INFLUENCE OF COMMUNITY PARTICIPATION ON PROJECT PERFORMANCE: A CASE OF RUIRI WATER PROJECTS, MERU COUNTY, KENYA

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A Research Project Report Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of Master of Arts in Project Planning and Management of the University of Nairobi

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DECLARATION

This project report is my original work and has not been presented for research in any other university.

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This project report has been submitted for research with my approval as University Supervisor

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DEDICATION

This project report is dedicated to my parents, siblings and the Franciscan Conventual Community in Kenya for their continued support throughout this study.

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ABBREVIATIONS AND ACRONYMS

D.O.M: Catholic Diocese of Meru

FR.: Father

ILO: International Labour Organization

KWAHO: Kenya Water for Health Organization

MDGs: Millennium Development Goals

M&E: Monitoring and Evaluation

NG-CDF: National Government Constituency Development Fund

OFMConv: Order of the Friars Minor Conventuals

O&M: Operations and maintenance

PME: Participatory Monitoring & Evaluation

SDGs: Strategic Development Goals

USAID: United States Agency for International Development

WHO: World Health Organization

ABSTRACT

The purpose of this study was to investigate the role of community participation in the performance of community water projects in Ruiri, Meru County. Specifically, the sought to establish the influence of community participation in financial management, project governance, operations and maintenance and monitoring and evaluation on performance of Ruiri-Thau Water Project. This study adopted a descriptive survey research design. The target population was 413 respondents comprising 400 households benefiting from Ruiri-Thau Water Project, 11 project committee members and two donors (Catholic Diocese of Meru and Meru County Government). Proportionate stratified sampling was used to derive a sample of 211 respondents – 196 household leaders, 11 project committee members and 2 donors. Data was collected using a structured questionnaire and an interview schedule. Data analysis and presentation was conducted using descriptive statistics with the help of IBM Statistical Package of Social Scientists (SPSS) Statistics, Version 20. The study established that community participation in financial planning had a moderate positive influence on project performance; community participation in project governance had a moderate positive influence on project performance; community participation in project operations and management had a weak positive influence on project performance, and community participation in monitoring and evaluation had a moderate positive influence on project performance. The study concluded that Ruiri-Thau Water Project community members were not participating actively in scrutinizing and approving financial transactions and pertinent reports and this was impacting project performance negatively. Moreover, elections were mere formalities to maintain the status quo; community members rarely attended project governance meetings and were not involved in decision-making for the project, thus impeding project efficiency and effectiveness. In addition, the community and project donors were contributing materials, labour, finances and security to the project towards enhancement of project performance. The study also concluded that community members were indifferent to the project by not visiting project sites, failing to attend meetings to discuss overall performance of the project and not requesting to scrutinize performance and progress reports. The study recommends that project team and donors should create a clear system of accounting for project money with the input of the community. Further, a new governance structure should be established with emphasis on new elections and with active community participation. Moreover, that a new system for receiving project materials and fees, and reporting water distribution problems be put in place. In addition, meetings and site visits should be organized regularly to inculcate accountability and transparency in project management. The findings of this study are of significance to communities and donors implementing water projects, government agencies and scholars in the areas project management, participatory development and community development.

CHAPTER ONE

INTRODUCTION

1.1. Background to the study

According to Griffin (2000), participatory development has its roots in economic development practices of the post-World War II period (1945 to Mid-1950s), when most of Europe needed reconstruction. The International Bank for Reconstruction and Development, (popularly known as the World Bank), was established to facilitate the process of economic recovery. The late 1950s and 1960s witnessed another significant process that necessitated economic development. Colonialism was in decline as many African and Asian countries attained independence. The need for development and modernization of these countries emerged. As Europe underwent reconstruction and economic development, global inequalities between rich nations and poor ones became evident and spawned the development aid era, pitting competing global war rivals, Union of Soviet Socialist Republics (USSR) and the United States of America (USA). Development was equated with economic progress dominated by the elite, with poor people offering cheap labour. This approach to development (also called modernization or top-don development), however, widened the gap between the rich and the poor and entrenched poverty, especially in developing nations (Cooke & Kothari, 2001).

