

**THE OPEN UNIVERSITY OF TANZANIA  
&  
SOUTHERN NEW HAMPSHIRE UNIVERSITY**

**MASTER OF SCIENCE IN COMMUNITY ECONOMIC DEVELOPMENT  
(2005)**

**EVALUATION OF MBAGALA KWANYOKA DEVELOPMENT  
TRUST  
TEMEKE MUNICIPALITY**

**KALEMERA CASTOR OSWALD**

**THE OPEN UNIVERSITY OF TANZANIA  
&  
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**“A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT FOR THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN  
COMMUNITY ECONOMIC DEVELOPMENT IN THE SOUTHERN NEW  
HAMPSHIRE UNIVERSITY AT THE OPEN UNIVERSITY OF TANZANIA”**

**2005**

**KALEMERA CASTOR OSWALD**

**SUPERVISOR (S) CERTIFICATION**

The undersigned certify that he has read the project, and found it to be in a form acceptable for review and hereby recommend for acceptance by the Southern New Hampshire University at the Open University of Tanzania a project entitled, ``*The role of community based organizations in the sustainability of water supply and services delivery* '' in partial fulfillment of the requirements of the award of Master of Science Degree in Community Economic Development to *Kalemera Castor Oswald*.

**Name: L.J. Kisoza**

**(Supervisor)**

Signature.....*L.J. Kisoza*.....

Date.....*23<sup>rd</sup> September, 2005*.....

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**DECLARATION BY THE CANDIDATE**

I, ***Kalemera Castor Oswald*** declare that this project is my own work and that it has not been submitted for a similar degree in any other University.

Signature:..........Date.....JULY 20, 2005.....

## **DEDICATION**

This work is dedicated to my beloved parents Mr. and Mrs. Oswald L. Kalemera, grand father, the late Laurent Miraji Kalemera and my grand mother, the late Veronica Laurent Kalemera who had always been encouraging me to work and study very hard.

## ABSTRACT

This research project on the role of CBOs in water supply and delivery involving ``Mbagala Kwanyoka Development Trust`` in Temeke District, Dar es Salaam City was conducted starting from September 2003 to February 2005. The main aim of the research was to determine the level of community participation in water supply services. The research results were envisaged to enhance the managerial capacity of the local CBOs in mobilizing local communities for sustainable development. Needs assessments and SWOT analysis was carried out to establish the CBO's needs priority and its capacity to address such problems. The identified immediate need was low community participation in water supply services. A community survey was conducted to assess the levels and factors affecting community participation in water supply services. A cross-sectional questionnaire survey was carried out in Mbagala Kwanyoka area; a sample size of 30 households was selected at random for interview. The survey results indicate that the majority of respondents, 73.3% were willing to pay water supply fees. But the monthly rates affordable by the community were 6,000/= - 10,000/= T.shs (50% of respondents), 1,000/= - 5,000/= T.shs (46.7% of respondents), and above 10,000/= T.shs (3.3% of respondents). On average the majority of residents could afford to pay within 5,000/= to 10,000/= T.shs. It was recommended to increase the level of community participation in terms of financial resources and labour. In order to implement the recommendation a project proposal for fund raising to support training seminars on borehole water management was developed.

## **ACKNOWLEDGEMENT**

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In particular I wish to thank the General Secretary of TEC Rev. Fr. Pius Rutechura, Executive Secretary of CARITAS Tanzania Mr. Peter Maduki and the Financial Controller of TEC Sr. Auxilia Muganyizi for their commitment and support for this programme.

I am also grateful to CED Director Michel Adjibodou, my supervisor James Kisoza and the chairperson for Mbagala Kwanyoka Development Trust Mr. Mapunda and his colleagues with whom I did much of the research work.

Special thanks are due to CED Instructors and CED staff members, my fellow CED participants and TEC staff members for their tireless cooperation and sharing during undertaking this programme.

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Finally but not least, I owe special thanks to my wife Sweetbertha, Castor K., my Son Cuthbert, Castor M., Mr. and Mrs. George Biita and family and other members of my family for their understanding and cooperation throughout my programme.

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## ACRONYMS AND ABBREVIATIONS

<b>CBO</b>	<b>Community Based Organization</b>
<b>CIP</b>	<b>Community Infrastructure Programme</b>
<b>CED</b>	<b>Community Economic Development</b>
<b>CARITAS</b>	<b>Development and Relief organization of the Catholic Church</b>
<b>CBWP</b>	<b>Community Based Water Programme</b>
<b>DAWASA</b>	<b>Dar es Salaam Water Supply Authority</b>
<b>DRA</b>	<b>Demand Responsive Approach</b>
<b>ESA</b>	<b>External Support Agencies</b>
<b>IRC</b>	<b>International References Centre</b>
<b>IDWSSD</b>	<b>International Drinking Water and Sanitation Supply Decade</b>
<b>NGOs</b>	<b>Non- Governmental Organizations</b>
<b>TDF</b>	<b>Tabata Development Fund</b>
<b>IMF</b>	<b>International Monetary Fund</b>
<b>ILO</b>	<b>International Labour Organization</b>
<b>ISW</b>	<b>International Secretariat for Water</b>
<b>ID</b>	<b>Identity</b>
<b>TEC</b>	<b>Tanzania Episcopal Conference</b>
<b>Msc</b>	<b>Master of Science</b>
<b>UCLAS</b>	<b>University College of lands and architectural Studies</b>
<b>U.S</b>	<b>United States</b>
<b>USRP</b>	<b>Urban Sector Rehabilitation Project</b>
<b>URT</b>	<b>United Republic of Tanzania</b>
<b>UNDP</b>	<b>United Nations Development Programme</b>
<b>UNICEF</b>	<b>United Nations Children Fund</b>
<b>SPSS</b>	<b>Statistical Package for Social Sciences</b>
<b>SWOT</b>	<b>Strength Weakness Opportunity and Threats</b>
<b>SNHU</b>	<b>Southern New Hampshire University</b>

<b>WHO</b>	<b>World Health Organization</b>
<b>WSSCC</b>	<b>Water Supply and Sanitation Collaborative Council</b>
<b>WB</b>	<b>World Bank</b>
<b>WG</b>	<b>Working Group</b>
<b>WATSAN</b>	<b>Water and Sanitation</b>
<b>WSP</b>	<b>Water and Sanitation Projects</b>
<b>T.shs</b>	<b>Tanzanian Shillings</b>
<b>ME</b>	<b>Male</b>
<b>KE</b>	<b>Female</b>
<b>OUT</b>	<b>Open University of Tanzania</b>



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## CHAPTER ONE

### 1.0 INTRODUCTION

#### 1.1 Community Based Organization Background

There are a few numbers of community-based organizations in Temeke Municipality. Among which is *Mbagala Kwa Nyoka Development trust*, which is found in Mbagala ward in Mbagala division.

The CED consultant approached the CBO through the Community Development Officer from Temeke Municipality. The officer is also an advisor of the CBOs in the Municipality.

One of the major reasons for selecting this particular CBO was that, the CBO wanted to expand its services to other areas within Kwanyoka location. But they wanted to carry out an assessment of the current service delivery before decision was made.

As a result of the above need the CBO leaders accepted the consultant to assist the CBO team in assessing financial ability of the new water user applicants to pay monthly water fee.

Mbagala Kwanyoka Development Trust is a Community – based organization established in June 2000 and registered in July 9<sup>th</sup> 2002 under the Trustees' Incorporation Ordinance (Cap. 375). It is located in Kwanyoka Street in Mbagala ward in Temeke Municipality.

Its functioning is guided by the Water user constitution under the leadership of the water committee and patronship of the District, ward and street leadership. It is committed to serve around 3,000 households comprising of around 10,054 people in Kwanyoka Street. Apparently about 82 households equal to 2.7% of the total households are connected to water service from the borehole.

The plan for 2004 was to connect at least 118 households to water service from the same borehole pending results of the assessment, proposal writing and availability of financial assistance. Revenue from water bills is estimated at T.shs 820,000/= per month where by each household connected to water service is required to pay for T.shs 10,000/= as a flat rate per month.

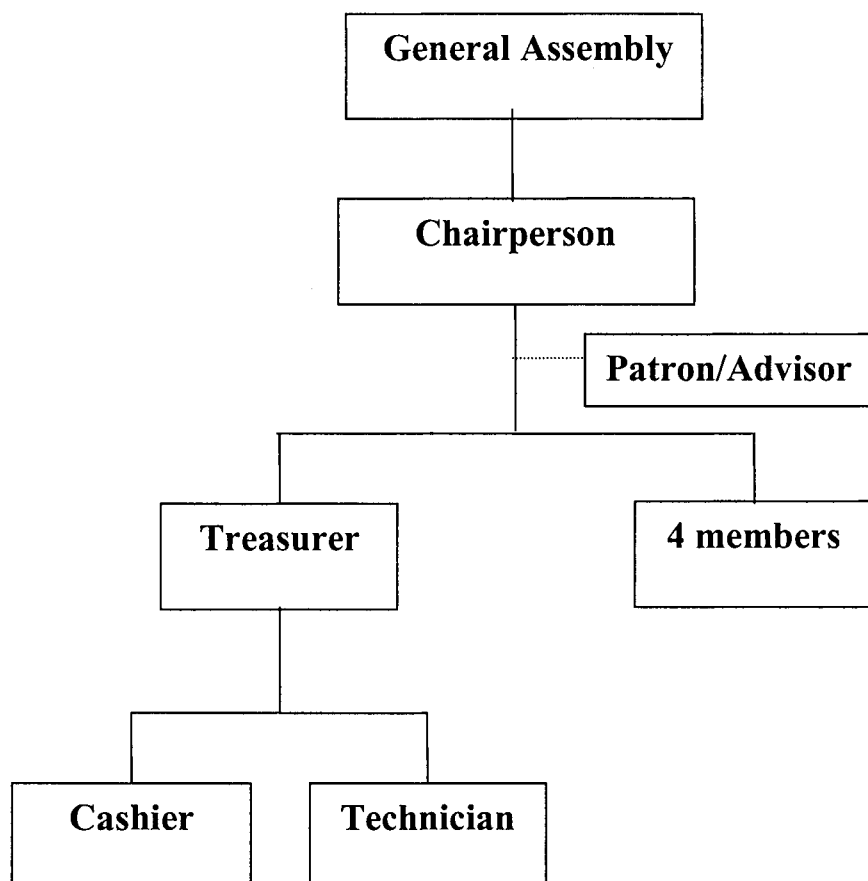
### **1.1.1 The CBO organization and administration**

Water committee is made up of eight (8) members of whom five (5) are female and three (3) are male. There are a Chairperson, Secretary, Treasurer, Cashier and other four members. Also there is a Patron/Advisor to the committee.

