of people up to date. This is so because of problems like urbanization, increasing poverty, lack of resources and the HIV and AIDS pandemic. Tetteh (2012) also point to the short comings of the traditional approaches and policies in the sanitation sector, something which emphasizes the need for increasing the use of technology in the water and sanitation sector.

In terms of the water resources, Zimbabwe is a semi-arid country heavily reliant on regular rains and has the highest per-capita water storage capacity in Southern Africa with extensive investment in large, medium and small scale dams Mapira (2011). Despite all this, the need for the fresh water is still high as the water is still useful in different ways.

The IDWSSD coincided with the period when Zimbabwe attained its independence in 1980 and inherited a well-developed urban sector and a neglected rural sector (UNICEF, 2010). This was a time when the country came into power and into possession of all that the country had, including deteriorating rural water and sanitation facilities. The country had challenges

with developing better water and sanitation facilities in the rural areas. (Parker 2005) explains that 98% of those without an improved water source live in rural areas and up to 42% of the rural population practice open defecation and that in 2008 46% of the Zimbabweans had access to improved drinking water and 30% to improved sanitation in line with the National Action Committee (NAC) inventory and council estimates.

When Zimbabwe attained its independence, the government hosted the Zimbabwe Conference on Reconstruction and Development (ZIMCORD) which aimed at identifying and prioritize development activities and also to mobilize resources (IWSD, 2001). Therefore, the water and sanitation sector was one of the activities that was targeted for improvement especially the rural areas.

According to the IWSD, (2001) before the mid1980s the water sector was fragmented and various government departments and agencies like the District Development Fund (DDF), Department of Water Development, Ministry of Home Affairs and non-governmental organizations (NGOs) were all responsible. The then Ministry of Energy and Water Resources Development (MEWRAD) with funding Norwegian Agency for development (NORAD) was tasked the production of the National Master Plan for Rural Water Supply and Sanitation (NMPRWSS). This plan was presented to the Cabinet in 1986 and was meant to be implemented through an integrated approach to sector planning, community participation, sector coordination at national and sub-national levels and through adoption of the approach's operation and maintenance system (IWSD, 2001). Therefore, the IRWSSP was launched and the National Action Committee (NAC) formed and took the responsibilities of resource co-ordination, monitoring project water and sanitation projects implementation. Makoni (2001) notes that the Committee also had the responsibility of developing guides and guidelines for implementation and that of capacity building for people to be able to engage in planning. According to Mapira (2011) a strong and well established legal framework guides the water

and sanitation sector, but enforcement is now weak and the policy environment does not reflect the current situation. He further indicates that in 2004 the Government of Zimbabwe launched the Millennium Development Goals report and raised the 1999 target for access to safe rural water supply and sanitation from 79% and 58% respectively to 100%. It further specified the goal that every household should have access to a latrine within the homestead and the potable water within 250m by 2015.

As in the International Decade Review, Zimbabwe held its own Decade Review (IWSD, 2001). Although the government had covered a lot of ground in aiming to reduce the water and sanitation challenges, a lot more needed to be done. Technology was still considered to provide the main solution but the involvement of the communities was also seen to be important to the development process. According to the NANGO (2011) operation and maintenance, sustainability of programs and meaningful involvement of the communities remained high on the agenda. Thus there was decentralization of power in which the government ceased to be the provider but the promoter of water and sanitation services, giving the institutions the responsibility to take the initiative. Cairncross(2004) postulates that water and sanitation facilities will be useless if improperly used. Therefore the ESAP launched by the government in 1991 redefined the role of the government and the Rural District Councils (RDCs) Act gave the RDCs the responsibility over development, including water and sanitation. This enabled the participation of the grassroots as they were now easily reached hence some achievement in the sector.

The Sector Review (1992) commonly known as “Vision 2000” articulated the strategy for the future development and management of water supplies and sanitation in Zimbabwe (IWSD, 2001). This decentralization capacitated the communities and gave them control over projects, finances in the water and sanitation sector. The three districts of Mberengwa, Kadoma and Nyanga were the areas in which this was made operational.

UNDP (2010) postulates that even up to date, roles and responsibilities for the water and sanitation sector are spread among several government institutions. In June 2010 the Government had agreed on sector leadership, the responsibility of key government ministries, and a coordination framework. Thus, the government has spelt out roles, responsibilities and the responsible people in the water and sanitation sector all around the country in order to make sure that all areas are covered and in an effort reduce the deteriorating water and sanitation situation in the country. Therefore, Tetteh (2012) indicates that indicates the main sector roles are subdivided amongst the following ministries:

1. The ministry of Water Resources Development and Management (MWRDM) now lead the entire water sector and the redesigned NAC, responsible for sector coordination. NAC is supported by the National Coordinating Unit (NCU) which is transferred to MWRDM. MWRDM has responsibilities for water resource management policy and development and implements using its parastatal arm, the Zimbabwe National Water Authority (ZINWA).
2. The Ministry of Health and Child Welfare (MoHCW) has the responsibility for rural sanitation, environmental health education and public health. Through its Environmental Health Directorate, it also supports the development of family wells and simple community water supplies (springs, hand-dug or hand drilled boreholes).
3. The responsibility Ministry of Local Government Rural and Urban Development (MLGRUD) is the host ministry of Zimbabwe's Rural District and Urban Councils and establishes policy and supports the planning operations of the Councils.
4. The Ministry of Transport, Communications and Infrastructure Development (MTCID) hosts the department for infrastructure development, which supervises rural infrastructure investments.

5. The Ministry of Environment houses the Environmental Management Agency with responsibility for enforcing water pollution control.
6. The District Development Fund, a technical parastatal with responsibilities for rural water supply and maintenance for many years operated under MLGRUD. DDF was subsequently transferred to MTCID and now reports to the office of the President.

Despite all these efforts by the government, the water and sanitation sector remains a challenge as the infrastructure is aging and much pressure is being exerted on it. (Mapira 2011) reports that even though urban services in Zimbabwe were built to a high standard and had achieved high levels by the 1990s, the implosion of the economy collapse, of the public sector investment and limited external financing from 2000 has meant minimal new investments in service delivery. This explains that despite all the effort, the slow progress being made in the sector is disappointing the government, donors and the needy communities. The other concerns noted by the IWDS are that many water and sanitation projects proved neither sustainable nor replaceable something which is exacerbated by the rapid population growth, and the widespread failure of the systems.

The inability of vulnerable populations to access safe water and adequate sanitation combined with the collapsed health care systems have resulted in frequent diarrhoeas and the cholera outbreak between 2008 and 2009 which has spread to 55 out of 62 districts and other neighbouring countries is a good example (Grangert,2002). This condition proved that the water and sanitation sector needed attention and that improvement of the sector would benefit more in terms of protecting other sectors in and outside the country. There are also policies brought forward but never put to work or practically implemented, like the national water and sanitation policy draft produced and submitted to Cabinet in 2004.

Ethical Considerations

Informed consent as a principle will be highly upheld. Informed consent is the procedure in which the individuals choose whether to participate in an investigation after being informed of facts that would likely to influence decision making (Nachmias and Nachmias, 1981). Respondents will be notified about the aim of the study so that they can freely and willingly take part in the study. This principle promotes voluntary participation by the respondents.

Confidentiality will also be highly upheld. This will be achieved through the exclusion of personal identities of respondents on the questionnaires. Rubin and Babbie (1993) are of the view that one of requirements of social work is to make sure that respondents do not reveal personal information about themselves. It will thus be explained to the respondents that there will be no need for their personal details for the sake of confidentiality and that the research is for academic purposes only and not any other.

CHAPTER 1

An Overview of the Water and Sanitation situation in Zimbabwe and the impact of civil society.

Chapter Summary

This chapter looks at water and sanitation indicators in brief and largely on the water and sanitation situation in Zimbabwe and the role played by NGOs in improving water and sanitation. Focus is on what the state is doing with regards to the water and sanitation situation and specific roles that NGOs have played in different areas.

Water and sanitation situation in Zimbabwe

According to Human Rights Watch 2013, Zimbabwe is among other developing countries still facing water and sanitation problems. Upon gaining its independence, Zimbabwe

inherited a well-developed urban sector and neglected the rural sector. In the first 20 years of Zimbabwe's Independence water and sanitation coverage improved. Overall water coverage increased from 32% to 56% while sanitation access increased from 28% to 55%. By 1990 urban water and sanitation services were pegged at 97% and 99% respectively a trend that declined to 60% and 40% respectively by 2008 (CSO Report: 2010). The urban water supply comes from piped water whereas the rural Zimbabweans rely on wells and boreholes which contain non-potable water that needs to be decontaminated and some of them malfunction. Though the urban dwellers get their water supply from the piped water, it is sporadic and sometimes unclean.