Thomas (2013) opines that participatory development emerged to curb the drawbacks of top-down development, which entails conception, planning and implementation of projects by the elite without involvement or consultation with the masses, who were considered not informed and technical enough to engage in development work. The International Labour Organization (ILO) developed the Basic Needs Approach in 1976, defining the minimum resources a person required to live, hence the need to offer workers incomes that would satisfy basic needs. Participatory development gained momentum in the 1970s. The World Bank also advocated for Basic Needs Approach in development and labour issues.

Participatory development was supported by scholars such as Paulo Freire and Robert Chambers who asserted that people must be given opportunities to participate in development

projects designed for their benefit as this would entrench a sense of responsibility and ensure project sustainability. Mohan and Stokke (2000) assert that participatory development is a grassroot movement that rejects 'top-downism' and 'statism' as the recognized channels of development. A plurality of development goals can be achieved outside conventional reliance on the state to initiate, fund and implement development projects (Stein & Harper, 2000).

Mohan and Stokke (2000) assert that since its introduction, participatory development has been adopted and utilized by various organizations in development work. The World Bank was among the first financial aid agencies to popularize this approach. Other organizations that have embraced this approach include International Monetary Fund, UN agencies such as UNDP and FAO, individual governments especially in the developing world, and civil society organizations working with local communities all over the world. However, for participatory development to work, it must embrace practical community participation in all phases of the project cycle. WHO (2002) asserts that community participation is not mere involvement of members of the beneficiary community in development, but also empowering people and helping them make decisions on desired developmental outcomes. On its part, WHO advocates for community participation in health issues globally, since is the best strategy of ensuring improved health and better livelihoods for global citizens.

Bamberger and the World Bank (1998) observe that local people must be active from the onset of a project to the time it is completed. The community cannot be a passive participant since it understands its needs, the dynamics of implementing projects in the locality and the accruing benefits, better than external donors. Social acceptability of the project, reasonable sharing of benefits, mobilization of local resources and project sustainability are some of the reasons advanced for active community participation in project management. Water projects call for participation of local communities in development initiatives since water is a basic, but scarce, commodity, often at the centre of conflicts between various types of users. The scarcity of water sources demands prudent conservation, extraction, distribution and management, all of which depend, to a large extent, on the understanding and cooperation of local people who are also the beneficiaries.

According to WHO (2010), over one billion (nearly 16%) global citizens lack clean and safe water for drinking. about 120 million Europeans lack clean and safe water. Developing nations are most affected, with rural areas where most people reside, being the most affected. Of the 49 countries in the Asia-Pacific region, 37 are considered to be water insecure. Nearly three quarters of these countries are likely to face water crisis at any time. Piped water is not available for about 60% of the population. According to UNEP (), Africa is the second driest continent, with water availability being critical for survival. Most people still live in rural areas, relying on rain-fed agriculture for livelihood. Only 40% of Sub-Saharan Africa population access clean, safe water.

USAID (2008) observes that Kenya is considered a water-scarce nation. It contains renewable fresh water resources of 647m3 per capita, yet UN standards require the nation to have not less than 1,000m3. Almost 80% of the country consists of arid and semi-arid land and rainfall is often unreliable. By 2006, 57% of Kenyans had access to clean drinking water as the country strived to attain the them Millennium Development Goals (MDGs). The Water Act 2016, guarantees every citizen the right to access water resources. In the Fourth Schedule of the Constitution of Kenya 2010, Kenyans have the right to adequate, safe and clean water. Further Strategic Development Goal (SDG) Number 6 advocates for provision of clean water and sanitation for all global citizens by the year 2030. For Kenyan especially in rural areas to enjoy the right to water and to cater for their ever-increasing need for the commodity, local water management projects must be encouraged and supported.

Despite this, as K'Akumu (2006) asserts, Kenya's history of water management reveals a bias towards commercial extraction and favouritism in relation to urban users as opposed to those in rural areas. During colonial times, provision of water to government facilities, settler community and commercial agriculture was the norm. Independent African states perpetuated the same in relation to elites and large commercial farms. The top-down approach to management of water and water resources has resulted in acute water shortages and conflicts. Droughts and deforestation have aggravated the situation. In recent times, the government has embarked on construction of various water dams and tunnels to channel

water to urban centres to deal with increasing demand from domestic, farming and commercial consumers. Incidentally, local communities, from whose areas water is extracted are not consulted, and do not benefit from mega water projects, a case in point being people in the Aberdare Region, whose rivers contribute to the water needs of Nairobi City.