The committee is responsible for day-to-day operations of the water supply and service delivery. It is accountable to the General Assembly.

Leaders can hold office for conservative terms of three years each.

**Figure 1.0: The CBO Organizational Structure**



### 1.1.2 Mission statement

*“To develop adequate local capacity and cooperation in addressing development issues in Kwanyoka area through promotion of community development initiatives”.*

### 1.1.3 CBO objectives

- Provision of borehole water supply and service delivery to the households in Kwanyoka area.
- Promote community health through environmental and sanitation activities.
- Promote community participation in community development activities.

### 1.1.4 CBO programs

So far the CBO is involved in Water and Sanitation Program operating in Kwanyoka Street/location. The current program is called *Community Based Water Supply and Sanitation*. The future programs will be to improve the road access and environmental conservation following the rapid population immigration into an area.

### 1.1.5 Current CBO activities

There are several activities being conducted by the CBO such as:

- Mobilize people to buy the Water Service from the borehole.
- Connect and supply water service to new customers both domestic and public.
- Collect water bills and maintain books of accounts.
- Maintain and repair the Water pump and pipes.
- Identify new potential areas for expansion.
- Conduct monthly meetings for the CBO members.

Reporting to members and copy to patrons.

#### **1.1.6 Assignment**

The assignment given to CED consultant was a result of the initial needs assessment and focused group discussion as well as the demand from the CBO leadership.

The CBO leadership asked the CED consultant to assist them in assessing the financial ability of the new water user applicants in paying their monthly water fees. The findings would be the basis for decision-making before expansion into other areas in Kwanyoka location.

### **1.2 Overview of Water Supply in Developing Countries**

According to the United Nations report (2000), 31 countries are facing water scarcity and 1 billion people lack access to clean drinking water. Water consumption is doubling every 20 years and yet at the same time, water sources are rapidly being polluted, depleted, diverted and exploited by corporate interests ranging from industrial agriculture and manufacturing to electricity production and mining.

The World Bank (1986) predicts that by 2025, two-thirds of the world's population will suffer from lack of clean and safe drinking water.

More than 97% of all waters are in the oceans. The rest is fresh water but most of that is of little use since is locked in icecaps and glaciers (Clarke, 1991). Water is an indispensable resource for human beings. The truth of this can be verified by the fact that, new human settlements are always established after identifying the reliable source of water.

Water is essential to sustain life. It is enshrined in the right to life and dignity, as set forth in the International Bill of Human Rights (Paul, 1986). In 2002, the United Nations adopted water as a human right. This adoption commits the 145 countries that have ratified the International Covenant on Economic, Social and Cultural Rights to gradually ensure fair and non-discriminatory access to safe drinking water (Paul, 1986).

According to the World Health Organization (WHO)(Paul, 1986) an estimated 1.7 billion people lack access to clean water and 2.3 billion people suffer from water-borne diseases each year. Water-borne diseases occur due to the inability to access clean water increasingly due to pricing.

Water privatization schemes throughout the world have a track record of skyrocketing prices, water quality problems, deteriorating service and a loss of local control.



Privatization advocates argue that switching from publicly owned and operated utilities to private sector firms will lead to greater economic efficiency, stabilized rates, reduced public debt and improved budgetary management (Kakeebeke 1995).

More often than not, privatization fulfills none of these promises; instead it creates a number of new problems. Private water companies are failing to provide citizens with safe, affordable water.

According to the lease, unprofitable areas are given to non-governmental organizations' assistance. (Peter, 1990)

Deliberate efforts made to improve living conditions of people cannot ignore the supply of water resource. In developing countries, however, most drinking water is contaminated as most sewerage is left untreated. A 1975 survey by the world Health Organization (WHO), which covered 90% of developing countries, showed that 1,200 million people lacked safe drinking water (Clarke, 1991).

Water borne diseases, the main cause of ill health most of the world's population, is ever present in developing countries. According to the WHO, as many as 4 million children die every year as a result of diarrhea caused by water borne infections (Clarke 1991). This risk could be removed completely if the supply of clean water is universally available.

### **1.3 Background to the Study**

In Tanzania, less than 40% of the rural population and 70% of the urban population have access to piped water. The rest of the population must seek water from unreliable sources. Women often walk up to 15 kilometers to fetch water of poor quality. Cholera outbreaks are common (Sayi, 2000).

The prevalent under funding of Tanzania's water infrastructure due to World Bank structural adjustments left the utility in need of almost US\$600 million in order to provide water for all citizens. Lacking the backing of the World Bank the government was forced to privatize the water supply services in the capital city of Dar es Salaam.

The move was supported with a World Bank loan of US\$61.5 million designed to pass enabling legislation and prepare the water utility for privatization. Additional funding was raised from other sources, such as the European Investment Bank and Agence Française de Développement; institutions not normally engaged in Tanzania.

Tanzania is endowed with water resources though not evenly distributed. Moreover, the utilization of water resources needs advanced technology so as to reach the vast and scattered population.

From out set provision of clean water supply was one of the government priorities, for instance, policies stated explicitly in the third five-year plan 1975/6 – 1980/81. In 1981,

it was declared that by the year 2000 villages should have access to clean and dependable water within a reach of 400 meters (Peter, 1990).

The Tanzania Government's policy of providing clean drinking water was thus a logical connection to two time spaced springboards, namely, the international decade of drinking water supply and sanitation and the much earlier national mass radio, campaigns particularly those of 1973 and 1975 (Peter, 1990).

The effects of the government policy of ensuring rural access to a source of water within a radius of 400 meters of a homestead was successful to a certain level. In certain villages residents were able to organize themselves to dig water bore holes and some were lucky to benefit from the donor assisted rural borehole water supply projects.

Starting from the early 1990's, in line with liberalization policy the Ministry of Water adopted a water development policy that invites more role players namely- non-governmental organizations, semi-governmental and private agencies on the supply side and places government more and more in the regulatory and negotiating roles (Peter, 1990).

The policy emphasizes among other things, greater participation by the beneficiaries in water project planning, execution, management and maintenance.

Failure of the government to provide safe and clean water to all of the population becomes a limiting factor in human development as water shortage is heavily implicated in humanity's present plight.

It was evident that government effort were declining, almost all water projects established earlier started to collapse after a few years because of poor maintenance on the one hand, and lack of funds to cater for operational costs on the other. Another reason for the collapse of water projects is lack of a participatory approach in planning, implementation and evaluation of water projects at all levels.

Significantly, the private sector was studiously, excluded from all involvement. The approach was typical of the time that is top-down, where planning, implementation and evaluation rested on the shoulders of the central government as the sole investor, implementer and manager of water supply projects. As a result, most projects have proved to be unsustainable.

The intended beneficiaries looked upon them as Public property, and as such, they believed they had nothing to do with them. More emphasis was placed on water supplying than on water management. The sector dependency on foreign financing of development projects has had adverse effect on sustainability.

Therefore this study intends to explore the factors affecting community-based organizations in the sustainability of water supply and service delivery. The results from this study will contribute to the general body of knowledge, which may promote useful ideas in prescribing the kind of community based organizations that may promote sustainability of water supply and service delivery in Temeke Municipality and other areas with similar settings.

#### **1.4 Statement of the Problem**

Temeke Municipality is a highly populated industrial area as compared to other municipalities of Ilala and Kinondoni in Dar es Salaam City.

Industrial development and human population in the municipality is growing at increasing rate. Temeke has a population of 771,500 people with a growth rate of 4.3 of whom 382,255 are female and 389,245 are male (Census, 2002).

These activities are mounting pressure on the limited water supplies to the municipality. In 1997, there was a water crisis in Dar es Salaam. The government requested the international donor community to assist in solving the water crisis. More than 200 boreholes were drilled and these supplemented the surface water supply, by a yield of 40,000 cubic meters per day (Kyessi, 2000).

The boreholes were drilled in Ukonga, Gongo la Mboto, Kiwalani, Yombo and Mbagala areas, which had no piped water supply schemes and instead relied on shallow

wells, which were often hygienically unsafe. In 1999, Dar es Salaam Water and Sewage (DAWASA), drilled additional thirty four (34) boreholes in neighborhood that were not served reliably by `` City Water`` piped water supply system.

This is an on going project funded by the World Bank financing Urban Sector Rehabilitation Project (USRP). Out of the 34 boreholes 17 of these have been earmarked to the supply of water to proposed ``community managed water supply systems``. The scheme will operate within the boundary of the city of Dar Es Salaam and along the lower Ruvu Water transmission main (URT, 2000).

The experience to be gained in this programme will be replicated in future community based water supply and sanitation projects to be introduced in other areas. Inadequate water supply in Dar Es salaam and the 17 boreholes earmarked for ``community management`` through their registered Community Based Organizations (CBOs) has raised concern from the community members, the local authority, Non Governmental Organizations (NGOs) and Financiers.

Despite all efforts by various water suppliers in the municipality, water supply has still remained unsatisfactorily low. Today only 68.8% of Temeke residents have access to a reliable water supply service (URT, 2000). The gap is caused by the inability of municipalities and public utilities to deliver and maintain water supply services for the growing populations, on a sustainable manner.

## **1.5 Research Objectives**

The general objective of the study was to explore the factors affecting Community based Organizations in the sustainability of water supply and service delivery in Temeke municipality.

The specific objectives were to:

- (i) Determine the level of community participation in planning, implementation and evaluation of water supply and service delivery.
- (ii) Assess the factors affecting sustainability of water supply and delivery projects run by Community Based Organizations.
- (iii) Determine the skill levels on project design and management by the CBO members
- (iv) Extend technical skills to the CBO and its management in the areas of project design and management while conducting research study.

### **1.5.1 The study questions**

The study addresses the following questions:

- (i) To what extent does the community participate in planning, Implementation and evaluation of the water supply and service delivery?
- (ii) What are the issues affecting sustainability of water supply and service delivery run by Community Based Organization?

- (iii) How do skills in project design and management contribute to the performance of the Community Based Organization in water supply and service delivery?

### **1.5.2 The main assumptions**

The study made the following assumptions:

- (i) Effective planning, Implementation and evaluation of water supply and service delivery at community level depend on the degree of participation of the community concerned.
- (ii) Sustainability of water supply and service delivery depend on a number of factors affecting the water scheme concerned.
- (iii) The level of skill on project design and management has a direct bearing on the performance of the project

### **1.6 Significance of the Study**

Sustainability of water supply and service delivery and the role-played by Community Based Organizations (CBOs) in promoting community participation in carrying out such projects has increasingly been attracting researchers and development practitioners to know more about that.