The 2012 Census data reflect 75% coverage in terms of household access to safe water drinking. This coverage still falls below the national and millennium goal targets. CSO Report (2010) states that the Millennium Development Goal (MDG) targets are for 89% water coverage and 72% sanitation coverage, whilst government targets aim for 100% coverage by 2015 in all subsectors, except rural sanitation 80% (CSO Report: 2010). More so, the 2012 water and sanitation figures reflect a decline in coverage compared to previous standards. For instance water coverage in 1990 was estimated at 78% in 2008 it dropped in rising to 75% by 2012. It should be noted that although the water coverage has started rising, there remains a gap in consistent provision of water services taking into account quantity and quality of services. Crisis Coalition Zimbabwe state availability and accessibility as some of the key issues for consideration in water supply which still remain compromised in the country.

In recent year Zimbabwe was put on economic sanctions which inherently affected flow of international aid to fund development project. According to Satterthwaite (2003), this affected the sectors ability to secure funds for adequate investment in the water and sanitation infrastructure. Historically water and sanitation services had never been given priority which

made the situation worse. In 2008 GoZ allocated USD17 million for the refurbishment of equipment and purchase of water chemicals, the amount fell far below the amount of USD250 million required by the Ministry of Water Resources and Infrastructural Development. Government's own estimates reflect the breakdown in public sector finance and loss of capacity for repairs, maintenance, and spares. In 2009 Morton Jeffrey Water Purification Plant in Harare, often run out due to shortages of foreign currency to import water purification chemicals (The Herald, 2009). Along with an old and crumbling infrastructure that is inadequate for the population of Harare.

The government with help of NGOs has endeavoured to make strides towards rehabilitating boreholes and constructing toilets so as to deal with water and sanitation related diseases like the cholera epidemic which hit the county in years 2008 and 2009. However, despite these efforts, the water and sanitation sector remain wanting as other related diseases like heal typhoid continue to pose a threat on the health and lives of people up to date. This is so because of problems like urbanization, increasing poverty, lack of resources and the HIV and AIDS pandemic. Tetteh (2012) also point to the short comings of the traditional approaches and policies in the sanitation sector, something which emphasizes the need for increasing the use of technology in the water and sanitation sector.

Zimbabwe's deteriorating water and sanitation situation is exacerbated by the increase in urbanization. Focus on development has been on the urban communities neglecting the rural communities which have seen the internal migration of people from rural to urban areas. Most people have moved to urban areas to seek better living conditions and this has strained the already limited resources. This has also necessitated the increase in acute water supply problems. According to Chagonda 2010, most cities and towns in Zimbabwe are increasingly failing to provide adequate and safe domestic water to their residents with such water supply problems more acute in newly established suburbs.

Makoni (2001) notes that the urbanization process was also observed in Zimbabwe where most urban centres experienced large population increases which resulted in the mushrooming of informal settlements. These were however destroyed in the 'Operation Murambatsvina'. When the country got its independence great strides were made in improving water supply and sanitation for both rural and urban areas. However, Tauya (2009) postulates that increasing pressures from rapid urban growth and the economic constraints have resulted in the decline of water and sanitation. This implies that in Zimbabwe while most centres are connected to water supply and sewer systems, it does not solve the problems of water and sanitation related diseases.

Makoni (2001) propounds that although Zimbabwe made remarkable progress in providing water and sanitation services to most rural populations, not much was done to most poor peri-urban communities in Umguza District which live in poor health life threatening conditions. Most urban areas were meant to cater for a few people, those who had come to the cities for employment. However because of urbanization, most families came to the cities in their numbers thus overloading the water and sanitation facilities which are now failing to contain the number of people in the cities.

Urban services in Zimbabwe were built to high standards and by the late 1990s had achieved a high level of coverage. According to Luthi (2010), the implosion of the economy collapsed the public sector investment and limited external financing from 2000 has meant minimal new investments. The failure to maintain or repair an already aging infrastructure has led to severe decline in services. For instance, according to Human Rights Watch (2013), Harare infrastructure piped water was developed before Zimbabwe's independence with a population of about 600 000 and now over two million yet there are no renovations that have been made. It is also noted that trends in Zimbabwe water supply coverage 1990-2010 estimates shows limited progress in drinking water supply over the whole period and a decline in piped supply

access. The intermittent power supply to water services is a major contributing factor (UNICEF, 2010).

Rural water and sanitation has not been spared of the stagnation and deterioration in services. Rural capital subsidies have dried, and only a few new facilities have been built. Meanwhile rural water and sanitation is characterised by aging superstructures and full latrine pits. Many rural boreholes and wells—the mainstay of the rural water infrastructure—are reported in a mal- functional status. Most rural households cannot afford costs that come with renovations hence reverting to use of unprotected water sources and open defecation. The 2010 Multiple Indicator Cluster Survey study estimates that 42% of the rural population as still practicing open defecation. The JMP reports that 98 % of those without an improved drinking water source are in rural areas. All this reflecting poor water and sanitation condition in rural areas.

The lack of water flow has caused frequent sewer blockages which have posed a threat to the health of residents. As a result of densification, many households had to share the use of the same infrastructure exerting pressure on the already deteriorating facilities leading to continued blockages and sewer bursts. Water treatment plants are dysfunctional and do not have the power to consistently pump the water. According to UNICEF (2008), over 60% of the rural water supply infrastructure in Zimbabwe is in a state of despair and as a result, many boreholes and wells contain non potable water and are in need of decontamination. Even in the urban areas the situation is similar as the water supply is sporadic and unsafe.

The unmaintained water pipes and leaks in water and sewage system mean that the flowing tap water can be mixed with sewage. A great many water treatment plants are dysfunctional, do not have the power to pump consistently or lack chemicals. Intermittent power supply to water services is also a major contributing factor. Old, unmaintained pipes and leaks in both the water and sewage system mean that tap water that does flow can be mixed with sewage.

Zimbabwe has two different sets of targets for the water and sanitation sector. These are the millennium development and national targets. Recent data reflect Zimbabwe as lagging in meeting any one of the set targets. Without recovery of the water and sanitation sector, Zimbabweans will face further cholera outbreaks, more deaths, illnesses, continuing poverty, and negative impacts on livelihoods, industry, tourism, food production and agriculture, pollution of rivers and water courses. This essentially translates to more hardship, particularly for women and children (Human Rights Watch 2013).

Thus the Zimbabwean government came up with a number of legislative measures as framework for the management of the country's water and sanitation system, for example the Water Act of 1998 and ZINWA Act of 2000. The parastatal board is responsible for the supply and management of domestic water and the authorities have a mandate to deliver water and sanitation services. ZINWA took over the responsibility to supply water services in urban areas. Water and sanitation facilities are supported by the key legislation which includes, the Water Act Chapter 20:29, Public Health Act, Environmental Management Act, Rural District Councils Act and the Urban Councils Act.

The Water Act Chapter 20:25 reformed the water sector to ensure equitable distribution of water and stakeholder involvement in the management of water resources. This enabled public ownership of water and water is no longer privately owned in the country. Water is now treated as an economic good and the "user pays" principle applies. Water is made available to every resident as it is a need and people pay to the Council for the use of water. In a bid to get the residents to maintain the water sources, water pollution has been recognised as an offence and the "polluter pays" principle applies. According to Sachchidananda (1999), the polluter pays principle is an economic principle which is accepted as a means of paying for the pollution of water by individuals.

The body that is set up to deal with the provision of water that is the ZINWA Act led to the establishment of ZINWA which was responsible for water planning and supply. Its mandate was to plan and manage water resources in the country. It was also responsible for the management of water permit system, operationalization of water pricing, operating and maintaining existing infrastructure and executing development projects. It was mainly responsible for the supply and management of domestic water in urban areas. It operated on a commercial and self-financing basis, where it provided its services at a significant fee to generate the revenue it needs to finance its administrative and water supply functions.

The Urgent Water Supply and Sanitation Rehabilitation Project supporting Harare, Chitungwiza, Mutare, Masvingo, Kwekwe and Chegutu (serving an estimated population of 4.15million) was approved on 07 April 2011 for an amount of USD 29.651 million to be financed through the Zim-Fund. The project aims to provide support for further restoration and stabilisation of water supply and sanitation services in the six urban areas. Other ongoing projects include the AWF supported Chitungwiza Water Supply and Sanitation Rehabilitation Project (Euro 2 million). The project is aimed at (a) stabilising the deterioration in the provision of water and sanitation services in the Municipality of Chitungwiza and (b) enhancing institutional capacity for efficient and sustainable operation and management of the water supply and sanitation services. This country profile was prepared by the Water and Sanitation Department (OWAS) of the African Development Bank. (The African Development Bank in Action 2012)

Despite all these efforts by the government, the water and sanitation sector remains a challenge as the infrastructure is aging and much pressure is being exerted on it. (Mapira 2011) reports that even though urban services in Zimbabwe were built to a high standard and had achieved high levels by the 1990s, the implosion of the economy collapse, of the public sector investment and limited external financing from 2000 has meant minimal new

investments in service delivery. This explains that despite all the effort, the slow progress being made in the sector is disappointing the government, donors and the needy communities. The other concerns noted by the IWDS are that many water and sanitation projects proved neither sustainable nor replaceable something which is exacerbated by the rapid population growth, and the widespread failure of the systems.

