EXAMINING COMMUNITY PARTICIPATION IN THE PERFORMANCE OF RURAL WATER PROJECTS IN MTWARA DISTRICT

COSMAS FOKAS KOMBA

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CERTIFICATION

The undersigned certifies that she has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation titled; *"Examining community participation in the performance of rural water projects in Mtwara District"* in partial fulfilment of the requirements of the degree of Master of Project Management (MPM).

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Dr. Lilian Joseph Macha Supervisor

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Date

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DECLARATION

I, **Cosmas Fokas Komba**, do hereby declare that, the work presented in this dissertation is original. It has never been presented to any other university or institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfillment of the requirement for the Degree of Masters of Project Management (MPM).

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Signature

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Date

DEDICATION

This work is dedicated with love to my wife Bellah John Kinunda my son's Belkmance and John and my daughter Elizabeth and Glory who have been a great inspiration in my life

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I first and foremost, wish to express my profound gratitude to God, the Almighty, who is the reason for who I am today and has been the source of my strength. Second, I would like to express my sincere thanks to my supervisor Dr. Lilian Joseph Macha for the guidance and encouragement throughout the research project. She was always available with suggestions and guidance whenever the need arose.

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ABSTRACT

The study sought to examine the community participation in the performance of rural water projects in Mtwara District in Tanzania. It was guided by three specific, which were to analyze contribution of community participation in the performance of rural water projects in Mtwara District, to analyze decision making in the performance of rural water projects in Mtwara District and; to examine the planning and implementation process in the performance of rural water project in Mtwara district. The study was guided by Pragmatic philosophy and used both quantitative and qualitative designs. The researcher employed multiple-case design which was useful to obtain relevant information from different cases such community leaders, local communities, experts and contractors. The study findings revealed that community participation can help in monitoring the project activities and reducing the operation costs of the project. Also, village meetings act as a forum for people to meet and discuss various issues related to the project. The study further revealed that the majority of community members were involved in the formulation, planning, implementation, and all other stages of the project cycle but have limited knowledge of the implementation structure. The study recommends for awareness creation within village, ward, and district level, and any barriers to their participation in water projects should be addressed. Community members should know that participating in water projects is their right and that it's not optional for contractors to do so.

Keywords: Water Project, Community Participation, Sustainable Project.

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LIST OF ABBREVIATION

- WRM Water Resource Management
- SSA Sub-Saharan Africa
- SDGs Sustainable Development Goals
- UNCED United Nations Conference on Environment and Development
- IWRM Integrated Water Resources Management
- CWRAS Country Water Resources Assistance Strategies
- DM District Manager
- SPSS Statistical Package for Social Sciences

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Community participation and management is fundamental to the provision of essential services like clean water facilities to underserved communities in developing countries. The role of active community participation in ensuring sustainable development is obviously recognized as the most important factors and agents of development (Marks et al., 2014). Development requires participation of the native people, who should be placed first in development projects aiming at improving and change their livelihood.

Development project like water resources programme affects the life of indigenous people both directly and indirectly; since they live around and are primary users of such resources (Marks et al., 2014, FAO, 2010). Community participation is one of the key ingredients of an empowered community. It is a principle so important that has made active citizen involvement in all aspects of strategic plan development and implementation. Community participation in water project management has received international attention to replace top down approaches to development. However, the approach receives critiques regarding the extent to which participation in water project design and implementation is meaningful and really engages communities in the process (Chumbula &Massawe, 2018).

Traditionally, top-down approaches to policy, project, program design and implementation have increasingly lost political legitimacy and been replaced with more deliberative, inclusive and bottom-up approaches (Akhmouch & Clavreul, 2016). During the past two decades, the concept of participation has been embraced in several environmental regulations relating to different sectors. In the water sector, the practices of Water Resource Management (WRM) has emerged as a means to move away from a traditional sub-sector approach to water provision to a more holistic or integrated approach to water management (Water Aid, 2011). It's without doubt that, the importance of public participation in decision-making has been recognized at both national and international level with plethora of high-level pronouncements and public exhortations to support the involvement of affected parties in decision-making process.

Historically, the participatory planning is not a new phenomenon, it can be traced back towards the end of structural adjustment program when World Bank evaluated the shortcomings of development projects and realized mass failures (Thomson, et al., 2017). It was observed that, development's failures were then characterized by its top-down, blueprint mechanics, which were to be replaced by more peoplefriendly, bottom-up approaches hence participation gained legitimacy within the institutional development world (Alejandro, 2007).

Nevertheless, in spite of its importance's to human livelihood, water is one among the sectors that has undergone the transition as well and acknowledge the important roles that stakeholders from different institutional settings can contribute to effective, efficient and inclusive water management (Akhmouch & Clavreul, 2016). Effective water and sanitation management relies on the participation of a range of stakeholders, including local communities hence making it to be a fundamental principal of good water governance (United Nations 2017; Eden et al., 2016). Water managers therefore needed to involve multiple stakeholder preferences in order to succeed in the implementation of water management strategies. This is due to the fact that, effective engagement of community is expected to results into many economic, environmental, and social benefits (Eden et al., 2016).

In Tanzania, local communities across different regions have created coping mechanisms to guarantee the preservation of water supplies. Dungumaro & Madulu (2003) found that, through effective participation; communities have enacted local bye-laws that would ensure proper management of water resources around them. For instance; in the Kihansi River Catchment area have enacted local by-laws that limits valley bottom cultivation within a 20 m range from the river banks. Also, in the rural areas of Mwanza, local communities usually organize themselves to construct dams for their livestock because they need to preserve natural water resources from pollution. Therefore, they formed by-laws to limit human activities like bathing and washing clothes close to the sources of drinking water (ibid.) However, the level of community participation in integrated water resource management is still low in Tanzania and in the majority of other developing nations, despite the fact that many researchers agree on its importance.

Much of the data required for water resources assessments are unavailable. In Ethiopia for instance, Planning and negotiating water basins is very difficult because there is no reliable information on the quantity of surface or groundwater. In addition to data gaps, there are currently very few places that have the resources to build these skills to create and use their own water management technologies. This lack of capacity is mainly at the local level (GWP, 2009). Mwakila (2008) concludes that, the failure of many development projects including that of water were due to ineffective participation of key stakeholders, low capacity of the communities in operation and maintenance of water system and management of water resources.

Hence, given the degree of attention in expanding stakeholders role in water management projects and critiques posed to participatory planning approaches, there is a need to examine the community participation in the performance of rural water projects in Mtwara district. The need for this particular study is essential as the demand for water is rising at an exponential rate due to increasing population in both urban and rural areas of developing countries (Miraji et al., 2019). Consequently, critical examination towards good performance of water projects will reduce the gaps of people who don't have access of clean water in rural areas, which is endeavor of this study.

1.3 Statement of the Research Problem

Despite the increase in demand for water resource, the supply for clean and safe drinking water to their citizens has remained to be a major developmental challenge in developing countries, especially in Sub-Saharan Africa (SSA) which reported to be among the most affected than other major regions (Dos Santo et al., 2017). It is vital to note that regardless of high demand of water resource in Sub-Saharan Africa and efforts done by international, national and local stakeholders in addressing the problem there are experience of different water projects which failed to deliver effectively or reported not to be sustainable especially in rural areas (Miraji, et al., 2019). The above arguments concur with the United Nations (2017) which revealed that the effective water and sanitation management relies on the participation of a

range of stakeholders, including local communities.

This study, therefore, intends to examine the community participation in the performance of rural water projects in Mtwara District whereby in 2021 the government of Tanzania has set aside approximately 24bn/ for the implementation of Mtwara Water Project which involves 205 villages of the Mtwara Rural area (Claude, 2021)).

According to the baseline survey conducted in Regional Commissioner Office in August 2022, water coverage of Mtwara region is 60%, whereas, only 66% f Mtwara rural district can access safe water, meanwhile, there are about 49 water projects in Mtwara rural. Therefore, it becomes significantly to examine the community participation in the performance of rural water projects. Is the community participation influence the performance of rural water projects in Mtwara district? This is the endeavor of the study.