In this study the researcher will explore factors affecting community-based organizations in the sustainability of water supply and delivery schemes.



The study results will be of important use to the CBO members, Temeke Municipality, Policy makers, intellectuals and other stakeholders in Tanzania and where similar applications are taking place.

## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

This chapter entails theoretical, empirical and policy reviews of various literatures used by the CED consultant. Also each review has been given sub titles relevant to the study.

#### **2.1. Theoretical Review**

##### **2.1.1 Community Participation for Sustainability of Water Supply**

Over the last decades community management has become the leading concept in rural water supply. It started with community involvement in system construction and developed into community participation and community management. In the process the responsibility for service provision gradually moved from national government to local people. The theoretical frameworks that underpin community management differ widely, from neo-liberal perceptions on reduced state involvement, to water as a basic human right, to water as an economic good, to people first and empowerment approaches. For most water supply and sanitation projects community management now is the guiding principle. Implementing management institutions and capacities is common practice and a whole range of (participatory) methods has been developed to do so (United Nations 1993; El-Ashry 1993; Wolfensohn 1997; Second World Water Forum, 2000).

Community management of rural water supply and sanitation schemes is now entering its second decade as a key paradigm for water supply development and management.

However, Community management approaches did not appear spontaneously from, nor do they exist in a vacuum. They are underlain by a long history of trial and error in the rural water supply sector, and are linked to and affected by developments in many other sectors: particularly those related to more general rural development, but also natural resource management and in particular water resources management (United Nations 1993; El-Ashry 1993; Wolfensohn 1997; Second World Water Forum, 2000).

The rural water supply and sanitation sector gradually emerged in the two decades prior to the 1980s International Drinking Water and Sanitation Supply Decade (IDWSSD). It developed in reaction to the struggles of post colonial states to extend the benefits of 'modern' infrastructure to their rapidly expanding populations. In the views of many of these states rural water supply was the prior responsibility of the national state. If a single starting point for the more recent development of the sector is sought, it should be the 1977 Mar del Plata conference, which set the groundwork for the IDWSSD. The decade put the emphasis on community involvement in rural WATSAN (United Nations 1993; El-Ashry 1993; Wolfensohn 1997; Second World Water Forum, 2000).

Community management came only into being during the IDWSSD, when the problems with existing, state and supply driven management paradigms came to the surface. It is only now, at the start of the 21st century that community management is finally ready to grow up from being an interesting pilot approach to take its place as paradigm of choice for rural water supply throughout the world. (United Nations 1993; El-Ashry 1993; Wolfensohn 1997; Second World Water Forum, 2000).

Community based participatory approaches seem to be advocated in many parts of the developing world. The informal sector usually extends services or goods that the government has not made widely available, that this can be offered in small lots to cater for the needs of the poor, or that are not yet extended to new areas of settlement (Rondinelli and Kasrda, 1993)

Building systems of participation is an important way of building commitment and trust. Through active participation beneficiaries may understand and support the management of a water project and find valuable roles to play within it.

Sustainability in service delivery is the ultimate goal for development. It refers to the maintenance and continuity of developmental efforts and aspirations for the communities over time without the fear of disintegration (Rondinelli and Kasrda, 1993).

At the level of Community Based Organization, sustainability is taken to embrace three main aspects of its growth and development. These are financial sustainability (present and future plans for sourcing funds), Institutional sustainability (organizational development and management practices) and lastly, Environmental sustainability (ability to collaborate and network within the physical, social-political and economic environment) (Iceberg, 2003).

Participation is not only a matter for the community; it is a reciprocal process in which the development workers and change agents at all levels of implementation must take part. Community Based Organization gears towards people's active participation through which a community identifies its needs, ranks them, develops the confidence and will to work at them, finds the resources (internal and/or external) to deal with these needs, takes action in respect of them and develops cooperative and collaborative attitudes and practices in the community (Iceberg, 2003)

As development strategy, empowerment entails the design and implementation of appropriate programmes to raise and increase capacity and ability of the target communities to address their current as well as future changing needs. The corner stone of this approach is active participation of target communities in problem identification, problem solving, and project planning and implementation process as opposed to doing things for them. (Paul, 1986).

Empowerment can be viewed as an operationalisation of interests. It signifies the development of a political being. It denotes the process of a group of persons from being a group in itself to becoming a group for itself. It indicates the change in social dynamics from being a group of persons who are similar because they share the same condition of lives and because they have basic interests in common, but who are now becoming a group which articulate those interests, define their own problems, claim social responsibility and demand political rights. It stands as a name for the growth in power of a social group who was previously dependent and possibly obedient, but which is now in the process of assuming the full responsibility for handling their own interests (Paul, 1986).

Sustainable water management reforms in developing countries calls for the participation of indigenous people, particularly women, as major partners. While the need for input from those persons most affected by developments has been acknowledged at the international level, in practice it rarely occurs (United Nations 1993; El-Ashry 1993; Wolfensohn 1997; Second World Water Forum, 2000).

The involvement of people in issues concerning the environment where they live is critical for its sustainability. The concept partly reflects the fact that people who inhabit the environment overtime are often the ones who are most able to make sound decisions about its sustainable use (Paul, 1986).

Where assistance or support is needed they should not be seen as passive recipients of information and external expertise with nothing to offer in return. McIvor, (2000) observes that ``people already have the knowledge on what they must have become passive observers, and a few people are taking decisions for everyone else''.

McIvor (2000) further argues that, `` yet like the concept of sustainable development of which it is a component, the word ``Participation'' is often used without providing a clear and definite statement of what it means. ``The occasional consultative exercises with local people or a more radical process of community involvement are both labeled ``participatory'' and we need to be careful that the term does not become debased as a result of common and ill-defined usage.

But the fact that it is so often used to indicate different things or it conceals what is often no more than a token acknowledgement of local preferences should not in turn mean that it is rejected.

Like the concept of sustainable development it is better to see the term ``participation'' as a principle of which organizations and individual working in partnership with local people should aspire, though imperfectly realized it is an ideal against which practical efforts should be constantly measured (McIvor 2000).

### **2.1.2 Involving communities in the design and selection of appropriate technology**

Community involvement is important in the selection of technology so that the design to be adopted is what the community wants, and that it is able and prepared to pay for its maintenance. (Kakeebeke, 1995).

Involvement of communities in the process of designing and developing water supply and delivery project is critical in order to ensure future sustainability of the services. Kakeebeke (1995) argues that this, however, is not the usual practice as most service providers operate with a top - down approach, deciding on such crucial issues as service levels for the user communities who are brought in the picture only after the services have been provided.

Several factors underlie this state of affairs, but lack of effective communication and appropriate participatory approaches are perhaps the most important ones. When discussing about the term community, McIvor (2000) noted that it is often used as if it represents a homogenous, clear and defined structure. In actual fact it conceals a range of vested interests in terms of economic position, ethnic, status, gender balance and age.

The problem of poor community participation in projects can be viewed in the context of organisation and management models. As Wren (1972: 36) notes, 'the development of a body of knowledge about how to manage has evolved within a



framework of the economic, social and political facets of various cultures. As such, Management thought is both a process in and product of its cultural environment.'

In a Western context, organizations exist primarily to carry out production and work towards economic goals efficiently and effectively. The scientific management method devised to facilitate this approach sees human beings as 'cogs in machines', being both rational and primarily motivated by economic incentives.

This legal-rational approach to management was formally introduced to the African continent during colonization, the process facilitated by co-optation of native leaders into the administration (Sehnick, 1949). However the charismatic authority of indigenous institutions, where family or group loyalties supersede notions of merit, is in marked contrast to the western management approach (Heady, 1995).

Furthermore, the limited view of cause and effect in Western thinking differs from the transcendental level of interpretation in African indigenous epistemology on organisation goals and behavior (Wariboko, 1999).

According to Kakeebeke (1995), participation in decision-making is part of a practical process concerned with the redistribution of power. It usually involves the transfer of administrative (decision making) and financial power from *traditional authorities* to *community based organizations* so that people may be able to command events that control their lives.

### **2.1.3 Role of project staff in training and changing attitudes of targeted beneficiaries**

Staff or Facilitators involved in water supply projects must be committed to developing participant's abilities and changing attitudes, rather than just fulfilling targets (Jedder, 1995). Tanzania institutional structure is ideal for people's participation. What is lacking is effective communication between extension staff and potential clientele.

To achieve this there is need to prepare and execute a technical training programme on processes related to people's participation (Bundala, 1989). Management of Community Based water programmes (CBWP) has faced a number of constraints in terms of its implementation. Experts and the local government water authorities have sometimes been reluctant to "relinquish" control and to accept that communities have something worthwhile to offer in terms of water supply planning and management (Lauria and Kolb, 2004).

This standpoint is clearly evidenced by non- functioning wells and silted dams, theft of fences and pipes, and the location of water points in salty areas.

In addition, the difficulty that targeted beneficiaries experience in using the new technology has now led to a general view that that technology alone cannot solve water problems and that social mobilization is also important.

#### **2.1.4 Building partnership in water supply projects**

The new partnership in water supply and service delivery involves both the public, private and community agencies working together in the water resource sector. This opposes the traditional tendency where by the government used to supply water alone.

Community members remained largely underutilized in the supply and management of water and sanitation services particularly those living in urban low- income settlements. Generally, they are viewed as poor people who have nothing to offer to the project and their readiness to participate financially and offering their entrepreneurship, in the provision of services is disregarded.

Self-evaluation of the level of involvement is an important aspect for the ownership of a project and its maintenance. While the level of involvement might be high, the non-involvement of some members may demoralize others (Kyessi, 2000).

### **2.2. Empirical Review**

#### **2.2.1 Trend of community participation in water supply and delivery schemes**

The earliest (Pre-1980s - Early days - the first steps towards involving communities) documented experiences of community involvement in water supply projects date from the late 1960s. The first use of the "community participation" keyword in IRC's library

database (IRCDOC) dates from 1967, and concerns an introduction to evaluative research (Suchman, 1967).

The first books in the IRC collection on community involvement in water supply projects came from Taiwan (1969) and Colombia (1975). IRC was an early champion of community involvement, and in the 1970s it produced the first of many books on the subject. The first handbook and literature review on participation and education in community water supply and sanitation were published in 1977 and 1978 (van Wijk, 1979 and 1981).

The community involvement paradigm (1980s - the International Drinking Water Supply and Sanitation Decade - community involvement) was officially adopted by the international community during the 1977 World Water conference in Mar del Plata, Argentina. The conference adopted a declaration in which it announced the International Drinking Water Supply and Sanitation Decade (IDWSSD) the slogan of which was to be "Water and Sanitation for All". The conference recognized that to come close to accomplishing this goal, a "radical overhaul of precepts and investment strategies governing the proliferation of taps, pumps and pipes in the developing world" was required (Black, 1998).