The government has over the years enacted laws to government the management of water resources. The Ministry of Water and Irrigation has the responsibility of formulating policy and coordinating water management and resource issues in the country. The practical work of regulating and the use of water resources lies with the Water Resource Authority (WRA). The Water Service Regulatory Board issues licenses for various forms of water extraction. Water Service Providers (WPS) work within this arrangement to provide services to the community. However, weak laws and poor implementation and enforcement have resulted in acute water shortage both in rural and urban areas.

Ruiri-Thau Water Association is a community water project that was established in 1992 by the Catholic Diocese of Meru in Ruiri area, Meru County, to serve the water needs of people of Buuri and Tigania West Constituency. Later the association was contracted by Tana Water Services Board under the Water Act 2002 and incorporated as an Association in 2003 under Section 10 of the Societies Act. Presently, the association is functionally owned by Meru County Government and Diocese of Meru and legally contracted by Tana Water Services Board under the Water Act 2016. The objectives of the association are to improve health and living standards of the community in accordance with self-help principles, through provision of gravity piped water in the project area. The mandate of the association is to provide clean, safe, affordable water and Sanitation services to Ruiri area residents. The association operates a meter-based water management system.

Ruiri-Thau Water Association is a small-scale water service provider located in Buuri and Tigania West Constituencies. It covers an area of 47km2 with a population of 30,000 people. The association serves a population of approximately 15,000 people. Water is rationed through 800 connections which include community water points (kiosks) and individual connections. Kathita Ruiri Community Water Project also operates in the same locality.

Some residents also have individuals and community boreholes. The highest decision-making organ of the association is the Annual General Meeting (AGM) during which all members participate in electing committee members. The Association has seven working staff and 11 committee members who are elected during the AGM. Committee members formulate the Daily Operational Policy of the association.

1.2. Statement of the problem

Kenya is a water-scarce nation, yet water is a critical commodity for human life and sustenance. According to Water.org (2018), 41% of Kenya's 46 million people depend on water sources that are unimproved like rivers, shallow wells and ponds, for their water needs. Moreover, only about 16% of the designated water suppliers in the country provide water on a continuous basis. Wateraid.org. (2018) further asserts that more than 30% of Kenyans do not have access to clean water. As a consequence, majority of Kenyans have to device their own solutions to the water crisis facing the country. Community water projects are critical components in the water provision matrix especially in rural areas where government-owned and run water companies do not offer services (Macharia, 2015). However, while these projects are relied upon by many rural citizens, they often fail to provide clean, safe and reliable water to targeted beneficiaries. Majority of these projects are initiated by donors and handed over to the community to manage once the project period elapses. Participatory development experts opine that projects that are implemented with the active participation of the community and beneficiaries are likely to perform efficiently and be sustainable (Batchelor, 2000). Ruiri-Thau Water Projects was initiated in 1992 by the Catholic Diocese of Meru (D.O.M.) and is partly supported by the County Government of Meru to serve the water needs of people living in Ruiri area, spanning Buuri and Tigania West Constituencies. However, despite more than two and a half decades of existence, the community-run project has failed to expand beyond the original area of operation and targeted beneficiaries still experience prolonged water shortages and maintenance issues. Considering many residents of Ruiri and its environs depend on this project for their water needs, it was important to carry out a study on the role of community participation in the performance of Ruiru-Thau Water Project with focus on financial management, governance, operations and maintenance and monitoring and evaluation.

1.3. Purpose of the study

The purpose of this study was to establish the influence of community participation in the performance of community water projects in Ruiri, Meru County.

1.4. Research Objectives

The project was guided by the following specific objectives.

i) To investigate the influence of community participation in financial management on performance of Ruiri Water Projects, Meru County.
ii) To determine the influence of community participation in project governance on performance of Ruiri Water Projects, Meru County.
iii) To assess the influence of community participation in operations and maintenance on performance of Ruiri Water Projects, Meru County.
iv) To evaluate the influence of community participation in monitoring and evaluation on performance of Ruiri Water Projects, Meru County.

1.5 Research Questions

The study sought to answer the following questions:

i) How does community participation in project financial management influence performance of Ruiri Water Projects, Meru County?
ii) To what extent does community participation in project governance influence performance of Ruiri Water Projects, Meru County?
iii) To what extent does community participation in project operations and maintenance influence performance of Ruiri Water Projects, Meru County?
iv) How does community participation in monitoring and evaluation influence performance of Ruiri Water Projects, Meru County?