1.4 Research Objectives

1.4.1 General Research Objective

The general objective of this study was to examine the community participation in the performance of rural water projects in Mtwara District, Mtwara region Tanzania.

1.4.2 Specific Research Objectives

The following are specific research objectives that guided this study:

i. To analyze contribution of community participation in the performance of rural water projects in Mtwara District

- ii. To analyze decision making in the performance of rural water projects in Mtwara District and;
- iii. To examine the planning implementation process in the performance of rural water project in Mtwara district.

1.5 Research Questions

1.5.1 General Research Questions

How did the community participation influence the performance of rural water projects in Mtwara District?

1.5.2 Specific Research Questions

- i. How does community participation contribute towards management of water resource?
- To what extent decision making influence the performance of rural water projects in Mtwara District and;
- iii. How did planning implementation process can promote performance of rural water projects?

1.6 Relevance of the Research

This study is in line with Tanzania strategy towards safe and clean water in both urban and rural area. Currently, Tanzania implementing many water projects through Rural Water Supply Agency in order to reduce the number of people with no safe and clean water. Given the challenges of accessing clean and safe water facing Sub-Saharan Africa and other developing countries like Tanzania, the seventeen Sustainable Development Goals (SDGs) have included a water-specific goal. Therefore, the study is relevant to SDG number 6 that aims to ensure availability and sustainable management of water and sanitation for all" by 2030 (United Nations, 2015).

Furthermore, this study will help the government to strengthen the water projects implementation and management towards safe and clean water by 2030. Hence the study will recommend different aspects of community participation that needs to be incorporated in the water projects for the effectively implementation and management performance. The study findings are expected to inform academic stakeholders from both central and local governments on the importance of adopting community participation practices that could reduce the existing wide range of redundant bureaucratic procedures in the implementation and management of water projects for good performance of water projects.

It will raise awareness to water engineers, and other water stakeholders including Minister of water, rural water supply agency officials, community leaders, policy makers and the donor agencies at large on the importance of taking into consideration community participation in both projects and practices for the better performance. The study also expected to contribute to the theoretical underpinning this study in the aspects of community participation and water projects in the theory.

1.7 Organization of the Study Report

This study is divided into five chapters organised in Masters Dissertation. Chapter one introduces the research topics, it covers different sections aimed at presents the general overview of the research problems. This includes the following sections: background of the study, statement of the research problem, general objective, specific objectives, and general and specific research questions. It also includes relevance of the research, and organization of the proposal.

Chapter two concerning with reviewing different literature about the subject matter, it comprises the sections such as chapter overview, conceptual definitions, critical review of supporting theories, empirical analysis of relevant studies, research gap, analytical conceptual; framework, theoretical framework, statement of hypothesis and summary.

The third chapter is about research methodology cover different areas such as research strategies, survey population, research areas or survey, sampling design and procedures, variables and measurements procedures, methods of data collections and data processing and analysis. Furthermore, chapter four provides with data analysis, presentation and discussion while chapter five is concerned with summary, conclusions and recommendations. The end sections indicate lists of references used in this study and appendices.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

The chapter presents a review of different literature related to this study. The chapter composed of both theoretical literature review and review of empirical literature, analytical conceptual framework and statement of hypothesis. The chapter concludes with synthesis of the reviewed literature and research gap. The aim is to review relevant information concerning community participation and water projects performance in rural areas.

2.2 Conceptual Definitions

2.2.1 Participation

The available literature indicates that there is no single definition of the term participation because every individual, organization and various government policies defines it basing on their own values, culture and contexts (FAO, 2010). Edward & Mejos (2007), defines participation as an inclusive and a positive relation between persons which encourages working together and allows person to get experience from others. Historically, the concept of participation emerged between 1960s and 1970s after critics of most development projects" failure to achieve much of their intended objective because of lack of community participation (Isager *et al.*, 2004). Though most development projects directly and indirectly affect the lives of the people, many of these were designed and implemented without active involvement of the people. This poses a necessity of participation as a word of development and that every development project has to embrace "participatory approach".

2.2.2 Community Participation

On the other hand, the concept of community participation is defined as a deliberate procedure of bringing together various aspects of natural resource utilization into a structure of sustainable management to meet the expectations of those who utilize the resources, managers and others who have a share in the resource. For the people to participate in the community it requires a physical involvement in the social development and ultimate control over decision making that affect their own welfare (Sayer & Campbell, 2004).

Local communities living near or within the resources are presumed to have greater knowledge and understanding of the resources and easily identify their constraints and opportunities (Agrawal & Angelson, 2009). This suggests that, they have a lot to contribute in the sustainable use the particular resources when they are made part of it. The study adopts the definition given by Chamber and Kumar (2003) which emphasizes on participation as an empowering element of the community to enhance resource control capacity of local communities.

2.2.3 Sustainability

The term Sustainability is a cross concept that stems from the idea of long-term development. The sustainability definition used in this study is taken from Water Aid's sustainability framework (2010), which states that sustainability is defined as whether WASH services and good hygiene practices continue to work and provide benefits over time. Those ongoing treatments, behavioural changes, and consequences have no time limit. In other words, in the current context, sustainability refers to the long-term benefits gained through continuing access to

water, sanitation services, and hygiene practices (WaterAid Sustainability framework, 2010).

2.3 Theoretical Analysis

2.3.1 Liberal Democratic Theory

Liberal democracy is associated with the doctrine that within the state individuals should be free to pursue their socio-economic and political preferences. There should also be a free exchange of ideas indirectly or directly produced by public opinion to control the means of production (Held, 2006 & Turner, 2003). The theory is a critical to traditional representative democracies that tend to limit citizen participation to voting, leaving the main work of governance to professional political elites. The basic assumption for this theory and philosophy of people's participation lies in the fact that, it is the human nature that man can best take pride and value in those things he has himself played role to create. In the process of involving himself, he takes account of his own problems, needs, aspirations, ideas and interest and incorporates them in the programmes, projects and activities that are implemented (Miraji et al., 2019).

Accordingly, due to the fact that their ideas have been incorporated, they feel that they are part and parcel of the particular project and are ultimately obliged to guarantee their success and continued effective operations. However, in other perspective, looking at community participation from this vantage point of human nature, it can be argued that, involving people in decision making, planning, implementation and evaluation on various development programmes that affect their lives is one of the basic and fundamental human rights which is principally advocated in democratic ethos.

This theory guided this study in identifications of different participation approach of water projects especially to measure local involvement in different spheres of decision making, Therefore, it is assumed that, water resources managed without the participation of community which is a direct beneficiary in decision making, planning, implementation and evaluation are often not properly maintained and hence are unsustainable. Contrary, the broad engagement of community in the direction and operation system, means the project good performance and sustainable. The theory applied in relation to water projects in Mtwara rural district and has been used to measure engagement towards successful implementation of the water projects.

2.4 Empirical Analysis of Relevant Studies

2.4.1 General Studies

Literature in community participation calls for high level of control whereby the community must be able to make strategic decisions from the designing phase to the operation and management (Olajuyigbe, 2016). The community engagement in effective operation and maintenance of rural water supply systems is crucial element for the sustainability of the water project (Samuel et al., 2016). The community members are the stakeholder's number one in every project and they should be respected at any cost. For example, for the community to be able to manage water resource project sustainability, capacity building is inevitable. This will provide power to influence water project governance (Kilonzo & George, 2017).

Despite this acknowledgement, a number of community-based water projects have failed due to poor maintenance (Mandara, et al., 2013, Samuel, et al., 2016; Leclert, et al., 2016) attributed to poor or limited skills by local people. However, the questions remain on how participation process should take place and when. Different questions raise on whether the community has capacity to manage project in terms of appropriate maintenance. Specifically, the collaborative framework should be clear specifically on the aspect of technical skills for inspection of the project and maintenance.

Another important element in community project management is to ensure effective communication structures that will allow smooth flow of information. The effective communication ensures that the projects are implemented according to community expected needs. Weak communication and accountability in community managed water project has been reported as one of the factors for poor performance of the project (Leclert et al., 2016). Likewise, when effective communication occurs, communities are aware, at every stage, of what is happening and of their role within the project (Dyer et al., 2014).

