COMMUNITY PERCEPTION OF THEIR PARTICIPATION IN THE IMPLEMENTATION AND SUSTAINABILITY OF RURAL WATER PROJECTS IN

MOROGORO RURAL DISTRICT COUNCIL

COMMUNITY PERCEPTION OF THEIR PARTICIPATION IN THE IMPLEMENTATION AND SUSTAINABILITY OF RURAL WATER PROJECTS IN

MOROGORO RURAL DISTRICT COUNCIL

By

Triphone Ngoja

A Dissertation Submitted in Partial Fulfillments of the Requirements for Award of Masters of Science in Development Policy of Mzumbe University

2015

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation/thesis entitled **Community Perception of their Participation in the Implementation and Sustainability of Rural Water Projects in Morogoro Rural District Council:** in partial/fulfillment of the requirements for award of the degree of Master of Science in Development Policy of Mzumbe University.

_____

Major Supervisor

_____

Internal Examiner

Accepted for the Institute Board – IDS

_____

CHAIRPERSON, INSTITUTE BOARD - IDS

DECLARATION AND COPYRIGHT

I, Triphone Ngoja, declare that this thesis is a result of my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award**.**

Signature _____

Date_____

ACKNOWLEDGEMENT

First and foremost I would like to thank the almighty God for giving me health and strength when I was pursuing my studies. I am deeply grateful to my mother for her prayers, moral support, encouragement and unconditional love throughout my life, May God blesses her.

I would like to express my sincerely gratitude to Prof. Eulalia Temba my supervisor for her tireless and professional guidance on critical issues concerning this study right from choice of the topic to report writing.

In addition, special thanks should go to my lovely wife Anniva Chalamila, son Bright, sister inlaw Angelista Ruwumba for their endless trust, encouragement, love and support throughout my studies. I am also indebted to the management of SUA for granting me study leave.

I also wish to extend my thanks to all District officials at water department in Morogoro rural district and all Ward Executive Officers, Village Executive Officers and other respondents for their support in getting relevant information as per study objectives.

This study is the product of many people right from setting the study to report writing. I can't acknowledge all of them by names but I am sincerely grateful to each of them and they are granted assurance that their suggestions will remain valued and appreciated forever.

DEDICATIONS

I dedicate this work to my beloved mother Filomena Makero who wholeheartedly laid down the foundation for my education; my wife Anniva Chalamila and son Bright for their encouragement, support and tolerance while I was far away from them.

ABBREVIATION

MDGs	-	Millennium Development Goals
NSGRP	-	National Strategy for Growth and Reduction of Poverty
NWP	-	National Water Policy
PRSP	-	Poverty Reduction Strategy Paper
RWSSP	-	Rural Water Supply and Sanitation Programme
SPSS	-	Statistical Package for Social Science
URT	-	United Republic of Tanzania
VEOs	-	Village Executive Officers
VWUAs	-	Village Water User Associations
WEOs	-	Ward Executive Officers
BRN	-	Big Result Now Programme

ABSTRACT

This study focused on community perception of their participation in the implementation and sustainability of rural water projects in Morogoro Rural District Council. Specifically the study intended to explore the understanding of people of activities towards water projects implemented in their localities; examine roles of community in implementing and sustaining rural water projects; examine perception of community to their participation and sustainability of water projects implemented in their localities.

The study population was the villagers, WEOs, VEOs, and WUAs in Morogoro Rural district specifically in Mkambarani, Mvuha and Dalla villages. The study also targeted District official in water department. Data of this study was collected through questionnaires, interview, observation and documentary methods. A total of 112 respondents were reached and the data was processed and analyzed using SPSS.

It was observed that the community has low understanding of project activities because all project activities were handled to contractors for implementation. With this implementation strategy, the community was required to contribute 5% of project cost and hence community participated through consultation in identifying project water sources, and financial contribution in implementation and operationalization of project. It was also learnt that water management was decentralized to community themselves. It was also observed that some villagers perceived their participation as supportive to project success where as others perceived their participation as exploitative means by leaders due to fraud and lack of transparency on project fund for operation and maintenances. Such perception demoralized participation of community in Dalla and Mkambarani water projects respectively.

The study find it worth to institute mechanism to watch over accountability and transparency of WUAs to get rid of fraud and unnecessary confidentialities on project fund to enhance villagers trust to WUAs and hence project sustainability.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

1.1 Introduction

This chapter presents the introduction part of the study and it is subdivided into different parts which include background of community participation in water projects since independence, statement of the problem, research objectives and their respective research questions which guided the study in the field during data collection and the conceptual frame with relevant variables.

1.2 Background Information to the Research Problem

1.2.1 Community Participation

The concept of participation in water project can be traced back since Tanzania attained its independence from colonial authority in 1961. Participation of community in their own development is very important for the effective implementation and sustainability of development projects. Different countries in the world have been using this approach in community based development projects. Tanzania has also been applying this approach in different development projects including water projects. Soon after independence, Tanzania came up with Water Policy 1970 emphasizing free water for all to ensure that each citizen access clean and safe water for life. In 1971, the free Water Policy 1970 was consolidated and the government declared that by 1991 all population in rural and urban areas should access free water service within 400 meters distance from their respective household. With this policy, the government was responsible for construction of new schemes, operating and maintaining them with nothing from the community. In this context, everything was centralized and hence all water related activities belonged to central government as the sole initiator, planner and provider of water and sanitation services.

However, in the mid of 1970s following International Drinking Water Supply and Sanitation decade in 1980s, foreign donors started developing water supply programs with a view to improve water coverage in developing countries including Tanzania. The programmes were largely developed bypassing government structures. The

facilities were rapidly built and handled over to regional water engineers who by then had neither budget nor capability to operate the facilities for their sustainability (URT, 2002; Kasiaka, 2004).

These early efforts toward programmes on water supply and sanitation proved failure largely due to lack of community involvement in implementation and management of the water schemes. This is ascertained by rural water experts including World Bank and other donor agencies that community is a fundamental to success of water supply projects in rural areas. Failure to involve them results to lack of commitment by the project beneficiaries. On the other hand, economic crisis in 1970s-1980s was another reason as to why many projects collapsed, economic crisis forced the government to downsize public expenditures across all ministries on recurrent cost. This affected water schemes operations and maintenances which basically were done centrally (Mwakila, 2008).

1.2.2 Community Participation and National Water Policies

In response to poor performance of water schemes and economic crisis, the government changed its policies and guidelines from free social service to cost sharing approach for cost recovery. In 1991, the government launched National Water Policy 1991 which focused on community participation through cost sharing in construction, operation and maintenances of water schemes. Under this system, the Village Water Committee were established as the key player in mobilizing community to participate in water project right from initiation, planning, construction, operation and maintenances through Village Water Fund financed by villagers themselves. However, the idea of cost sharing posed by National Water Policy 1991 did not materialize as the people still perceived water services as a free service to all and hence they were not accountable to any cost in water projects. They believed water projects belonged to the government and donors. Therefore, it became difficult to convince community members to engage in water projects particularly paying for water charges. This resulted to lack of commitment and sense of ownership among the community which affected the operations, maintenances and sustainability of water schemes in their respective villages (Water Aid Tanzania, 2009).

The National Water Policy 1991 was revised under the influence of PRSP 2000 and launched in 2003 as a starting point of new policy framework. The revised policy 2002 was designed basing on three principles of Decentralization by Devolution; Cost Recovery and Water Schemes Ownership. The three principles called for community at local level to take fully participation in initiating, constructing, operating and maintaining of water schemes, or these called Community water Management Approach. With this policy, the new role of the government became policy and regulation formulation, coordination and facilitation. The management and coordination of day to day activities related to water issues is to be done by the community under the guidance of local authorities just like village water committees. Furthermore, while the past foreign donors projects often bypassed the government at national, regional and local level, the current policy requires them to be implemented under the supervision of the government (URT, 2000; 2002).

In response to National Water Policy 2002, the government through Ministry of water in close working with development partners such as World Bank formulated various programmes and projects to increase water coverage in rural areas. The programmes include Shinyanga Rural Water Supply and Sanitation; Water Sector Development Programme; the National Rural Water Supply and Sanitation Programme implemented in Kilosa, Mvomero, Morogoro Rural and other Districts in Tanzania mainland. The programmes require active participation of the communities in planning, operation, management and maintenances to enhance sense of ownership, legitimacy, and protection of infrastructure and sustainability of rural water schemes (URT, 2011).

Despite the efforts invested to provide safe water and improved sanitation under the current policy, the situation shows little improvement. According to MKUKUTA/NSCRP and PRSP progress reports, access to water in rural areas increased from 48.5% in 2000 to 60 .1% in 2010 and in urban areas increased from 73% in 2000 to 84% in 2010 (IMF, 2003: p 37; URT, 2011:p viii). Moreover, the recent research conducted in rural areas revealed some water schemes are not properly functioning. (Water Aid - ODI, 2005; Jiménez and Pérez-Foguet, 2008). The same is true in Morogoro Rural District Council (URT, 2014).

It is not yet known to what extent the community was involved in all these strategies of implementing the projects. It is from this background that the researcher intends to assess the community perception on participation in implementation of rural water projects in Morogoro Rural District, since the projects affects their daily life and their perceptions affects success and even sustainability of the projects.

1.3 Statement of the Problem

Community participation approach is a highly pronounced world wide as an important component for the sustainability of development programmes. However, awareness of community perception whether wrong or right are important as they have real consequences for acceptance of participatory approach and the development programmes in particular. In Tanzania, participatory approach was well practiced on education sector, rural roads and now is being applied in water sector under the guidance of National Water Policy 2002. The emphasis on adoption of this approach in water programmes was to get people involved in designing, planning, implementing and managing their own development in their respective areas.

Participatory approach minimizes fully community dependence on Government in which they lack ownership and hence little or no protection of projects directed in their villages. This was experienced in 1970s under free water policy where water pipes, corks and other materials were stolen by community members who wrongly perceived Government as the owner of those water projects. This was due to low level of participation in which the communities were just informed on what happened in their localities. Therefore, active community participation empowers people to solve their actual problems by the use of available resources and appropriate technology respectively with Government as facilitator. The involvement of people in solving their own problem right from designing, planning to implementation promotes a sense of ownership of projects among community members and hence ensures protection and sustainability of projects.

The involvement of community in other sectors revealed that few people have now been aware of the need of their involvement for their own development as they are the ones benefiting from the intended projects. However, majority of rural poor are less aware regarding participatory approach and hence very rarely demand their rights to be involved in decision making of community development project. The same is true to rural water projects under National Water Policy 2002.

Although some people are involved in water projects as per National Water Policy 2002 requirement, the recent reports by Water Aid, (2005) have shown that some projects are doing well and sustained by the community while some have not even been accomplished and others are no longer functioning. The same scenario has been reported in Morogoro Rural District water projects. Information about community perception of participatory approach with a thorough understanding of the needs and expectations of the community about the water supply and sanitation services can help in better implementation and sustainability of water projects. Though the studies by Mwakila, (2008); Sserwagi, (2012) and other researchers on community participation revealed that people are fully involved in development projects, it is not clearly to what extent people are involved in water projects and how they perceive this participation in projects implemented in their localities. This study therefore, intends to examine the community perception of their participation in implementing and sustaining water projects in Morogoro Rural District.

1.4 Research Objectives

1.4.1 General Objective

The general objective of the study is to determine how the community perceives their participation and sustainability of water project in Morogoro Rural District Council.

1.4.2 Specific Objectives

i. To explore the understanding of people on water projects and activities implemented in their localities
ii. To examine the role of community in implementing and sustaining the rural water projects
iii. To examine the perception of community on their participation in implementing and sustaining water projects in their localities

1.5 Research Questions

i. What is the understanding of the people about activities towards water projects implemented in their localities?
ii. What is the role of the community in implementing and sustaining projects?
iii. How communities perceive their participation in implementing and sustaining water projects?

1.6 Scope of the Study

The study will be undertaken in Morogoro Rural District Council (in three villages namely Mvuha, Dalla and Mkambrani) as it is not easy to conduct the study in the whole country due to time factor, size and geographical distribution of population. In content wise, the study focused on community perception of their participation in implementation of water projects in Morogoro Rural District Council. Specifically the study explored the understanding of people on water projects and its activities in comparison to actual activities; examined the roles of the community in implementing and sustaining water projects and how they perceive their participation in implementation and sustaining of water projects.

1.7 Significance of the Research

It is the hope of the researcher that the findings of this research will be important in various ways as follows;

a) The study helps Government and Development partners understand the relationship of community perception to success and sustainability of projects. The understanding of community perception alerts the Government and Development Partners to mediate the situation in case the perception does not favour project success.

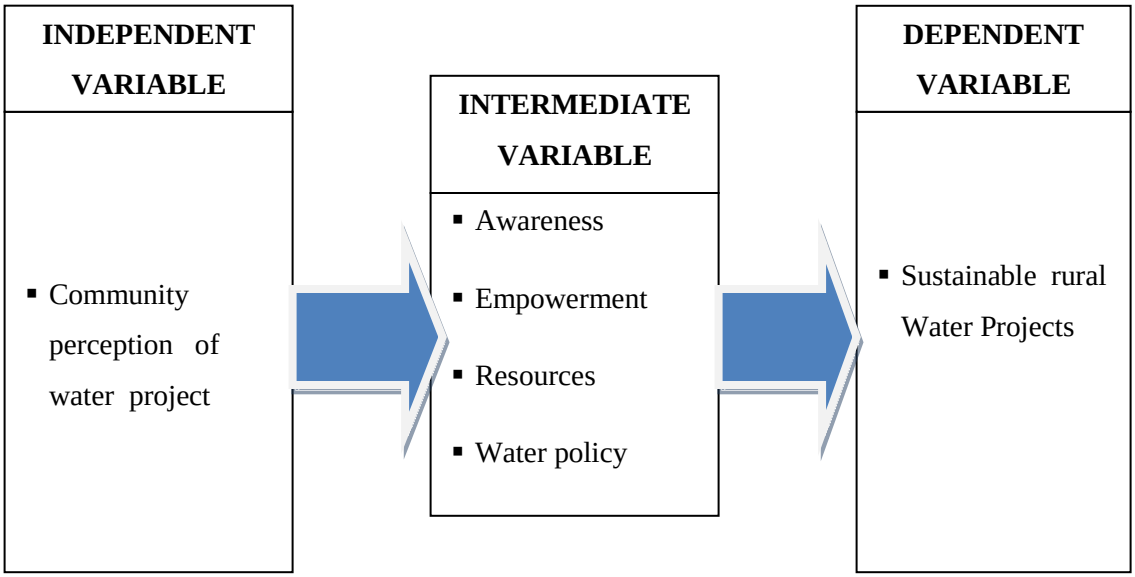
b) This study makes it clear that community is not necessarily be involved physically in developments project through free labour provision, material contribution, instead they can be involved through financial contribution to effectively meet project objective.

c) The study provides useful information for the Government and other Development Partners particularly those dealing with development projects designed to involve community. E.g. it reminds Government and other Development Partners that they need to understand community perceptions and its effects towards the intended interventions and the participatory approach before actual implementation; it also remind them to consider good governance in managing development project for the betterment of the community.