Such an overhaul was badly overdue. The conventional water and sewerage systems, the only ones the international donors had to offer, were complex and only affordable

to an elite minority, leaving a large majority of people without services of any kind. Public health experts and engineers had learnt from experience that all that poor people could anticipate from existing models of service delivery were exclusion and marginalization. "The vast majority of those without water and sanitation services were poor, and the countries in which they lived were frequently water short and had little to spend on public infrastructure" (Black, 1998).

Therefore, if there was to be any substance to the Decade's slogan, entirely different, lower-cost approaches would have to be found, capable of extending services to poorer urban and rural areas and governments and donors had to be persuaded to invest in them. The new approach was found in concepts of self-reliance and community action that had begun to be popularized under the catch phrase 'small is beautiful' (Schumacher, 1973).

Small is beautiful was to become one of the key-slogans of the water and sanitation sector. It came along with a shift in focus to small NGO led projects, in which users were encouraged to take an active role in terms of providing inputs, labour or cash, to the development of simple, low cost systems. This was the basis of the 'community participation' model that was to remain accepted practice for much of the rest of the decade. The decade also saw a massive expansion of donor investments in water supply and sanitation. These investments were mostly harnessed in projects and programmes. Both the community participation model and the project approach

meant a drive away from the supply driven models that were the territory of the post colonial states (Chambers, 1983).

The models of the IDWSSD remained small and scattered, and did not start to approach the scale necessary to address the decade's ambitious goals. In parallel to the water sector activities of the IDWSSD awareness grew throughout the various fields of development co-operation, of the need to involve communities or users at all stages of the project cycle. An important chronicler of this process was Robert Chambers. In a number of publications, he stressed the importance of 'putting the last first', and highlighted the dangers of allowing outsiders with their characteristic 'biases' to drive the development process. Rather he suggested a 'bottom up' development model in which the subjects of development themselves defined their needs, priorities, and preferred developmental pathways (Chambers, 1983).

By the early 1980s there were therefore three main drivers to 'community participation' based approaches. First of all, a new paradigm for development rooted in the concept that development should come from the roots of a society, instead of from the top. Secondly, a widely shared perception that many 'conventional' water supply policies and programmes were failing to achieve their goals. Thirdly, vision that community participation could replace some of the loss of the state's implementation capacity brought about by the implementation of IMF promoted Structural Adjustment Programs.

Halfway through the IDWSSD the donor community assembled in the External Support Agency Collaborative Council, which officially identified community participation as one of the six basic prerequisites for improved performance of the water and sanitation sector. As a result many projects started involving women and men in trench digging, system maintenance, and water committees. However, it soon turned out that sustainable water and sanitation could not be achieved without involving people not just in the manual work, but also in the planning of programmes and the selection of technology (Parwoto, 1986).

It is perhaps therefore not surprising that it is around this time that the first references to 'community management' start to appear. Early examples include David Korten's monograph on community management in Asia (Korten, 1986) and Parwoto's model for community based management in Indonesia (Parwoto, 1986).

Later, field studies in which community management played a major role emerged from Chile, Guatemala, and Malawi in 1988 while a year later experience emerged from Cameroon, sub Sahara Africa, Ghana, Indonesia, and a WASH study Towards community management: a guide to integrating behavioural sciences and engineering technology in water and sanitation projects (Roark et al, 1989).

It was experiences such as these that would be brought together in New Delhi in 1990 to mark the official birth of the community management paradigm.

The IDWSSD - a case of limited success - By the end of the decade a total of US \$ 73 891 million had been spend on expanding water supply, and by 1990, no region had achieved less than 73% coverage of the population in urban areas (South East Asia) and less than 32% coverage of the population in rural areas (Africa).

Overall, this represented a significant increase in water supply service coverage: from 75% in 1980 to 85% in 1990. This was an enormous achievement; however it also fell far short of attaining 'water and sanitation for all'. During the decade it also became clear that many of the constructed water and sanitation systems broke down soon after implementation as a result of poor maintenance and management. Although coverage was increased, the sustainability was often questionable (UNDP, 1990).

While missing its objective of water and sanitation for all by a wide margin, the Decade did trigger a number of activities and initiatives, that resulted in 1.2 billion more people world wide having access to adequate and safe drinking water supply facilities, and 770 million more having access to sanitary facilities. In addition to this a clear success of the decade was in putting 'appropriate technology' firmly at the Centre of rural water supply (Ireland Aid, 1999).

As the IDWSSD came to an end in 1990 (1990s - New Delhi - Community management Dublin and Rio) a flurry of regional and global meetings sought to draw together the lessons of the Decade and to map out new directions for the water and sanitation sector



in the 1990s. They culminated in the Global Consultation Safe Water 2000 in New Delhi in September 1990 (UNDP, 1990).

The resulting Delhi Statement promoted the principle of "Some for all rather than more for some", which set out the guiding principles as the basis of future sector work. For the first time at global water conference community management was endorsed in the guiding principles (UNDP, 1990).

The principles built on the failures in upkeep and maintenance of the community participation schemes of the 1980s, and supported itself intellectually on the 'last first' paradigm championed by Chambers et al, (1983). Put simply, the new paradigm said that those communities should not just be involved in system inception, but should accept ultimate responsibility for and ownership of the entire lifecycle of the system.

Other guiding principles adopted in New Delhi also have bearing on community management. On institutional reforms, the New Delhi Statement promotes an integrated approach, including changes in procedures, attitudes and behaviour and the full participation of women at all levels in sector institutions. It also urges adoption of sound financial practices, where community management can also play an important role.

The emphasis on community management was strengthened in the Nordic Fresh Water Initiative (1991), which called for water management responsibility to be devolved to the lowest possible level. The subject was further stressed in the Dublin Statement on Water and Sustainable Development (1992). The 500 participants in that meeting agreed that water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels.

They underlined that women play a central part in the provision, management and safeguarding of water, and suggested that in principle water should be recognized as an economic good.

At the Earth Summit in Rio de Janeiro in June 1992, world leaders committed themselves to a comprehensive programme to provide sustainable water supply and sanitation services to the hundreds of millions of the world's population who currently lack them. At the summit all States and support agencies were urged to implement activities aiming for universal coverage outlined in Agenda 21, a strategy for sustainable development in the 21st Century (UNDP, 1990).

A guiding principle in the achievement of Agenda 21 is: "Community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes." (UNICEF, 1992). The activity list includes numerous measures to bring about effective community management as:

- Encouragement of water development and management based on a participatory approach, involving users, planners and policy makers at all levels.
- Application of the principle that decisions is to be taken at the lowest appropriate level, with public consultation and involvement of users in the planning and implementation of water projects.
- Support and assistance to communities in managing their own systems on a sustainable basis.
- Encouragement of the local population, especially women, youth, indigenous people and local communities in water management
- Linkages between national plans and community management of local waters
- Integration of community management within the context of overall planning

To consolidate desk research and field studies and to provide guidance in community management IRC in collaboration with UNDP, UNICEF, WHO and the UNDP/World Bank Water and Sanitation Program and DGIS organized an international workshop in November 1992 in the Hague, the Netherlands, with the theme "The Role of Communities in the Management of Improved Water Supply Systems".

The workshop brought together experiences in community water management from seven developing countries: Cameroon, Guatemala, Honduras, Indonesia, Pakistan, Uganda and Yemen. Participants from these countries presented case studies, which

were reviewed together with a background paper and a review of experiences from 122 completed water supply projects prepared by the WSP (Evans and Appleton, 1993).

The Third Global Forum of the Water Supply and Sanitation Collaborative Council (WSSCC) held in Barbados (November 1995) endorsed the creation of a Council-sponsored Working Group (WG) on Community Management and Partnerships with Civil Society, led by the International Secretariat for Water (ISW). Regional Coordinators were selected in Africa (NETWAS), Asia (Approtech Asia and NEWAH) and Latin America (CIUDAD). The aims of the Working Group were:

- To present to the WSSCC frameworks which facilitate more harmonious interaction among governments and the various actors of civil society (private sector, NGOs, community-based organizations (CBOs))
- To identify best practices of community management approaches, and
- To influence governments and external support agencies (ESAs) to adopt these approaches, including involving the actors of civil societies in their planning processes.

The Working Group presented a Code of Ethics on Community Management in Manila in 1997.

The members of this group also became involved in the development of the Water for People VISION 21 that fed into the overall World Water Vision that was endorsed by

the ministers at the Ministerial Conference following the Second World Water Forum in The Hague in March 2000 (Evans and Appleton, 1993).

The approaches needed to reach the goal of hygiene; sanitation and water for all by 2025 are set out in VISION 21. VISION 21 focuses on mobilizing people's own creativity and energy in developing solutions for improving their health and welfare.

The people centred approach builds on community management as its main vehicle. During the 1980s and 1990s a variety of different actors, with very different agendas signed up to the concepts of community management. Governments saw community involvement as a way of reducing demands on over-stretched resources.

Donors saw an opportunity to focus and stretch development budgets towards effective implementation of water supply and sanitation facilities, and to bypass the problems posed by corrupt and inefficient governments. NGOs became the voice of the community and happily seized an opportunity to increase their role, becoming in many countries a sort of parallel government (Evans and Appleton, 1993).

Finally multilateral donors such as the World Bank saw community management as an ideal vehicle for their messages about reduced government involvement, and increased private sector and civil society roles. The World Bank, and later WSP (Water and Sanitation Programme) developed the Demand Responsive Approach

(DRA), which is heavily geared towards the operationalisation of community management approaches (Evans and Appleton, 1993).

Community management had clearly therefore been accepted - albeit for a variety of different reasons - as a management concept. More and more examples of community management could be found around the world, and Uganda, Ghana, South Africa, India and Tanzania had all made community management a key concept in their national water policies and laws. However, as was highlighted in the Vision 21 report, the problems of lack of sustainability, inappropriate technologies, and failure to increase water and sanitation coverage all continued to be serious (Sendoro, 1991).

In November 2000 the Fifth Global Forum of the WSSCC in Brazil reached consensus on the way forward for the water supply and sanitation sector: the Iguaçu Action Programme. The Iguaçu Action Programme (IAP)'s mainspring is Vision 21. It translates that Vision, which has caught the imagination of the world and is shared by all WSSCC members, into practical activities to improve hygiene, sanitation and water for poor people (Sendoro, 1991).