2.4.2 Studies in African Countries

During the past two decades, participation has been embraced in several environmental regulations relating to different sectors. The importance of public participation in environmental decision-making has been recognised at both national and international level with plethora of high-level pronouncements and public exhortations to support the involvement of affected parties in decision-making process. At international level, the United Nations Conference on Environment and Development in Rio in 1992 (UNCED or the 'Earth Summit') emphasized the need for public involvement in the design and implementation of all sorts of environmental policy. Principle 10 of the Rio Declaration on Environment upholds the idea of broad-based public participation in environmental decision-making as follows: 'environmental issues are best handled with participation of all concerned citizens, at the relevant level...each individual shall have appropriate access to information concerning the environment that is held by public authorities and the opportunity to participate in decision-making process (Boakye & Akpor, 2012).

According to the World Bank (2017), Water Resources Management Policy promoted a multi-sectoral approach to the planning and management of water resources, a fundamental shift from the sector-based investment planning practiced prior to 1990s. The policy integrated the Dublin Principles and explicitly recognized the environment (wetlands and fisheries) as a legitimate use of water (like agriculture, energy, industry, livestock, mining and urban and rural supply). However, the World Bank continued to largely rely on its safeguard policies to address environmental and social issues in water resources investment planning and design decisions. Hardly any systematic effort was made to address the environment in the water resources policy dialogue.

The Water Resources Sector Strategy (2003) adopted the concept of Integrated Water Resources Management (IWRM), endorsed by the Global Water Partnership, for managing and developing water resources in a sustainable manner. The Strategy recognized water for the environment as an important water use (a tooth of the comb). It also considered environmental management -pollution control, source

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protection, allocation of water for environment and conservation of wetlands - as a key element of IWRM. Following the Water Resources Sector Strategy, the Bank has introduced Country Water Resources Assistance Strategies (CWRAS) for countries facing water resources challenges to guide investment and promote the use of IWRM principles in those countries (IPCC, 2007).

2.4.3 Empirical Studies in Tanzania

Tanzania is well renowned with water resources. According to the Food and Agriculture Organization, in 2008 Tanzania had 96.27 km3 of renewable water resources per year (by comparison, estimated world water resources are in the order of 43,750 km3/year). This corresponds to 2,266 m3 per person per year (Aquastat Factsheet Tanzania, 2010). Water resources are however distributed unevenly, both in time and space. During the dry season, which usually lasts from June to October, large rivers dry up or their flow decline substantially. Some parts of the country receive, on average, up to 3,000mm of rain per year, while in other regions (such as the Dodoma Region or the Rift Valley) yearly rainfall averages 600mm (PHDR, 2007).

Lakes alone cover about 7% of Tanzania's land surface. On the borders there are three African Great Lakes: Lake Victoria, Lake Tanganyika and Lake Nyasa; inland lakes include Lake Rukwa, Lake Eyasi and Lake Manyara. There are nine major drainage basins in Tanzania, divided according to the recipient water body. The Lake Victoria basin drains to the Mediterranean Sea (through the Nile River basin). Draining to the Indian Ocean there are the Pangani River Basin, the Ruvu/Wami River basin, the Rufiji River basin, the Ruvuma River and Southern Coast basin, the Lake Nyasa basin. The Lake Tanganyika basin drains to the Atlantic Ocean through the Congo River basin. The Internal Drainage basin and the Lake Rukwa basin belong to the Rift Valley basin (URT, 2005).

Projections indicate that, by 2025, Tanzania will experience water stress (defined as average per capita water resources below 1,500 m3) due to population growth and an increase in water consumption (WB, 2006). As of 2002, water use for municipal water supply in mainland Tanzania was about 493 million m3/year, or 0.5% of total renewable water resources (URT, *Ibid*). Despite this availability of fresh water and heavy investment in clean water projects, still water shortage problem is high. The study will add on the theory and practice of participatory planning in natural resource management specifically water and how the approaches foster the performance of water projects.

2.5 Research Gap Identified

Studies on community participation in the water projects acknowledge that, in order to address the issue of water resources sustainability, community participation in the management is of potential requirement (Mark 2014; Miraji *et al*, 2019; Fatihiya & Massawe, 2018). Literature shows that community participation has not featured well and that not much in practice is known in Tanzania (Mokiwa, 2015). This study has been carried out to examine the role of community participation in the performance of the water projects in rural area specifically in Mtwara district.

2.6 Analytical Conceptual Framework

The figure below (Figure 1.1) shows the conceptual framework. It illustrates the relationship between independent and dependent variables. Community participation

as an independent variable which include related variable such as decision making, planning and implementation assumed to affect performance of water projects. Therefore, if there is effect participation it will lead to good performance, meanwhile, if there is no community participation the larger the possibilities for the project to perform poorly.

Independent Variables





Figure 1.1: A Conceptual Framework Source: Researcher, (2023).

2.7 Theoretical Framework

At conceptual level the study is explained using three sets of variables; mainly independent, intermediate and dependent. Independent variable employed in this study is community participation which included; decision-making, planning and implementation. On the other hand, intermediate variables support independent variables towards dependent variables. Intermediate variables include aspect such as community satisfaction, motivation, collaboration, commitment and hard working. Community involvement in decision making, planning and implementation of water projects not only helps to build community capacity to make better decisions, but also to improve legitimacy, ensure compliance, transparency and inclusion of the members of community

2.8 Statement of hypothesis

- Community participation contribute to the performance of rural water projects in Mtwara District
- Decision making influence the performance of rural water projects in Mtwara District and;
- iii) Planning and implementation processes affect the performance of rural water projects in Mtwara district.

2.9 Summary

Chapter two reviews different literatures about community participation related to the performance of the water projects. Generally, it was observed that Tanzania is rich with water resources though they are uneven distributed within the country and some of them are seasonal. Currently, there are highly investment on water projects by government and other development partners. Therefore, the chapter analyses different literatures in relations to the focus of the study whereby both theoretical and empirical literature review were analyzed including research gap. The next chapter will deal with research methodology that will be used in this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter presents the research methodology that was used in this study. The sections of this chapter include; research strategies, the study area, targeted population, sample and sampling techniques, data collection techniques and data analysis. The aim of this chapter was to provide guideline on how the research objectives of this study achieved.

3.2 Research Philosophy

This research was guided by the Pragmatic philosophy. This belief directs researchers to use all approaches available to understand the research problem and question. They also have the flexibility to make their own decisions. This gives researchers the freedom to select the research methodologies, strategies, and procedures that best suit their requirements and objectives (Cresswell & Cresswell 2018). Therefore, due to the need of acquiring various kinds of data, this research has employed Pragmatic philosophy as it uses mixed methods of data inquiry and analysis.

3.3 Research Strategies

The study employed a case study design in order to facilitate data collection as many data as possible in order to get wide understanding of the problem (Creswell, 2012). Within a case study design, the researcher employed multiple-case design so as to allow different respondents from different strata to be involved as well as to get real picture of the study. With this regard, multiple case studies were useful in enabling

the researcher to obtain relevant information from different cases such community leaders, local communities, experts and contractors. A Multiple case designs is very important in mixed research as it strengthens the result by replacing the pattern by increasing the robustness of the study (Yin, 1994) hence it could be significantly in studying the community's participation in rural water projects.

3.3.1 Survey Population

Target population involve actual list of sampling units from which the sample is chosen (Cohen, Manion & Morrison, 2006). Usually, population share the same characteristics in terms of values, beliefs and norms (Kothari, 2004). Therefore, the targeted population in this study is 1 RUWASA District Manager, 118 village leaders, 204,770 community members and 6 contractors. The study involved community members of the selected villages of Mtwara rural district.

3.3.2 Area of the Research

Mtwara region is one of Tanzania's 30 administrative regions. According to the 2012 national census, the region had a population of 1,270,854, which was lower than the pre-census projection of 1,374,767. The region is bounded by Mozambique to the south separated by the Ruvuma River, Ruvuma Region to the west, Lindi region to the north and the Indian Ocean to the east. The Mtwara District is one of the most vulnerable districts of the country, consisting of 18 wards and 118 villages with a population of 213,554. Rural populations in the district are extremely under served by, and lack access to sufficient, reliable, safe and sustainable water and sanitation services.