Erratic water supply has been seen as a violation of human rights. It promotes and perpetuates discriminatory practices against women and children as they are the ones that bear the burden of providing water for the family. The committee on Economic Social and Cultural Rights which monitors the implementation of international Covenant on Economic Social Cultural Rights (ICESCR) realised that human life is dependent upon water. Water is needed to maintain a basic standard of personal and domestic hygiene sufficient to keep one healthy. Water provision cannot be separated from two other inter-related factors that is sanitation and health. Thus water is a need in day to day lives for food production, hygiene maintenance and securing livelihoods

Several reasons have been put forward for the deteriorating status of water and sanitation services in both rural and urban areas of Zimbabwe. Among these reasons include local authorities' failure to maintain and upgrade the water and sanitation infrastructure to meet the growing demands. Lack of a comprehensive policy and government will to efficiently and effectively manage and support water and sanitation services has been blamed for the dilapidating status of water supply in the country. Other reasons for compromised service delivery include inadequate capital to support, maintain and service the sector.

The failure to improve and maintain the water and sanitation facilities in the country costed the country's health sector. Between 2008 and 2009, Zimbabwe was hit by a cholera outbreak which claimed 5000 lives including children according to World Health Organisation. . In

2008 people did not have access to safe drinking water which severely impacted the human lives and capabilities. People had no access to clean and safe water and most urban toilets have the flush system. This made it difficult to use the toilets because in most cases they are non-functional due to blocked sewer system and erratic water supply in which some people resorted to the bush system and most of them resorted to building temporary shallow pits latrines which pose a threat to the general health of residents. Though there was the rehabilitation of boreholes, people suffered from the long queues.

Open sewers and flowing sewage systems are most common in the suburbs of Harare. This is largely due to the large population there where by people are straining the already limited resources. The sewage systems do not cater for the available population resulting in frequent sewage blockages and water leakages. The inadequate system for refuse disposal has been a contributing factor to the poor sanitation in some parts of the area. Irregular garbage collection has also resulted in refuse piled up on the streets acting as a breeding ground for various types of diseases.

United Nations agencies and international NGOs drilled over 200 boreholes during the cholera epidemic for the people residing in areas around Harare so as to provide safe and clean drinking water. The boreholes may have provided needed source of potable water at the time but due to lack of maintenance, many have been contaminated. Human Rights Watch (2013) did water quality tests on the borehole water and found out that one-third of boreholes were contaminated. Lack of funding and adequate resources for the maintenance of water and sanitation facilities has resulted in the malfunctioning of these facilities.

Zimbabwe has struggled providing proper water and sanitation facilities to its citizens. The water supply quality and quantity services have been described as insufficient and poor. In the rural areas, water supply is characterised by intermittent supplies and long walking

distance to the nearest water point. Lack of resources has resulted in the rural people failing to construct new toilets replacing the already full pit and Blair facilities. Thus this failure to repair and maintain the already aging infrastructure has resulted in the severe decline in the facilities. Most urban settlements have high levels of unaccounted-for water, water sources in need of repair and raw sewage outflows that enter rivers and dams which are the main sources of water supply. This has led to the water pollution of the main source of the water supply worsening the already deteriorating water situation.

Water and sanitation facilities in rural areas have deteriorated in services over the years. Only a few new facilities have been built and the rural capital subsidies have dried out. The infrastructure is aging and their latrine pits are full and the residents cannot afford to build new ones exposing them to diseases. Their boreholes and wells which are the mainstay of the rural water infrastructure are in malfunctioning conditions and as a result they have reverted to use of unprotected water sources and open defecation. This is because they cannot afford renovations and maintenance of the water sources and as a result, people still have to walk long distances in search of water sources.

The inability of vulnerable populations to access safe water and adequate sanitation combined with the collapsed health care systems have resulted in frequent diarrhoeas and the cholera outbreaks which has spread to 55 out of 62 districts and other neighbouring countries is a good example (Grangert,2002). This condition proved that the water and sanitation sector needed attention and that improvement of the sector would benefit more in terms of protecting other sectors in and outside the country. There are also policies brought forward but never put to work or practically implemented, like the national water and sanitation policy draft produced and submitted to Cabinet in 2004.

Despite being faced by all these water problems, the residents came up with some coping strategies to help them through the water crisis. Like any other specie, humans always find a way to counter a challenge. In urban areas people have resorted to recycling water at domestic level. For instance they may use the water they use for laundry to flush in the toilet or to water the garden. However though water recycling has helped water management at household level, it has exposed people to poor hygiene practices. What may have come across as a water management strategy is the leading cause to poor hygiene practices leaving the people prone to several diseases.

Communities have also come up with easily accessible alternative water sources. Most urban people rely on tap water for water supply. With the erratic water supply prevalent in the area, people have drilled wells and boreholes in their homesteads as an alternative water source. This has helped with regards of having to stay in queues for hours. However, the wells and boreholes in urban homesteads are shallow and are susceptible to sewage and other ground water contamination. Due to lack of maintenance, the boreholes have become old and mal-functional and are also contaminated due to the poor sewage system.

Limiting amount of water usage on household chores, gardening and laundry has been absorbed as another strategy to curb the water problems. People put on their clothes for longer periods before washing them so as to avoid water wastage to do their laundries. This is an indicator of poor hygiene practices and undermines good health and hygiene and such can cause skin infections and other hygiene related disease including the proliferation of parasites such as lice. People find it normal to wear dirty clothes all over again without washing them for some time which exposes them to other diseases. This may limit the water usage but it undermines the Millennium Development Goal of achieving universal health for all as it promotes poor hygiene.

Open defecation in urban areas has been seen as a way of dealing with the water and sanitation situation yet it has only promoted the poor sanitation practices amongst the residents. Findings revealed that household resort to open defecation whenever they are unable to flush their toilets due to lack of water or when their toilets are clogged and overflowing. This contaminates the unprotected dugout wells thereby posing a health hazard to the residents. In some cases they resort to the consecutive use of the toilet without flushing to save water. This exposes the people to diseases and bad odours.

Role of NGOs in improving Water and Sanitation in Zimbabwe

NGOs have been the panacea to the rising problem of water and sanitation as a result of rapid urbanization. According to UNDP Human Development Report (2002), there are over 37,000 NGOs in the world, a growth of 19.3% from 1990. Due to financial constraints, the government has in some cases failed to provide clean and safe water for its citizens both in urban and rural areas. Focus has only been in urban areas neglecting rural areas that need attention as well. However, NGOs have actively complemented the state's work in improving water and sanitation. Without water, sanitation and hygiene, it is impossible to attain sustainable development thus NGOs have played an imperative role in improving the water and sanitation situation in Zimbabwe.

NGOs activities have enhanced the living conditions of people by improving access to local water supply. World Vision Bulawayo Water and Sanitation Response Program in partnership with AusAID started up the BOWSER program in Bulawayo. The program focused on improving sewerages and water supply systems so as to address the menace of waterborne diseases which had become problematic in the country. The Zimbabwe Government's 2011-2015 National Hygiene and Sanitation Strategy was aligned to the

BOWSER program. The program's aims were to improve water access for the poor, sanitation and hygiene and improving governance to ensure the sustainability of water and sanitation systems in small and medium-sized towns.

According to the AusAID Report (2013) the first phase of BOWSER mainly focused on water, sanitation, participatory health and hygiene and infrastructure rehabilitation. Findings confirmed that the program rehabilitated sewerage pumping stations to ensure a healthy environment. Raw sewages from burst pipes would flow from the streets into residents' homes where their children frequently played. This made the children and the residents prone to waterborne diseases which was a threat to a cholera outbreak thus hindering development. They also raised sand traps that blocked the sewage pipes which reduced the sewage blockage problem. The fixed sewerage pumping stations increased access for Bulawayo residents to a functional sewerage system and a disease free environment.

The second phase of the program improved council institutional capacity, improved service delivery and increased collected revenue. Over 1 200 water leaks were repaired which reduced water losses which were costly for the council as the water was not being used by anyone. The collection systems was upgraded which increased the revenue from 16% of billed amounts in 2009-10 to over 65% in 2011-12. The program complemented the Bulawayo City Council service provision for its residents as it now able to reinvest the collection funds from water and sewage services into mainstream service delivery. It also resulted in 40% reduction in diarrhoeal diseases in all age groups, promoted trilateral engagement with South Africa and supported the establishment of the first municipal call centre in Zimbabwe.