Vision 21 covers many subjects, and it is important, for impact and consistency, to concentrate mainly on a small number of them. The Council therefore suggested four main advocacy subjects for the Council's work at all levels over the next few years. Two of those deal with community management issues:

Institutional management options, public-private partnerships and the adoption of a code of sector ethics and rights. In many instances, institutional frameworks and arrangements require dramatic changes to enable realization of Vision 21 principles. This will be a massive challenge. While policies are in place in many countries, the lack of effective legal frameworks, implementing strategies and resources to execute these policies and actions are a hindrance. Public-private partnerships of various types are an emerging option (Sendoro, 1991).

The ongoing work suggested to be undertaken in the IAP is the promotion of institutional reform, the promotion of good governance, capacity building of public sector agencies, and the promotion of engagement of all sector stakeholders, including the establishment of partnerships with the private sector and the implementation of institutional arrangements supporting sanitation.

An aspect not previously addressed is the institutional implications for adoption of a code of ethics and greater appreciation of the rights of consumers, concurrent with responsibilities, in sustainable service development. Moving to these people-centred empowerment approaches will present additional institutional challenges.

A community-based, participatory and social marketing approach at the heart of Vision 21 is a commitment to building on people's energy and creativity. This implies the development of community-based approaches, which can operate at scale, in

which householders, and communities can take action. A variety of social marketing and participatory approaches have been developed. These approaches need to be incorporated into support mechanisms and implemented at scale (Sendoro, 1991).

Community-based and Non-Governmental Organizations as well as individuals are virtually helping one another in extending basic infrastructure to the settlements through self-help spirit. The spirit has helped to cut-down costs of construction and operating of water supply schemes in Mbagala, Yombo Dovya, Tabata, and Tungi where such services are provided at an affordable price (Sendoro, 1991).

Indigenous peoples' perspective on water use and management fore example in Sierra Leone, contrasts with modern Western approaches adopted by the national government. Conflict between the two styles of management limits community participation and hence effective development of the resource (McIvor, 2000).

Many of the problems arise because projects do not adopt a cross-cultural and interdisciplinary approach in planning. Although the preparation stage for many water projects acknowledges the importance of including women in leadership roles in ways that are intended to empower them, the traditional female power base centered on water and the river is often diminished by developments (McIvor, 2000).

Project implementation without adequate consultation and consensus accounts for continuing suspicion. In addition to cultural constraints on knowledge sharing,



influences how easily information is divulged by indigenous people and innovative ideas received. Hence, the quality of data collected at the grass-roots level may be compromised (McIvor, 2000).

To prevent such problems, water scientists must broaden their knowledge base to encompass a variety of relevant disciplines such as history, sociology and anthropology. Multidisciplinary data in the annals of colonial and recent reports must be analyzed to access the depth of the problem (McIvor, 2000).

The centuries-old oral tradition of Africa, somewhat like shifting sand, must be thoroughly documented because increased knowledge about achievements, beliefs and values, and what sustained peoples of Africa in the past, form the foundation on which to build for the future (McIvor, 2000). African nationals, acting as counterparts to foreign experts on international aid projects or water-based mining ventures, must act as advisers and guides to the local environment.

In the North, after decades of struggle, it has now become legitimate that social and economic interest groups organize themselves in order to articulate and press for the fulfillment of their demands (Paul, 1986). However, in many developing countries, the paternalistic attitude of the bureaucratic elites and their political allies serves as a cover-up for their real intentions, which are to stay in power and preserve their privileges.

Consequently, severe objections are often raised against the encouragement of any kind of educational organization which would enable people to analyse and reflect upon their

own situation and to collect information and acquire any additional skills they deem necessary to bring about the desired changes. If such changes are not identified, understood, and wanted by the people themselves but are the outcome of plans made by others, then development is thriving in name only, while its real praxis is domestication and paternalism (Paul, 1986).

Despite the fact that indigenous value systems and methodologies have been declared worthy of emulation, the only means of involvement to date have been incorporation and co-optation into Western-style models (United Nations 1993; El-Ashry 1993; Wolfensohn 1997; Second World Water Forum, 2000). A comprehensive list of actions that could rectify these discrepancies has emerged from numerous deliberations, but implementation of actions in most developing countries remains a challenge. (Gleick, 1993).

### **2.2.2 Experience of community involvement in the design and selection of technology**

The twentieth-century water policies relied on the construction of massive infrastructure in the form of dams, aqueducts, pipelines, and complex centralized treatment plants to meet human demands. These facilities brought tremendous benefits to billions of people, but they also had serious and often unanticipated social, economical, and ecological costs.

Many unsolved water problems remain, and past approaches no longer seem sufficient. A transition is under way to a "soft path" that complements centralized physical infrastructure with lower cost community-scale systems, decentralized and open decision-making, water markets and equitable pricing, application of efficient technology, and environmental protection (Gleick, 2003).

Discussing the communication between service provider and community experience from Mozambique Kakeebeke observed that a Survey of eight-water committee has revealed that a key function in maintaining the contact between the project, the water utility, the co taker and the consumers, was wrong.

In many cases the committees were not able to play this role due to the following reasons:

First, absence of formal relationship between the water utility and the water committees as the utility deals exhaustively with the paid co taker. Second, untimely involvement of the water committee in the project management cycles. Thirdly, too high dependency on the local authorities, which meant that the water committees have weakened their position as representatives of the consumers. Fourth, presence of undemocratically nominated committees rather than the elected ones and fifth lack of trust in local leaders (Rasmussen, 1993).

International Reference Centers (IRC) (1987) argued that, engineers and technicians sometimes go to the communities, install water supply systems and expect the villagers to use them and take care of their maintenance.

Nevertheless, the intended beneficiaries are not consulted on matters of design, construction, use and maintenance of the facilities. It is difficult, if not impossible to achieve the continued functioning of small water supply schemes (or sustainability) without greater degree of community involvement.

The participation of women in the development process has been so much recognized by the development practioners around the world. Giving women leadership roles on water projects is considered a means of female empowerment.

Experience has shown that project and programme planning which does not take into account gender – specific differences in society is likely to fail or be less efficient than necessary, because it tends to reach mainly male members of the society in question (Rasmussen, 1993).

Equal rights and equal opportunities for men and women are among the fundamental human rights. The majority (70%) of world's poor are women who are the primary agents of managing natural resources, such as water and community woodlands. Thus

women are pivotal to the development of strategies for protecting the environment and ensuring sustainable development (Rasmussen, 1993).

The experience from Tabata Development Fund (TDF) in Ilala Municipality revealed that a community based water supply scheme for the settlement in Tabata ward, was very successful.

The decision was prompted by the chronic problem of water supply shortages in the area. TDF took the initiative of searching for an alternative source but through involving the community from the beginning (Kyessi, 2002).

The time taken to fetch water decreased dramatically and the price of water fell down by almost 500%. Like wise the burden on women and children who used to walk far to fetch water was also reduced. This is largely the outcome of the decision to involve people in the whole process of project management (Kyessi, 2002).

### **2.2.3 The importance of Community involvement in running water supply schemes**

Experience from Zimbabwe shows that, the main reasons for failure of water supply scheme of small dams and boreholes in Zambezi valley was the fact that local communities did not regard these dams and boreholes as their own (Lauria; Kolb.2004).

They felt they belong to someone else's responsibility. Secondly, there had been inadequate process of consultation with local people prior to the construction of such facilities, which left them with an impression that they had no role to play in their management. This activity contributed to lack of ownership of facilities by the people themselves.

There were no community sanctions against the destruction of surrounding, and water shed, limits on the number of livestock around water points and prevalence of procedures maintenance (McIvor, 2000)

In the past decade, international donor agencies and governments have generally required water supply systems to be financially self-sufficient, with stakeholder participation in their planning and operation to ensure sustainability. Efforts are being made to shift planning from a process that tends to be dominated by governments to one with more involvement of water users (Lauria; Kolb.2004).

However the concept of water as a marketable commodity promoted by the national government and global interests contrasts with the more holistic view of water in traditional society. Conflict arises where water sources on which communities depend are taken over for mining, hydroelectric power or agricultural schemes without adequate consultation. Traditional livelihoods are disrupted and questions of equity and the

notion of water as a common good arise. Protests by indigenous people limit project success and account for loss of capital investments (Akiwumi, 2003).

#### **2.2.4 Learning experience about effective partnership and participation**

In Tabata ward an assessment on the level of community participation was conducted in year 2000. Out of forty three, five respondents (12%) complained that TDF did not involve the people in the project.

The findings may be questionable as did not take into account of the local government and decentralized system established in the settlement during the whole process of implementation. It was observed that the use of several mobilization techniques was influential in convincing the people to participate in the project (Kyessi, 2002).

Realization of the potential of community initiatives to act in full partnership with the public and private sector will require sustained efforts, such as sharing information with communities as a starting point for community involvement and participation; raising community awareness and attain their commitment to the process of partnership as well as the willingness to pay for the services.

Effective community participation do not only ensures sustainability of investments and greater efficiency in the sector but also strengthens the foundation of public – private

partnership by bringing in greater transparency and public acceptability to the process (Kakeebeke, 1995).

The design and implementation of a community based water supply scheme needs the participation of many actors in order to achieve the desired efficiency, effectiveness and sustainability. These may include both internal and external actors. External agents or participants bring with them experiences, technical know how and finance (Kyessi, 2000).

The external input is necessary and fundamental in community participation in social services provision. Lack of adequate promotion, especially in districts without promotion officers, affect mobilization of people in carrying out programme activities (Kunfaa, 1996).

## **2.3 Policy Review**

### **2.3.1 The importance of policies in water supply and service delivery**

In the past water supply projects were implemented without the active participation of the stakeholders in planning, construction and management. As a result, the projects were not properly operated and maintained and thus became unsustainable. Ownership, operation and maintenance. The government was the sole implementer and operator and



supplied free water to stakeholders since it was regarded as a freely supplied commodity.

The National Water Policy, 2002 directs that, roles and responsibilities of different stakeholders will be clearly defined to ensure the participation of legitimate representatives of stakeholders. Participation of both men and women in decision-making, planning, management and implementation of water resources management and development will be enhanced. As the future managers of water resources, young people will be involved from the early stages for future sustainability. However, the policy of actively involving indigenous populations in decision-making processes on water development reform is not being successfully implemented in most parts of the country.

According to the Community Development Policy-1996, the percentage of all Tanzanians with access to sufficient clean and safe water increased from 12% (1971) to 47% (1980) to 46% (1992). However, statistics show that up to 1993, this service was provided to 75% of urban dwellers by comparison to 46.4% of those living in the rural areas. When one remembers that the majority of Tanzanians (more than 70%) live in villages, it is clear that there are still many Tanzanians who have no access to this service.