Women and children of Mtwara rural district have to travel on average six kilometres to a water source in the dry season to collect water for human consumption. Mtwara rural district was selected as a case study due to the reason the piped water schemes often operate poorly with only 50 % of the people within their service areas getting water regularly. The service levels of the existing water supply systems were found unsatisfactory particularly in the rural areas. Therefore, it was necessary to carry out this study to assess community participation in the rural water project performance in Mtwara district council.

3.4 Sampling Design And Procedures

The researcher used purposive sampling and simple random sampling techniques in order to get participants who gave the data concerning the phenomena under study.

3.4.1 Purposive Sampling

Purposive sampling is the type of sampling in which units are selected subjectively by knowledge that help the researcher to identify the right people who know about the subject matter (Kothari, 2004). This method was helpful in balancing the location of the study area for data collection but also, the research needed to obtain information from key people who were District Managers (DM), Village Leaders, Community members and Contractors of two villages.

3.4.2 Sample Size

A sample refers to a small group of people from larger group of which information is obtained (Fraekel & Wallen, 2000). The sample is useful to represent large population since it is difficult for the researcher to involve the whole population in the area. The study involved two villages with 68 sample sizes due to easy to be accessible, triangulate the information gathered, management and less expensive. In this study, researcher involved 68 respondents as indicated in table 3.1

S/N	Categories of Participants	No. of Respondents
1	District Managers (DM)	01
2	Village Leaders	04
3	Community members	60
4	Contractors	03
	Total	68

Table 3.1: Composition of Prospective Participants

Source: researcher, (2022).

District Manager of RUWASA (DM): This respondent was involved in this study because he is an administrator and supervisor of all water projects in the district. Based on their main roles including implementing the water projects among others, he/she was selected purposefully in order to provide deep and relevant information on the community participation in the water projects.

Village Leaders: These leaders were involved in this study as far as they are key administrator responsible in supervising all government activities in their areas. Therefore, from each village the village chairperson and one representative of the village council was selected purposively in this study because they hold vital information on the number of implementations of water projects in their areas of jurisdictions.

Contractors: Contractors were selected because they are responsible for technical matters, consultation, and guidance to water projects.

Community Leaders: This group was involved in this study because they have rich experience and information on community participation and they are number one stakeholder in not only water projects but to all projects.

3.5 Methods of Data Collection

These are instruments used in the collection of the data in the field. In this study, the researcher used three methods of data collection which are questioners, interview, and observation.

3..1 Questionnaires

In this study questionnaire was used to collect information from local communities. Questionnaires will be used in the study to collect data from local communities because could contact a large number of people at relatively low cost. To exhaust all relevant information, researcher was used both closed and open-ended questions aiming at collecting the information to the respondents.

3.4.2 Interview Method

This method was used to collect data from the district water engineer, village government and water contractors. The method was used in this study because it enabled the researcher to learn the feelings and opinions from participants on the problem being explored. Also, the method gave opportunity for a researcher to explain or clarify questions and it allowed personal interaction with participants. The information obtained in the questionnaire was supplemented by the results from interviews to capture important information community participation and their role in the performance of the water projects.

3.5 Data Processing and Analysis

Data processing involved editing of the questionnaire, coding, classification and data entrance which was done through computer using Statistical Package for Social Sciences (SPSS) programme in order to make descriptive analysis of the data for interpretation. Cross tabulation analysis using Chi-square test was done to compare the relationship community participation and performance of the water projects. The data collected through questionnaires as quantitative techniques was analysed and presented through frequency tables, charts and graph which show frequency count and percent distributions. The qualitative information was categorized and coded basing on study objectives in producing final report. An inductive thematic approach was employed in the analysis of data from in-depth interviews in which the emerging issues will be identified and connected to the data collected and their discussion.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS 4.1 Introduction

This chapter presents the analysis and discusses the findings of the study on community participation in the performance of rural water projects in Mtwara district. The findings are presented and discussed in accordance with four research objectives, which are intended to analyse the contribution of community participation to the performance of rural water projects in Mtwara district; analyse decision making in the performance of rural water projects in Mtwara district; and examine the planning and implementation process in the performance of rural water projects in Mtwara district. Data was collected using interviews and questionnaires. The chapter is divided into sections and sub-sections according to the themes and sub-themes.

4.2 Contribution of Community Participation in the Performance Of Rural Water Projects

The first objective sought to analyse the contribution of community participation to the performance of rural water projects. The study examined the major aspects of responding to this objective. This includes first examining the advantages of community participation in the water projects. The aim is to measure the contribution of community participation in the water projects. Findings were collected through interviews and questionnaires with water project officials, village leaders, and community members. The findings revealed the existence of different levels of participation in the performance of rural water projects, as explained in the below sections.

4.2.1 Sustainability of the Project

Community participation was examined to determine whether or not it contributed to the good performance of the water projects in rural areas. According to officials from rural water projects, community participation is important in the protection of water sources because it increases community members' sense of ownership. That means, through the participation of community members, people become aware of the importance of the particular water projects and, hence, cooperatively, they protect the project against any destructive behavior. One official from the district water office reported that:

Community participation is the source of the feeling of ownership. Community members use their efforts to protect the project against any harm from other people. People can also protect water sources as long as they understand the particular project is for their own benefit and not for government officials. (Interview: government officials. 15/9/2022).

The findings above indicate that the participation of community members increases the sustainability of the projects. The findings from Kilombero village in Mtwara district revealed the same concerns about sustainability as community members oversee and safeguard the water projects in their area. Hence, community members are the ones who understand their environment, opportunities, and obstacles. By sharing their experience with contractors and government officials, it could increase the sustainability of the project. Furthermore, this could reduce the possibility of the project's failure. The collaboration between experts and local communities is helpful to determine the needs of the project, as the local communities have experience with their environment.

In addition to the above, the responses from the field revealed the importance of community participation in the maintenance and operation of water projects as

follows:

Community participation enables the community to participate in the operation and maintenance of the project. Experts can come and go, but community members are there. Hence, they are responsible for operation and project maintenance to make it sustainable from one generation to the next (Interview: government official, September 15, 2022).

The above statements revealed the benefit of engaging community members: even after the end of the project's implementation, the project could remain sustainable generationally. The community members can arrange themselves on how to operate their project and how to handle maintenance; all these are important aspects toward project sustainability.

4.2.2 Reduce costs

Community members from Namanjele village observed that the community participation is of significant advantages not only to the community alone but also to the government as it reduces the costs of the project implementation as some of the activities can be done by the community members: An interview with one community member revealed that the response asked in order to take advantage of community participation in the water projects revealed that:

The community contribution is to make sure that water services become available by supplementing the government's efforts through the provision of labour power in the project. But also involving the donation of land free of charge for water projects (interview, community member. September 20, 2022).

The study's findings showed that human resources were the most valuable resources contributed by community members. Human resources were contributed through unskilled labour, security, and locally available materials, which communities indicated they contributed often. Information was shared by the project management team on the different categories of resources to be contributed by community members. The majority of community members felt satisfied when requested to contribute resources.

The evidence above implies that community participation helps soften government budgets so that funds can be allocated to other projects. That means the amount of funds that could be used in other projects and compensation will be allocated to other projects due to the community's willingness to provide it free of charge. The question of lowered project cost observed in this study concurs with the study by Olokotun (2017) that, with scarce resources and the increasing needs of the rural population, where the majority of people still live in Africa, we should not continue to plan for the people from the top or from the cities without their input. Community-based development initiatives improve the match between what a community needs and what it obtains from development projects.