1.8 Conceptual Framework

Community perception, willingness, understanding and sense of ownership of project exist as an independent variable whereas sustainability of water projects remains to be dependent variable. This is because implementations of water projects under participatory approach depend on community perception, understanding, and willingness which determine their support in implementing and sustaining projects. On the other hand, implementation and sustainability of water projects depend on community empowerment and resources from government and donor support. However, the extent of empowerment, participation by the community in implementing water project depends on community's perception, willingness, sense of ownership and understanding toward the projects.

Figure 1.1: Conceptual framework



Source: Researchers own construct

The framework guiding this study was built from theory of participation based on voluntarism model developed by Verbal *et al* (1995). The model postulates that participation of people in any intervention depend on three factors. The first factor is the resource that individuals have i.e. money, time and skills; second factor is

psychological engagement with the intervention and participatory approach itself i.e. individual perception/sense of usefulness of the intervention and the approach adopted; thirdly recruitment networks that bring people into development intervention i.e. awareness creation and request for participation that come to individuals at work, in church, organization, government leaders at various levels, meetings, from friends or neighbours. The three factors in voluntarism model which feature the conceptual frame work in figure 1.1, determine to large extend how much people participate in development initiatives to effective meet predetermined objectives. The same is applicable in implementation and sustaining rural water projects (Rubenson, 2000).

1.9 Conclusion

The Free Water Policy during the 1970s considered community the recipient of water and sanitation services with the State the sole implementer of water projects. By then the community were just informed on what was going or happened in their localities with no feedback. As a result, they perceived Government as the owner of those water projects. Such perception resulted to lack of ownership of project properties among community members and hence loss of water pipes, corks and other materials due to stealing (Water Aid Tanzania, 2009). National water policy 2002 recognized the need of community participation for the success and sustainability of water projects. It emphasizes on active involvement of community right from designing, planning, implementing and managing water projects. The Government launched various programmes in 2002 including the Rural Water Supply and Sanitation services to implement National water policy 2002. However, the situation shows that some projects have been sustained and are operating while some are no longer operating. It is not clear so far to what extent community are involved and how they perceive their involvement in implementing rural water projects in their respective areas (URT, 2000; 2002; 2011). This study therefore intends to assess community perception of their participation in implementing water projects in Morogoro Rural District.

The study specifically focused on the perception of the community to their participation in implementing and sustaining water projects; explored understanding of the people about activities towards water projects and the role of community in implementing and sustaining rural water projects. The study helps understand how community perception affect their participation in development projects no matter whether perception was right or wrong; it also clearly shows that community is not necessarily be involved physically in developments project through free labour provision or material contribution, instead they can be involved through financial contribution to effectively meet project objectives; the study reminds government and other development agents that they need to understand community perceptions and its effects towards the intended interventions and the participatory approach before actual implementation; it also reminds them to consider good governance in managing development project for project success and sustainability to meet the community needs.

The study was grounded on theory of participation based on voluntarism model which highlights three factors determining people participation i.e resource factor; psychological engagement i.e individual sense or perception; and recruitment factor.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews some experiences, knowledge, skills given by various authors and National Water Policy content in relation to community participation and perception as related to water development projects success and sustainability.

2.2 The Concept of Community in Development Projects

In the context of this study, community means people living in a particular geographical area who are benefiting from the development projects implemented in their respective areas. Brieger, (2005) defines community as a group of people in a defined geographical area sharing the common values, goals, history, language and interests. In Greek language, the term community means a fellowship or a group of people who come together for mutual support to fulfill their development interventions in their particular geographical area (Brieger, 2005). In the context of water development intervention, community are the recipients of project output, provide required contribution, own and sustain the projects affecting their lives, participate in project security. Community also implements and monitor water project with a broad common goal to ensure reliable supply of water and sanitation in their locality (Mwakila, 2008).

2.3 Concept of Participation in Water Projects

The concept of participation simply means the involvement of people in a particular development intervention such as water project. Such people can either be direct beneficiary or indirect beneficiary to the intervention undertaken in a particular geographical area. Similarly, Wilcox, (2003), defined participation as a process in which individuals, groups and organizations become actively involved in a project and programmes of activity. Participation generally entails empowering beneficiaries and other stakeholders to influence project planning, decision-making, implementation, monitoring and evaluation.

Basically participation to development spheres have been highly pronounced in developing countries since 1980`s in neo liberalism era. It is now accepted component of projects design among donor agencies and governments in implementing any development projects including water projects. The need for participation in development intervention reflects broader social trends particularly the quest for success and sustainability of development projects; the support for partnership working and the challenge to traditional democracy resulting in the desire for a greater community voice in their own welfares. This led to movements demanding participation in project planning, decision making, implementation and management (Richard, 2004:3). Consequently, different development intervention have been initiated on smallholder crop, road, health, education and livestock development, irrigation and water supply services under the label of people's participation. Others labeled it as public involvement, social mobilization, self help development and community participation.

2.4 Community Participation in Development Projects

Community participation is sometimes termed as people's participation, public involvement, self help development as well as social mobilization in development context. They all simply mean individuals' involvement in the struggle for their own development in their respective geographical area. Such meaning is also emphasized by Singh, 2005, who defined community participation as a process by which individuals, group of families assume responsibility for their own local problems/ welfare and develop a capacity to contribute to their own and the community's development. In the context of water sector, it refers to an active process whereby beneficiary influence the direction and implementation of water development projects rather than merely receive project benefit. The experience from World Bank with the community participation in development projects places participation by beneficiaries rather than external personnel, stressing the involvement of beneficiaries in groups, and refers to a process to meet the project objectives rather than products (Schouten and Moriarty, 2003).

The broad objectives to get people involved in their own development is to empower them to decide, design and implement their own development in reflection to their actual problems in daily life situation; it also develop a sense of ownership of projects among the community members and hence ensures security of project properties and sustainability of the development intervention.

However, different countries opt for community participation with different purposes and objectives. For example, among other things, Tanzania adopted community participation in development due to economic crisis 1970-1980s in which the government had no enough fund to run all development intervention (Kasiaka, 2004). With this situation, the objective to adopt participatory approach basically was to get active support from the people in undertaking development interventions to supplement budget deficit as well as sustaining the projects respectively. In Tanzania this has worked in education sector under SEDP, PEDP; road sector in rural areas. The approach is now being applied in water sector to ensure effective and reliable supply of water and sanitation services to people in their villages.

Furthermore, Paul, (1987), highlighted five objectives of community participation in any development intervention including water projects as follows;

a) Sharing project costs: Participants are asked to share part of the project cost either by contributing money, labor or occasionally material/goods during the project's implementation stages.

b) Increasing project efficiency: Beneficiary consultation during project planning or beneficiary involvement in the management of project implementation/operation.

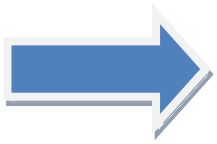
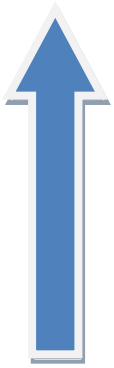
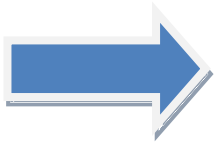
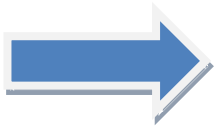
c) Increasing project effectiveness: This is all about ensuring that the involvement of beneficiaries will lead to achievement of intended project objective.

1) Building beneficiary capacity: It is either through ensuring that participants are actively involved in project planning and implementation or through formal or informal training and consciousness raising activities.

2.5 Levels of Community Participation

Levels of community participation are the ways/forms through which community can be involved in development intervention. The levels or ways differ from one another on their applicability. According to Sherry Arnstein, 1969, there are eight levels of participation through which communities can be involved in planning and implementing development interventions. It is argued that involving people varies from informing them of a decision, through to giving citizens full control of the development intervention. The difference between these levels is the relative balance of power and control between the participants and the authorities. These levels can also be applied in water and sanitation projects in rural and urban settings. The table below shows the levels of participation from lower at bottom to higher at upper part.

Table 2.1: Levels of Community Participation

1. Citizen control 2. Delegated power 3. Partnership		Degree of citizen power	Higher level  Lower level
4. Placation 5. Consultation 6. Informing		Degree of tokenism	
7. Therapy 8. Manipulation		Non participation	

Source: Modified from Arnstein, (1969)

From the table above, Manipulation and Therapy are basically non participative levels. They are the levels which aim at curing or educating the participants on particular initiative. The proposed plan is best and the job of participation is to achieve public support by public relations. Below is a description of each level of participation:-

Informing, it is a most important first step to legitimate participation. But too frequently the emphasis is on a one way flow of information. No any channel for feedback. This is to say the communities are just informed on what is going or will happen in their localities (Wilcox, 2003).

Consultation, again a legitimate step which involves attitude surveys, neighborhood meetings and public enquiries to get their views on particular development plan/initiatives. But Arnstein, (1969) still feels this is just a window dressing ritual as the degree of participation is still low.

Placation, it is a kind of participation which allows citizens to advice or plan but the power to judge and decide the legitimacy or feasibility of the advice is retained to authorities/power holders. For example, co-option of hand-picked 'worthies' onto committees (Wilcox, 2003).

Partnership, power is in fact redistributed through negotiation between citizens and power holders or donors. Planning and decision-making responsibilities are shared in corporation basis, e.g. through joint committees (Wilcox, 2003).

Delegated power, citizens holding a clear majority of seats on committees with delegated powers to make decisions. Public now has the power to assure accountability of the programme to them (Wilcox, 2003).

Citizen Control, the citizens takes full responsibility right from designing, planning, implementing and managing the development projects, however development partners and the government play the facilitating role to community meet their desired goals (Wilcox, 2003).

2.6 Perception and Sustainability of Development Projects

Perception is a mental process that elaborates and assigns meaning to the incoming sensory patterns. Thus, perception creates an interpretation of sensation. It gives interpretation to what we see, what we hear and so forth to produce meaningful experience. However, what an individual or community interprets or perceives may be substantially different from reality (Pickens, 2005). In the context of this study, perception refers to the ways community regard, understand and interpret their involvement in implementing rural water projects based on their experiences.

Community perceptions are important whether right or wrong, they have real consequences for the acceptance and sustainability of any development programmes including water programmes. A lack of awareness of how organizations, programmes and implementation approaches are perceived by the community is proving to be a growing hindrance to their effective implementation and sustainability (Haddad, 2009). The same is true to water projects and the participatory approach to implement rural water project. For example in Tanzania, the big shortfall of Water Policy 1991 was the community perception on the ownership of the water projects and their facilities. The community by then perceived water projects as the government property and hence concept of participation through cost sharing proved failure. This affected construction, operation and maintenances of water schemes as well as safety of project properties due to stealing by peoples in villages. Such perception was highly developed in peoples mind by the free water policy in 1970s when the government was the sole investor, planner, implementer, and the manager of the water schemes for the community consumption (URT, 2002).

2.7 Models of Water Management

Water projects can be managed or implemented in three different ways namely state centered, market centered and community centered management (Lein, and Tagseth, 2009). The three differs in their course of applicability and the way they regard and involve community in the implementation/managing water projects or resources.

2.7.1 State Centered Water Management Model

It's a model which treats water as a social good and hence it's a free service to people. This model is sometimes referred to as state centered model which is based on top down approach in which administrative, political institutions are the ones to design, plan, allocate and manage water resources in the interest of the community (Lein and Tagseth, 2009). This implies that model believes that the communities are the recipients of water development initiatives from authorities. The communities are just involved in the consumption of the projects output in terms of fees to recover cost of providing infrastructure and to fund the operation of water management authorities. The model assumes that authorities have superior knowledge and overview of available resources, possible ways of using water and also ideas and tools to decide on the optimal way of allocating resources. The example on the application of this approach can be seen in integrated river basin planning. It was inspired by the Tennessee Valley Authority (TVA) model ; it was also applied in several African countries since the 1960s. In Tanzania, such model was adopted in Free water policy 1970 and National Water Policy of 1991 (Lein and Tagseth, 2009).

The model was popular in many countries as it appealed to the ideas of modernization, rationality and planning and it carried the notion of strong and active state as the engine of development to communities. However, the results of large-scale river basin projects in Africa have often been quite disappointing (Adam, 1992). The approach was criticized in 1990s by neoliberal and populist development paradigms that it restricted individuals' freedom to participate and decide on their own development (Todaro and Smith, 2012).

2.7.2 Market centered Water Management Model

It is a model which insists on management of water in profit motive rather than service oriented. The market-based model presents a critique of the state model related to questions of how and by whom, decisions about the allocation of water should be made to community. With this approach, water projects should be implemented and

managed in economic basis and considered as an economic commodity in all its competing uses.

With this, the model emphasizes water users/community to pay for water services based on three reasons which include: - water charges can be used to recover the cost of providing the service; it can provide an incentive for the efficient use of scarce water resources; and water charges can be used as a benefit tax on those receiving water services to provide potential resources for further investment for the benefit of others in society. Market centered model has its origin on neoliberal argument that while market may not be perfect, they are certainly better than bureaucrats and politicians in allocating scarce resources (Lein and Tagseth, 2009).

It is argued that water can and should be treated as a commodity the same as oil and other natural resources and can thus be traded. This can be done by establishing clear tradable property rights through which a market for water can be established. Basically, a system of water rights is a means to empowering water users/community, providing security of tenure regarding water rights and providing incentives to consider the full opportunity costs of water. With this model the role of the state remains to create conducive environment for market to operate which can be challenging in some situations. However, the approach to treat water as economic commodity has been criticized that the access to water should be seen as human rights and hence should be treated as social good (Lein and Tagseth, 2009).