1.6 Significance of the study

The study's recommendations are critical to communities and managers implementing water projects at grassroot level, since these stakeholders will learn from best practices and pitfalls in the project under study. Moreover, donor agencies and individual donors will gain from the study because they will understand the need to prioritize and mainstream community participation in all phases of projects. More importantly, this study is of critical significance to communities managing local water project as it recommends practicable solution to

challenges in community participation in project management. In addition, this study augments the existing corpus of literature of project management and community development.

1.7 Delimitation of the study

While there are several water projects serving the Ruiri Community, this study focused on Ruiri-Thau Community Water Project. Data was collected from committee members, household representatives and project sponsors' representatives.

1.8 Limitation of the study

The study was limited by time and financial resources. To mitigate these challenges, data was collected during sub-location committee meetings and from household living along major roads.

1.9 Assumption of the study

It was presumed that the beneficiary community of the Ruiri Water Project and project sponsors would volunteer honest and accurate information for the study. The study also assumed that the sample was representative of the population.

1.10 Definition of key terms

Community:	A group of people living in the same locality and sharing common resources such as water.
Community participation:	Active involvement of members of the community in initiating, planning, executing, monitoring and evaluation and decision-making projects they are meant to benefits from.
Community involvement:	Passive community participation in project management.
Governance:	How community water projects are led and governed so as to determine how water is distributed across the beneficiary community.
Performance:	The ability of a water project to supply targeted beneficiaries with clean and safe water in an effective and reliable manner. Also, the ability of project committee leaders to utilize project funds prudently, economically and in tandem with a budget

	prepared through active community participation.
Water project:	A water supply initiative undertaken to supply clean, safe and reliable water for domestic use.
Project implementation:	Execution of a project, for example construction of reservoirs, laying of pipes and connecting water to households.

1.11 Organization of the study

The project is organized into five chapters. Chapter One, is the 'Background to the Study', which encompasses background information, problem of the study, purpose of the study, research questions and objectives as well as the significance, assumptions, delimitations and limitations of the study. It also presents the definition of key terms. Chapter two, 'Literature Review, is a critical review of literature related to the study, presented thematically – according to the objectives. This sections also contains the theoretical and conceptual frameworks, an explanation of the relationship between variables and a brief exposition of research gaps. Chapter three, 'Research Methodology', explains how data will be gathered, analysed and presented. It entails the research design, target population, sample size and sampling procedure, data collection instruments, data collection procedure, data analysis technique, ethical issues and operational definition of variables. Chapter Four, "Data Analysis, Presentation and Interpretation" presents, analyses and interprets the findings of the study based on respective variables. Finally, Chapter Five, "Summary of Findings, Discussions, Conclusions and Recommendations", sums up the findings, and presents pertinent discussions, inferences and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter consists of a review of literature relevant to the objectives of the study. Information in this section is derived from both primary and secondary sources, with comparable and complementary research studies bearing the greatest significance. The chapter is organized thematically to cover respective objectives. It also contains the study's theoretical framework, conceptual framework and research gaps.

2.2 Project Performance and Community Participation

Project performance is a concept that is best understood within the confines of the definition of projects. According to PMI (2008), a project is "a temporary endeavour undertaken to produce a unique product, service, or result". Heagney (2012) asserts that based on this definition, a project is a one-time activity – not repetitive in nature. Projects are executed with definite commencement and culmination dates; have definite budgets, scope of work to be accomplished and clearly defined outputs and outcomes. In essence, a project is considered to perform when it achieves all the parameters that define that project. However, as Pinto and Slevin (1988) observe, this approach to defining project performance is simplistic. Further, there appears to be no consensus on the part of project management experts on what exactly project performance is.

The measurement of project finance is replete with ambiguities. While some consider projects to be successful or otherwise based on the projects meeting budgetary and logistical requirements, others assert that even projects that are completed beyond their timelines and exceed their budget are successful if they achieve the envisioned outcomes. In essence, the performance of a project should be hinged on outcomes, not outputs. The emphasis of client satisfaction as the key measure of project performance epitomizes this approach. Barr (2015) identifies several measures of project performance, including direct impact, bottom-line impact, Return on Investment, timeliness, adherence to budget, and stakeholder support and engagement. On the other hand, the Centre for Business Practices (2005) developed five

broad measures of project performance: financial measures, customer measures, project / process measures and learning and growth measures.