4.2.3 Increases Accountability

The question concerning the contribution of community participation in water projects was further addressed by community members of selected areas that could contribute to accountability for both citizens and leaders. It was revealed that community participation enables people to understand their responsibilities towards project performance. On the other hand, through community participation, leaders become accountable and, hence, work hard to meet the project objectives because community members are aware of what is going on in the project. A researcher conducted interviews in Kilombero village with community members. The response was as follows: Community participation increases accountability among both community members and contractors and leaders. When leaders understand that community members are aware of what is going on in the project, they will use public funds properly and make sure that the project is implemented on time. Meanwhile, community members will make sure that they participate fully in the project and become accountable for any consequences, either positive or negative, that arise from the project. The same goes for the contractors. They will adhere to the standards, rules, and regulations stipulated in the contract. (Interview with C.M.: 16/9/2022).

The above arguments reveal the tripartite collaboration in water project implementations. The discussion revealed that there is a high need for community participation in order to empower local communities to understand their duties in the projects for performance, as community members are the owners of the project. Further analysis revealed that community participation will make the contractors adhere to all standards, such as the materials to be used, the time for implementation, and the value for money shown in the project.

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The abovementioned qualitative findings are further supported by quantitative data (see Table 4.1) as follows: About 47 percent of the respondents revealed the sustainability of the project as the community participation contribution, 28 percent said it reduces the cost whereas, about 25 percent said that it will increase

accountability to both leaders and community members.

Table 4.1: Contribution of Community Participation In The Performance OfThe Rural Water Projects

Variables	Frequencies	Percentage
Sustainability of the project	28	47
Reduce Cost	17	28
Increases accountability	15	25
Total	60	100

Source: Field data (2022)

The study findings observed that when communities participate in their own projects, they benefit from the following: empowerment of communities to improve efficiency in the maintenance of the water projects, hence the sustainability of the project; local participation reduces the cost of production and hence yields better projects and better outcomes; and greater transparency and accountability. In fact, the study experiences are further supported by many scholars, including Tade (2001), who observed that because communities have considerable capacity to plan and implement programmes when empowered, they are also given the power to decide and negotiate.

This strategy enables communities to effectively participate in participatory development, which is the most important approach towards enabling communities to help themselves and sustain efforts in development work. Communities are no longer seen as recipients of development programmes; rather, they have become critical stakeholders that have an important role to play in the management of programmes and projects.

4.3 Decision Making in the Performance of Rural Water

Decision-making is key in determining the performance of projects, and the more the

community and the project management committee are involved in the decisionmaking process, the better the projects will perform. The second objective of this study was to examine the decision-making process in the performance of rural water. This objective is intended to explore community involvement in the decision-making process concerning water projects in the Mtwara rural district. A questionnaire and interviews with community members, the district water office, contractors, and village leaders were used to collect data. The findings revealed the different ways of involving people in various decision-making processes, as discussed hereunder.

4.3.1 Village Meetings

The responses from the field revealed that many people were participating in water projects through awareness created in village meetings. The findings revealed that community members informed about the project, including the implementation strategy, so as to be aware of what was going on in the project. Further analysis revealed that experts used the opportunities of meeting with local people to learn about the history of water sources, water demand, and other related information. It was revealed that most of the community members in Mtwara rural district provided their opinion on the best way to benefit from the project that would be sustainable, as one of the informants acknowledged that;

I remember that I participated in the village meeting concerning water projects. In the meeting, we discussed various issues that strengthen the project, but also learned from experts in different areas, such as water source history, protection, and determination of water demand. Also, in the meetings, the issue of land was discussed, specifically the uses of either private or public land for project purposes (Interview, C.M., 9/16/2022).

The statement above shows that village meetings act as a forum for people to meet and discuss various issues related to the project. Experts use the forum to raise public awareness about the project, its implementation, monitoring, and evaluation. Also, they learn more about the local environment, culture, and attitudes toward the particular water project. During an interview, one of the district water officials said:

As a design engineer, I engage people in the following aspects: First, determination of community activities that require water, second; water source history and protection, and third; to determine community wealth in relation to water demand (Interview with G.O: 20/09/2022).

In addition to the government officials, another person had this to say:

To engage villagers, we start by involving them in the awareness of the project, involving them in some work and education in preserving water bodies, as the community members should form the bodies governing operations of water supply. Community members are encouraged to share these ideas with their neighbours so together they learn about how their new water point is just the beginning of some big changes in their lives (Interview, G.O at school A: 10/9/2022).

The information above implies that community members are aware of what is going on in the water projects and have been involved in different ways from the preparation stage to the beginning of the project. Hence, they have a positive perception. On the other hand, the negative perception of community members towards water projects could be a barrier to better project implementation. The need for good water and sanitation is widely recognised as an essential component of social and economic development.

The provision of water supply and sanitation services addresses some of the most critical needs of the population. Safe water and good sanitation are essential to the protection of community health by limiting the transmission of infectious diseases and assisting in the maintenance of a sanitary home environment. At the same time, they contribute greatly to the enhancement of human dignity and economic opportunity by freeing people, mainly women and young children, from the drudgery of water carrying and providing more time for them to engage in other activities (WHO & UNICEF, 2004)

4.3.2 Community Work Provision

The study findings revealed that most of the community members in Mtwara rural district were reported to be involved in community work that facilitated the implementation of water projects. Further analysis revealed that people with technical expertise are involved in different activities and earn different wages. Involving the community in the project reduced the cost of taking labour from urban areas or other rural areas. According to one community member,

We are given priority in the case of labour power to be used in the water projects. Also, in case the project needs the contribution of a labour force, we have been mobilised by the village leaders to work on the project (Interview, C.M., and September 20, 2022).

The findings above show that community work creates projects that are communityowned, sustainable, and monitored for years after completion. This ensures they make a real, transformative impact on the lives of communities for decades to come.

In that regard, the Water engineer said that:

We believe that it is vital to have community members contribute to a project as it helps realise the fact that they own it and will be the ones to look after it in the future. These contributions can come in many forms, including money or materials (like sand or gravel), labour, or even preparing food for the drilling team. The important part is that, whatever the contribution, local people are involved and making meaningful sacrifices for the sake of the project (Interview with G.O., 17/09/2022).

From the quote above, it can be asserted that community participation in project development is about ordinary citizens assessing needs and participating in project

planning and budgeting, implementation, and monitoring. This improves public resource management and reduces corruption, thus making civil servants and political leaders accountable to the people.

4.3.3 Representations through Water Village Committee

The study findings revealed that village water committees, as grassroots organisations spontaneously formed by rural collective members, play an irreplaceable role in the management of rural water projects. Therefore, because of its importance, development agencies increasingly depend on passing information to communities or organising activities through the elected leadership committees of self-organizing groups. The study revealed that many people participated in water projects through representatives of water committees who were selected by community members. The responses from interviews and questionnaires revealed the good work done by the committee in regulating the water issues before, during, and after implementation. In that view, the community member noted.

The water committee usually helps in creating awareness and educating the importance of water projects in rural areas. (Interview with DSEO, 22/9/2022).

The preceding assertion demonstrates the importance of water committees in bridging the gap between people, government, and contractors. This is due to the fact that in some scenarios, it's difficult for all people to participate in all water project processes, but through committees, people become represented. It was also noted in the interview that many people believed the committee to be a good representative of their voices. During the interview, one village leader testified that:

We believe in the water committee to represent us in all water issues since it is difficult for all of us to participate in everything. By having a committee, some decisions can be made on time, as they are few compared to the meeting of all the villagers. We elect them, so we have the authority to remove them from their positions if they fail to perform their duties effectively. (Interview, village leader, September 19, 2022.

Also, other field responses revealed the existence of the chairperson and secretary of community water users as follows:

Also, there is a community of water users who manage, distribute, and conserve water from a source used jointly. The aim of this community of water users is to resolve conflicts between members related to joint use of water resources and collect water user fees (Interview, Community Member: 19/9/2022).

The study findings revealed the existence of a community of water users who regulate the joint use of one source of water. The overall argument for representation demonstrates that community participation through water committees supports decentralized, demand-driven, innovative, low-cost, and community-based water resource management in rural areas. It is rooted in the strong belief that local management and community initiatives play a key role in ensuring and sustaining the success of enhancing water supply and sanitation services to poor communities. The Community Water Committee ensures that government funds are directed directly to local communities in need.