2.7.3 Community Centered Water Management Model

It's a model which calls for community involvement in development spheres. The need for increased participation of community in development initiatives and nature resource management emerged after the challenges of state approach to water management by the neo populists and market model of water management in 1980-1990s. Since then local community was considered an important element in development and in managing resources including water in a sustainable manner. This argument corresponds with Dublin statement which states that water development and

management should be based on participatory approach, involving users, planners and policy makers (Lein and Tagseth, 2009).

Water management community may be typically a village or group of water users sharing a schemes or a source of water. Members of the community have the rights to utilize the resources with no individual ownership of the resource. Rights to access water are implanted in fulfillment of certain agreed obligations (for example be a member of the village or group, contribute in construction or maintenance of infrastructure). Once these obligations are fulfilled, a person has a claim to water along with other members of the community. The closer involvement of communities/users help to reduce operating cost, make water distributors more responsible thereby increasing efficiency and contributing to a general democratization in development. In Tanzania, the current water policy of 2002 emphasizes the use of this model in implementing water projects in urban and rural areas (URT, 2002).

In the context of this study, Community centered water management model is more applicable as the study examine community perception of their participation in implementation and sustainability of rural water projects which are being implemented on active participatory basis elaborated in the model.

2.8 National Water Policies and the Community Participation

Government of Tanzania has been working hard to ensure water is well supplied to citizens since independence. Despite significant investment in the Water Supply services since the early 1970s, water supply coverage is not satisfactory (IMF, 2003). The 1991 National Water Policy set a goal of providing clean and safe water to the population within 400 meters from their households by the year 2002. However, the progress report in 2000 revealed that about 50% only of the rural population has access to a reliable water supply service (IMF, 2003; URT, 2011). Some of the reasons were noted to be poor operational and maintenance arrangements, over 30% of the rural water schemes were not functioning properly (URT, 2011). The water coverage for urban areas was 73%, but most of urban water supplies are inadequately treated due to malfunctioning treatment plants. It is argued that the major short fall of the

1991 Water Policy was on implementation strategy which adopted the State Centered Approach with little people participation through cost sharing. The policy did not consider community participation as an important element in implementing water project. The policy considered central government as the sole investor, implementer, manager of water projects and the only responsible organ for protecting water sources while environment protection was not given its due significance (URT, 2002).

In trying to address such weakness experienced in Water Policy 1991, Poverty Reduction Strategy Paper (PRSP), 2000, among other things, considers water as a key factor in the socio-economic development and fight against poverty. With this consideration, in 2000, the National Water Policy 1991 was revised under the influence of PRSP to come up with revised policy which recognized the significance of active community participation in developing water sector. The revised policy now empowers community to participate in water project right from initiatives, planning, construction, operation, maintenance and management. With such changes, the ownership of project goes to community and the government role changes from service provider to that of coordinator, facilitator, regulator and guidelines formulator (URT, 2002). PRSP believed that people participation in development water project increases ownership and protection which in turn ensures sustainability of water services to community. This is geared to improve health and alleviate poverty through improved access to adequate and safe water in rural and urban areas which also corresponds to the National Development Vision 2025 (URT, 2000). The revised National Water Policy was in place in 2002 with its objective to develop a comprehensive framework for sustainable development and management of national water resources in participatory basis (URT, 2002).

2.9 Community Empowerment in Water Projects

According to the National Water Policy 2002, the community is being empowered and facilitated to initiate, own and manage their water schemes including water wells. It is also empowered to make choice of appropriate technology to suit them in undertaking, operating and maintaining water projects at low cost in their respective

areas. This among other things may include use of environmentally friendly technologies such as gravity. Solar, and wind power for pumping water.

2.10. Rural Water Supply and Sanitation Programme (RSSWP)

In the course of operationalzing the National Water Policy 2002, the Government of Tanzania with a credit from international Development Agency (IDA) in 2002 launched Rural Water Supply and Sanitation Programme (RWSSP) to enable rural people access reliable and sustainable water supply and sanitation. Initially the project was designed to cover 30 villages followed by other eleven districts as pilot study and then extended to about 250 villages more in the Tanzania mainland to benefit from the project. The project employed participatory approach in all villages to effectively implement the water projects as per National Water Policy 2002 requirement (URT, 2011).

One of the project components was to consolidate all other isolated programmes such as Shinyanga Rural Water Supply and Sanitation Programme and other area/district based projects into one big programme called National Rural Water Supply and Sanitation Programme (NRWSSP) that will cover the entire Tanzania by 2006. The programme was designed to meet Tanzania Development Vision 2025 target of 100% access to safe water for all; MDGs water target to reduce by ½ the proportion of people without access to safe water; NSGRP water target which is to increase access to safe, clean affordable and reliable water to 65% in rural areas and 95% in urban areas by 2015 (URT, 2011).

2.11. Empirical Review of other studies

Various other studies related to community perception of their participation in the implementation and sustainability of water development project

Mwakila, (2008) conducted a study on community participation in water supply and sanitation, the results revealed that majority of respondents who were interviewed and those who filled questionnaires had a good understanding about water project implemented in their areas of residence. Respondents were aware of water projects existed in the residence; aware that TASAF were financing water projects implemented in their localities; and also aware of their roles in implementing and sustaining water projects.

Furthermore, Mwakila, (2008) discovered that the high understanding by the community was due to involvement of community from initial stage. Various participatory methodologies such as Rural Appraisal (RUA), Community Mapping as well as Participatory Hygiene and Sanitation Transformation (PHAST) were employed. This was ascertained by 45 out of 52 respondents who agreed that they were involved and informed about the project right from initial planning ofr projects. However, Mwakila, (2008) noted that, although beneficiaries participated in identifying and prioritizing water projects, they were not consulted to locate the positions of new water wells; the decision was done by LG leaders instead, hence the beneficiaries' requirements were not taken into consideration during implementation.

Mwakila, (2008) also found that community members participated in cash and free labour in water project. Cash contribution (1000/Tsh) per household was required for the initial opening of bank accounts and it was also a way of demonstrating the community's commitment to the projects. Free labour was provided in the activities such as preparation of ditches for laying pipes, fetching water for construction, carrying building blocks and other building materials, painting well housing, and cleaning areas for drilling boreholes. Such participation by labour covered some of the water project costs.

Furthermore, financial contribution and decentralized water management through water committees were also adopted as a strategy in operating, maintaining and managing water projects. Strategies to implement, operate, maintain and manage water projects were determined at initial stages as per TASAF requirement and the National Water Policy 2002. Community members paid water charges amounted to 10/=tsh per bucket to support operation and maintenance of water project and related facilities.. However, amount collected from community was small as some community members did not see the relevance to pay for water services since they had offered free labour during project implementation. Others wanted to know why they had to pay for water services now as opposed to previous days when water services were offered free. This meant that community members perceived water service as a free service. The findings noted that community were not aware of who was supposed to pay water user charges as others believed TASAF was responsible for operation cost. However, it is clearly stated in National Water Policy 2002 that community has to cover full cost in operating and maintaining water projects in their respective residences (URT, 2002). Although the study by Mwakila, (2008) highlighted that the community participated through financial contribution and labour provision, it did not tell how community members perceived their participation in the implementation and sustainability of water projects.

Sserwagi, (2012) conducted a study on in Community Stakeholders' Perception of Participatory Process in Development Project, a case of Women Participants of the Bukoba Women's Empowerment Association (BUWEA) in rural Tanzania. The analysis of the study revealed that the women were aware of the participatory process and that the process, as initiated by the external stakeholders, had led to the success of many economic-development projects. This was reflected from community responses on their understanding and perception of the participatory process in development project. Sseruwagi, (2012 discovered common words and phrases that portrayed the women's understanding and perception of participatory process; understood and perceived as an approach for building relationship among the project beneficiaries; a process that meant involvement of beneficiaries in their own development; a process

that gives responsibility to project beneficiaries; the process that allow beneficiaries to make decisions that affect them; a process promoting full ownership of project to the beneficiaries. It was also noted that women perceived participatory process as a means to enhance empowerment to project beneficiaries.

As the participants reflected on what they perceived to be participation, their voices revealed a local contextual understanding of the participation process. The results further indicated that in order to have meaningful dialogue in development, it is important that the voices and knowledge of the rural poor are listened to and taken into account in various stages of development projects. Sseruwagi, (2012) emphasized that when the rural poor are increasingly involved in the process of developing themselves at the various stages of development, capabilities and capacities are increased, which enable them to own and manage their destinies in collaboration with external stakeholders. On the other hand, Nikkhah & Redzuan, (2010) argues that participation requires significant and explicit recognition of the voices and the perceptions of the in-community stakeholders in the entire process, which becomes an effective participatory structure. Otherwise, participation will reflect the old pattern of a top-down process. However, Sseruwagi, (2012) did not show how women were involved in various development projects.

2.12. Conclusion

Awareness of community perception is very important for acceptance and sustainability of participatory approach and development programmes. Community participation in water programmes was thought to be the relevant approach to get people directly involved in struggling for their own development in their respective areas. This was realized in 1970s-1980s after failure of some projects which were designed, planned and implemented by the Government with little or no community involvement i.e. State Centered Water Management Approach. With this approach, community perceived water projects and its properties owned by the Government, hence little community support to protect and sustain project.

Knowing this anomaly, National water Policy 2002 recognized the need of community participation and therefore it empowers community to participate right from designing, planning, implementing, operating and managing water projects in their respective areas i.e. Community Centered Water Management Approach. The approach aims at involving community to solve their own problems and hence develop sense of ownership and therefore ensures protection and sustainability of projects. In trying to operationalize the National water policy 2002, the Government launched different programmes in 2002 including Rural Water Supply and Sanitation Programmes to enable rural people to access reliable and sustainable water and sanitation services in their respective areas.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents various techniques the researcher used to come with relevant findings regarding Community perception of their participation in implementing and sustaining rural water projects in Morogoro Rural District. It describes area of study, research design, target population, sample size and sampling procedures, data sources and data collection instruments, data analysis, interpretation and presentation.

3.2 Study Area

The study was conducted in Morogoro Rural district council specifically in Mvuha, Dalla and Mkambarani villages. Morogoro Rural District Council is one among 5 districts in Morogoro region. The district had a total population of 286,248 in which males were 140,824 and females were 145,424 (population census 2012). Morogoro Rural District Council was selected for this study due to the fact that there were many water projects which had already been implemented under community participation and others were still on progress. Moreover, some of the project has been successful implemented and others were not properly functioning to date. But also Morogoro Rural District Council was easily accessible in terms of transport and hence lower cost to the researcher.

3.3 Research Design

Research design is a detailed blue print used to guide a research study towards its objectives. Similarly, it is a conceptual structure within which research is conducted; it constitutes the blueprint for the collections, measurement and analysis of data (Kothari 2004).

This study used a case study design in which the perceptions of community on their participation in implementing rural water projects was assessed. This was expected to add knowledge on how perception influences effective implementation of rural water projects and its sustainability. The case study design employed varieties of data

collection techniques such as questionnaires, interviews, and observation methods for primary data and documentary review for secondary data. The case study design has been chosen for this study so as to get detailed information and comprehensive picture on how community perceived their participation in implementing rural water projects directed in their localities. Furthermore, it gave chances for researchers to choose and analyse one particular unit in detail with its findings at less cost in term of time and money.

3.4 Target Population

Study population comprised various stakeholders of water projects in Morogoro Rural Districts Council particularly in Mvuha and Mkambarani wards. The target population included Villagers, District officials, WEOs, VEOs and members of the Village Water User Associations. The sampling unit was individuals who were beneficiaries of water project implemented in their respective villages.

3.5 Sample and Sampling Techniques

3.5.1 Sample Size

The simplified formula by Yamen (1967) was used for calculating the sample size of a research. The study population at Dala, Mvuha and Mkambarani villages was estimated to be **8, 281** (URT, 2014). The sample size was then;

$\mathbf{n = N / 1+N (e)^2}$ Where n = sample size,

N = population size (8, 281)

***e*=** level of precision (9%)

Therefore:-

$n = 8,281/1+ 8,281 (0.09)^2$

$n=8,281/1+8,281(0.0081)$

$n=8,281/68.0761$

$n=121.6$

The sample size of the study was 122 of which 90 respondents were villagers and 32 were key informants. The detail and distribution of sample size is given in table 3.1.

Table 3.1: Respondents Distribution Table

S/N	RESPONDENT CATEGORY	VILLAGES			TOTAL # OF RESPONDENT
		Mvuha	Dalla	Mkambarani	
1	Villagers	30	30	30	90
2	Village Water Committee Members	8	8	8	24
4	Village Executive Officer (VEOs)	1	1	1	3
3	Ward Executive Officers (WEO): From Mvuha & Mkambarani Wards	1		1	2
5	District officials from Water Department				3
	TOTAL - SAMPLE SIZE				**122**

3.5.2 Sampling Technique

The researcher used probability and non probability sampling methods to get the right number of sample from the area under study.

3.5.2.1 Probability Sampling

Probability sampling is also known as random sampling; it is the sampling procedure in which each item in the population has equal chance of inclusion in a sample (Kothari, 2004). The Method is good as it help avoid bias in selecting items to make a sample.

This technique was used in selecting a total of 90 villagers i.e. water project beneficiaries in which 30 villagers from each village were selected randomly by physical visits by the researcher. The researcher was accompanied by hamlet chairpersons in each village purposely for introduction to villagers. However, as the visits around the villages were made, the hamlet chairpersons did not influence the researcher in selecting the respondents.

The technique was also used in selecting members of Village Water User Associations (VWUAs) from members lists accessed from respective VWUA Chairpersons. Each

VWUA had a total of 12 members in which 8 members were randomly selected from each village for interviews. This category was one among key informants to the study due to their position in water project management in villages.

3.5.2.2 Non Probability Sampling

Non probability sampling is that sampling procedure in which there is no possibility of estimating the probability that each item in the population has to be included in the sample. The items in the sample are selected purposively by the researcher, the choice made concerning the items remain supreme (Kothari, 2004).

This technique was used to select VEOs, WEOs, and District officials purposively as key informants to the study. These were the leaders who basically had necessary information with regard to water projects implemented in villages.

3.6 Data Source

3.6.1 Primary Data Source

Both qualitative and quantitative Primary data was collected direct from the field in reflection to the objectives of the study. Primary data was collected through interviews, observation and questionnaires from three villages.