Involvement of both women and men in problem identification, planning, decision making, implementation and evaluation is very important in attracting interest groups to join forces and discuss different aspects pertaining to their life situation.

### **2.3.2 The role of policy intervention in water supply and sanitation systems**

Failure to involve all stakeholders in planning and operation of water supply and sanitation systems has led to a lack of appreciation of problems faced by water and sanitation service deliverers in operating and maintaining the system. In turn, this has led to complaints from customers and non-payment for the services.

Thus the National water Policy, 2002 directs that, service providers will provide water supply and sanitation services using the most effective technology available, which is suitable to the area and the socio-economic circumstances of the users.

In rural areas, where communities will be responsible for operation and maintenance, they will be empowered and facilitated to make appropriate technology choices that will suit their own capabilities, particularly in those which require low investment costs and are operated and maintained at least cost.

Communities should develop the habit of rejecting poor technologies and be willing to recognize, accept and make use of better technologies that can reduce their workload and increase productivity (Community Development policy 1996).

### **2.3.3 Sound policy for successful community involvement**

The core to successful water resources management lies on building the knowledge, skills, and institutional base at the national, basin and local level to utilize the relatively new and multidisciplinary tools of integrated water resources management.

With the advent of the present approaches to water resources management, which emphasize integration of sectors, comprehensiveness, participation and subsidiary, and which treats water as both a social and economic good, the focus of knowledge and skills now goes beyond the traditional skills of hydrology and engineering, to include economics, law, environmental and social sciences and skills for water conservation and water-demand management.

Also, specific tools such as River basin modeling and decision support systems, as well as strategies for communicating and engaging with communities and stakeholders are essential (The National Water Policy, 2002).

Training in management, planning, business and administration should be provided to women and to members of ward, district and village development councils.

Such training should emphasize the importance of planning and supervising implementation and monitoring the results, with the aim of fostering women's development (Ministry of Water and Livestock development, 2003).

The National water policy 2002 directs that, communities will be empowered to initiate, own, manage, operate and maintain their water schemes, including responsibility for coverage of operation and maintenance costs, so as to improve the sustainability of rural water supply systems. Eventually communities will be responsible for letting and supervising design, construction and operational contracts for their water supply systems.

#### **2.3.4 Community participation in water supply services as a policy matter**

The National Water policy, 2002 insist on full participation of beneficiaries in planning, construction, operation, maintenance, and management of community based domestic water supply schemes in rural areas.

Communities will be empowered to initiate, own, manage, operate and maintain their water schemes, including responsibility for coverage of operation and maintenance

costs, so as to improve the sustainability of rural water supply systems. Eventually communities will be responsible for letting and supervising design, construction and operational contracts.

A holistic basin approach will be adopted for integrating multi- sectoral planning and water resources management that recognizes the economic value of water and ensures sustainability, whilst decentralizing decision-making through subsidiary principles.

On the water supply and water related sanitation side, a holistic and sector wide approach to planning (SWAP) will ensure efficient allocation of public financial resources, thus reducing regional and district inequalities, and facilitating communities to take the lead in the planning, implementation and management of rural water schemes.

The Community Development Policy 1996 encourages Communities to conceive and formulate their plans and look for the resources to implement them without waiting for assistance. However they should also identify where it is necessary for the government to contribute and where they need further assistance from donors either inside or outside the country.

The national Water policy 2002 directs that, mechanisms for effective and appropriate stakeholder participation in the provision of water supply and sanitation services will be

instituted to ensure that all stakeholders understand and meet their obligations, and are actively involved in the planning and design and development of schemes.

## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 The study Area**

##### **3.1.1 Geographical location**

Temeke Municipality is situated at 6°48' and 7°10' South and 39°12' and 39°33' East. The Municipality is found in the City of Dar es Salaam. It is located in the Southern part of Dar es Salaam bordering part of the Indian Ocean. It is one of the three Municipalities in Dar es Salaam City and fulfils, interalia, important administrative, marketing, service and related functions.

As a Municipality it is not offering services to the Temeke alone but also for other bordering Municipalities. With comparison to other Municipalities, Temeke shows peri-urban and urban characteristics.

##### **3.1.2 Climate**

Generally, Temeke District has high temperatures (hot weather conditions) and has a bimodal rainfall pattern namely (a) short rains period that begin toward the end of December and end in February (b) The long rains usually start in February and end in June. The high temperatures prevail throughout the year; ranging from 25 °c between

June to August, up to 35 °c between January and March. The rainfall received ranges from 800-12000 mm per annum. The most notable feature of the Kizinga, Mzingu, and Mbezi rivers is that they sometime get flooded.

### **3.1.3 History of Temeke district.**

Temeke District is part of Dar es Salaam city council. It was established in 1972 as a District within coast region. Temeke district is one of the three municipalities established in 2000 following the dissolution of the city commission.

### **3.1.4 Population**

Basing on the 2002 census data, Temeke Municipality had a population of 771,500 people with a growth rate of 2.8% per year of whom Female are 382,255 and male are 389,245.( See Annex 3)

### **3.1.5 Socio-economic activities**

There are several development activities taking place in Temeke, which include agriculture and livestock farming, fisheries, forestry, tourism, industry and transport. Temeke district has a total of 45,000 hectares of land, which is potentially viable for agricultural production. A total of 33,000 ha and 15,000 ha of arable land are under cultivation and grazing respectively.



### **3.1.6 Water Supply and demand**

Water demand in Temeke Municipality is 12.2 millions gallons per day (Mgd). Water supply is 8.4 mgd representing 68.85% of the total demand of the Municipality. The average population served by clean and safe water at the 400m is 525,000 out of 771,500 according to the 2002 National census. Water services are obtained from different sources namely: Boreholes, Shallow wells and Dar es Salaam main system (City Water).

A total of 137 boreholes exist in Temeke Municipality out of which 97 are operating and 40 have different problems like fault pumps and chemical pollution. There are also 120 shallow wells in which 81 out of them are operating while 39 have either faced problems of fault pumps or stolen.

### **3.1.7 Administration**

The district is administratively divided into three divisions namely; Chan'gombe, Mbagala and Kigamboni.

The divisions are further subdivided into Wards, Street/villages and Home lets.

### **3.1.8 Justification for selecting the study area**

The study was conducted in Temeke Municipality council. Mbagala division was purposively selected for the study.

The reason behind was that, unlike other places in Temeke and Dar es Salaam as a whole, more people are migrating to Mbagala from other parts of the City and thus its population is growing rapidly as compared to other places. Temeke is experiencing increasing urban and peri-urban characteristics. Therefore increased availability of water to meet the increasing demand in an area requires various strategies by different people and institutions to achieve the policy objectives by addressing community participation and the role of Community Based Organizations (CBOs) in the sustainability of water supply and delivery services.

### **3.2 Research Design**

The research design was a cross sectional survey. A cross sectional study involved asking questions to a representative sample of the population at a point in time where such instruments as questionnaires and interview guides are used. The design is most appropriate for descriptive purposes and determination of the relationship, between variables.

### **3.3 Research Approach and Strategy**

The research approach and strategy was participatory action research. Site visits, physical and telephone contacts were used during research design and implementation. A number of data collection techniques such as Participant observation, Questionnaires and focused group interviews were applied in addition to documentary survey.

### **3.4 Sampling Procedure**

#### **3.4.1 Target population**

The target population in the study area consisted of all water users including 80 households, who are connected to the pipe water supply system in Kwanyoka location.

#### **3.4.2 Selection of Community Based Organization (CBO) and respondents**

Due to time limitation and the course requirements, purposive sampling was used in the selection of the CBO after a thorough consultation with the Temeke Municipal authority.

The sample size was 66 respondents comprising of 30 Piped water users, 10 new water applicants, 10 water vendors, and 5 CBO leaders. Others were 1 Community Infrastructure programme (CIP) coordinator, 1 District Water Engineer, 1 Ward Executive Officer, 1 Street Executive officer, 1 Physical planner, 1 District Medical officer, 1 District Public health officer, 1 Community Development officer, 1 City Water officer, 1 Academia from Rwegarurira Water Resource Institute and 1 Academia from University College of Lands and Architectural Studies (UCLAS). Water users and vendors were selected randomly.

### **3.5 Data Collection**

There are many different methods of data collection. The most appropriate methods can be selected according to the kind of information that is needed, who is collecting it, and

when and how it will be used. A combination of methods should always be used so that data can be cross - checked.

Qualitative data were collected through interview with respondents and key informants while Quantitative data were collected through questionnaires and documentary surveys. Both data categories helped the CED consultant to cross check the information and minimize errors bias.

Data collection was done at two levels namely; primary and secondary

*At primary level*, first hand information was collected from the selected households water vendors, CBO leadership and other volunteers at Kwanyoka location. While *Secondary data* were collected from Ward, district and institution levels. Documentary sources also provided secondary data in addition to above sources. Here various reports and documents were reviewed for the purpose of getting official and reliable information that were related to the study.

### **3.6 Data Analysis**

The aim of data analysis is to synthesize information to make sense out of it. Different techniques can be appropriate depending upon whether the researcher has qualitative or quantitative data.

*Primary data*, all filled - in questionnaires were coded by assigning ID Numbers and columned in advance of analysis.

Quantitative analysis was done by the computer using Micro Soft Excel and Statistical package for Social Scientist (SPSS)(No. 8.5 of 1988) in order to prepare grouped /cumulative frequency distribution tables and percentage. While

*Secondary data*, qualitative responses were sifted and categorized for easy analysis. These were used to compare and cross check with quantitative data by using qualitative analysis.

### **3.7 Limitation of the Study**

Since only one Community Based Organization and study location was purposively selected, the findings of the study cannot be generalized for Temeke district as a whole. They only pertain to that particular CBO and Mbagala Kwanyoka location where the study was carried out. However, the findings can be generalized to the areas with the similar settings.

## CHAPTER FOUR

### 4.0 RESULTS AND DISCUSSION

This chapter is concerned with the results and discussion of the findings obtained from the fieldwork. After contacted several respondents and collecting the completed questionnaires, the findings were obtained as summarized below:

#### 4.1 Age of Respondents

**Table 4.1: Distribution of respondents' age by age categories**

Age	Number of respondents			
	N = 30	Percent	Valid Percent	Cumulative Percent
29-35	4	21	21	21
36-40	4	21	21	42
41-45	3	16	16	58
46-50	3	16	16	74
51-55	1	5	5	79
56-60	4	21	21	100
<b>Total</b>	<b>19</b>	<b>100</b>	<b>100</b>	

**Source: Field Survey, May 2004**

Results in table 4.1 shows that the respondents age range from 29 to 60 years. Such combination was useful in planning, implementation and problem solving in the sense that different ideas, talents and experience could be enhanced and enriches each other. Majority of the participants are in the productive age, which is potential to the CBO performance as they can plan, implement and manage the project effectively. The effect of age distribution is reflected in table 4.7 on the importance of participation in planning

and implementation of the water supply and delivery services where by response to participation was 73.3% meaning that 22 out of 30 respondents agreed on the importance of community participation on such projects.