NGOs have played an imperative role in health and hygiene promotion. They have improved the public access to the proper knowledge about safe drinking water and the water related

risks for the human health. The UNICEF Report (2015) states that globally, waterborne illnesses are a leading cause of death for children under five, killing nearly 1,000 children every day; mainly from diseases like diarrhoea, dysentery and cholera. However the child mortality rate can be reduced through the access to clean water and safe hygiene practices. The problems that come with the need to expand on the contaminated water supply and sanitation network including wells, boreholes and piped water is the reason to educate the Zimbabweans on improving personal access to safe water supply. Workshops and seminars on water problems have been held and debates on water supply and solutions needed for improvement have been given. During the workshops people are educated on how to treat water before drinking it and the simple hygiene practices of washing hands after using the toilet or washing food before eating.

More so, according to Dewar (2015), health facilities are provided to allow a state of social, physical and mental well-being of people which is supported by Abraham Maslow's hierarchy of needs. His hierarchy postulates physiological needs such as thirst and food rest as the base of a pyramid of motivation to satisfy physical needs. Safe and clean water is a need and people must have access to it at all times. The Urban Protracted Relief Programme implemented in Bubi, Hwange and Tsholotsho resulted in the formation of health clubs in the areas and 65 health clubs have been formed to date. These health clubs have promoted voluntary participation of the community members in health and hygiene promotion seminars. They have also enhanced the knowledge of people on access to safe water and clean hygiene practices. It is through the water and sanitation projects that the NGOs have partially achieved the United Nations Millennium Development Goals for improving people's health which is a step towards development.

Facilitation of service delivery is what defines NGOs role in improving the water and sanitation sector. The government has had constraints in providing water and sanitation

service for both rural and urban areas. Focus has been service delivery in urban areas neglecting the poor rural areas. However, NGOs have curbed the service delivery difference by focusing on the improvement of water and sanitation in the rural districts. The functioning NGOs in water and sanitation service delivery include Oxfam, Plan, ORAP, Water Aid and World Vision. The European Commission Urban WASH Programme's aim was to improve the lives of households in Tsholotsho urban centre mainly focusing on the water and sanitation issues. According to ORAP's annual report (2011), the programme improved access to clean and safe water for 1000 households and 2250 individuals at Tsholotsho growth point. They also improved sanitary facilities and promoted hygiene practices at Tsholotsho growth point. To improve water access, they rehabilitated boreholes which enabled people water access anytime.

Emmet (2006) notes that poor water and sanitation negatively impacts on quality education. "Every child has the right to be in a school that offers safe water, healthy sanitation and hygiene education". Not only does water affect children's health, it also affects children's academic lives. If there are water leakages and sewage blockages, children may fall sick due to water related illnesses which prevents their full ability to attend school. This thus affects the children's academic performances. The girl child is the most affected as they tend to be unwilling to attend school when the toilets are not private or clean or simply not available once they have reached puberty stage. The shortage of adequate has resulted in school abscondence.

Thus the NGOs have been gender sensitive and realised the need to construct more toilets at schools that are not only restricted to use by boys but allow girls to use them as well. A number of toilets have been constructed in schools enabling children to access proper sanitation. Not only school children are affected by poor sanitation but the teachers also. If they fall sick, classes are likely to be cancelled. Furthermore, if relatives fall sick, girls often

stay at home to care for the sick and are even less likely to attend school than boys (WHO/UNICEF, JMP, 2008). Thus the water and sanitation projects in schools have created healthy and safe environments conducive for better learning. The provision of clean and safe water at schools has met the Millennium Development Goal of universal access to education and reduced the child mortality rate.

Pick and Sirkin (2010) propounded that NGOs have addressed the “poverty cycle” through raising awareness on the importance of water and practicing clean hygiene at all times. Poverty is characterised by low levels of formal employment, poor health, low standards of education and low literacy levels. These factors impact on the “poverty cycle” where each element is both a cause and an effect. Inadequate water supply is both a cause and an effect of poverty. Unclean water and poor hygiene practices lead to outbreaks of diseases. Sickness hinders the sick people and care givers from going to work. This has resulted in people having no source of income for their sustainability while spending the little money they have on medical bills.

According to the United Nations Water Report (2009) the poorest people from Dar es Salaam, Tanzania, spend an average of 10% of their income buying water from vendors at inflated prices which implies that they spend more on water. Thus in some cases poor water and sanitation has led to people being poverty stricken. NGOs have realised the link between water and sanitation and poverty and have provided hygiene education and toilets that enable people to live in healthy environments. With the improved water and sanitation, people can go to work and earn some money to sustain themselves and the burden on the meagre income has been reduced.

More so, NGOs have acted as intermediaries in communicating community needs and advocating gender equity and participation. It is often women who suffer the most from poor

water and sanitation as they are the ones responsible for the water supply provision for their families on a day to day basis. As the main providers of water supply, with the improvement in the water and sanitation facilities, women's lives achieve greater agency. Water supplies have been rehabilitated within close proximity to the households. Therefore women spend less time collecting water for their families and spend more time pursuing their own ambitions. By helping to maintain water facilities provided, women gain stronger positions in their communities. They are involved in all stages of the projects from building to managing the schemes.

This has increased their involvement in the domestic, financial and political decision making. Women have also been spared from the humiliation of practicing open defecation and to find private places to go the toilet or having to walk long distances to isolated water points. A total of 25 boreholes were constructed in the district and toilets at schools. The project had a high level of participation and gender integration as health clubs at schools were introduced. This shows universal participation of women, men and children in the water and sanitation issues which enables them to know about the importance of clean water and good hygiene practices. The health clubs also help everyone to be involved in the maintaining of their own water sources. Thus the increase in knowledge to access safe water and elimination of poor sanitation increases human dignity and capabilities.

Conclusion

Zimbabwe's water and sanitation sector has deteriorated over the years. Focus on improving water and sanitation has been on the urban areas neglecting the peri-urban areas and the rural areas. The government has failed to fully improve the WASH sector due to financial constraints and other demands. The government has however put forward key legislative measures that support water and sanitation improvement in the country. NGOs have also come in to compliment the works of the government in improving water and sanitation. They

have often been actively involved in WASH projects in the rural areas. The government with the help of NGOs has endeavoured to make strides towards rehabilitating boreholes and constructing toilets so as to deal with water and sanitation related diseases like cholera, typhoid and diarrhoea. Thus it is necessary for the government to work with NGOs in improving the water and sanitation situation in the country because NGOs are funded for the projects which compliments the state's efforts.

CHAPTER 2

The Impact of ORAP in improving Water and Sanitation in Umguza ward

7

Chapter Summary

The chapter presents an analysis of the data collected and findings arrived at from the different interviews with the targeted sample. It focuses on the respondents' coping strategies with the water and sanitation situation before and after the intervention of ORAP Umguza Ward 7. It discusses the effects of water and sanitation situation on the health, education and economic activities of the people. Challenges faced by ORAP in their activities in Umguza are established.

Water and Sanitation situation in Umguza before ORAP operated

The water and sanitation situation has deteriorated over the years in the country. This has been mainly due to government financial constraints. The Government has normally given priority the WASH sector in the urban areas neglecting the peri-urban areas and rural areas. Most NGOs have intervened in the WASH situation concentrating on the rural areas and not much attention has been given to the peri-urban communities. This explains the poor water and sanitation situation in Umguza before ORAP intervened. Poor water supply and sanitation facilities in the area undermined efforts to end poverty and waterborne diseases in the country and to achieve the Millennium Development Goals of a healthy population. The erratic water supplies and poor sanitation facilities in Umguza were justified by its location

that it is in the peri-urban areas and the WASH projects have often focused on the urban and rural areas only.

There was the inadequate water supply for the people in the area. 27% of the population depended on tap water and the majority resorted to stored water, accessing water from the river and some had potable water sources, the borehole which some of the boreholes would produce hard water and some soft water. The hard water was not suitable for their cattle as the cattle would suffer from hard water disease. Though the hard water did not kill any people, it was not good for consumption. The low pressure on the water and its poor quality showed that the residents perceived access to safe water as a challenge. Those who did not have boreholes accessed their water from non-potable water sources. Some of the people resorted to ponds which unfortunately had already dried up during the dry seasons. Women as the water providers for the families had to travel long distances of about 2km to access the community boreholes. The long distances they had to travel to fetch water were a burden as it was an everyday routine which left the women exhausted at the end of the day

The other option they had was to scoop mud out of the ponds then wait for hours for the water to rise then they get some water. Some of the residents depended on ponds for their source of water for drinking and other household activities. It would take about an hour or two to access the water which meant that women would spend more time fetching water instead of doing other activities that could improve their livelihoods income. According to UNICEF (2008), the standard time for collecting water is between 3-30 minutes. This indicates that households would spend long hours collecting inadequate water that would not meet the families daily minimum water needs.