Therefore, it sets out to explore possible arrangements that can increase community involvement in the development and operation of water supply schemes. In order to understand why there have been limited applications of this strategy, Tanzania's experience with community participation is examined. It is observed that there are good procedures for community participation in the water projects. Though, few respondents were not aware of some procedures. It is suggested that, to increase participation, local communities should be involved more in all aspects of water project. The study findings supported by Mtinda (2006) that creation of village water committees with powers of mobilizing local people, planning, and financing is seen as one of the most promising ways of increasing community participation.

Further findings from quantitative data revealed the same on the participation process in the decision-making process. It was revealed that 47 percent of the decision-making process was conducted through village meetings, 28 percent through community work provision, and 25 percent through village committee representation in the water projects.

Table 4.2: Decision Making in the Performance of Rural Water VillageMeetings

Variables	Frequencies	Percentage
Village meetings	28	47
Community work provision	17	28
Representation through village committees	15	25
Total	60	100

Source: Field data (2022).

The notion of community participation in development initiatives has spread widely. It is revealed that the involvement of local people can lower the cost of achieving a given objective and can result in development initiatives that are consisted with their preferences. Moreover, such participation can assist in information pooling about exchange opportunities, to improve the transmission of individual reputations, and build institutions that allow the poor to act collectively in their own interest - all features of strengthened social capital (Mansuri & Rao, 2004). That means, if a community or group has a genuine need for a water and work towards its

establishment, such a facility would be well protected and maintained by its members because it is their sweat.

Local institutions are the key to sustainability; these can be done through village meeting, or village committee. When local groups are actively involved in project design and implementation, they take on ownership and are more likely to continue the project when donor funding ends, compared with externally imposed water projects. From the results, it's clear that involvement of community is important ingredient in determining performance of projects. Communities should be encouraged to take front role in project cycle.

The study findings also revealed that the projects have management committees which were selected by community members. The study showed those project management committees are fully involved in project selection and implementation. Project management hold their monitoring visits and meetings with community members on quarterly basis. Majority of community members are somehow aware if they have been linked to other development actors. Majority of community members indicated that roles of different groups had been defined during project initiation, implementation and that project governance had effect on development project performance.

4.4 Relationship between Community Participation and Performance of Water Project

The research question is derived from objective three that sought to establish stakeholders' views of the influence of collective decision making on performance of development rural water projects in Mtwara rural district. To obtain the respondents views, the researcher administered questionnaire to the respondents. The findings analysis revealed that there is relationship between water performance and community participation. The study findings revealed that the existence of community water users and water committee facilitate the monitoring and evaluation process as well as the sustainability of the project.

The committee is helpful in coordinating the opinion of people about the project hence shaping the overall project objectives in case of standards of material used, labour power and continue to monitor the project through community of water user towards its sustainability. As one of the interviews participants revealed:

The committee used to oversee the challenges of mistakes in the particular project and hence share with responsible authority for the aim of eradicating difficulties and ensure quality of the project. Also, there is community of users who manage, distribute and conserve water from a source used jointly. (Interview, Community member: 19/9/2022).

Therefore, the implementation of the community participation is very crucial at all stages and continuously in order to attain sustainability in the water projects. The support of local communities may be critical towards project sustainability as the community members are the one who will use the project hence it is necessary for them to sustain the water sources for future uses. Accordingly, the study concurs with Kinyota (2020) that community participation in project development is about ordinary citizens assessing needs and participating in project planning and budgeting, implementation and monitoring. That means, by engaging community in the project it will improves public resource management and reduces corruption.

Thus, making civil servants and political leaders accountable to the people. The exemption of weak and powerless citizens from decision making is one of the causes

of project unsustainability. The results of this study concurs with the study by Arthur and Michelle (2002) that the need to making participation work therefore is to create forms of downward and upward accountability and simultaneously to maintain close links between the higher levels of government and the community where projects are being implemented. In order to ensure community participation on projects success, community leaders must accept the challenges for project sustainability.

The leaders must be out rightly be accountable and answerable to beneficiaries rather than to political and bureaucratic superiors. Their records should be well kept in simple language and accessible to every member of the community. The leaders should be transparent in their dealing with members of the community and call for regular meetings. Further observations revealed that Participation plays major role in people's management of their own affairs. Ownership and control of resources have a profound impact on participation in development projects (Danny et al., 2004).

4.5 Planning and Implementation Process in the Performance Of Rural Water Project

The study examined how community members were involved in the project development cycle. The results of the study observed that, rather than imposing development projects on a community, its members should be allowed to participate meaningfully in the planning and execution. Development is meaningless if it does not harness the potential of the beneficiaries, who are the primary stakeholders. The study revealed the participation of people in the decision-making process, from the planning to the implementation stages. Further the study findings revealed community participation to bring government closer to the people and to bring people closer to government. In other words, the study observed that it is high time to absorb the culture of a bottom-up approach to development planning; otherwise, development may be a mirage. This is due to the fact that the failure of many government projects and even the plethora of abandoned projects that dot the landscape of many communities is a tragedy, given the scarce resources and the ever-increasing needs of the rural populace.

I am satisfied with our engagement in the water project as we have been involved in different steps, and I wish things to continue like this when the project is done (interview, community member: 19/9/2022).

Government leaders try to engage us when it comes to development projects, especially water. We were involved in the decision regarding the water project, though sometimes some of us did not participate in the meeting or were passive in case we were needed by the government officials (interview, community member: 9/19/2022).

The study revealed that it is of great importance to involve community members in all stages of the project cycle for reasons of ownership, performance, impact, and sustainability. Monitoring and evaluation are important management tools to track your progress and facilitate decision-making. While some funders require some type of evaluative process, the greatest beneficiaries of an evaluation can be the people with whom your rganized on works. By closely examining your work, your

rganized on can design programmes and activities that are effective, efficient, and yield powerful results for the community. The results above agree with the findings of Altschuld & Kumar (2010), who argued that the involvement of local people in the conception, execution, monitoring, and evaluation of development projects has become very central to attaining sustainable development.

The implementation phase was rganized by meetings with community leaders, special groups' needs, women and religious leaders, and the

whole community. In the meeting, we gathered different information, including the determination of the source capacity and demand required (interview, government official: 19/9/2022).

The study further revealed that the cornerstone of community-based development initiatives is the active involvement of members of a defined community in at least some aspects of project design and implementation. When potential beneficiaries also make key project decisions, participation becomes self-initiated action what has come to be known as the exercise of voice and choice, or empowerment.

The study findings supported by Mansuri & Rao (2004), the benefits include the following: it will lead to better-designed projects; better targeted benefits; it is more cost-effective; it will lead to a more equitable distribution of project benefits; it will lead to less corruption; it will strengthen the capabilities of the citizenry to undertake self-initiated development activities; and it will improve the match between what a community needs and what it obtains. This is because the project will be more consistent with the preferences of the target group.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions, and recommendation of the study. Summary of the study written based on the objective of the study whereas conclusion and recommendation are drawn from the overall results of this study. The chapter begins with introduction, summary of the study, conclusion and recommendations.

5.2 Summary of Major Findings of the Study

This study examined the community participation in the performance of rural water projects in Mtwara district. Based on the research findings the following summaries are drawn in each specific objective as follows.

5.2.1 Contribution of Community Participation in the Performance of Rural water projects.

The study examined whether or not community participation contributes to the good performance of water projects in rural areas. It was revealed that community participation contributes to the participation of community members' sense of ownership. Through their participation, people become aware of the importance of the particular water projects, and hence, collaboratively, they protect the project from all harmful behavior, which in turn could affect the sustainability of the project. Also, by engaging community members, they will be comfortable with the processes, practices, and procedures that could affect the water resources even after the end of the projects. Moreover, the study findings revealed that community participation can help reduce the operation costs of the project. This is due to the fact that some of the project activities are done by community members. Hence, community participation softens the government budget as other expenses can be allocated for other projects. Furthermore, the study revealed that accountability affects both leaders and citizens. The participation of community members' help in monitoring the project activities will hence facilitate the effective use of public funds while ensuring the timely implementation of the project's activities.