3.6.2 Secondary Data

Secondary data was also collected as the second hand information to satisfy the need of the study. Different sources such as official records on project information e.g. cost of projects; records on fund collected from villagers; Document on project implementation schedule; Constitutions guiding for Village Water User Associations (VWUA). All these sources were accessed from different leaders including District officials, WEOs, VEOs and VWUAs.

3.7 Data Collection Methods

The study employed questionnaires, structured interviews and observation to collect primary data as per study objectives.

On the other hand, secondary data were collected through documentary review. The combination of methods was used deliberately to get well detailed and clarified information which could not be obtained by single method.

3.7.1 Questionnaire

The questionnaire instrument consisted of open and closed questions as per study focus. Open ended questions enabled respondents to express their experience on their perception to participate in implementing rural water projects and other related information. Close ended questions were set to gather information as per researcher intention which could not be obtained in open ended questions.

In this study questionnaires were distributed to 90 villagers who were beneficiaries to water projects in villages. In managing questionnaires, 70 villagers responded to several questions posted to questionnaires under supervision of the researcher. The researcher read questions to respondents and recorded responses accordingly. This was done deliberately to ensure that respondents gave their own responses according to their own experiences with no any sort of influences from friends. Also this helped to get responses on time with no loss of questionnaires. On the other hand, 20 respondents filled questionnaires on their own as they were occupied with other duties when they were visited by the researcher. All questionnaires were well filled and collected on time.

3.7.2 Structured Interviews

Interviews were employed to obtain primary data. District officials, WEOs, VEOs, VWUAs' Members and villagers were interviewed to generate information needed in this study. All these categories of respondents were interviewed using interview guide. Interview technique was used as a probing mechanism to get detailed information and opinions of the respondents upon the questions asked in reflection to the study, the interview made interviewer free to formulate questions as they came to mind around the issue being studied.

3.7.3 Observation

Non participant observation was used during data collection. Camera was used to capture observed events and the note book was used to record the observed phenomenon. The participants were informed before taking pictures. Among other things, the researcher observed water tanks and public water points as a result of new water projects at all villages; water pump and generator at Dalla village; borehole which was used as the source of water before the project in Mkambarani; villagers bathing, washing and fetching water direct from Mvuha river. The researcher also observed ongoing project activities which included construction of public water points and finishing of water tank at Mvuha village.

3.7.4 Documentary Review

Various documents were reviewed in the District water Department, villages and ward offices, VWUAs offices. This method also involved going through various sources both published and unpublished documents including official reports and documents that provided relevant information to the study. The issues reviewed included record on trend of financial contributions from villagers, records on water project costs and amount charged to each village, projects activities as in project work plans as well as modalities to mobilize participation of villager on water projects.

3.8 Data processing, Analysis and Presentation

3.8.1 Data Processing

Data was reviewed by the researcher for completeness and consistency right from the field in relation to the questions. The data was edited, categorized, coded and entered in SPSS accordingly.

3.8.2 Data Analysis

Substantial part of the data was descriptively analyzed to describe nature of phenomenon under study. Open ended responses were organized and categorized under their relevant subheadings to facilitate understanding. Quantitative data was also analyzed descriptively. Frequencies, percentages and cross tabulation between variables were used in the analysis of data.

3.8.3 Data Presentation

Data was presented in tabular forms with frequency and percentages calculated for drawing conclusions on particular phenomenon under study.

3.9 Conclusions

The study was a case study based in Morogoro Rural District Council in which all villagers men and women, District officials, WEOs, VEOs, and VWUAs were the target population as long as they were the ones involved in implementing water projects. A total of 122 sample size was used of which Villagers and Water Committee Members in each Village were randomly selected whereas the VEOs, WEOs and District officials were purposively selected as they were likely to have relevant documents, guideline and other project information. Both qualitative and quantitative data was collected through various methods including questionnaires, interviews, observation and documentary in reflection to research objectives. The collected data was coded, processed and analyzed descriptively through SPSS Programme.

CHAPTER FOUR

PRESENTATION OF THE FINDINGS

4.1 Introduction

This chapter presents major findings from Dalla, Mvuha and Mkambarani Villages in Morogoro Rural District. The findings were obtained from five major categories of respondents which included Villagers, Village Water User Association (VWUAs), VEOs, WEOs, and the District officials from Water Department. Findings were collected through questionnaires, interviews, observation and reviewing various documents. This chapter is divided in four parties, first part explains sample characteristics of respondents; second part explains community understanding of activities toward water project implemented in villages; third part gives roles of community in implementation and sustaining water projects; fourth part tells more about community perception of their participation in implementing water projects.

4.2 Respondents Profile

The results in Table 4.1 shows that most of the sampled respondents were aged between 31 – 40 years which accounted to 38.9% of total respondents followed by 27.8% respondents ranging between 41 – 50 years with no respondents aged below 18 years. Basically, the findings revealed that majority of respondents were mature enough to understand the importance of water development projects as well as playing roles in implementation of projects which required people's participation. This corresponds to Tanzania Constitution, and Water User Association Constitutions (WUAC) which recognized a person of 18 years old and above as an adult person and hence a valid workforce to participate in development interventions including rural water projects (URT, 1977, WUAC, 2013).

The results also indicate that more than fifty percent (56.7%) of total respondents (90) were female. This indicates that the number of women was higher than men due to the fact that women were easily found at their respective houses during data collection. It was also the interest of the researcher to have more women than men since women

were the most affected group with water shortage problem at household level. Mbugua et al, (1993) insisted that under normal conditions women are more victimised stakeholders whenever water shortage problem occurs in their residences. However, men were also included since they were the key stakeholders in water sector. Majority of respondents were farmers who counted to 70% of total respondents as the villages were geographically in rural setting. However, there were also few (10%) employees from different institutions in villages including Secondary & Primary schools, Health centre, Prisons and Ubena Sisal Estate. It is also shown that only 3.3% of respondents were retirees as shown in Table 4.1.

Table 4.1: Respondent Profile

Variables	Frequency	Responses in (%)
Age Categories (Years)		
18 – 30	15	16.7
31 – 40	35	38.9
41 – 50	25	27.8
51 - above	15	16.7
Sex Categories		
Male	39	43.3
Female	51	56.7
Occupation categories		
Employee	9	10
Business	15	16.7
Farmer	63	70
Retiree	3	3.3

Source: Field Data, December, 2014

4.3 People's Understanding on Water Project in their Village

The researcher was interested to know the community knowledge about water project implemented in villages. This based on identifying existing water sources/project, the founder of the project, implementation period, project activities and the way they perceived water projects implemented in their villages. The findings on all these areas are given in section 4.3.1.

4.3.1 Understanding on Existing Water Projects

4.3.1.1 Water Project in Mkambarani Village

The study found one water project which was sourced from Uluguru Mountain at Bamba village. The project was implemented between 2006 and 2008 in participatory basis. The community was involved right from initializing, implementation, operation, maintaining and managing the project. The project was found functioning as villagers were observed fetching water in public water points as shown in Figure 4.2. The study observed one water tank (50,000 M^3) which distributed water to 16 public water points all around the village. Before the project, villagers in Mkambarani used water from boreholes, Ngerengere River and others walked longer to Pangawe in search of water. Water from these sources was not safe for human consumption. Below are some pictures on project facilities after project and a borehole before the project.

Figure 4.1: Water tank after project in Mkambarani village

Source: Field Data, December, 2014

Figure 4.2: Public Water point of Mkambarani village

Villager was observed fetching water at one of water points during data Collection in Mkambarani Village 2015 (**Source**: Field Data, January, 2015).

Figure 4.3: Bore hole used as source of water before project in Mkambarani

Above hole is one of the water sources used by villagers at Mkambarani and neighboring villages before water project was implemented in Mkambarani. As it can be seen, water was neither clean nor safe for domestic uses (**Source**: Field Data, February, 2015).

4.3.1.2 Water Project in Dalla Village

It was observed that villagers in Dalla used water directly from Mvuha River. The researcher found one water project in Dalla Village which was implemented between 2010 – 2013. The community was involved right from implementation, operational and management of the project. However the project was found not operational due to lack of fuel to pump water using generator. It was revealed that there was mistrust among leaders on money collected from villagers for operation and maintenances which discouraged community to go on monthly financial contribution. It was also discovered that salty water from the project contributed a bit to low response to financial contribution as villagers were happy with taste of water from the river. The researcher observed misused water points by villagers residing close to water points simply because no water was flowing to them. Figure 4.4, 4.5 and 4.6 shows water tank, public water point and generator observed in the village during data collection.

Figure 4.4: Water tank after project in Dalla village

Above is a water tank in Dalla village which was constructed to distribute water to five public water points all across the village **(Source**: Field Data, December, 2014).

Figure 4.5: Water point in Dalla village after project

As it can be seen from the picture, villager decided to use a water point close to her residence as a table for tomato business since there was no water flowing from the project for more than ten months. Basically this was not accepted as National Water Policy 2002 requires all villagers to participate in protecting water facilities (**Source**. Field, Data, December, 2014).

Figure 4.6: Generator for water pumping in Dalla village

Generator installed in Dalla village used to pump water to water tank and supply to public water points in the village. (**Source**: Field Data, Dec, 2014)

4.3.1.3. Water Project in Mvuha Village

It was found that villagers were using water from traditional source in Mvuha River. The study also found one ongoing water project in Mvuha village which was the extension of Dalla water project. The researcher observed already constructed water tanks and some ongoing activities such as construction of water points across the village. The project was expected to use the same water pump and generator at Dalla Village. The project was scheduled for completion in December 2014. However, the project was implemented by Contractor under full supervision of District Engineers with no community participation in any form. Figure 4.7 and 4.8 show some observed ongoing activities to accomplish the project;-

Figure 4.7: Construction of water tank in Mvuha village

Water tank in Mvuha village designed to supply water to seven public water points in the village (**Source**: Field Data, December, 2014)

Figure 4.8: Water point construction in Mvuha village

Villagers providing paid labour in construction of water point at Mvuha Market centre in Mvuha Village (**Source**, Field Data, and December, 2014).

4.3.2 Community Understanding on Project Founder

The findings through questionnaires revealed that, villagers in both villages had different understanding on who initiated water projects in their villages. Findings in Table. 4.2 shows that more than fifty percent (54.4%) of respondents mentioned Government as initiator/founder of projects in villages; it is also shown that about 21.1% of respondents said Donor was the founder; on the other hand 17.8% of respondents had no idea on who initiated water project and 6.7% mentioned community as the founder of the water projects in their villages as shown in Table.4.2.

Table 4.2: Project founder as per community understanding

Villages	**Mentioned project founder**				
	Community	**Government**	**Donor**	**Don't know**	**Total**
Mkambarani	5	14	7	4	30
Dalla	1	20	8	1	30
Mvuha	0	15	4	11	30
Total	**6 (6.7%)**	**49 (54.4%)**	**19 (21.1%)**	**16 (17.8%)**	**90 (100%)**

Source: Field Data, December, 2014

However, interview with District officials revealed that water projects in all villages were initiated by Government in trying to deliver clean and safe water to villagers. Water project in Mvuha was implemented under Big Result Now Program (BRN) which were supposed to involve community at all levels whereas in Mkambarani and Dalla water projects were implemented under Rural Water Supply and Sanitation Programme (RWSSP) supported by World Bank and communities in respective villages.

4.3.3 Community Understanding on Project Activities

The results showed that villagers mentioned only three activities which included digging channels for laying pipes and construction of water tanks and public water points as the major project activities they knew through observation. This was because villagers were not physically involved in project activities as all projects were undertaken by contractors. However, the interview with District official revealed that there were more than three activities to each project which include identification of water source for the project; mobilization of materials; there was also construction of water tanks; there was a construction of water intake at Uluguru Mountain for Mkambarani water project where as in Dalla village there was a borehole drilling; rising of main pipes and distribution of pipes installation; construction of 7 public water points in Mvuha, 5 in Dalla and 16 in Mkambarani Village. Some of these activities were verified in contractor work plan for Mkambarani water project.

4.3.4 Community Perception on Water Projects

The study discovered that the Villagers had different perceptions toward water projects implemented in their villages. As it can be seen on Table 4.5, about 62 respondents equivalent to 68.9% of the respondent perceived water project as solution to water problems they experienced in their villages, out of these, 30 respondents were interviewed at Mkambarani village and 16 from Dalla and Mvuha respectively. The main argument behind their perception was the expectation of clean and safe water from the projects as compared to existing sources.

It is also shown that 12 respondents equivalent to 13.3% perceived water project as wastage of resources and hence unfavorable to them, these included 4 respondents from Dalla and 8 respondents from Mvuha villages. The reason behind their perception was that, water from the project tasted salty as it was underground water. The researcher noted that the villagers were used of water from the river which tasted good to them. This observation was approved by some elders from Dalla village who had the following to say at different time:-

> "*We are not ready to use salty water while the river still exists. We have been using water from Mvuha River since colonial era, this water always tasted well and no one has died because of water from this river".*

The table 4.5 also shows that 10 respondents all from Dalla equivalent to 11.1% of total respondents perceived the project as leaders project as it was forced by the leaders, not prioritized by the villagers. The reason to their perception was that, Dalla village had already natural water from the river which they used for domestic uses since colonial. To them, their priorities were primary school and hospital rather than water since they had no even a single dispensary and school. They relied on health centre and primary school to the next village at Mvuha. Villagers argued that, Leaders at Ward and Village level forced the project in the Village in favour of their political interest. This was approved by interview with elders, who exposed that,

> "*The truth of the matter was that, water project in Dalla Village was initially targeted for implementation at Mvuha village. However, under the influence of Councillor from CCM, the project was diverged to Dalla simply because the Village Chairperson in Mvuha by then was from opposition party -"Tanzania Labour Part". Therefore, she didn't like opposition part to wave flag through this project. With such feeling, she tried the best with other leaders at ward level to convince District Council to divert it in Dalla village where all political leaders were from ruling party - CCM. It was albeit simple to her as long as these villages were under her jurisdiction".*

It is also shown from Table 4.3 that, about 6 respondents all from Mvuha village equivalent to 6.7% of total respondents perceived the project as CCM campaign for local Government election. This was because the project was implemented from April,

2014 to December 2014 in which local Government election preparation and campaign was undertaken. This perception was associated to CCM Campaign because it's a ruling party which had several times promised for safe and clean water in the village. Table. 4.3 indicate community perceptions to the projects implemented in their villages.