## 4.2 Gender

Gender aspect was observed during the fieldwork. Table 4.2 shows the number of household heads by gender

**Table 4.2: Household head distribution by gender**

Gender	Number of respondents			
	N = 30	Percent	Valid Percent	Cumulative Percent
Male	22	73.3	73.3	73.3
Female	8	26.7	26.7	100.0
<b>Total</b>	<b>30</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Field Survey, May 2004**

Out of 30 respondents 73.3% were male household heads while 26.7% were female heads. Such gender distribution among male and female heads helped to reduce gender-biased decisions in the CBO. Presence and participation of women was active. Most of women respondents during field visits, showed to be well informed about the CBO activities. Women representation in the CBO water committee is 50%.

A gender-equal society is a society in which both men and women, as equal members, have the opportunity to participate in all kinds of social activities at will, equally enjoy political, economical and cultural benefits, and share responsibilities.

In such a society, the human rights of men and women are equally respected. Women who desire an active role in society may participate in activities of their own choosing,

while men could enjoy a fulfilling home and community life. A gender-equal society is a society built by men and women as equal partners.

### 4.3 Family Size

It was very important to know the household family size in order to examine the level of family dependency. Table 4.3 below shows the number of the members in a family and the percentage.

**Table 4.3: The family size in Kwanyoka location**

Family size	Number of respondents			
	N = 30	Percent	Valid Percent	Cumulative Percent
1-3	13	43.3	43.3	43.3
4-6	14	46.7	46.7	90.0
7 and above	3	10.0	10.0	100.0
<b>Total</b>	<b>30</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Field Survey, May 2004**

Family size distribution varied from 7 members (10%) and above followed by 4-6 members (46.7%) and 1 - 3 members (43.3%), which was the lowest size. The size of the family had a direct bearing to the income status of the household concerned. The lower the family size, the better the income status.

### 4.4 Affordability of water services fees

The affordability of the water service fees is not the same as the need for water. Every human being needs water regardless of his or her ability to pay for the water bill.



Table 4.4 below, shows the individual financial ability to pay for the water services in Kwanyoka area.

**Table 4.4: Perceived affordability of the water services fees**

Amount in T.shs/month	Number of respondents			
	N = 30	Percent	Valid Percent	Cumulative Percent
1-5,000	14	46.7	46.7	46.7
6-10,000	15	50.0	50.0	96.7
Above 10,000	1	3.3	3.3	100.0
<b>Total</b>	<b>30</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Field Survey, May 2004**

From the table above 50% of the sample population can afford to pay between 6,000/= and 10,000/=T.shs per month, 46.7% can afford to pay between T.shs. 1,000/= and T.shs 5,000/= while 3.3% household can afford to pay above T.shs 10,000/=.

On average, the population of Mbagala Kwanyoka can afford to pay the water bills without any significant defaulters, if the water bill is calculated at a range of 5, 000/= and 10,000/= T.shs.

This is because most households fall within lower and medium income class which monthly income ranging from 45,000/= and 100,000/= T.shs.

Sustainability of water service delivery will among other factors, depend on the ability of the water users to pay for water fees.

The findings in table 4.4 indicate that, at least 50% of the surveyed population can afford to pay their monthly water fees (10,000/= T.shs). However it should be noted that, lack of funds hindered the rapid expansion of the project to other new areas as planned. In order to resolve this shortfall, The CBO asked interested residents to contribute some money for water connection and recover the money in a six-month period. During this period the CBO creditors had to enjoy the services without paying monthly bill.

#### **4.5 The impact of the CBO**

The CED consultant was interested to examine if there was any impact, which can be attributed to CBO since it was established in Kwanyoka area. The main impacts were on environment and health (table 4.5, 4.6)

##### **4.5.1 Impact of the CBO on the environment**

It was evident that, with water availability more trees were being planted within residential areas and in the public open spaces. Soil erosion has been controlled due to planting trees along the valleys and steep slopes. Community education on the environment has been going on the streets, primary school and sub locations. Participation of the people in the tree-planting day keeps on increase due to continuous sanitization campaign conducted by the CBO. Table 4.5. below shows the rate of response in relation to the impact of the CBO to the environment.

**Table 4.5: Perceived impact of the CBO on the environment**

Scale	Number of respondents			
	N= 30	Percent	Valid Percent	Cumulative Percent
Low	7	23.3	23.3	23.3
Medium	21	70.0	70.0	93.3
High	2	6.7	6.7	100.0
<b>Total</b>	<b>30</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Field Survey, May 2004**

In testing whether the CBO had caused any impact on the environment, respondents were asked to examine the level of impact. Out of 30 respondents 21 respondents representing 70% considers that the impact was at medium level, 2 respondents equal to 6.7% said the impact was high and 7 respondents (23.3%) said the impact was low.

Each category had their own dominant reason for the above response. Those who said there was low impact argued that, the CBO service was not extensive and the water supply was not adequate to cater for domestic and gardening uses. This in a way hinders the environmental care activities such as tree planting.

Those who perceived that the impact was medium had no any reason, but they acknowledged the fact that, many households are not doing much to utilize the water service in order to improve the environment at their respective homesteads.

The reason could be the fear to overutilise the water service and cause water supply problem to other users and pay more money for the additional consumption.

Very few said that the impact was high. The reason behind was that, before the introduction of the CBO services the condition of the environment was not good at all.

As more people were immigrating into the area more trees were cut down and there was no effort to replace them until water service was provided. Until now at least, every household has planted more than three trees around and more trees are planted in open spaces.

#### **4.5.2 Perceived impact of the CBO on sanitation and health condition**

Water service is directly related with health and sanitation issues. The CED consultant asked the respondents whether the CBO made any impact to sanitation and health condition of their community. Table 4.6 summarizes the response as shown below:

**Table 4.6 Impact of water supply on Community Health and Sanitation**

Scale	Number of respondents			
	N=30	Percent	Valid Percent	Cumulative Percent
<b>Positive</b>	22	73.3	73.3	73.3
<b>Negative</b>	8	26.7	26.7	100.0
<b>Total</b>	30	100.0	100.0	

**Source: Field Survey, May 2004**

From table (4.6); 73.3% of the respondents were of opinion that the CBO had made the positive impact to their Health and Sanitation while 8% said the impact was negative.

Some of the cited reason was that since they got pipe water mosquito breeding increased with a consequent increase in malaria cases in the area. However they could not give any empirical evidence to support their argument.

#### 4.6 Program Sustainability

The basic assumption was that any sound scheme must, among the other things be sustainable and long lasting impacts. One of the means towards sustainability of similar schemes is to adapt and apply community participatory approaches in water supply and management.

These methods can only be useful if they do involve people in decision-making process, implementation programmes, sharing benefits, and in evaluating of programmes. People should be sensitized in such a way that they can respond to development programmes and volunteer to contribute to the public programmes. Table 4.7 shows the respondents participation in water management programme

**Table 4.7: Responses on community participation in water delivery programme**

Response	Number of respondents			
	N=30	Percent	Valid Percent	Cumulative Percent
Yes	22	73.3	73.3	73.3
No	8	26.7	26.7	100.0
<b>Total</b>	<b>30</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Field Survey, May 2004**

The results show that table (4.7), 73.3% of the respondents agreed that Community participation is important and should be encouraged by the CBO leaders in order to ensure sustainable water supply in Kwanyoka location. However they acknowledged the fact that, the community alone can sometimes fail to accomplish some tasks due to limited capacity especially on highly technical aspects such as conducting a water survey and installation of machines.

In order to overcome this shortfall, The CED consultant asked them to suggest a solution so that they can be assured of continuous supply of water. One of the main solutions, suggested, was Public private Partnership, table (4.8)

**Table 4.8 Responses on public/private agencies partnership**

<b>Partnership</b>	<b>Number of respondents</b>			
	<b>N=30</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Yes	22	73.3	73.3	73.3
No	8	26.7	26.7	100.0
<b>Total</b>	<b>30</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Field Survey, May 2004**

About 73% of the respondents supported partnership between the public and the private agencies. The fact is such kind of partnership speed up development and builds the capacity of the CBO members in terms of skills development and competence in the CBO management. This was reflected in the general performance of the CBO. For instance, members of the CBO water committee possess qualifications in Business

administration, Accountancy and plumbing however, other qualifications such as environmental engineering and project management would add value to the CBO performance.

## **CHAPTER FIVE**

### **5.0 CONCLUSION AND RECOMMENDATIONS**

#### **5.1 CONCLUSION**

This project work was undertaken to provide consultancy services to the CBO and make a study on the role of CBOs in the sustainability of water supply and delivery service.

The project work was carried out in Temeke District in Mbagala ward in Kwanyoka location from September 2003 to November 2004.

The results of this work show that community participation in planning and management of water supply was high while the level of skills of the members of the water committee was satisfactory.

Partnership between and among community, public and private agencies in water supply and delivery was perceived to be important factor in the sustainability of the water supply schemes. Effective community participation does not only ensure sustainability of the CBO services and greater efficiency in the sector but also brings greater transparency and public acceptability of the process.

With regard to individuals' ability to pay for water services, it was observed that, there are few residents who can afford to pay above the current rate of T.shs 10,000/= per month. Majority can afford to pay between T.shs 5,000/= and T.shs 10,000/=.



The study found out that the CBO was perceived by respondents to have made a significant impact on the environment and health condition of Kwanyoka community.

## **5.2 RECOMMENDATIONS**

The issue of participation of women and men as well as the public and private sectors in water supply and service delivery has proven, to be the means of attaining of sustainability of water service delivery. The CED consultant therefore draws up the following recommendations:

5.2.1 Sustained efforts should be made to increase the level of participation of community members in terms of financial resources, labour and technical input in the current and future projects. Participation should take place throughout the project cycle.

### **Strategy**

- Raise awareness on importance of establishment, operating and sustaining water User Associations at local level;
- Define an organizational framework for viable local catchment water users organizations to support a national wide organizational structures;
- Promote the involvement of women, and youth in water resources management at local level; and

- Identify special interests, training and capacity building needs of the different groups in the management of water resources at local level.

5.2.2 Both men and women should be actively involved in the management and operation of the current and future projects. Women and children are the main beneficiaries; they are likely to have more interest with the CBO services as once the services collapse they are the ones who will suffer most. Thus women should be encouraged and empowered to take active role in the management of water supply and services delivery.