Burns *et al* (2004) asserts that community participation entails engaging communities and individuals in making decisions that have an impact on their lives. Targeted beneficiaries of project should be encouraged to participate in all aspects of the project when they are not willing to do so. Community participation is not synonymous with community involvement or mere engagement. Community participation entails conscious and active decision making in the project life cycle. Bamberger, and The World Bank (1998) advance a number of reasons are advanced for community participation in projects. To begin with, this practice promotes cohesion and entrenches democracy and accountability in society. Further, the community understands itself comprehensively in the process of defining its needs, challenges and solutions. Policies that ensue from community participation are also relevant and practical vis-à-vis local needs. Moreover, the community gets economic value from voluntary contributions, development of skills and employment opportunities that spring up from the project process. Community participation is also a harbinger of sustainability, ensuring projects and pertinent outcomes live to benefit the current and future generations. World Health Organization (2002) defines community participation as, "The process by which people are enabled to become actively and genuine involved in defining the issues of concern to them, in making decisions about facts that affect their lives, in formulating and implementing policies, in planning, developing and delivering services and in taking action to achieve change".

2.3 Community Participation in Financial Management and Project Performance

Mesa, *et al*. (2014) observe that community water projects involve regular and occasional financial transactions for a number of reasons. Infrastructure and equipment such as water pipes, storage tanks and other reservoirs must be bought. Moreover, operations and maintenance are common as breakages and wear and tear takes place. In places where water has to be pumped from the ground using electric power, communities either pay respective power bills or purchase fuel for generators which must also undergone occasional repairs. In some instances, project committees employ individuals to perform day-to-day administrative, technical and security work. Other financial obligations include paying water regulators and

local governments, as well as costs involved in holding important events such as Annual General Meetings (AGM). All these costs are borne by water project beneficiary members, especially after the culmination of external donor funding and handing over of the project to the community (Njogu, 2014).

According to Petersen *et al*., (2006), projects and financial management are solely related since the former depends on the latter to achieve expected output and outcomes. Projects are considered to have failed when they fall below stipulated financial management standards. Budgetary allocations for projects are meant to last the entire project life. Budgets must be realistic in tandem with revenue and expenditure estimates. A budget is a tool for controlling expenditure and averting debts and mismanagement. Community water projects depend on members' contributions to finance operations and overheads, hence the need for a budget (Harvey & Reed, 2007).

According to Macharia, Mbassana and Oduor (2015), during the project planning phase, post-project financial feasibility should be addressed and arrangements made to ensure the project does not collapse due to inadequate funding after the donor has pulled out. It is critical that community water project management committees be trained in managing funds to avert collapse of project due to embezzlement or mismanagement of money collected from the community. Specifically, committee members need to be equipped with critical accounting, budgeting and financial record keeping skills to enhance accountability and transparency. Community members who contribute to the project must be confident that their money is being utilized as per the agreed budget failure to which they might withdraw financial, material and moral support, resulting in the collapse of the project.

For community budgeting and expenditure processes to be effective, community members, especially the beneficiaries of the project, must be actively involved. Participation in planning a project's financial activities fosters mutuality and cooperation in project implementation. According to Baiocchi (2005), communities that budget together achieve increased effectiveness in their projects, promote the welfare of the poor, and avert the negative effects of bureaucracy exhibited in top-down development. Further, owing to the

realization that the rest of the community is keen to understand and vet the usage of project funds, management committees are likely to be transparent and accountable for the funds entrusted to them.

In a study carried out in Kiambu County, Kenya, to establish how community participation influenced performance of boreholes funded by the government, Njogu (2014) established that where community members participated actively in financial management of borehole projects, project performance was better than where participation was minimal. These findings corroborate those by Twebaze (2010) who conducted a study to investigate community mobilization in rural water projects in Wakiso District, Uganda. The latter study established that project beneficiaries who understood highly how water project funds were spent reported a high degree of transparency among the project management committees.

Another study carried out by Kinyua, Mwangi, Riro and Muchiri (2015) in Kieni, Nyeri County, Kenya, to establish financial sustainability of community water project, arrived at significant findings. It was found out that community members contributed cash and building materials for water projects, hence the need for prudent and accountable financial management among project leaders. Community members also paid membership and user fees to access water. This was in additional to funds provided by donors, the Government of Kenya (GoK), NGOs and fundraising events. The study also established that most communities did not hold annual meetings for financial planning, anissue that jeopardized operations and management funding. Moreover, most community members complained of not receiving regular reports on project expenditure. The study concluded that owing to poor financial management, lack of accountability on the part of project managers and poor or inadequate financial management skills, most of the community water projects in Kieni District had collapsed.