Table 4.3 Community perception of the project implemented in their villages

Name of village	Community Perceptions of the Project				Total
	Local Gvt election Campaign	Solution to water problem	Wastage of resources - Salty	Leaders Project - forced	
Mkambarani	0	30	0	0	30
Dalla	0	16	4	10	30
Mvuha	6	16	8	0	30
Total	**6 (6.7%)**	**62 (68.9%)**	**12 (13.3%)**	**10 (11.1%)**	**90 (100%)**

Source: Field Data, December, 2014

4.4 Role of Community in Implementing and Sustaining Water Projects

In this part, the study focused on how villagers participated in implementing and sustaining rural water projects. The study revealed that communities participated through consultation and financial contribution as shown in Table 4.4. The two forms of participation were adopted because project activities were implemented by contractors.

Table 4.4: The role of community in implementing water projects

Name of Village	Roles played			Total
	Financial Contribution	Consultation	None	
Mkambarani	26	2	4	30
Dalla	26	3	4	30
Mvuha	0	0	30	30
Total	**52 (54.7%)**	**5 (5.3%)**	**38 (40%)**	**90 (100%)**

Source: Field Data, December, 2014

The findings from table 4.4 above indicated that 52 responses out 90 responses from villagers equivalent to 54.7% participated in financial contribution. Out of them, 26 respondents contributed money in Mkambarani, and 26 respondents contributed money in Dalla village. It is also shown that only 5 respondents equivalent to 5.3% were consulted in identifying project water sources. However, those who were consulted also participated by financial contribution as it was a must to all villagers. Table.4.4 also shows that all respondents from Mvuha (30) and others from Dalla (4) and Mkambarani (4) did not participate at implementation stages.

The researcher was interested to know the reasons as to why 38 respondents did not participate at implementation stage. It was found that all 30 respondents in Mvuha village were not informed to participate; other reasons included income poverty, serious sickness during implementation. Additionally, employees at Magereza and Ubena Sisal Estate were exempted from participation because their employers contributed a lump sum to top up 5% of project cost required from community members. However, these employees were involved in operation, maintenance and management of projects to ensure sustainability.

4.4.1 Financial Contribution to implement Water Projects

The study showed that total project cost was shared by various stakeholders which included Community themselves, Donors-World Bank and the Government. It was found that, in Mkambarani and Dalla Village, the villagers contributed 5% of total project cost whereas 90% was contributed by the World Bank and remaining 5% was from the Government making a total of 100% to pay contractors as shown in Table 4.5.

However, the study through responses from questionnaires filled by all respondents from Mvuha village discovered that villagers did not contribute 5% of the project cost because they were not informed about it. Interview with District official revealed that, villagers in Mvuha will have to repay 5% of total cost when project construction was over. It was further discovered through interview with VEO and VWUA members in Mvuha that such information was not yet given to villagers and village leaders. Table

4.5 displays amount contributed by each stakeholder including percentage required from Mvuha community.

Table 4.5: Stakeholders financial contribution to implemented water projects

Stakeholders	Contribution by Percentage	Contribution in Villages (Tsh)		
		Mkambarani Village	Dalla Village	Mvuha village
Community	5	27,800,000.00	8,250,000.00	12,400,000.00
Government	5	27,800,000.00	8,250,000.00	235,600,000.00
Donor –WB	90	500,400,000.00	148,500,000.00	-
Total	**100**	**556,000,000.00**	**165,000,000.00**	**248,000,000.00**

Source: Morogoro Rural District Council, 2014

4.4.1.1 Amount Contributed by Villagers

The findings show that 47 respondents out of 90 participated through financial contribution. The study found that it was agreed through village meetings that villagers in Mkambarani had to contribute 5000/= Tsh per villager above 18 years of age whereas in Dalla villagers contributed 5000/= per household. The amount was agreed to cover 5% of the project cost required from the community. However, the findings showed that some villagers contributed 5000/= Tsh and others Tsh 2000/=Tsh for implementation purpose as shown in Table 4.6 below.

Table 4.6: Amount contributed by individual villagers

Name of village	Amount Contributed per head			Total
	5000/=Tsh	2000/=Tsh	00/=Tsh	
Mkambarani	26	0	4	30
Dalla	18	8	4	30
Mvuha	0	0	30	30
Total	**44 (48.9%)**	**8 (8.9%)**	**38 (4s2.2%)**	**90 (100%)**

Source: Field Data, December, 2014

From Table 4.6, 44 respondents equivalent to 48.9% of total respondents contributed 5000/= Tsh as per village meeting agreement. It is also shown that 8 respondents all from Dalla equivalent to 8.9% of total respondents managed to contribute only 2000 /= Tsh instead of 5000/= Tsh due to financial constrains, this was ascertained by WEO and VEO through interview. Table 4.6 also shows that 38 respondents equivalent to 40.% of total respondents did not contribute any amount during implementation. It is shown from the table that, majority of these were interviewed in Mvuha village where villagers were not informed to participate in any means and others in Dalla and Mkambarani did not participate due to various reasons including sickness, old age and income poverty as explained in section 4.4.

4.4.2 Operating, Maintaining and Sustaining of the Projects

It was found that there were deliberate strategies put forward to involve villagers in operating, maintaining and managing rural water projects in villages to enhance sustainability. Some of the strategies included empowering villagers to manage, operate and maintain water projects through Decentralized administrative system; another strategy was introducing financial contributions and water charges as sources of fund to operate and maintain projects.

4.4.2.1 Empowering Villagers in Water project Management

The study revealed that, villagers were empowered to play role to manage and sustain water project through decentralized administrative system. This resulted to introduction of Village Water User Association (VWUAs) with a broad role to manage, operate, and maintain water projects at village level. This was geared to handle water projects to the hands of the villagers themselves as beneficiaries to foster ownership and protection of projects for the existing and future generation. The VWUAs were found functional in Dalla and Mkambarani villages. However, VWUA in Mvuha village was on registration process as a preparation to take over water project which was at finishing stage of construction.

VWUAs were found to form fully fledged water management in the village comprising chairperson, secretary, accountant and other nine members. All leaders of the associations and members were selected by the villagers among the villagers within the village through village meeting. It was further noted that the associations had minor water committees at each public water points in the village comprised of chairperson, secretary, accountant and two other members. These were responsible for managing their respective water points and report to VWUA. The main argument behind these VWUAs was to empower villagers themselves to participate in managing their own water projects to ensure protection and sustainability of the projects for their own lives.

4.4.2.2 Financial Contribution to Operate and Maintain Water Projects

Another strategy was the introductions of financial contributions from the villagers as source of fund to enable VWUA effectively manage, operate, maintain and sustain water projects. The study revealed that the role of community here was to pay agreed amount to VWUA. The study in Mvuha village showed that there was no any financial contribution from villagers because the project was still on construction and the villagers were still using water from the river. It was informed that VWUA was on wait for project handle over from the Contractor and District council for them to arrange on how to involve villagers in running the project sustainably.

The study in Dalla village found that, villagers contributed 2000/= per household in a monthly basis. Collected money was deliberately to enable VWUA purchase fuel to pump water to the villagers and meet other maintenances costs. However, it was discovered that VWUA stopped collecting such contributions for more than 10 months ago and the project remained dormant for the whole period. Further interview with leaders and villagers revealed that the project seized due to low response of villagers on required monthly contribution. This was because the villagers were discouraged by leaders at village and ward level who misused fund collected to run the project; and partly by the unfavorable salty- taste of water to villagers whom seemed to believe much on water from the river which tasted good to them.

The study discovered that VWUA at Mkambarani introduced registration fee amounting to 1500/=Tsh and yearly membership fee amounting to 500/= Tsh to registered members as sources of fund to the association. It was also found that every villager had to pay water charge amounting to 1/=Tsh per litre. Money collected was used to support VWUA activities including maintenances to ensure reliability of water supply in the village. The study discovered that, the membership was optional to all villagers in household basis. The registered members had several rights including right to ask any information from the association; right to be elected or elect; right to attend association meeting and a right to use water free in case of social problem such as death of relative. However, it was found that only 203 households registered for membership out of 1230 total households in the village. The researcher was interested to know the reasons as to why many households did not register for membership. Interviews with villagers revealed that majority of them were not aware about the membership and registration procedures to the association. Others did not see the importance to register and had the following to say;-

> "*We are not registered members of the association because we don't see the essence of registration while we are the ones who brought the project in the village through our financial contributions. We are already registered members right from the time we contributed 5000/=Tsh during implementation. Otherwise, let it be a must to all villagers but not optional to few interested villager since the project is for all villagers*".

However, the study revealed that villagers were ready to pay daily water charges amounting to 1/=Tsh per litre with a belief that this amount would cover maintenance costs to the project infrastructures where the need arose.

4.4.3 Modalities guided Community Participation in Water Projects

The study discovered that WUAs in close working with VEOs, WEOs and hamlet chairpersons established some modalities to effect collection of fund from the community to implement and sustain rural water projects in their village accordingly**.** The following were some workable findings from Mkambarani and Dalla villages.

1. Every individual in the village above 18years was a valid work force and hence had to play role/participate in implementing and sustaining water projects.
2. Students, people with disabilities, sick persons and elders above 65 years of age were free from contribution
3. The amount for implementation must be 5000/= Tsh per head. In Mkambarani, each person above 18years in a household must contribute 5000/=. This is to say each head of the household had to pay for himself/herself, spouse as well as for all children in the house above 18 years old if at all they couldn't afford. It was found different in Dalla village where the head of the household and his/her spouse were responsible for contribution excluding other members of the household.
4. Amount for operation and maintenances of project must include water charge of 20/=Tsh and 2000/= Tsh which covered registration fee 1500/=Tsh and yearly membership fee 500/= Tsh in Mkambarani. Water charge was paid by all villagers whereas registration fees and annual fees were paid by registered members of VWUA in household basis. Every household had a chance to register for membership. This was also different in Dalla village where contribution was 2000/=Tsh per household in monthly basis to all households.
5. Villagers had to collect their contributions through hamlet chairperson for submission to VEOs in case of 5000/=Tsh contribution for implementation and that for operation, and maintenance was submitted to VWUA.

4.4.4 Mobilization of people in Implementation and Sustaining Water Projects

The study found that different methods were used by village leaders in mobilizing and sensitizing community to respond to their roles in implementing and sustaining water projects as shown in Table 4.7.

Table 4.7: Methods used to mobilize community to participate in water projects

village Name	Ways to Mobilizing Villagers Participation in Water projects					Total
	Village Meeting	Visit by Leaders	Neighbours	Advertisement on notice boards	None	
Mkambarani	20	4	3	3	0	30
Dalla	18	11	1	0	0	30
Mvuha	0	0	7	0	23	30
Total	**38 (42.2%)**	**15 (16.7%)**	**11 (12.2%)**	**3 (3.3%)**	**23 (25.6%)**	**90 (100%)**

Source: Field Data, December, 2014

From Table 4.7, shows that 38 equivalent to 42.2% of interviewed respondents were mobilized and sensitized through village meeting. This method was applied in Dalla and Mkambarani. It was ascertained by WEOs, VEOs and VWUAs that Village meeting was the dominant means to create awareness and sensitize communities to fully participate in water projects. It is also shown that 23 respondents equivalent to 25.6% of interviewed respondents were not mobilized in any means. The findings show that all these were interviewed in Mvuha village where the villagers and their leaders were not involved in decision and implementation of the project. All activities were decided, implemented and monitored by District Council. It is also shown that, 15 respondents equivalent to 16.7% were informed and sensitized by village leaders through door to door visit. The leaders concerned with this method were Hamlet chairpersons and WUAs. This went together with collection of agreed financial contributions for implementation and operation of water project in Mkambarani and Dalla villages. It is also shown that 11 respondents equivalent to 12.2% were informed by their neighbours and others were informed through notice board advertisement accounting to 3.3% of respondents.

4.5 Community Perception of their Participation in Implementing and Sustaining Water Projects

The researcher was interested to know how villagers perceived their participation in implementation and sustainability of rural water projects in their villages. The researcher designed open question for respondents to freely express their responses. The findings in Table.4.8 shows that 45 respondents equivalent to 51.1% of respondents were happy with their involvement and hence perceived their participation as supportive to the project success and sustainability. These respondents came up with number of reasons toward their perception by arguing that; their participation meant a chance to be involved in their water development; chance to voice and solve their own felt problem; a chance to know and share project information i.e. increase transparency to them and hence create good relationship between village leaders and villagers. They added that, their participation meant ownership of projects. All these increased willingness and readiness to participate in the project and hence ensured project success, protection and sustainability. With these reasons, they found themselves very supportive to the projects implemented in their villages.

It is also shown from table 4.8 that 15 respondent villagers equivalent to 16.7% of total respondents were not happy with their involvement. Out of them, 11 respondents were from Dalla and 4 in Mkambarani village. These respondents looked at their participation as exploitative means by the village leaders. The reasons behind their perception were lack of transparency and claim for misallocation and fraud of project fund collected from villagers by WUAs. With all these, the villagers thought that the leaders misused their contribution that's why they were not ready to expose financial matters to public. This affected participation of some villagers in paying introduced registration and membership fees to support operation and maintenances in Mkambarani. On the other hand, project in Dalla was much affected to the extent that water did not flow to villagers for more than ten months due to lack of fuel to pump water. It was found that Villagers in Dalla were still using water directly from the river despite of presence of water project. Some villagers in Dalla expressed themselves that;-

”*We only see water flowing at public water points when there were visits by District Officials and other Government Leaders. However, water stopped soon after their departure. We wonder whether this project was real for villagers or show up to leaders coming in the village”.*

With this situation, villagers were discouraged and found that their efforts to support water project did not serve the intended purpose and it was always exploited by the village leaders and WUAs.

It is also shown that, 29 respondents equivalent to 32.2% of interviewed respondents had no comment since they did not participate in any activity in water projects implemented in their villages. The researcher discovered that majority of these were interviewed in Mvuha village where villagers were not involved in decision of the project and implementation. However, further interview with these respondents showed that they could be ready if at all they were informed and involved since they were the beneficiaries of the project. Table 4.8 below shows community perceptions of their involvement in implementing and sustaining rural water projects.