### **Strategy**

- Monitor the relative involvement of men and women in various aspects of water supply and service delivery;
- Promote active participation of women in water issues;
- Involve women and men equally in the provision of water and sanitation services; and
- Cultivate and promote a culture of gender equality in communities.

5.2.3 There is a need to increase technical assistance to the communities by encouraging NGOs and other Agencies to support CBO in their initiatives so that they can deliver adequate and quality services to their clients. This can be done through organizing exposure and training programmes at different levels as

it is being done by the district councils on other programmes such as sustainable agriculture and Income generating activities. NGOs involved in water and sanitation such as WATER AID can play a useful role in provision of technical assistance.

### **Strategy**

- Identify sector needs at local level in terms of staffing and skills requirements;
- Implement a human resources development plan for building staff capacities in integrated water resources management at local level;
- Develop a framework for strengthening human resource capacities in local catchment water user organizations; and
- Develop capacity within the appropriate organizations for systematically addressing the management of water issues.

## **CHAPTER SIX**

### **6.0 IMPLEMENTATION OF ASSIGNMENT**

The study/assignment drew up three recommendations as a way forward towards sustainability of water supply and service delivery schemes run by CBOs.

Out of which, recommendation no.5.2.1 was developed into a project proposal based on the request of the CBO leadership. Below is the project proposal to be submitted to donors for funding and implementation.

## 6.1 EXECUTIVE SUMMARY OUTLINE

PROJECT TITLE:	Mbagala Kwanyoka Borehole Water Management Training
CONTACT PERSON:	Chairman (Mr. Mapunda)
PROPOSAL SUBMITTED BY:	Mbagala Kwanyoka Development Trust P.O. Box 75307 Dar es Salaam, Tanzania. Cell: 0744 876629/0744 583862
PROBLEM STATEMENT:	To increase the level of participation of community members in terms of technical input, labour and financial resources in the current and future projects.
MISSION STATEMENT:	To develop adequate local capacity and cooperation in addressing development issues in Kwanyoka area through promotion of community development initiatives.
TARGET GROUP:	Around 80 CBO members and invited participants
ACTIVITIES:	Organize and Conduct training seminars
OUTCOMES:	Increased participation in terms of labour, financial and material input by the members of the CBO and the beneficiary community in running water supply services
REQUEST FOR FUNDING:	<b>USD 6,265</b>
OUR CONTRIBUTION:	<b>USD 2,088.33</b>

## 6.2 EXECUTIVE SUMMARY

To whom it may concern

Mbagala Kwanyoka Development Trust would like to submit its project proposal to your good office for funding consideration. This proposal is meant for raising financial resources, which will enable the CBO to organize and conduct training seminars on borehole water management. At least 80 CBO members (60% women) will participate and benefit out of this project. We believe that the impact of this project will spread over to other people in Kwanyoka area.

The project aims at increasing the level of community participation in the operation and management of borehole water supply and service delivery scheme in the area.

The project is scheduled for one-year period; the starting period will depend on the financial availability and training logistics. It is estimated that the project activities may cost up to T.shs 9,082,500/= of which T.shs 2,270,625/= will be raised locally as local contribution to the project budget and the rest of the amount, which is T.shs 6,811,875/= is hereby requested to Donors. The Municipal council has agreed to provide technical support in terms of training facilitation and Monitoring during the implementation.

The implementation of this project will reduce the problem of low participation by community members in the running of borehole water schemes hence contribute to the National Strategy for Economic Growth and Poverty Reduction.

## **6.3 PROJECT PROPOSAL**

### **6.3.1 Project background**

In the past the provision of water services in peri urban areas has been led by the central government, in many cases with the support of external Agencies. Beneficiary communities have been expected to play a major role in maintaining the schemes and collecting the revenues necessary to meet operations and maintenance costs.

The lack of involvement of communities in decisions in the design and construction of the schemes, combined with a lack of awareness raising of the communities' responsibilities has led to many schemes failing to be maintained at the level necessary to sustain even basic service levels.

In recent years, various forms of community involvement and responsibility for peri urban water supply and management have been implemented, such as community owned trusts and user associations, which have led to increased sustainability. Improving community participation in peri urban water supply and management will increase the sustainability of the scheme.

### **6.3.2 Problem statement**

The provision of peri- urban borehole water supply service without the active participation and support of the beneficiary communities has led to:

- Ineffective awareness raising of the communities' role as beneficiaries;
- Lack of acceptance by the communities of their responsibilities for the sustainability of the peri urban borehole water supply schemes;
- Use of inappropriate technologies, locations of service points, and levels of service;
- Failure of communities to appreciate the need to pay for water;
- Lack of maintenance of facilities by communities; and
- Poor management of the scheme.

### **6.3.3 Policy framework**

Communities will be empowered to initiate, own, manage, operate and maintain their water schemes, including responsibility for coverage of operation and maintenance costs, so as to improve the sustainability of rural water supply systems. Eventually communities will be responsible for letting and supervising design, construction and operational contracts for their water supply systems (The National Water Policy 2002).

### **6.3.4 Policy Goal**

Ownership and management of rural water supply schemes is transferred to beneficiary communities.



### **6.3.5 Policy Strategy**

The strategy for community management will be to:

- Raise awareness of communities regarding their responsibilities for owning, managing, operating and maintaining rural water supply schemes;
- Prepare guidelines for establishing community owned organizations, and procedures for transfer of ownership of rural water supply schemes to communities;
- Establish technical and managerial support mechanisms;
- Prioritize the capital investment requirements for rehabilitating or providing rural water supply schemes, and locate sources of funding; and implement a phased programme of transfer of rural water supply schemes to community ownership.

### **6.4 Project Justification**

This project is a result of the request of the CBO leadership, which submitted their request to the CED Consultant when he was carrying out his field study in Kwanyoka location between year 2003 and 2004.

Certainly, there is a lot to be desired from the National water policy of 2002 before community empowerment in running and managing their water schemes is realized. Similarly, Mbagala Kwanyoka Development Trust was given a borehole by DAWASA

for own management and maintenance without given proper preparation in terms of technical input and management skills.

The government in the support of the World Bank in 1997 constructed the boreholes in Dar es Salaam during the severe water crisis. In the beginning, all boreholes were operated by DAWASA but later on were handled over to the CBOs, which were ready to manage them.

Mbagala Kwanyoka Development Trust took over from DAWASA in 2000. The water committee comprising of eight members was formed given the responsibility of running the scheme on commercial basis on the behalf of other members of around eighty (80) in numbers. The shift was in line with the policy requirements and advice from the World Bank.

One of the major setbacks in running and managing the water scheme is that, there has been low level of community participation in the project affairs and most of the activities are being left to the CBO leadership and its water committee.

Thus this project is intended to increase the level of participation of community members' in terms of technical input, labour and financial resources in the current and future projects through conducting training seminars to CBO leaders and all members for a period of one year.

The project will build on the methods and interventions developed by the government and Mbagala Kwanyoka development Trust in ensuring effective participation and future sustainability.

### **6.5 Proposed intervention**

This project therefore, aims at increasing the level of community participation in the operation and management of borehole water supply and service delivery scheme in Mbagala Kwanyoka in Temeke municipality. The aim will be attained through organizing and conducting training seminars to at least 80 members of whom 60% should be women.

### **6.6 Target Group**

About 80 people in Kwanyoka location equivalent to 80 households will be trained in *community based water management*. This will include 8 CBO Committee members and 72 members from the water scheme.

### **6.7 Project Objectives, Outputs, Activities, Indicators and Means of Verification**

#### **6.7.1 The Project's overall objective**

To increase the level of participation of Kwanyoka community members in terms of technical input, labour and financial resources in the current and future projects.

### 6.7.2 The Specific objectives, Outputs, Activities, Indicators and Means of Verification

Items in 7.2 are summarized in table 1 below

**Table 6.7.2 Specific objectives, outputs, activities, indicators and means of verification**

<b>Objectives</b>	<b>Outputs</b>	<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>
Enhancement of participation of all CBO members in water management scheme	1.Four training seminars held with CBO members 2.Increased level of participation of CBO members in water management	1.Identify training areas and consultant 2.Develop training module and tools 3.Conduct training to CBO members	1.Existence of effective and efficient participation of CBO members 2.Training module and tools developed	1.project records, names of participants and their signatures 2. Training reports by the consultant
Ensure monitoring and evaluation on the level of participation of CBO members in water management	At least 80% participation is attained on equal gender basis	1.Develop Monitoring and Evaluation guidelines 2.Conduct regular M & E 3. Reporting	1.M & E guidelines developed and applied 2.Progress and final reports in place	1.Project report 2. Application of the guidelines

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## 6.8Time frame

S/N	Activity	Responsible Person	J	F	M	A	M	J	J	A	S	O	N
1.	Identify training areas and consultant	CBO water committee											
2.	Develop training module and tools	Consultant											
3.	Conduct training to CBO members	Consultant											
4.	Develop Monitoring and Evaluation guidelines	Consultant											
5.	Conduct regular M & E	CBO											
6.	Reporting	CBO Management											

### 6.9 Proposed Budget

S/N	Activity/ item	Cost Breakdown	Amount	Total TZS
1.	Identify training areas and consultant	1.Four Consultative meetings @ 50,000/= 2.Consultant fee 100,000/= @meeting	200,000/= 400,000/=	600,000/=
2.	Develop training module and tools	1. Consultancy fee 30 days @50,000/= 2.Printing 20 copies @10,000/=	1,500,000/= 200,000/=	1,700,000/=
3.	Conduct training to CBO members	1.Four training seminars for 10 days @50,000/= 2.Venue for ten days @30,000/= X 4 seminars 3.Consultancy fee 250,000/=per seminar X 4 seminars	2,000,000/= 1,200,000/= 1,000,000/=	4,200,000/=
4.	Develop Monitoring and Evaluation guidelines	1.Consultancy fee 2.Guideline production	500,000/= 200,000/=	700,000/=
5.	Conduct regular M & E	Daily subsistence allowance for 8 M&E monitors @150,000/=for three months	1,200,000/=	1,200,000/=
6.	Reporting	Report pproduction;3 reports @50,000/	150,000/=	150,000/=
7.	<b>Sub total</b>			<b>8,650,000/</b>
8.	Contingency	5% of sub total		<b>432,500/=</b>
9.	<b>Grand total</b>			<b>9,082,500/=</b>

**Note that;** local contribution will be 25%of the grand total (Tzs 2,270,625/=). The amount will be raised from the CBO Bank Account.

**Request to Donor(s) is Tzs 6,811,875/**

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