Some of the residents accessed their water from Umguza River. The river was contaminated by the raw sewages that flow into the river so the water was not safe for drinking. By

drinking the water, residents were risking acquiring waterborne diseases like cholera, typhoid and diarrhoea. The water was also contaminated by lead and mercury which are fatal in high doses of ingestion. Though there were no deaths reported from drinking the water from the river, doctors warned the residents that eating meat from the animals that drink from the river or using the water to cook. They said that residents faced the risk of long-term poisoning from the chemicals. With the raw sewages that flowed into the river, the water had a bad odour and was not safe for consumption. One of the residents was asked if she drank water from the river before she said that she would rather die from thirst. *“Ahh ngingazake ngiqale ngoba amanzi lawa aluhlaza, ayanuka phu, alobulembu, alamagwebu lamaphepha avela khonale edolobheni”*. This clearly indicates that people would access water from the river and use it for domestic purposes without treating it exposing themselves to diseases.

Due to intermittent water supplies in the area, some of the people resorted to rain harvesting and would hardly get a constant water supply throughout the year. This was as a result of drought and poor rainfall patterns throughout the country. This meant that people had troubles in accessing safe and adequate water for use.

Most residents were not satisfied with the water quality they collected for domestic purposes. Astonishingly, some of them did not treat the water in any way. When asked why they would not treat the water before using it one respondent said, *“I had always known that the water from the river was dirty. I am one of the people who sometimes drank from the river. Although the water was smelly, I did not think it affected my health”*. However 5% of the respondents filtered their water before use. They would use a filtering cloth which would only sieve the water of impurities but would not kill the germs. Some would use alum to treat their water which they said it affected the taste of the water. Only a few would boil their water. This indicates that the culture of boiling unhygienic water which is the safest way to

prevent waterborne diseases was not practiced by people. This automatically left the people prone to diseases like cholera, diarrhoea and typhoid.

Toilet facilities in the area are the flush system thus there is need for the availability of water at all times. The erratic water supply resulted in residents not fully using their flush toilets. Some of the residents ended up resorting to open defecation in the bushes, at the back of their houses at refuse dump sites. Open defecation in the bushes exposed the people to snake bites. The residents described the water system as appalling thus they could not use their flush toilet facilities. Their toilets require water at all times to function. With the water problems, they would use the toilet one after the other to save and limit water usage. This act of piling up faeces in the toilets could result in the outbreak of cholera.

The improper use of toilet facilities which resulted in people opting for other means and facilities for defecation led to the contamination of the environment and water sources in the area. Open defecation resulted in flies flying all over the area which led to the 2008 cholera outbreak. This caused unnecessary deaths of people not only in the area but throughout the country. The use of proper sanitation facilities prevents germs from contaminating the environment and protects the health of the people by preventing the spread of the diseases. The poor sanitation facilities worsened their safe water access problems because since some of the people would defecate behind their houses or in the bushes, those faeces would still flow into the river from which they accessed their domestic water from. Thus the people in Umguza already had the developed toilet facility system but due to water challenges, their sanitation facilities posed as a threat to their human health.

The intermittent water supply in the area resulted in the poor hygiene practices by the residents. Without water availability and access at all times, it is difficult to maintain and practice good hygiene. Normally it is advised to wash hands after using the toilet or to wash

food before eating and cooking it to reduce the spread of infections and viruses. People would try to save and limit water usage by overlooking all the hygiene practises risking disease outbreaks. With water problems in the area, diarrhoea levels had gone up as people tended to be economic with the water and would hardly follow any of the health and hygiene practices.

In attempts of limiting water usage in households, people would wear the same clothes for longer periods before washing them again. This promoted uncleanliness amongst the households and this resulted in people having skin rashes, lice and worm infections. People ended up spending more money on the medical bills instead of buying clean and safe water. Residents also ended up recycling water to save it. The water used for laundry would be used again for gardening which is not healthy for the vegetation. The grey water is not safe and is hazardous to the human health. Personal hygiene was also undermined as people would use little water for bathing or even skip bathing sometimes. It became normal to wear the same clothes more than a couple of times or to bath once in two days due to the water situation. This would result in the contraction of various diseases. Good hygiene practice is a preventative measure of reducing the spread of diseases. Thus with the erratic water supplies in the area, it promoted poor hygiene practices.

People in the area had no proper waste disposal places and would dispose their waste either on the side of the road or in the bushes. The solid waste included garbage, rubbish and dirt that accumulate in their homesteads. The municipal could not afford to collect garbage from the residences weekly as it is supposed to be and sometimes would even go for 2 months without collecting any garbage. People were not allowed to dispose their waste at sanitary landfills free of charge as the municipal claimed that land fill operations were costly. Since the municipal would not collect the garbage and rubbish, people in the area would dump their solid waste in the nearby bushes. The city council established focal points where residents would dump their garbage and they would later collect it. The designated dump sites became

a haven for breeding diseases. This polluted and contaminated the environment as the solid waste would flow into the river when it rained.

Pampers with faeces were openly disposed in the bush which resulted in massive flies in the area. Due to improper refuse disposal, residents often had diarrhoea outbreaks. The people's health was at risk as the waste contained hazardous chemicals and toxins harmful to the people and the environment. The municipal would rarely collect waste from the area mainly because the area is in the peri-urban. Not much development attention is given them and as a result improper disposition of waste has posed a threat to their environment and health. Failure by the municipal to collect the residents' garbage resulted in residents dumping waste on the side roads and in the bushes and in places close to the river which would contaminate their water source. The "polluter pays" principle which was introduced did not work in this area as people would still openly dump their waste in the bush. Thus the improper disposal of solid waste contaminated the water sources resulting in water problems in the area.

The sewage system in the area was characterised by blocked and obsolete leaking sewage pipes. This was as a result of the corrosion of old pipes. The sewage would discharge and flow into the environment. The synonymous with the area was water scarcity; heaps of uncollected refuse and burst sewer pipes. This situation raised fears of disease outbreaks and environmental degradation. The burst sewages would flow from the streets into the residents' houses. These leaking sewers and burst pipes were a serious health hazard to the residents and the children who often played outside their houses. The raw sewages were laced with toxic chemicals like lead, mercury, cyanide and chromium which flowed into the same river where people got their water risking cumulative lead and mercury poisoning when ingested.

It was said that some of the sewage leakages were deliberately caused by residents who vandalised sewers by breaking manhole lids or covers exposing the sewers to the children

who ended up throwing rocks and rags into the sewers. EMA fined the Bulawayo City Council for polluting Umguza River as the council would not attend to the burst sewers and replace these depleted pipes. *“We were exposed these burst sewer pipes and living with the uncollected heaps of refuse for so many months and this exposed us to a lot of diseases especially our children. It seems there is no solution in sight”* said one the resident in the area. Leaking sewer pipes had become a common sight in the area.

Poor water and sanitation in the area largely affected the education as it negatively impacted on the quality education of the community. Good health is needed to carry out human activities. Thus with the erratic water supply and poor sanitation facilities in the area, the residents' health was compromised. Not only did water affect children's health, it also affected children's academic lives. The water leakages and sewage blockages often resulted in children falling sick due to water related illnesses which prevented their full ability to attend school. The pass rate in the area had drastically dropped due to the water situation as most of the school pupils would always report to school late. Some of them would end up not going to school as a result of the water challenges. This affected the pupils' performance during examinations. The water situation did not only affect the pupils at schools but the teachers as well. Lessons would sometimes be cancelled as it was hazardous for the pupils and teachers well-being to be using the school sanitation facilities without running water available.

This affected both the teachers and the pupils' attitude towards education. A parent said that, *“We would not force our children to go to school because there was no water for them to bath before going to school and we could not also allow them to use the little water we fetch after queueing over night at the pond”*. The water situation affected the girl child the most. They tended to be unwilling to attend school when the toilets are not private or clean or

simply not available once they had reached puberty stage. The shortage of adequate resulted in school abscondance.

They would not attend school especially when they were on their monthly periods. Boys would attend school more than the girls would. Girls would also be expected to help their mothers to fetch water at the expense of their education.

People's economic activities were affected resulting in the increase of poverty levels in the area. In availability of water and sanitation facilities has a detrimental effect on the economic activities of the people which influences people's overall well-being. The people's cost of living in the area had increased as they had to either buy water or drill boreholes in their homesteads which were expensive. The poor water supply led to low farm yields. Irrigating crops using water from Umguza River was not recommended as the water was heavily polluted. The toxins in the river affected the quality of crops produced in the area. A farmer in the area said that, "*We found that the cabbages and lettuce grown under irrigation did not meet standards for markets as they were highly intoxicated*". Farmers had been compromised and could not produce anything for market resale.