Table 4.8: Community perception/views on their participation in water projects

Name of village	Community Perceptions			Total
	Supportive to project success	Exploited by Village Leaders	No comment	
Mkambarani	26	4	0	30
Dalla	18	11	1	30
Mvuha	2	0	28	30
Total	**46 (51.1%)**	**15 (16.7%)**	**29 (32.2%)**	**90 (100%)**

Source: Field Data, December, 2014

4.6 Community Comments to improve Participation of People in Water Projects

The findings in table 4.9 shows that 33.3% respondents accepted involving people in water project thereby arguing it's a good approach as people are the beneficiaries of project, therefore, there is a need to get them involved at every stage. It is also shown that 30% of respondents said involving people needs transparency on project issues especially financial matters to peoples being involved. Others of about 14% argued that involving people in projects needs committed leaders who will be not selfish and efficient enough in utilizing project resources to meet predetermined project goal for the betterment of beneficiaries. On the other hands, 13.3% did not accept involving people in projects as they believed water service delivery was always the role of government to its citizen, therefore, they suggested not to involve people in implementing water projects. Other respondents (1.1%) suggested to consider mixed age and sex group in leadership to community water projects to ensure discipline, activeness gender equality in managing water project. All these were considered as important hints in improving participatory approach in implementing water projects in Mvuha, Dalla and Mkambarani villages.

Table 4.9: Comments on improving participation of people in water projects

Responses	Frequency	Percentage
Needs transparency	27	30.0
Needs committed leaders	14	15.6
Not good approach	12	13.3
Good	30	33.3
Needs continuous sensitization	6	6.7
Consider mixed age and sex group in leadership	1	1.1
Total	**90**	**100.0**

Source: Field Data, December, 2014

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1 Introduction

This chapter discusses findings as collected from Dalla, Mvuha and Mkambarani Villages in Morogoro Rural District. The findings were all about Community Perception of their Participation in the Implementation and Sustainability of Rural Water Projects. Specifically, first part of this chapter discusses understanding of community about water projects in their villages, this based on understanding on project founder, project activities and perception toward water project; second part discusses roles of community in implementing and sustaining water projects; third part discusses perception of community on their participation in implementing and sustaining water projects.

5.2 Understanding of People on Water Projects

5.2.1 Understanding on Water Project Founders

National water policy 2002, emphasizes that participation of community should start from initiation stage to enhance sustainability. The researcher was first interested to know from the villagers on who initiated water projects in their villages. The researcher expected that there could be a common understanding among the villagers in the same village. However, the finding showed that villagers had different understanding. According to the results, majority of respondents mentioned Government whereas few mentioned community, Donors and others had no any knowledge on who initiated projects. However, interview with District officials revealed that water projects in all villages were initiated by the Government in response to water shortage problem in the villages. Water project in Mvuha was implemented under BRN whereas projects in Dalla and Mkambarani were implemented under RWSSP in the partnership between Government, World Bank and Community. The interview with WEOs & VEOs revealed that such different

understanding was due to low involvement of villagers at initial stages of the projects which is basically against the National Water Policy 2002.

5.2.2 Understanding on Water Project Activities

At the beginning the researcher had assumption that villagers had high understanding of activities to implement water projects in their villages. The findings showed that the villagers had low understanding of the project activities as their participation in the project was not physical involvement in the activities. This was because of the nature of implementation strategy in which all projects activities in all three villages were handled to contractors who were engaged by the District Council. Villagers managed to mention only three activities which included digging canals, construction of water tanks and public water points as the major project activities they understood from the projects.

However, it was informed by District officials that there were more project activities than what was mentioned by villagers. According to the nature of the projects in Dalla, Mkambarani and Mvuha, the study highlighted six project activities which were involved in implementing water projects by contractors; firstly, reconnaissance survey to identify water sources, this involved village leaders including water committees by then, Contractors and District officials. However, this activity was not experienced in Mvuha village because the project was extended from water project in Dalla Village; Secondly, mobilization of materials needed, this was done by contractors themselves; Thirdly, construction of water tanks, this was done by contractors using few paid labour force from respective villages; Fourthly, construction of water intake at water source for Mkambarani while in Dalla there was a borehole drilling; Fifth, rising of main pipes and distribution of pipes installations all across the village; Sixth, construction of public water points in each village by the contractors using paid labours from the villages respectively. In all these six activities, only the first activity involved physical participation of villagers through their village leaders and few villagers whereas all other activities were left to contractors to completion of the

projects as per World Bank requirement. However, few villagers were involved to provide labour in cash.

5.2.3 Community Perception of Water Project implemented in Villages

The researcher experienced different perceptions of the villagers toward water projects implemented in their respective villages. It was found that majority of respondents from all villages perceived water project as solution to water problems; others from Dalla and Mvuha perceived project activities as wastage of resources; some respondents from Dalla looked at water project as leaders' project and other from Mvuha looked at projects as CCM campaign for local government election.

5.2.3.1 Perceived Project as Solution to Water Shortage Problem

More than sixty percent (68.9%) of respondents had no doubt about the project. They found the project as the savior to water shortage problem in the villages and hence they perceived the projects as the solution to their water problems. This was reflected from their experience on unsafe water sources which included Mvuha river for the case of Dalla and Mvuha villages; boreholes and Ngerengere river for the case of Mkambarani village. Therefore, the villagers with this perception expected clean and safe water from the projects; they also expected water sources closer to their households. National Water Policy requires that the Government should provide clean and safe water to the rural areas with water points located within 400 meters from the furthest homestead (URT, 2002). However, some women blamed that some water points were located far from their homesteads as they were not involved in allocating water points.

5.2.3.2 Perceived Project as Wastage of Resources

The study also revealed that about 13.3% of respondents from Dalla and Mvuha were not very happy with the projects implemented. They agreed with the project that water was clean and safe than water from their traditional source in the river which they were using, but the project water tasted salty compared to river water. Such taste was

unfavourable to them because the project was not sourced from the river instead it was underground water. With this taste, these villagers were not interested with the project and hence perceived the project as wastage of resources as majority will not use such water. They argued that, had they been involved in decision of the project, they could advice the District Officials and contractor to trap water from the river source at Mount Uluguru. This study discovered that these villagers were used of water from the river which tasted good to them. Some villagers declared that;-

> "*We are not ready to use salty water while the river still exists. We have been using water from Mvuha River since colonial era, the water always tasted well and no one has died because of this water".*

With this perception, villagers in Dalla had to participate in project as it was a must whereas those in Mvuha declared not to support project if they were asked to do so. However, the researcher noted that, villagers fetched water direct from the river in which some villagers were observed to wash and bath in the river. This is to say, river water which was argued to taste good to them, was not treated and hence was not safe for them. This showed that there were no enough efforts to educate villagers on importance of the project to them as well as the effects of untreated water from the river.

5.2.3.3 Perceived Project as Leaders Project

Other villagers from Dalla village said that the project implemented in their village was not their priority; it was forced by leaders at ward and village level for their political gain. Villagers mentioned primary schools and dispensary as their major priorities. They were satisfied with river water. With this situation, these villagers of about 11.1% of total respondents perceived water project in their village as Leaders project because it was not their priority and they were not involved in decision of the project.

Villagers with such perception could hardly be willing to participate in the implementation of project activities. This was approved by one woman through interview who confidently argued that, had participation to this project been optional,

majority of villagers could not show up to support project as we have free water from traditional source in the river. Further interview with some famous elders in village insisted that the project was not the choice of villagers and exposed how the project came to be implemented in Dalla Village. These elders had the following to say;-

> "*The truth of the matter was that, water project in Dalla Village was initially targeted for implementation at Mvuha village. However, under the influence of Councillor from CCM, the project was diverged to Dalla simply because the Village Chairperson in Mvuha by then was from opposition party -"Tanzania Labour Part". Therefore, the Councillor did not like opposition part to wave its flag through this project. she tried the best to convince District Council to divert it in Dalla village where all political leaders were from ruling party - CCM".*

This proved to the study that the villagers were not involved in decision of the project in Dalla. This was against the National water policy requirement which stipulates that both men and women have a right to actively participate at all levels in water projects, including decision making, planning, implementation, and management with a view to promote sense of ownership and sustainability of the water programs. Failure to do that means promoting unsustainable water project (URT, 2002).

5.2.3.4 Perceived Project as Campaign for Local Government Election

The study showed that 6.7% respondents perceived water project implemented in Mvuha as CCM campaign for local Government election. This was grounded on the project implementation period which was between April to December, 2014 in which local Government election and campaign was underway. Therefore, villagers associated implementation of project in this period to CCM promises on clean and safe water in the village. It was also noted that Villagers were worried about the project activities that could stop soon after election was over since they were not involved in any activity. However, people with such perception could easily be convinced by the leaders from opposition party not to participate in any means.

5.3 The Role of Community in Implementing and Sustaining Water Projects

At the beginning the researcher had assumption that villagers were involved to play role in implementing water project through various forms of participation ranging from material contribution, free labour provision, financial contribution, material incentives and consultation depending on the choice of each villager. However, in this study, it was found in Dalla and Mkambarani that villagers were involved in rural water projects through financial contribution and consultation. These forms of participation were preferred to water projects in the villages because the project activities were handled to contractors for implementation from the beginning to completion as per World Bank requirement.

5.3.1 Community Consultation in identifying Project Water Source

The findings highlighted consultation as one form of community participation which was practiced in Dalla and Mkambarani villages at earliest stage of projects implementation.. The study noted that, Village leaders and water committees by then on behalf of villagers were consulted to join survey team which included contractors and district water engineers to identify water source for the projects. The villagers in survey team explained that their roles were to direct contractors and district officials all around the village and nearby mountains and the villagers were free to raise their views. This was deliberately to help them identify appropriate source of water as per their expertise. However community in Mvuha village were not consulted as the project was just extension of Dalla water project under supervision of District Council.

Although villagers were consulted during survey in Mkambarani and Dalla, still the decision on where to locate water source for the projects remained to Contractors and District Engineers due to their professionalism and expertise on water issue. It was learnt that Villagers in Dalla wished to have water project by gravity which could source its water from the river source - Mount Uluguru but it never worked. Amrstein, 1969 and Pretty, 1995, prove this as they considered consultation as a low level of participation in which professionals listen to public views but they are under no

obligation to take on board members' views. This means, community interests were not well considered.

5.3.2 Community Financial Contribution during Project Implementation

The study found that total project cost was divided to be contributed by various stakeholders who included Donor 90%, Government 5% and villagers themselves were required to contribute 5% of total cost. This kind of sharing cost of the project indicated partnership and interactive participation among stakeholders in implementing water project. The literatures argue that, when people implement development project in joint form, the groups forming a joint, take control over the project and hence have a stake in maintaining structures and practices (Pretty, 1995). This is to say, participation of villagers in implementing water project through 5% meant, they have a share and hence control and voice over the project as primary stakeholders (beneficiaries) of the project. This gave power to villagers to own and protect project for their lives as they felt the pinch of project cost through their financial contributions.

In this study, it was noted that, villagers had to contribute 5000/=Tsh per head in Mkambarani and 5000/= per household in Dalla village to make 5% of total projects cost. This amount for contribution was decided and agreed together in public village meeting in both villages. This showed active participation by villagers as they were involved in deciding amount to be contributed and the way forward to collect agreed amount. As a result, villagers owned the decision and felt responsible to contribute agreed amount. One woman said the following during interview;-

> *"I am a jobless woman with 3 children, however, for we agreed in the meeting and I was one among other members, then I had to find 5000/=Tsh for contribution".*

Although, it was agreed to pay 5000/= Tsh, the study discovered that some villagers in Dalla managed to pay 2000/= Tsh due to low financial capability. It was also learnt that elders and sick villagers were exempted from contribution. This indicated that Village leaders and VWUA were considerate to those with serious social problems and

those who managed to contribute little than what was agreed. Although contribution was a must to villagers, findings showed that some villagers did not pay any amount due to income poverty as majority of villagers were peasants. However it was found that those who did not show up completely were taken to the court. The study noted that, this helped to enforce contributions from villagers in both villages. One woman from Dalla had the following to say;-

> *"I rely on water from the river, and I have been using this water since born, I did not see the need of paying 5000/= for water project as we already have free water from the river. But, I had to convince my husband to pay for both of us; otherwise they could take us to the court for not complying with village meeting agreement".*

Furthermore, although water project in Mvuha village was at finishing stage, villagers did not contribute any amount since they were not involved in implementation i.e. nobody asked villagers to participate in any form. It was informed through interview with district official that villagers were to be involved in repaying 5% of total project cost and establish mechanism to operate, maintain and manage project sustainably after the project construction was over. However, interview with villagers, village leaders and VWUA showed that they were not aware about repaying 5% of total cost. They only understood that the project implementation was funded by the government and they were to be responsible for operations, maintenance and management of the project after hand over to VWUA. Such understanding was also not official to them.

The experience from Dalla and Mkambarani showed that roles of villagers to project were exposed through village meeting before implementation began and the contributions were collected while the project activities were on progress. As this never happened in Mvuha project, it contradicted with the issue of sustainability addressed in NWP that the project beneficiaries need to be involved in decision of the project and informed of their roles to the project right from the beginning of the project to gain social acceptability and support of the project.

5.3.3 Operating, Maintaining, Managing and Sustaining Water Projects.

The findings showed that Donors and the Government handled the project to villagers for operation, maintenances and management of water projects to enhance sustainability. This comply to NWP 2002 which emphasizes that communities need to take full responsibility for operation and maintenances costs as well as managing their water project in the village with a view to ensure sustainability of rural water projects. The study found that, in both projects, there were decentralized administrative structure to manage water project at village level through VWUAs and also, there were freedom to establish mechanism to collect money from villagers to enable operations and maintenances of worn out facilities of installed project infrastructures.

5.3.3.1 Community Management of Water Projects in Villages

It was learnt that community were empowered to play role in managing water projects on their own through VWUAs formed by the villagers themselves. VWUAs were important in enhancing sustainability of water project as they were handled to villagers themselves. The associations were operating, monitoring and solving problems encountered to normal functions of installed infrastructures of water projects. However in this study, VWUAs were found functional in Dalla and Mkambarani whereas association in Mvuha was on registration process as the project was still in construction by the contractor under the supervision of District Council. It was learnt that VWUA members and the leaders in all villages were elected through meeting to manage projects on behalf of the community in three years tenure.

The study found that, VWUAs operated right from the beginning of the projects in Dalla and Mkambarani villages although by the time such associations were called Water Committees. This increased knowledge and experiences to technical part of VWUAs in dealing with water infrastructures problems. This was different in Mvuha where the association will only operate after hand over of the project from the contractor. The study showed that among other things, the VWUAs leaders were

responsible to give feedback to community on different activities pertaining to water projects.