2.4. Community Participation in Project Governance and Project Performance

UNESCO (2018) defines governance as, “structures and processes that are designed to ensure accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment, and broad-based participation.” The practice of governance promotes inclusivity and citizen participation public affairs. Water Governance Facility

(2018) defines water governance as, "…the political, social, economic and administrative systems in place that influence water's use and management. Essentially, who gets what water, when and how, and who has the right to water and related services, and their benefits." The two definitions have a critical factor in common – community participation in determining the use and control of water resources. Rogers and Hall (2002) opine that issues of water governance have been articulated globally and documented in such documents as the Global Water Partnership, which among other issues, calls for practical measures to boost the production and management of clean water and for distribution of the vital commodity to people of all socio-economic backgrounds. In Kenya, the Water Act, 2016, was developed to create order and instil governance and equitable distribution of water resources across the country. The Act had undergone radical changes over the years owing to emerging issues and challenges in water management and governance of the years.

Crook (2003) asserts that for community projects to be effective, community members must participate actively in governance matters. Governance of community water projects entails a number of issues. To begin with, communities must embrace and practice democratic principles when electing those to head committees. Through the assistance, guidance and supervision of donor or government agencies, communities should hold elections for project committee members at regular intervals, preferably annually. The roles and responsibilities of each of the committee members must also be agreed upon. Moreover, community members must be key and active participants not only in the elections but also decision-making on all other aspects of the project. This entails agreeing on when to hold meetings and how feedback is to be reported. It is also incumbent upon the beneficiary community to attend forums during which various reports are presented and financial plans developed. This will enhance transparency and accountability. Governance of water projects also encompasses linkage with other partners such as donors, the government and its agencies that deal with water and environment issues, other water resource users, supplier of various machinery and equipment for the project and the community at large.

Kenya Water for Health Organization (2009) observed that bad governance was the root cause of many failed water projects in Kenya as well as the reason diseases emanating from

poor water and sanitation were prevalent. Bad governance would force withdraw of donors from supporting projects, which would in turn water scarce and expensive forcing poor people to fetch water from dirty sources, hence diseases. Integrity issues at the heart of water supply include lack of transparency, professionalism and accountability, favouritism in enforcing laws related to water issues, poorly-managed projects that failed to meet their objectives, and corruption in water management.

Mbevi (2016) carried out a study on the influence of community participation on the performance of development project in Makueni County, Kenya, and established that governance was a critical factor in development. The study found out that all community projected had management committees, majority of which had been elected by members of the community from amongst themselves, thus enhancing accountability and transparency. Another significant finding of the study was that committee members had undergone training to enhance their project management skills. The importance of capacity building to enhance project performance and sustainability is emphasized by Bamberger and The World Bank (1998). Moreover, it was established that project committees held regular meetings and this served as a deterrent to project officials not to embezzle funds of mismanage the project in any way. The study concluded that community participation in governance helped to equip committee leaders with critical skills for project management, and promoted accountability and transparency, thus enhancing overall project performance. Njogu (2014) also carried out a study in Kiambu County, Kenya, to determine how community participation influenced the performance of rural borehole projects financed by the National Government Constituency Development Fund (NG-CDF), targeting two projects. It was established that where the community participated in electing leaders, performance was better than the opposite. The study also established that participation in transparency and accountability meetings, and participation in decision making enhanced performance of respective projects.

These findings corroborate assertions by TASAF (2005) on the significance of elections of community projects leaders and accountability among leaders respectively. However, it is important to consider studies that have yielded contrary findings for comparison purposes. One such study is by Tanga and Maliehe (2011) who established that despite community

participation of women in handicraft projects in Lesotho, levels of poverty were still high among these women. Some of the reasons cited for this situation was the absence of men, who were more experienced in managing projects, as well as a top-down approach, in that the women were not the initiators of the project; an outsider was. Incidentally, while women were active in decision-making and implementation, they did not have total control over the money in the hands of committees.