5.2.2 Decision Making in the Performance of Rural Water

The study's findings revealed Village meetings act as a forum for people to meet and discuss various issues related to the project. Experts use the forum to raise public awareness about the project, its implementation, monitoring, and evaluation. Also, they learn more about the local environment, culture, and attitudes toward the particular water project. The study further revealed that most of the community members in Mtwara rural district were reported to be involved in community work that facilitated the implementation of water projects.

Further analysis revealed that people organising organisations with expertise are involved in different activities and earn different wages. Involving the community in the project reduced the cost of taking labour from urban areas or other rural areas. Also, the water committees, as grassroots organisations spontaneously formed by rural collective members, play an irreplaceable role in the management of rural water projects. Therefore, because of its importance, development agencies increasingly depend on passing information to communities or organising activities through the elected leadership committees of self-organizing groups. The study revealed that many people participated in water projects through representatives of water committees who were selected by community members. The responses from interviews and questionnaires revealed the good work done by the committeed in regulating the water issues before, during, and after implementation.

Furthermore, the study revealed the existence of a community of water users who regulate the joint use of one source of water. The overall argument for representation demonstrates that community participation through water committees supports decentralized, demand-driven, innovative, low-cost, and community-based water resource management in rural areas. It is rooted in the strong belief that local management and community initiatives play a key role in ensuring and sustaining the success of enhancing water supply and sanitation services to poor communities.

The Community Water Committee ensures that government funds are directed directly to local communities in need. Further analysis revealed that there is a relationship between water performance and community participation. The existence of community water users and a water committee facilitates the monitoring and evaluation process as well as the sustainability of the project. The committee is helpful in coordinating the opinions of people about the project, hence shaping the overall project objectives in terms of standards of material used and labour power, and continues to monitor the project through the community of water users towards its sustainability. Generally, the study findings show that the implementation of community participation is crucial at all stages and continuously in order to attain sustainability in the water projects. The support of local communities may be critical to the sustainability of the project, as the community members are the ones who will use it, so it is necessary for them to sustain the water sources for future uses.

5.2.3. Planning and Implementation Process in the Performance of Rural Water Project

The planning and implementation processes are the main determinants of the performance of rural water projects. The study findings revealed that a communitymanaged project is an approach that gives communities the responsibility to plan, implement, and manage both the construction and operation and maintenance of rural water services. The results revealed that poor planning and a lack of engagement among community members are among the factors affecting project sustainability. Further evidence from the Mtwara rural district reveals that community management of water infrastructure generates higher institutional, managerial, financial, and technical sustainability performance compared to projects managed by local government, NGOs, and charity organizations.

The results linking the community-managed project approach to greater sustainability of water services can be explained by the reaction of communities to empowerment, which increases their awareness and sense of ownership. The experience they are getting from the construction management of water points might also give them the necessary skills and knowledge on how to sustain their water services. Thus, the study concurs with different literature that in order to attain the sustainable development goal target of the water sector, which aimed at increasing the water supply coverage and improving the functionality of existing water infrastructures, the policymakers and governments of developing countries should work more, besides participation, on the empowerment of user communities in the construction of water points.

The study further revealed that the majority of community members were involved in the formulation, planning, implementation, and all other stages of the project cycle, while only a few were involved in the implementation stage. However, no community member was involved in the monitoring and evaluation stages of the project cycle. The study showed that the majority of community members have limited knowledge of the implementation structure, while the project management committee indicated that community members are moderately aware of the project implementation structure. The study revealed that there exists a reporting and feedback channel between the community, management, and district government, and that its condition is good from the perspective of the project management committee and fair from the perspective of community members. The study revealed a need for the district to offer civic education to community members about their role in decision-making.

5.3 Conclusions

Community participation has contributed significantly to the performance of development projects by sharing information on what their needs or priorities are, where the projects should be implemented, and who should be the target beneficiaries. Community participation provides meaningful project processes whereby local communities effectively participate for project sustainability. Accordingly, the engagement of local communities in the water projects supports government efforts towards effectively sustaining and expanding water services, particularly for the poorest people. This is because water is a basic need, now recognized as a human right. While the value of human life is clearly not seen simply in a financial cost figure, there are nonetheless clear economic justifications for increased access to water and sanitation.

Therefore, the study observed the advantage of local communities' engagement in water projects is higher than its disadvantages, hence the study's urge for the standard to be implemented throughout the nation. Furthermore, the failure of many development projects, including that of water, was due to the ineffective participation of key stakeholders and the low capacity of the communities in the operation and maintenance of water systems and the management of water resources. Moreover, the study revealed that projects with engaged stakeholders were more sustainable than non-participatory water projects.

5.4 Recommendations

5.4.1 Ministry of Water

The government, under the ministry of water, should prepare the community participatory manual for the water projects in the country. The manual should guide all water project stakeholders in the implementation of the project. This study recommends the guidelines in the hope that they will provide uniformity in the water projects as well as ensure full community participation in the projects. Proper training and technical support at all levels and for all groups engaging in water project implementation and management should be given priority. Water attendants should be given basic technical training which serves a purpose for minor repairs in case of system breakdowns.

5.4.2 President's Office Regional Administration and Local Government Authorities

To make strategies that will help village leaders and all relevant authorities engage people in various communities. To achieve this, these leaders need to be empowered through different participatory methods so that they can be champions for community engagement. It should be stated that each project should include community participation protocols and implementation procedures before it is allowed for implementation by its authority. Cooperation among the key stakeholders is important especially among the Local Government leaders and Water Committee, and between Water Committee and the community, as well as technical experts at the municipal and institutional level.

5.4.3 Development Activist

The activists should consider the strict follow-up of community participation in development projects. Community participations should be agenda number one among partners and should not remain in the hands of government officials only.

5.4.4 Community

The community should be made aware and their consciousness raised within a village, ward, and district level, and any barriers to their participation in water

projects should be addressed. Community members should know that participating in water projects is their right and that it's not optional for contractors to do so. People should be mobilized so as to build interest in sustaining the initiated project services. Mobilization should start at the initial stage of project implementation. Community members should be well briefed at the beginning of water project about cost sharing.

5.4.5 Recommendations for Further Studies

- i. This study based on assessment of the community participations in the water projects in Mtwara rural district. Therefore, similar study could be conducted in other sectors such as health, energy and education.
- ii. This study focused on the rural area. It is recommended a similar study be conducted by making comparison on community participation in water projects in urban areas.

REFERENCES

- Agrawal, A. & Angelsen, A. (2009). Why are we Seeing "REDD? An Analysis of The International Debate on Reducing Emissions from Deforestation and Degradation in Developing Countries: Analyses. Institut du Dévelopment Durable et des Relations Internationales, Paris.
- Akpor, O. B. & Muchie, M. (2011). Challenges in meeting the MDGs: The Nigerian Drinking Water Supply and Distribution Sector. *Journal of Environmental Science and Technology*, 4(5), 480-489.
- Alejandro, P. L. (2007). Participation: The Ascendancy of a Buzzword in the Neo-Liberal Era: *Development in Practice*, 17, 539-548.
- Arthur, A. S. & Michelle, R. D. (2002). Community Involvement: Theoretical Approaches and Educational Initiatives. New Jersey: Wiley-Blackwell Publishers.
- Chambers, R. & Kumar, S. (2003). *Methods for Community Participation: A Complete Guide for Practioners*. Paperback: ITDG Publishing.
- Cohen. L., Manion, L. & Morrison, K. (2005). *Research Methods*. London: Rutledge Falmer.
- Creswell, J. W. & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Los Angeles: Sage.
- Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. Washington DC: SAGE.
- Danny, B., Frances, H., Marilyn, T., Pete, W. & Mandy, W. (2004). Making Community Participation Meaningful: A handbook for development and assessment. England: The Joseph Rowntree Foundation by The Policy Press.