This affected their income leading them to poverty. The people's cattle often suffered from hard water disease which would result in their death sometimes. The death of livestock in large numbers affected the people's economic activities as some of the farmers would use their cattle for ploughing. Also the river had fish which some people in the area made a living out of fishing from the river and selling the fish. However the fish found in the river were poisonous as they had lead and mercury. Thus people's economic activities were affected which exposed them to poverty as they had limited sources of income.

Impact of ORAP on water and sanitation in Umguza Ward 7

Water availability and good sanitation facilities contribute towards improving human lives and in the development of the country. The government has not been able to fully provide adequate water and good sanitation facilities due to financial constraints and other demands. Focus on development has been given priority to the urban areas. NGOs have come in to compliment the government's efforts to improve water and sanitation throughout the country. Peri-urban areas have often been left out on development issues and NGOs have tried to balance development in all the areas. Umguza's water sources, supply and availability was erratic and people often suffered from water problems. ORAP activities improved the water sources and sanitation facilities in the area and have created a healthy environment for the people. The main aim was to improve supply of clean water for domestic use, reduce distances to water points to at least 500metres, to improve water supply for human consumption to at least 15litres per person per day and making water available for irrigation purposes.

ORAP's intervention in providing water source facilities to the community has improved the people's access to clean and safe water. A total of 20 boreholes were rehabilitated, replacing worn out parts. ORAP realised that without water being available to the residents at all times, no meaningful development would take place. They drilled and equipped boreholes to provide people with potable water sources. As a result people now had safe and clean water for domestic use. The burden of having to stand in long queues for hours to fetch water was lessened. With availability of boreholes near their homesteads, they no longer had to walk long distances to access water. This however enabled women to concentrate on other activities that could help them earn income than to spend most of their time fetching water. With the water available at close proximity, people could eat healthy as they would wash their food with adequate water before eating.

The rehabilitation and drilling of boreholes in the area reduced the risks of cholera outbreaks and diarrhoeal diseases. It also reduced their risk of long-term poisoning from lead and mercury found in the water. They no longer had to access water from the ponds which had already dried up. Therefore with the improved water sources, people's right to basic water supply and access was upheld. ORAP also abstracted water from sand and they piped water from water tanks to homes. This meant that residents could access potable water from their homesteads which improved their health conditions and reduced the outbreaks of diseases. The water sources made available reduced the water costs incurred before when they had to buy water and chemicals. Treating the water themselves was quite expensive thus with the boreholes made available, they would now use their money for other household demands.

More so, ORAP reconstructed Umguza River and treated the water for the people before use. This resulted in the boosting of people's economic activities. Farmers in the area can now irrigate their crops using the water from the river without the fear of contaminating the crops. Agricultural activities have been elevated and this has improved on the household income levels. If farmers can now produce crops for the markets, they earn money to sustain their families. Poor water and sanitation has often resulted in people being poverty stricken but with the improved water sources, poverty levels have been reduced. Thus with the coming of ORAP and its activities in the area, sources on income are made available. Women no longer have to spend most of their time fetching water but they are now also involved in community project that empower them. Nutritional gardens were established which kept the women occupied and now had sources of income to earn a living and sustain their families. Respondents noted that provision of water and sanitation facilities has increased production in the area

The piping of water from water tanks to homes resulted in the full functioning of the toilet systems in the area. The flush toilet system they have requires running water at all times.

Open defecation which polluted the environment and posed as a threat to their well-being has now reduced. People now use their places of convenience and are now safe and reliable. Open defecation stripped off women of their human dignity as they had to find places of convenience in the bush. The proper sanitation facilities resulted in the reduction of the spread of diseases. It also protected the environment from contamination from the faeces which enabled them to carry out their agricultural activities. Water availability promoted good hygiene practices with the sanitation facilities. People can now flush their toilets after use without having to wait for the next person to use the toilet again and flush at once. Rehabilitation of water sources improved the hygiene and sanitation in the area.

Raw sewages were a common sight in the area but with the intervention of ORAP in improving water and sanitation in the area, all that is history. Burst pipes were replaced as they were old and were bound to burst every now and then. Water leaks were repaired which reduced the amount of water losses which were costly for the council. Leakages are no longer as serious and bad as they used to be thus making water available to the residents as there was no more water being wasted by leaking to the ground. All the old water and sewer pipes having been replaced created a whole new sewage set up in the area. This reduced the pollution levels of the Umguza River as the raw sewages would flow into the river. They would also treat the sewage before disposing it as the untreated sewages posed a health threat to the environment. Fixed sewerage pumping stations were established which increased the access for the residents to a functional sewage system. This created a disease free environment for the residents.

Good hygiene practices have been adopted in the area. ORAP normally carries hygiene practices seminars and workshops in the area. In these workshops, people are educated about home hygiene that is the practices to prevent or minimize spreading of diseases in the domestic setup, hand hygiene that is washing hands with soap and water to prevent the spread

of infectious diseases, food hygiene that is washing food before cooking and eating it and cooking food appropriately and thoroughly and body hygiene that is washing the body with adequate water to reduce illnesses and contamination of diseases.

The workshops have also improved the public access to the proper knowledge about safe drinking water, water related diseases and good hygiene practices. People have also been educated on how to treat water before drinking it or before domestic use. Thus with ORAP operating in the area, people are now aware of the dangers and health hazards that unsafe water poses. Educating people about the importance of water and sanitation has made it easier for ORAP to improve the water and sanitation situation.

In a bid to improve water and sanitation in the area, ORAP formed a total of 5 health clubs where by people would be educated on health and good hygiene practices and they disseminate the information to the rest of the community. Selected members were trained on Participatory Health and Hygiene Education who then trained the rest of the community. Through these clubs, communities meet and share knowledge on health and hygiene. These health clubs have promoted voluntary participation of the community members in health and hygiene education seminars. There is a need to monitor the water facilities after they have been put in place.

With the health clubs available monitoring has been made easier as the people monitor and preserve their own water facilities. By helping to maintain water facilities provided, women gain stronger positions in their communities. They are involved in all stages of the projects from building to managing the schemes. This has increased their involvement in the domestic, financial and political decision making. Active participation of all ages and sexes of the community members has been improved which has helped in the maintenance of the water and sanitation facilities. Waterkeyn (2010) postulates that people change behaviour if

they are approached as a group rather than as individuals, they can determine their standards of hygiene together and make informed decisions based on common understanding. The health clubs have also promoted environmental protection. They organize themselves and clear illegal dump sites which show that people have embraced new hygiene practices.

These health clubs were also introduced in primary schools where teachers were trained and educated on good hygiene practices. The teachers helped to ensure that toilet facilities were clean at all times and would disseminate the information on health and hygiene to the children. The involvement of school children in these health clubs has promoted good hygiene practices as they are educated on the importance of access to safe water and appropriate sanitation facilities and the fatal implications poor water and sanitation have on the human health. They take the knowledge home and inform their families as well which has promoted domestic hygiene.

ORAP operations in Umguza ward 7 granted school children in the area their right to education. Children can now attend their classes without their lessons being cancelled due to water scarcity. Normally classes would be cancelled if water was not available because it was not safe for the children to access sanitation facilities without water. School children would also be absent most of the times which affected their academic lives. With the water sources improved and more sanitation facilities established, school attendance rates have elevated. Pass rates have improved and the attendance rates have also elevated. Universal education has been achieved and this has boosted the literacy rate levels of the community. Thus the water and sanitation projects in schools have created healthy and safe environments conducive for better learning. The provision of clean and safe water at schools has met the Millennium Development Goal of universal access to education and reduced the child mortality rate. With the boosted literacy rate levels, this has also enhanced development in the country.

ORAP, having been gender sensitive realised the need to construct more toilets at the local schools that are not only restricted to use by boys but allow girls to use them as well. Girls would in most cases abscond from lessons especially during their monthly menstrual periods because the sanitation facilities were not friendly enough to accommodate them during that time of the month. A number of toilets have been constructed in schools enabling children to access proper sanitation. They have created healthy and accessible sanitation facilities that do not neglect the girl child. This has increased the girl child school attendance and somehow empowered them as education has been made for both sexes

Challenges faced by ORAP in improving Water and Sanitation

Challenges refer to the problems encountered by ORAP in carrying out their water and sanitation activities. The study found a lot of challenges affecting ORAP in their quest to providing potable water sources and sanitation facilities for Umguza Ward 7 community. It has been indicated that they have financial constraints that hinder their efforts in fully achieving and improving the water and sanitation facilities in the area. There is low level of investment in the sanitation sector by donors.