However, majority of respondents in Dalla claimed that meeting was convened very rarely. The reason for not convening meeting regularly was because VWUAs did not like to be questioned on income and expenditures of water fund. This happened every time when there was misuse or fraud of project fund. However, in Mkambarani village, such rights to feedback were given to few registered members of association accounted to 203 households equivalent to 13.5% of total household excluding 1027 households equivalent to 86.7% of households which were not registered. This was unusual approach to villagers as the former water committee exposed everything to all villagers through public meeting.

5.3.3.2 Community Financial Contribution in Operations and Maintenances

National Water Policy, 2002, requires that the community has to pay fully for operation and maintenance cost to sustain rural water projects in their respective village. Villagers took full responsibility to run the project for their lives. With this responsibility, VWUAs introduced financial contributions from villagers as source of fund to help associations operate and maintain water sources for the villagers and their generations. This was a way to involve villagers in running and maintaining water projects. It was noted that each village had its own modality to set amount to be contributed by villagers.

In trying to effectively operate and maintain water project, Dalla VWUA introduced a monthly contribution of 2000/= Tsh per household. This was decided and agreed through village meeting. VWUA considered all households in the village as members as they all were water users and hence had equal rights. Therefore the role of villagers was to pay monthly contribution which was used for fuel and meet maintenances. However, the project was found not operational. The findings showed that mistrust among village leaders made the contributions to stop as they misused water fund collected from villagers and the project seized for months due to shortage of money. Villagers were still using water from traditional source in the river. Generally, mistrust

among leaders in Dalla village lowered villagers' morale to pay monthly financial contribution accordingly and hence failure of leaders to address normal functioning of water project.

On the other hand, the study through documentary review and interview with VWUA members noted that, VWUA in Mkambarani introduced two forms of financial contributions to get villagers participate in operating and maintaining water projects. The first was water charge amounted to 1/= per litre which was charged to all villagers, it was learnt that villagers had no query on this; secondly, they introduced registered membership to association with a registration fee (1500/= Tsh) and annual fee (500/=Tsh) as per Mkambarani Water User Association Constitution. This meant that, only registered villagers were the valid members of the association. VWUA did not consider all villagers as members of the association as experienced in Dalla. The study through documentary review and interviews with VWUA members discovered that only 203 households equivalent to 16.5% of total households (1230) were registered for membership in Mkambarani WUA. This is to say, about 1027 households equivalent to 83.5% did not register for membership in VWUA and hence did not play role to operate and maintain project through registration and membership fees. It was also noted that these non registered villagers had no right to ask for financial reports from VWUA; no right to be elected or elect leaders and no right to VWUA meeting. With this, non registered villagers had a feeling that they were deliberately excluded from these rights in favour of leaders' interest.

However, it was found that majority of respondent villagers were not registered because they didn't know that they had to register for membership; and others declared that, they didn't see the essence for villagers to pay registration and membership fees since they paid contributions during project implementation. Although it was learnt from the study that villagers were willing to pay water charges of 1/=Tsh per litre, from this evidence, it can be assumed that villagers were not willing to pay registration fee and annual fee simply because they were not well informed right from the beginning. This indicated that, VWUA didn't pay much attention to educate, create awareness and sensitize villagers on membership procedures; reasons to introduce

membership registration and its related fees; advantages to registered members and disadvantages to non member villagers. Although the project was doing fine in Mkambarani, but still it needed participation of entire community in village to ensure sustainability as the registered members were few and hence little amount was collected from them for operation and maintenances.

Based on the findings, the sustainability of these projects were questionable. Much effort is needed to build and develop trustworthy among leaders in both villages. It is also needed to sensitize community in Mkambarani towards membership registration and membership annual fees to cover operation and maintenances costs. This could help convince majority of villagers to register for membership and share equally operation and maintenance costs for the lifelong of project and for betterment of the existing and future generation.

5.4 Community Perceptions of their Participation in Water Projects

The researcher wanted to know how community perceived their participation in implementing and sustaining rural water projects. The findings showed that two different perceptions emerged among the respondents and others had no comments. The first group perceived their participation **as supportive to the project success** where as the second group perceived their participation **as being exploited by village leaders**. The other group emerged in Mvuha village which had **no comments** as they were not involved in the implementation process.

5.4.1 Perceived participation as supportive to project success

The findings showed that more than fifty percent of respondents (46 respondents) had no doubt with their participation, they were happy to be part of project partners. They perceived their participation as supportive to success and sustainability of projects in their respective villages. To them participation meant chance for them to be involved in their development; a chance to voice and solve their own felt problems; a way to create togetherness and good relationship among villagers and other stakeholders

concerned with the project. One woman in the village explained the following to emphasis a sense of togetherness in the village;-

> *"When we "villagers" come together we all understand that we have a common goal for the village, our togetherness means strength to development, therefore we want to develop water sector in the village on our own through our participation in water project in the village"*.

Participation also meant a way to develop sense of ownership and protection of project among villagers as long as they had their stake on the project. All these increased willingness and morale among the villagers to actively participate in the project to solve their own felt water shortage problem they experienced and hence perceived their participation as supportive to the project success and sustainability.

In this study, respondents with this perception felt included in water project and added that the success of water projects was due to their participation in implementation, operation and maintenances. People with such perception are likely to devote their efforts to support project wholeheartedly and hence sustainably.

5.4.2 Perceived participation as exploitative means by Leaders

The findings showed that, other respondents perceived their participation as means of exploitation by village leaders. To them, participation meant working for private gain of the village leaders and WUAs rather than for villagers. The study noted that these were the villagers who were not happy with the way village leaders and VWUAs were behaving to villagers financial contributions for the projects. They looked at leaders as benefiting from villagers money collected for the projects. The major reasons behind this perception were misuse/fraud of water fund and lack of transparency on income and expenditure of water fund. Villagers in Mkambarani and Dalla were blaming that VWUAs were not transparent as they were not holding regular public meeting to disclose financial matters to villagers.

However it was learnt in Mkambarani village that, right to access financial reports was given to few registered members in WUA (203 households) leaving majority of villagers who were not registered (1027 households). The experience from former

water committees showed that everything was exposed to all villagers through village meeting and villagers were not registered for membership as all villagers shared equal rights and responsibilities to water project. This was not the case with existing VWUA. Villagers thought that VWUA had their own private agenda on water fund that's why they did not expose financial matters to all villagers through village meeting. It was discovered that such perception made villagers reluctant to participate through paying registration and membership fees introduced deliberately to support operations and maintenances of water project.

Furthermore, the study showed that, financial reports had also never been exposed to villagers in Dalla. It was added that, the former water committee and the village leaders misused water fund collected from villagers. As a result, villagers did not get water from the project for months as there were no money for fuel and maintenances. The researcher found that villagers were still using water from traditional source in the river despite of existence of water project. It was claimed that, villagers used to see water flowing from water points when there were visits by Government leaders, however such water stopped soon after their departure.

With this situation, villagers under this group looked at participation as means to exploit community money for leaders private benefit. Those in Dalla were discouraged and developed a sense of mistrust to village leaders and VWUAs. This resulted to low response to monthly financial contribution among villagers in Dalla that's why the project was observed not operation during data collection. Although the project was found functional in Mkambarani, majority of villagers were not trusting VWUA leadership due to lack of transparency of water charges collected and hence reluctance in paying registration and membership fees.

From this study, people who look at participation as exploitative means can hardly show up to support project designed to be implemented under participatory approach. With such perception, sustainability of projects is likely to remain questionable the same as observed in Dalla and Mkambarani water projects respectively.

5.5 Community Comments to improve Participation of People in Water project

Although there were two contradicting perception of community toward their participation in water project, villagers came up with number of comments on how to improve participation of people in water projects. The findings showed that majority of respondents found it better to involve people in water projects at all levels since they are the beneficiaries and target of project. They added that community is likely to protect project and its facilities when they are actively involved and hence ensure sustainability of project. Other respondents emphasized that involving people in water projects needed committed leaders who are not selfish, who are transparent and efficient to utilize community efforts to meet intended project objectives to beneficiaries.

They also argued that leadership on community water project need to consider different age and sex groups so as to have people of different ages and sex. According to them, this is likely to promote activeness, discipline and gender balance to effectively meet project objectives that can benefit all groups in village. It was found that some respondents believed that communities were recipients of water services hence there is no need to involve people in water project. These respondents were still affected by free water policy which considered community as the recipient of services from the government. More awareness creation is needed among communities to get real meaning of participation in their own development as they suggested that participation need continuous sensitization.

CHAPTER SIX

SUMMARY, CONLUSIONS, AND POLICY IMPLICATIONS

6.1 Introduction

This chapter presents the summary, conclusion and policy implication in relation to findings as per objectives of the study. This chapter also addresses the area for further studies in reflection to findings of this study.

6.2 Summary

This study was conducted in Morogoro Rural District within Morogoro Region. The water projects which were studied are found in Mkambarani, Mvuha and Dalla villages. The area of study was characterized by subsistence agriculture, small proportion of business and few villagers were employed in health centres, primary and secondary schools as well other organizations within villages. Majority of villagers were married and the couples had equal chance to participate in developing water sector in villages.

National water policy 2002 emphasizes the participation of community in rural water projects from initializing of project, designing, implementation and management of water projects with a view to foster sustainability. This study aimed at assessing community perception of their participation in the implementation and sustainability of rural water projects in Morogoro Rural District. Specifically the study focused on understanding of people about activities towards water projects implemented in their localities; role of community in implementing and sustaining rural water projects; community perception of their participation in implementing and sustainability of water projects in their respective localities.

The study used case study design to explore the findings in the study area. Simple random sampling was used to identify villagers who were the beneficiaries of water projects. It is these respondents who filled 90 questionnaires during the study; another group of respondents who were randomly selected were members of WUAs who were entitled for daily operation, maintenances and management of water projects in the villages. On the other hand, purposive sampling was applied in selecting local government officials which included VEOs, WEOs, and District officials from water Department. A total of 112 respondents were successfully reached during data collection in study area.

The study was mostly qualitative as it involved much detailed explanations and reasons of various phenomena as per study objectives. However quantitative data were also collected to determine respondent age, family size, amount of money contributed by individual villagers to support implementation, operation and maintenances of water projects. Different methods of data collection were used which included questionnaires, interviews, observation and documentary review. Data was analyzed using SPSS Program.

The study explored the understanding of people on water project activities implemented in villages, the findings showed that villagers had no enough information about the project and its activities. For example, villagers showed different understanding on project founder of the same project in each village. About 54.4% of respondents mentioned government as project founder which was followed by 21.1% who mentioned Donors. It was also shown that 17.8% of respondents had no idea on who initiated water project and 6.7% mentioned community as the founder. Interview with District official revealed that all projects were initiated by government in response to water shortage problem in villages. This showed that villagers were not well involved and informed about projects at initial stages of water projects.

Another example was the understanding on project activities in which villagers managed to mention only three activities in implementing water project. Such activities were digging canals, construction of water tanks and public water points. However, it was learnt that there were more than three activities in implementing water project in villages. The little understanding by villagers was due to the fact that all project activities were handled to contractor for implementation. Interview with District official revealed that the actual project activities included identifying water sources for the projects; mobilization of materials for the projects; construction of water tanks; construction of project water source i.e. water intake for Mkambarani and drilling borehole for Dalla village; rising of main pipes and distribution of pipes installations; and lastly construction of public water points.

The researcher was also interested to find out how community perceived water project implemented in the villages. The findings indicated that 68.9% of respondents perceived projects as solution to water problems they experienced. It was followed by 13.3% of respondents who looked at project activities as wastage of resources as project water tasted salty. It was discovered that these were the respondents from Mvuha and Dalla villages who were happy with river water which tasted good to them than water from the project. It was also found that 11.1% of respondents looked at project as leaders' project as the project were forced by leaders, it was not the priority of villagers. These respondents were from Dalla village who seemed to be happy with river water and hence they wanted money to address other problems (primary school or health centre) in the village. It was also learnt that about 6.7% of respondents understood that the project activities were just means for CCM to campaign for local government election since it was implemented in local government election season. These respondents were from Mvuha village where water project was found at final stage of construction during data collection. Although villagers had different perceptions toward water project activities, it did not affect their participation in the implementation stage at Dalla and Mkambarani as their participation was a must to all villagers.

The study also examined community role in the implementation and sustainability of water project, the findings revealed that 54.7% of respondents participated by financial contribution during implementation of water project activities. The study found that villagers in Mkambarani agreed to contribute 5000/= Tsh per head whereas villagers in Dalla contributed 5000/= per household. Such amount was targeted to recover 5% of project cost as contribution from communities. However few respondents (8.9% out of 54.7%) managed to pay 2000/=Tsh due low financial capability. It was also learnt that 5.3% of respondents participated by consultation at early stage of implementation during survey to identify project water source. It was found that 40% of respondents did not participate in any means due to various reasons which included sickness; income poverty and others were required not to participate by their employers as their organizations paid a lumpsum to support implementation of water project. These were the employees at Ubena Sisal Estate and Magereza in Mkambarani. It was also noted that all respondents from Mvuha village did not participate in project because they were not informed about their roles to the project.

It was also found that villagers had a role to operate, maintain and manage water project to ensure projects sustainability. The study discovered that the projects were handled over to community themselves after implementation was over in Dalla and Mkambarani. Community managed water projects through WUAs who had chance to negotiate with community on amount to contribute for supporting operations and maintenances. WUA in Dalla village introduced monthly contribution (2000/=Tsh) per household. However, such contribution was stopped due to misuse of project fund in which project was found not operational due to lack of fuel. Villagers were still using water from the river. Likewise, WUA in Mkambarani introduced water charges of about 1/=Tsh per litre; membership registration fee (1500/=Tsh) and annual membership fee (500/=Tsh) to its members. However, villagers were ready to pay water charges than the introduced fees. Only 203 households registered for membership out of 1230 households since the registration was optional and there was low sensitization to villagers.

The study noted that different methods were used to mobilize and sensitize communities to participate in the implementation and operationalization of water projects. The findings indicated that 42.2% of respondents were sensitized through village meeting though it was seldom conducted especially after project completion. It was also shown that about 25.6% of respondents from Mvuha village were not mobilized in any means because villagers and their leaders were not involved in implementing water project to the time the researcher was collecting data for this study. About 16.7% respondents were visited by leaders to collect required money contributions whereas 12.2% were informed and influenced by their neighbours and 3.3% of respondents mentioned notice boards.