- Dungumaro, W. E. & Madulu, F. N. (2003). Public participation in integrated water resources management: the case of Tanzania. *Physics and Chemistry of the Earth*, 28, 1009-1014.
- Dyer, J., Stringer, L. C., Dougill, A. J., Leventon, J. & Syampungani, S. (2014). Assessing participatory practices in Community Based Natural Resource Management: Experiences in Community Engagement from Southern Africa: Journal of Environmental Management, 137, 137-145.
- Eden, S., Megdal, S. B., Shamir, E., Chief, K. & Lacroix, K. M. (2016). Opening the Black Box: Using a Hydrological Model to Link Stakeholder Engagement with Groundwater Management. Water Journal, 4(8), 216-240.
- FAO, (2003). Participatory Development: Guidelines on Beneficiary Participation in Agricultural and Rural Development for the Rural Institutions Participation Service, Rural Development Division, (2nd edition). Food and Agriculture Organization of the United Nations Rome Italy, FAO.
- Gebremedhin, Y. (2004). Community Participation and Sustainable Soil and Water
 Conservation Management the Case of Zala-Daget Project: Dogu'a Tembien
 Woreda Tigray Highlands. Masters thesis, Addis Ababa University.
- Global Water Partnership, GWP (2009). IWRM Implementation Project in Ethiopia: Final Project Report.
- Held, D. (2006). Models of Democracy. Cambridge: Polity Press.
- Isager, L., Theilade, I. & Thomson, L. (2004). People's Participation in Forest Conservation: Considerations and Case Studies University of Aarhus, Hoejbjerg, Denmarkdanida Forest Seed Centre, Humlebaek, Denmark & Csiro Forestry and Forest Products: Kingston, Australia.

- Kilonzo, R., & George, V. (2017). Sustainability of Community Based Water Projects: Dynamics of Actors' Power Relations. Journal of Sustainable Development, 10(6), 1913-9071.
- Kinyata, G. S. (2020). The Impact of Community Participation on Projects' Success in Africa: A Bottom-Up Approach. *International Journal of Research in Sociology and Anthropology (IJRSA)*, 6(3), 01-08.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*, 2nd Ed., New Delhi: New Age International Publishers.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*, 2nd Ed., New Delhi: New Age International (P) Ltd.
- Kuhlman, T. & Farrington, J. (2010). What is Sustainability? Agricultural Economics Research Institute, Wageningen University the Hague, The Netherlands Institute for Rural Research, Geography and Environment, University of Aberdeen, Elphinstone Road, Aberdeen AB24 3UF, Scotland, UK.
- Mandara, C. G., Butijn, C. & Niehof, A. (2013). Community Management and Sustainability of Rural Water Facilities in Tanzania. Water Policy Journal, 15(2), 79-100.
- Marks, S. J., Komives K. & Davis, J. (2014). Community Participation and Water Supply Sustainability: Evidence from Handpump Projects in Rural Ghana. *Journal of Planning Education and Research*, 34(3), 276–286.
- Ministry of Planning, Economy and Empowerment, (2007). *Poverty and Human Development Report (PHDR)* December. Retrieved on 21st June, 2021 from; <www.povertymonitoring.go.tz/documents/phdr_frontpage.pdf>.

- Miraji, M., Liu, J. & Zheng, C. (2019). The Impacts of Water Demand and Its Implications for Future Surface Water Resource Management: The Case of Tanzania's Wami Ruvu Basin (WRB). Water, 11(6), 1280.
- Mtinda, E. O. (2006). Sustainability of Rural Water Supply and Sanitation Services Under Community Management Approach: The Case of Six Villages in Tanzania. Unpublished master thesis, Linkopings Universitet, Sweden.
- Mugenda, A. & Mugenda O. (2003). *Research Methods "Qualitative Approaches*". Nairobi: ACT Press.
- Mwakila, W. (2008). An Assessment of Community Participation in Water Supply and Sanitation Services: *The Case of Yombo Dovya and Barabara ya Mwinyi, Water Community Projects, Temeke, Tanzania*. Institute of Social Studies, The Hague, The Netherlands.
- Nelson, N. & Wright, S. (1995). *Participation and Power* in N. Nelson and S.Wright (eds), Power and Participatory Development: Theory and Practice.London: Intermediate Technology Publications, 17pp.
- Nkongo, D. (2009). Management and Regulation for Sustainable Water Supply Schemes in Rural Communities. Water Aid Tanzania. 30pp.
- Olukotun, G. A. (2017). Achieving Project Sustainability through Community Participation. *Journal of Social Sciences*, 17(1), 21-29.
- Sayer, J. & Campbell, B. (2004). *The Science of Sustainable Development: Local Livelihood and Global Environment*. Cambridge: Syndicate of the University of Cambridge Press.
- Shukor, F. S., Mohamed, A. H., Sani, S. A. & Awang, M. (2011). A Review on the Success Factors for Community Participation in Solid Waste Management.

International conference on management. Skudai, Malaysia. University of Technology: Malaysia.

- The Intergovernmental Panel on Climate Change, IPCC (2007). *Climate Change: Impacts, Adaptation and Vulnerability.* Cambridge: Cambridge University Press.
- Thomson, M., Kentikelenis, A. & Stubbs, T. (2017). Structural adjustment programmes adversely affect vulnerable populations: a systematic-narrative review of their effect on child and maternal health. *Public Health Rev*, 38, 13.

Turner, P. (2003). Liberal Democracy 3.0. London: SAGE Publications.

- United Nations, (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Sustainable Development knowledge platform. UN.
- WHO & UNICEF, (2004). Meeting the MGD Drinking Water and Sanitation Target:
 A MidTerm Assessment of Progress. WHO/UNICEF Joint Monitoring
 Programme for Water Supply and Sanitation. Geneva: WHO and New York:
 UNICEF.
- Yin, R. K., (1994). Case Study Research Design & Methods: Applied Social Research and Methods Series. 2nd Ed., Thousand Oaks, Sage Publication Inc.

APPENDICES

APPENDIX 1: QUESTIONAIRE FOR COMMUNITY MEMBERS

- 1. Age: _____ 2. Sex:_____ 3. Marital Status____ 4. What are the contributions of community members on the performance of the water projects? 5. Who is responsible for decision making concerning water projects in your area? 6. Are there any water committee in your village? a) Yes b) No 7. What are the responsibilities of water projects in your area? 8. Are you responsible for decision concerning water resources in your village? a. Yes b. No
- 9. If yes, how are you involved in the decisions?
- Are you satisfied with participation in water projects? If the answer is Yes,
 /No. Explain why______

APPENDIX 2: INTERVIEWS SCHEDULE FOR KEY INFORMANTS (DISTRICT MANAGERS, VILLAGE LEADERS & CONTRACTORS)

- 1. What are the advantages of community participation in the water projects in rural areas?
- 2. Explain how do you engage people in the water projects?
- 3. Do you think there is relations between community participation and water project performance? How?
- 4. Explain how planning process take place at community level, who are involved? Why?
- 5. How implementation phase organized, who involved, at what capacity, how?

APPENDIX 3: RESEARCH CLEARANCE LETTER

THE OPEN UNIVERSITY OF TANZANIA

DIRECTORATE OF POSTGRADUATE STUDIES

P.O.BOX 23409 DAR ES SALAAM, Tanzania http://23409www.openuniv



Tel: 255-22-2668992/2668445 Ext.2101 Fax:255-22-2668759 E-mail: <u>dpgs@out.ac.tz</u>

REF: PG 201701435

Municipal Director P.O BOX MTWARA 24th August 2022

RE: RESEARCH CLEARANCE

The Open University of Tanzania was established by an act of Parliament No.17 of 1992, which become operational on the 1st March 1993 by public notice No. 55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1st January 2007. In line with the Charter, the Open University mission is to generate and apply knowledge through research.

To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you **Mr Cosmas Fokas komba. Reg No: Pg201701435**, pursing Master of Project Management We here by grant this clearance to conduct a research titled **"Examining Community participation in performance of Rural water Project in Mtwara District, he** will collect his data in your Municipal between 1st September 2022 to 31th October 2022

In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.BOX 23409, Dar es Salaam. Tel: 022-2-2668820. We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours Sincerely,

Naucueant Prof. Magreth S.Bushesha DIRECTOR OF POSTGRADUATE STUDIES.