The organisation has experienced late disbursement of funds. This has slowed down the pace of progress and development in the WASH sector. For instance the organisation wanted to drill more boreholes in the area but due to limited financial resources, they only managed to rehabilitate and establish a few water points. Due to limited funding, their budgets are restricted and cannot improve much. Thus financial constraints and late disbursement of funds have been a challenge to ORAP in improving water and sanitation facilities in Umguza.

Among these challenges encountered, there is the issue of funding. ORAP is donor funded and therefore it depends on the finances donated to them. Bidet (2002) notes that NGOs are not profit making organisations and therefore depend on donor organisations and individuals

for financial assistance. If the donors donate little money, they have to budget to budget on that little money and make decisions on what to do with the finances. The other problem they faced is that the donor organisations would sometimes determine what their funds should be used for. This meant that their projects were mainly controlled by the donors and were told what to do with the funding. This restricted the proper utilisation of the funds as they could not plan on progress. This also resulted in the poor project planning and implementation of the water and sanitation facilities in the area.

ORAP also faced challenges with the members of the community. Some community members were unprepared during the infancy stages of the project components. It was noted that most groups were interested in the poultry projects. They did not value the importance of water and sanitation but instead they were only interested in income generating projects. People expected financial payments if they helped in maintaining their water and sanitation facilities or if they helped in clearing the garbage dumpsites to protect their environment. This became a challenge in that for ORAP to make sure water and sanitation facilities were maintained, they had to educate people on the importance of WASH and the detrimental implications it had on the people's well-being. In some cases, only a few people would show up at the WASH seminars which made it hard to educate the people about water and sanitation and convince them to work together.

The issue of cross rates has also been a major challenge to the organisation in improving water and sanitation in Umguza. Cross rates have affected the value of money. Some of the organisation donors are from outside the country and when they send their donation, they do not consider the cross rates. Once the money is converted, it would be too little for them to embark on big projects. This has also caused stagnant development as the finances would not be enough to carry on with the projects considering that workers have to be paid as well.

Conclusion

The water and sanitation situation in Umguza Ward 7 needed special attention as people often suffered from water availability. The area had limited water sources in which people had to resort to other unpotable water sources like the river, ponds, rain harvesting and stored water. Their health was at stake as their water sources were unsafe. With the coming in of ORAP in the area to improve the water and sanitation situation, there were noticeable changes that improved the water access for the people. This has promoted good hygiene practices in the area. Although ORAP was faced with several challenges in their operations, the organisation managed to effectively curb these challenges by working with available resources.

CHAPTER 3

Enhancing the water and sanitation situation in Umguza ward 7

Based on the findings of the research, the following recommendations will help improve the role of NGOs in the water and sanitation sector.

It is recommended that ORAP should regularly visit the community assess the use and maintenance of these water facilities. This can however be achieved by stakeholders involved in the provision of such facilities setting up effective monitoring and evaluation teams. These teams will help detect any problems affecting the water points and therefore solve them promptly before they deplete. This will prevent the people from resorting to their unhygienic sources of water supply if their problems are not solved.

There is need to improve water access and availability. The number of water facilities provide to the community was not enough to meet the water needs of the communities. The community members may have potable water sources now, the population out numbers the water facility and thus much time is spent accessing water. This has also resulted in some of the boreholes breaking down because the boreholes need to be renovated periodically. Thus more boreholes should be drilled and water pipes connected to households to meet the demand in water access. Committee members should also be encouraged to have routine maintenance whether the water points are broken down or still fully functioning.

Easy access to water sources and sanitation facilities is not enough. Sustainability of services is most important. The operation of ORAP in Umguza ward 7 in improving water and sanitation services placed critical remarks around the quality and sustainability of these contributions. People often fall back to practising open defecation if the toilets are not maintained well. Ensuring the sustainability of services provided require management technical skills and finance mechanisms in place at the ward.

An integrated approach between water, sanitation and hygiene is needed particularly in health centres and schools. Hygiene promotion should be upheld. Without hygiene promotion, taps and toilets will not be adequately used and health impacts will not materialize. With respect to sanitation, water pipes should be well connected to households to avoid people defecating at the back of their houses which may pollute the environment. To ensure that women and girls can equally benefit from the improvements in water and sanitation services, menstrual hygiene management should be included. Thus there is a strong need for co-operation with the health and education sectors.

Since the hygiene education has gone down well in areas where ORAP has undertaken water and sanitation activities, it should replicate its activities in other peri-urban communities as they are often side-lined in development. Focus on water and sanitation has only been on urban areas and rural areas and hardly on peri-urban areas. Poor water and sanitation largely impacts on the general human wellbeing therefore it is important to enhance the water and sanitation situation in other districts. If water and sanitation facilities are improved in other districts, it will help prevent the risk of cholera outbreaks and diarrhoeal diseases in these communities.

More so, the public should be encouraged to pay for the water they fetch from the newly established boreholes. Inadequate funds have slowed down water and sanitation projects which have resulted in limited access to water sources in Umguza. The money can be used to cover operational and maintenance costs. It can also be used for rehabilitation and establishment of more new boreholes. This would result in people having potable sources of water and easy access to them. This can be done by setting up a Water and Sanitation Development Board or have the community members sustain and manage the facilities.

NGOs should implement more of low cost technologies which communities can easily maintain using locally available materials as it would ensure sustainability. NGOs normally experience late disbursement of funds which hinders their development targets. If low costs technologies are adopted, it could cut on ORAP's water and sanitation budget. Reduced budgets allow the organisation to improve the water situation in other areas. Thus development is enhanced.

Geological surveys should be done before water point establishment to ensure that the boreholes have a greater depth and therefore yield more. This will enable use of water for productive purposes which encourage continued functionality of water points thereby ensuring sustainable impact on the community's well-being. This will also help to avoid future contamination of ground water sources.

Conclusion

NGOs have played a crucial role in complimenting the state's efforts of improving the water and sanitation in all the areas. Their role in improving water and sanitation problems has been grouped into three major key elements which are; inputs, outputs and impact. With regard to inputs, NGOs give financial, educational and technical support. They have played advocacy roles and collaborated with other institutions to promote good water and sanitation in peri-urban areas.

This research has shown that ORAP has played the input roles by constructing and rehabilitating safe water points, encouraged the use of the flush system toilets by making water available and finally conducting educational workshops on hygiene awareness. This has been acknowledged by the community members in Umguza ward 7 as they are actively involved in the Health Clubs. These Health Clubs have organised clean up campaigns to keep the community clean by dumping waste at the appropriate dump sites. Community members have been educated on the importance of safe water and good hygiene practices.

Thus the intervention of ORAP in Umguza ward 7 will go a long way in achieving the MDG in water and sanitation.

There has been improved access to water and sanitation services in the area. ORAP managed to drill more boreholes in the area and improved the water system to enable people to use their toilet facilities. These facilities have given the people easy access to water and sanitation facilities. Less time is also used in accessing the facility as compared to the time these facilities were lacking in community. This has enabled people especially women not to spend most of their time fetching water but doing something productive with their lives.

ORAP activities have positively impacted on the water and sanitation facilities by improving the well-being of the people on health, economic activities and education system. On the health, people are no longer at the risk of contracting water diseases. Good hygiene practices have been encouraged which has created a healthy environment for the people. On the economic benefit, women's standards of living have been improved. Women would spend hours fetching water which would not allow them to do any other activities, which now they can participate in income generating projects to help them earn a living. Educational pass rates have improved as children can now attend school regularly. Girl children have also been emancipated as the school environment accommodates them now. Thus NGOs have upheld the achievement of some of the MDGs.

References

- Bidet, E. (2002). 'Explaining the Third Sector in South Korea', *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol. 13, Issue 2. South Korea: Kluwer Academic.
- Booth, B. Martin, K. (2001). *Urban Health and Development: A Practical Manual for use in Developing Countries*. London, Macmillan Education.
- Cairncross, S. McCoy A. O'Neil D. and Sethi D. (2003). *Health, Environment and the Burden of Diseases: A Guidance Note*. London: Department of International Development.
- Central Statistics Office (2002), *Zimbabwe National Census*, Government Printers, Harare, Zimbabwe
- Central Statistical Office (CSO). (2009). *Preliminary Report: Technical and financial Assistance Provided by United Nations Children's Funds*. Harare, Zimbabwe.
- Clark, J. (1991). *Democratizing Development: The Role of Voluntary Organizations*. London: Earthscan Publications Ltd.
- Curtis.V and Cairncross. S. (2003) Effect of washing hands with soap on diarrhoea risk in the community: A systematic review. *Lancet Infectious diseases*. Vol 3. No.5,pp. 271-281.
- Dewar, D. M. (2015). *Essentials of Health Economics, Second Edition*. London: Jones and Bartlett.
- Drangert J.O , Okotto-Okotto J , Okotto L.G.O & Auko O (2002). Going Small When the City Grows Big, *Water International*, 27:3, 354-363.
- Emmet, B. (2006). *In the Public Interest: Health*. London

Human Rights Watch, (2013).(online). Available at <http://hrw.org>. Accessed on 26/03/2016

Institute of Water and Sanitation Development (IWSD). (2001). *Health and Epidemiology Module*. Harare, Zimbabwe.