On examining community perception of their participation in implementing and sustainability of water projects, the findings revealed that 51.1% perceived their participation as supportive to project success and sustainability. This was because they felt to be involved in project and had a chance to voice and solve their problems and also developed a sense of ownership of projects. This increased willingness to support water project as it touched their everyday lives. It was also learnt that about 16.7% of respondents found that participation was a means to exploit villagers' income. These respondents had this perception due to unethical actions by leaders which included lack of transparency and fraud of project fund. Villagers looked at these leaders as having private agenda on project fund that's why financial matters were not exposed publicly. This was very serious in Dalla village which resulted to failure of project as it was found not functional due lack of money to purchase fuel for water pump. As a result, villagers in Dalla were still using water from the river. On the other hand, majority of villagers in Mkambarani were not read to pay registration and membership fee with a believe that the introduced fees were leaders own project. Therefore, lack of transparency and mistrust made people demoralized and felt being exploited. This is likely to affect sustainability of water projects in villages.

6.3 Conclusions

Community participation in rural water projects was a government strategy to implement NWP 2002. This was deliberately to get active support from the community in undertaking water development programmes to supplement budget deficit as well as the quest for success and sustainability of water projects respectively. With this, the policy emphasizes to involve community right from planning, construction, operation maintenance and management of water project. There were different ways which were expected to involve community in water projects. Some of the ways are consultation, material contribution, free labour provision, financial contribution and so on. The authorities could either use one or combination of them in water projects. However, awareness of community perception is very important for acceptance and sustainability of participatory approach and the water projects in particular.

The study on community understanding on water project activities implemented in the villages showed that the villagers had little knowledge on project information and its activities. This was due to low level of community involvement at initial stages of project implementation and the nature of implementation strategy in which all activities were handled to contractors. However, the rights of project information to community remain important as the community were the target beneficiaries and also the partner in implementing the projects in their respective villages.

With regard to role of community in the implementation and sustainability of water projects, the situation in Mkambarani and Dalla villages showed that the projects were implemented by contractors with project cost shared by the World Bank (90%), Government (5%) and the community (5%). The community was involved through consultation and financial contribution to cover 5% of total project cost for implementation. WUAs set a uniform amount (5000/=Tsh) to be contributed by villagers to cover 5% of project cost. The study revealed that community in Mvuha were not involved in any means as they were to be involved and repay 5% of project

cost after implementation was over and the project handled to WUA in December, 2014.

Community had also a role to sustain water projects through financial contributions to support operations, maintenances and management of water projects. It was learnt that WUAs had an opportunity to organize and set amount for villagers to support operation and maintenances of water projects to ensure reliable supply of water services in the village. However mistrust among leaders discouraged villagers as a result monthly financial contribution to support project operation and maintenances stopped and the project seized in Dalla village. Whereas, in Mkambarani village, people were willing to pay water charges rather than membership and registration fee as they perceived such fees were leaders private project. As mistrust has already demoralized community participation in operation and maintenances, it is not good indicator to project sustainability in future.

Pertaining to Community perception of their participation in the implementation and sustainability of water projects, the study revealed that some villagers were happy with their participation in the implementation, operation and maintenance of water projects. Their involvement through financial contribution in solving water problem made them perceive their participation very supportive to the project success. They added that, their participation to project touching their daily life meant supporting it wholeheartedly, owning and protecting it sustainably. On the other hand, other villagers were not happy with their participation due to unethical actions by village leaders. It was discovered that lack of transparency on financial matters and fraud of project fund made community believe that leaders were benefiting from project fund and hence perceived their participation in monetary terms as exploitative means by leaders. This affected project in Dalla village where people's response to contribution decreased as a result project was found not functional. Likewise, in Mkambarani village, lack of transparency to the public, fraud rumours and low awareness creation on membership to WUA made people reluctant to pay registration and membership fee because they believed these fees were benefiting WUA leaders. It is obvious that unethical actions by the leaders resulted to community perception that had affected

participation of community in supporting operation and maintenances of project in Dalla as well as in Mkambarani.

6.4 Policy Implications

This part is all about researchers opinions, suggestions made to District Council, Village leaders and WUAs in order to ensure that rural water projects are successfully implemented and sustained for the betterment of villagers' well beings.

Pertaining to Community understanding of water project activities implemented in villages, it was found that villagers had little information about water project and the activities implemented. Villagers in the same villages had different understanding on project founder. This implies that villagers were not well informed about project. There is a need to get community well informed about project affecting their lives. When the villagers are well involved and informed about the projects and its proceedings, they are likely to feel being involved, feel part of project and develop sense of ownership and hence promote common understanding.

Pertaining to the role of community in implementing and sustaining rural water projects, the findings of this study revealed that villagers, WUA and Village leaders in Mvuha village were neither informed of the project nor aware about their roles in the implementation of project which was found implemented by contractor under full supervision of District officials. This was against the National water policy which requires that the community be involved right from the decision of project to enhance sustainability of rural water projects. Therefore, there is a need for District Council through Water Department to involve villagers and village leaders right from the beginning of the project as per NWP 2002. This will help villagers and village leaders know their roles to the project right from the beginning; it will also give villagers with opportunity to voice an appropriate way for them to participate for effective implementation and sustainability of project.

It was also revealed that majority of villagers in Mkambarani did not play role to support operation and maintenances of project through paying registration and

membership fees. This was because some villagers were not aware of membership procedures, and others were reluctant. It was learnt that there was no deliberate efforts by WUA to educate and create awareness to communities on registration procedures, reason to introduce membership and registration fees and the rights to register. There is a need for WUA to involve and educate communities on any new decisions/approach that seem to be supportive to project sustainability for the betterment of the community. This will help get support of the entire community to meet the intended purpose as communities are highly willing to devote their efforts on what contribute to their social well being.

With regard to Community perception of their participation in the implementation and sustainability of water projects, the study noted that WUAs in Dalla and Mkambarani were all blamed for lack of transparency and misuse of fund collected. This led people find participation as means of exploitation by leaders and hence lowered community response to financial contribution to support operation and maintenances. It was learnt that WUAs were operating autonomously and hence leaders felt to be last say of the project fund collected from communities and never called meeting when there was financial query. Basically this was not the intention of water policy to establish WUA. There is a need to institute proper mechanism to oversee the accountability and transparency of WUAs to eliminate unnecessary confidentialities and fraud on project funds among committee's leaders and members. This will increase villagers trust to WUAs and support to project and hence sustainability of projects.

6.5 Areas for further study

This study has shown to what extent the community participation was useful in the implementation and sustainability of rural water projects. The types of participation in implementation and operational strategies adopted are seen very important for sustainability of the projects in villages. However, unethical actions by village leaders and WUAs made some villagers perceive their participation as being exploited and hence reduced response in supporting operation cost. Further studies are therefore needed to investigate the effectiveness and efficiency of WUAs in the sustainability of water projects in reflection to NWP 2002.

REFERENCES

Adams, W. M. (1992). Wasting the Rain. Rivers, People and Planning in Africa. University of Minnesota Press, Minneapolis

Brieger, W, R. (2005). Defining Community. Retrieved on 11th, Aug, 2014: From www. http://ocw.jhsph.edu/courses/socialbehavioralfoundations/PDFs/Lecture10.pdf

Haddad, S. (2009). Perception and Acceptance at Community level: The case of Médecins Sans Frontières (MSF) in Yemen: Retrieved on 1st, Sept, 2014 From http://www.odihpn.org/humanitarian-exchange-magazine/issue-45/perception-and-acceptance-

IMF, (2003). Tanzania Poverty Reduction Strategy Paper Progress Report. Washington, D.C. Retrieved on 31st, Aug, 2014 from http://web.worldbank.org

Jiménez, A, Pérez-Foguet, A. 2008. Quality and sustainability aspects in water access indicators: an example from Same District, Tanzania. Proceedings of 33rd WEDC International Conference. Accra, Ghana. Water, Engineering and Development Centre, Loughborough University, UK

Kasiaka, K. (2004). Participatory Planning and Sustainability of Water TASAF Water Project, UDSM Press, Tanzania.

Kothari, C.R. (2004). Research Methodology, Methods and Techniques, 2nd Edition, New Age International (P) LTD, New Delhi

Lein, H, and Tagseth, M. (2009). "Water Policy Reforms-Between Principles and Practical Applications". **Water Policy**. Vol. **11**, No. 2. Pág. **203-220**.

Mbugua, J.et al.(1993). Community Participation for Sustainable Water and Sanitation, FAKT SD Consultant, Nairobi, Kenya

Mwakila, W. (2008). Aseesment of Community Participation in Water Supply and Sanitation Services, The Hague, Netherland

Nikkhah, H. A., & Redzuan, M. B. (2010). The role of NGOs in Promoting Empowerment for Sustainable Community Development. Journal of Human Ecology, 30(2), 85-92.

Paul, S. (1987). Community Participation in Development Projects: The World Bank experience, Washington DC, USA

Pickens, J. (2005). Attitudes and Perception- Leadership/Management, Retrieved on 11th, Aug, 2014 from healthadmin.jbpub.com/borkowski/chapter3.pdf

Pretty, J. N. (1995). Participatory learning for sustainable agriculture. World Development, 25(8), 1247-1263.

Richard, C et al. (2004). Practical Approaches to Participation, SERRG-Policy Brief No.1: The Macaulay Institute, Aberdeen

Rubenson, D. (2000). Participation and Politics: Social Capita, Civic Voluntarism, and Institutional Context. London, UK

Schouten, T., and P. Moriarty (2003). Community Water, Community Management, London, UK

Singh, U. (2005). Community Participation in the Management of Public Good: Myth or Reality, Case Study of Two Villages in India, ISS Research Paper, The Hague, Holland

Sseruwagi, G. K. (2012). Participatory Development: An investigation of in comommunity stakeholders' Perception, University of the Incarnate Word, USA

Todaro., M., and Smith, S. (2012). Economic Development; 11th Edition; Addison Wesley Press: Boston

URT, (2000). Poverty Reduction Strategy Paper: United Republic of Tanzania. DSM, United Republic of Tanzania

URT, (2002). National Water Policy. Ministry of Water and Livestock development, , Dar es Salaam, United Republic of Tanzania

URT, (2011), National Strategy for Growth and Reduction of Poverty, Dar es Salaam, United Republic of Tanzania

URT, (2011). Rural Water Supply and Sanitation Programme: Programme Implementation Manual (PIM), Annex 3. Guidelines For Planning and Operating District Water and Sanitation Grants. Ministry Water, Dar Es Salaam, Tanzania.

URT, 2014. Morogoro Rural District Socio Economic Profile. Regional Administration and Local Government Authority Prime Minister's Office Morogoro District Council, Tanzania

Verbal, Schlozman, & Brady, (1995). Theories of Participation and High Intensity Participation, University of Michigan Press, USA: Retrieved on 20th, August, 2014 from: www.press.umich.ed/pdf0472106201-ch2pdf

WaterAid – ODI, (2005). Learning for Advocacy and Best Practice – WaterAid Water Point Mapping. Report of findings based on country visits to Malawi and Tanzania. Prepared by Katharina Welle, Overseas Development Insitute. Retrieved on 31st,Aug,2014 From: www.wateraid.org/international

Wateraid-Tanzania, (2009). Management and Regulation for Sustainable Water Supply Schemes In Rural Communities, Water-Aid-prepared by Nkongo Diana. Dar Es Salaam, Tanzania

Wilcox, D. (2003). The Guide to Effective Participation, Delta Press, Brighton, London Retrieved on 10th, Aug, 2014 from: http://www.partnerships.org.uk/guide/index.htm

Yamen, T.(1967). Statistics: An Introductory Analysis, 2nd Edition., New York: Harper and Row. Retrieved on 5th, October, 2015 From:www.amazon.com/Statitiscs-Introductory-Analysis-2nd – Edition/dp/B0000CNPXC

APPENDICES

APPENDIX I: INDIVIDUAL RESPONDENT QUESTIONNAIRE

A. Background Information

i. Name of Village……

ii. Respondent sex – male [ ] /female [ ]

iii. Respondent age: a) 10 - 20 [ ],

b) 21 - 30 [ ],

c) 31- 40 [ ],

d) 41 - 50 [ ],

e) 51- 60 [ ],

f) Over 61 yrs [ ]

iv. Marital status: a) Married [ ],

b) Single [ ],

c) Widowed [ ],

d) Divorced [ ]

vii. Occupation: a) Employee [ ],

b) Business [ ],

c) Farmer [ ],

d) Others [ ]

viii. Family size …….

B: Information on Community Perception, Participation, Rural Water Projects Implementation and Sustainability

1. How many water projects do you have in your village ……...
2. Who is the founder of the project?
   i) Community [ ]
   ii) Government [ ],
   ii) Donor (mention)……..

3. What is your perception on the water project implemented in your village?.....……..... ……
4. Give reasons on your perception in qn 3
   …….....**.....**
   ……
   ……
5. From your knowledge, experience, and understanding, what are the major activities associated in implementing water projects?
   i)……ii)……..……
   iii)……iv)……..
   v)……..vi)……
6. Did/do you participate in any activity you mentioned in qn 5?
   i). Yes [ ], ii). No [ ]
7. If yes, in which activities are/were you involved?
   ……...……..……
   ……...……..
8. How did you participate in each activity mentioned in qn 7?
   ……
9. If no in qn 6, why?
   ….....**.....**

……..……

10. How do/did you get information to participate in implementing water projects?

……..……

11. What are your views on your participation in implementing water project in your village?……...……...……

12. Give reasons on your answer in question 11

.…….....……..……

…….

13. What are your opinions to improve people participation in implementing water project in your villag……

APPENDIX II: INTERVIEW GUIDE FOR LEADERS

1. Position…….
2. How many water projects do you have in your village ……..……
   ……..
3. Who is the founder of the project?
4. What is your view on people perception on water projects directed in the village?.....……...……
   ……
5. Give reasons on your views in qn4
   …….....
   ……
6. What are major activities in implementing water projects?
   ……
   ……
7. How the community participated in each activity mentioned? .....
   .....……..……
   ……..
8. What modality do you use to effect positively each way of participation mentioned in question 9
   ……..……..……..……
   ……..
9. From your experience, what challenges do you face in each way of participation mentioned in qn 9?.....
   ……
10. If no in Question 6, why?
    .....
    ……
11. From your experience, how do people perceive their participation in implementing water project ……...……

12. Give reasons on your views in qn no.13 ……..…….....

    ……...……...

13. How do/did you mobilize community to participate in implementing water projects?…….....