Katyal, T. and Satake, M. (2001). *Environmental Pollution*. New Delhi: Anmol, Publications. Pvt. Ltd.

Larsson, M. (1998). *The Law of Environmental Damage, Liability and Reperation*.pg 90

Luthi, C. McConville, J & Kvarnstrom, E (2010): Community based approaches for addressing the urban sanitation challenges, *International Journal of Urban Sustainable Development*, 1:1-2, 49-63

Makoni, F.S.N. (2001). *An Assessment of water and sanitation facilities and related diseases among poor urban communities in Zimbabwe*, Qwa Qwa, School of Life Sciences

Mapira, J. (2011). *Challenges of Solid Waste Disposal and Management in the City of Masvingo, Zimbabwe*. In the *Journal of Social Development in Africa*, Vol 26 No. 2, pp67-91.

NANGO (2011) Consolidated Community Score Card Meeting Report. Harare.NANGO

ORAP Report (2012). Available at <http://www.orapzenzele.org>. Accessed 25/02/2016

Park, Sang-pil (2002) *NGOs, Government and Policy*, Arche, Seoul.

Pick, S. and Sirkin, Y. (2010). *Breaking the Poverty Cycle: The Human Basis for Sustainable Development*: Oxford

Punch, K. (1998). *Introduction to Social Research Quantitative and Qualitative Approach* London, Sage Publications.

Rubin, A. and Babbie, E. (1993) *Research Methods for Social Work*. 2nd Edition, Pacific Grove Cole Publishing Company.

Sitton, D. (2000). "Development of Limited Water Resources: Historical and Technological Aspects." Applied Research Institutes, Ben-Gurion University of the Negev. <http://www.mfa.gov.il/mfa/go.asp?MFAH0iae0>. 13 November 2002.

Tetteh K E (2012): Responding to the challenges of social health insurance in African countries, *Development Southern Africa*, 29:5, 657-680

Thomas Ward,(1992). *Development, Social Justice, and Civil Society: An Introduction to the Political Economy of NGOs*, Paragon House.

Todaro, M. P. and Smith, C. S. (2009). *Economic Development*. 10th Edition, US, Pearson Education Ltd.

Todaro, M. P. and Smith, C. S. (2012). *Economic Development*. US, Pearson Education Ltd.

UNDP (1997) *Human Development Report: Human Development to Eradicate Poverty*.

Oxford: Oxford University Press.

UNDP (2002) *Human Development Report*, Oxford University Press: New York

UNICEF (2006), *World Water Development Report; Water, a shared responsibility*. MDG Assessment Report, United Nation Retrieved 2011-08-15.

UNICEF, (2009) *Water Sanitation and hygiene*, retrieved from <http://www.unicef.org/wash/>

UNICEF (2012). *Children and Women in Zimbabwe: A Situation Analysis Update*. Harare, UNICEF.

Waterkeyn J. (2003). *Cost Effective Health Promotion: Community Health Clubs*. Abuja. 29th WEDC

Waterkeyn J.A.V. (2005) Thesis Submitted to the University of London in fulfilment of Doctor of Philosophy (London School of Hygiene and Tropical Medicine)

WHO / UNICEF (2000) Joint Monitoring Programme for Water Supply and Sanitation. 2000.

Global Water Supply and Sanitation Assessment 2000 Report. Washington: WHO/UNICEF.

WHO/UNICEF (2008), Progress in Drinking-water and Sanitation: special focus on sanitation: Joint Monitoring Report, United Nations.

WHO/UNICEF (2009), Progress in Drinking-water and Sanitation: special focus on sanitation, MDG Assessment Report, United Nations.

WHO/UNICEF (2010) Global Annual Assessment of Sanitation and Drinking Water (GLAAS), New York

World Bank (1995), Rural Development. Putting the Pieces in Place, Washington DC

www.wateraid.org (2005), "National Water Sector Assessment, Zimbabwe" wateraid,.

Retrieved 2016-03-26.

Appendices

Interview Questions for the community members

My name is Sakhile S. Ndlovu. I am a student at Midlands State University pursuing an Honours Degree in Development Studies. I am researching on the role played by ORAP in improving the water and sanitation situation in Umguza ward 7. . Please note that no names shall be used under any circumstances and all information given shall be kept as confidential as possible. Also note that this questionnaire is purely for educational purposes only. Your participation will be greatly appreciated.

Appendix 1

Section A: Socio-Demographic characteristics

- | | | | |
|---------------|------------------|---------------------------|------------------|
| 1. Sex | i. Male [] | ii. Female [] | |
| 2. Age | i. 10-20 [] | ii. 21-30 [] | iii. 31-40 [] |
| | iv. 41-50 [] | v. 50+ [] | |
| 3. Occupation | i. Farmer [] | ii. Trader [] | iii. Teacher [] |
| | iv. Nurse [] | vi. Other (specify) | |
| 4. Religion | i. Christian [] | ii. Traditional [] | iii. Other |

Section B: Water and Sanitation situation before ORAP intervened

1. How long has ORAP operated in the community
2. What was your source of drinking water supply before ORAP's intervention?
i. Borehole [] ii. Well [] iii. River [] iv. Pond [] v.
Rain harvesting [] vi. Other (specify)
3. How satisfactory was the drinking water before ORAP's intervention in terms of quality, frequency of flow and odour?

	Quality	Frequency of flow	Odour
1. Good	[]	[]	[]
2. Bad	[]	[]	[]
3. Very Bad	[]	[]	[]
4. How long did it take you to fetch water? i. 10- 20 minutes [] ii. 20- 30 minutes []
iii. Above 30(specify)
5. Did you manage to get water from the source throughout the year? i. Yes [] ii. No []
6. If No, please explain

7. How would you treat your water before drinking it ? i. Boiling [] ii. Adding alum to water [] iii. Putting the water down to settle [] iv. Filtering the water [] v. No treatment [] vi. Others (specify).....

8. Did the water have any effect on your health? i. Yes [] ii. No []

9. If yes, what were its effects on your health? (Tick all that apply)

- i. Diarrhoea [] ii. Skin rashes [] iii. Stomach aches []
- iv. Worm infection [] v. Guinea worm infection []

10. Please explain your answer above

.....

.....

11. What were the effects of education ?

- i. Lateness to school [] ii. Absenteeism from both teachers and pupils []
- iii. Teachers refuse postings to the community []
- iv. Poor performance [] v. Others (specify)

12. What were its effects on economic activities? i. Low farm yields [] ii. Collapse of business [] iii. Deformity [] iv. Poverty []

v. Other (specify)

Toilet facilities

13. Has ORAP constructed any toilet facility you in the community?

- i. Yes [] ii. No []

14. If yes, how many are they

15. Before the construction of the toilet facilities, where did you rescue yourselves?

- i. Bush [] ii. River side [] iii. Back of the house []
- iv. Rubbish dump [] v. Dig a hole and do it [] vi. Other (specify).....

Section C: Impact of ORAP on Water and Sanitation

16. What is your source of water for drinking now? i. Bore – hole [] ii. Well []

iii. Pipe-borne [] iv. Rain harvesting []

v. Others (specify)

17. To what extent has the interventions of ORAP in water and sanitation helped the community in terms of health?

- i. Reduce infant mortality [] ii. Eradicated guinea worm disease []
- iii. Prevented water and sanitation related disease [] iv. Help prevented snake bites []
- v. Others (specify).....

18. To what extent has the interventions of ORAP in water and sanitation helped the community in terms of education? i. Prevented lateness on the part of pupils

- to school [] ii. Prevented absenteeism from both teachers and students []
- iii. Teachers now accept postings to the community [] iv. Improvement in the performance of pupil []
- v. Others (specify).....

19. To what extent has the interventions of ORAP in water and sanitation helped the community in terms of economic activities? i. Improved the living standards of the people []

- ii. High productivity [] iii. Improvement in business activities []
- iv. Reduced poverty.[] v. Others (specify).....

APPENDIX 2

Interview Guide

- 1). What is the trend of the water situation in Umuza ward 7 for the past years?
- 2). How are the people coping with the water situation in the area?
- 3). To what extent did the water problems impact on the education, health and economic activities of the community members?
- 4). What can be done to improve the sanitation coverage level?
- 5). What is the state of the water and sanitation related diseases in the district?
- 6). What was your source of drinking water before ORAP's intervention?
- 7). Do people normally treat their water before use?
- 8). If so, how do people treat their water before drinking?
- 9). How relevant are the health clubs implemented in the community?
- 10). How has ORAP's intervention in the area improved the water and sanitation situation?