2.5 Community Participation in Operations and Maintenance and Project Performance

According to Dillon (2018), a key feature of water projects is the constant need for repair and maintenance. Castro, Msuya and Makoye (2009) define O&M as activities that a water supply project requires in order to remain effective, efficient and sustainable after it has been constructed. Operations & maintenance (O&M) of water projects becomes critical after the donor has withdrawn and the community is left to manage the project. O&M is not just about technical matters. It entails social, managerial, institutional and financial matters as the management of a water project seeks to reduce or eradicate key challenges that threaten project sustainability. Brikkè, F. (2000) asserts that water supply projects are subject to leakages, broken pipes, dysfunctional pumping equipment, need for fuel, water diversion, stealing of project materials and equipment and related challenges. Project committees must budget for such eventualities and address the problems as soon as they arise to avert interference with water supply to project beneficiaries.

The significance of O&M is best understood by analysing water projects that failed owing to negligence. According to the World Bank (2010), more than two-thirds of water projects in South Africa's Eastern Cape had collapsed owing to inadequate O&M. Another study in Tanzania by Eduvie (2006) established that only about 3,100 boreholes and wells of 7,000 owned and operated by local communities were operational. In both cases, beneficiary communities failed to own the project and maintain them after the donor had pulled out. As expected, wear and tear and lack of repairs and replacement took their toll on the water projects to the point of total collapse. The scenario was also partly attributed to failure to empower beneficiary communities with knowledge and skills to own the water projects and maintain and operate them in perpetuity.

In a study carried out in Ghana by Auckhinleck (2013), it was established that borehole projects in Afram Plains and Atebubu Districts were repaired promptly after breaking down, thus averting the use of unsafe surface water. Further, the study established that community members understood and appreciated their roles of sustaining the project through O&M. Njogu (2014) further investigated the influence of operations and maintenance on project performance in relation to NG-CDF borehole projects in Kiambu County, Kenya. It was established that members of water projects participated in O&M by making cash contributions to project committees to deal with arising challenges. Moreover, where community members paid requisite fees and contributed labour to borehole projects, project performance was more efficient and effective. Another critical contribution to the project was provision of land for project activities.

2.6 Community Participation in Monitoring and Evaluation and Project Performance

Swanepoel and De Beer (2006) assert that community participation in project performance must entail monitoring and evaluation. Participatory M&E consists of collaboration between person and entities working within and outside the project in assessing the project's progress at periodic intervals with a view of identifying issues that require change or modification and taking remedial action. The distinction between monitoring and evaluation is that the former is conducted on a continuous basis while the latter takes place at specified intervals e.g. annually or at the culmination of the project. PME must include members of the beneficiary community, donors, the government and other parties with as stake in the project.

Lawal and Onohaebi (2010) identify several benefits of PME. They include updates on the status of project completion; identifying of interruptions and emerging risks, strengthening of decision-making abilities of the community and building sustainability into the project. Conventional monitoring and evaluation is carried out by experts. PME, on the other hand, is stakeholder-driven. Members of the community assess the progress they are making towards predetermined outputs and outcomes. Concomitant reports are discussed, consensus built and action taken collectively as the community moves towards realizing the ideal situation that spawned the project.

The advent of PME, though, is viewed as a challenge by some M&E practitioners, according to Cracknell (2000). The involvement of non-experts in a process that is largely viewed as elitist has elicited debates as to its effectiveness. PME essentially envisions a society that takes charge of developmental processes that promote decision-making, independence and interdependence and democratic practices in project management. Bond and Hume (2010) developed the concept or M&E for empowerment, asserting that when communities participate in M&E, they are empowered in the process.

Ngondo (2014) conducted a study to establish how community participation influenced timely completion of NG-CDF projects in Kirinyaga County, Kenya. It was established that majority of the project committees had not been conducting meetings to update project beneficiaries on the progress of pertinent projects. Similarly, most of the respondents indicated that their views on the progress of projects were not sought. The study also established that there was moderate participation of targeted beneficiaries in monitoring of critical project activities. The study concluded that PEM was not implemented in the project as it should, hence affecting performance of projects. These findings correspond to those by Njogu (2014) who studied NG-CDF projects in Kiambu County, Kenya, and established that where the community participated in field visits and attended meetings where project progress reports were discussed, the project performed better than vice versa. The study concluded that failure to involve project beneficiaries in monitoring and evaluation is detrimental because it increases chances of misappropriation of project funds by leaders.

2.7 Theoretical Framework

This study was guided by the Ladder Theory of Participation, which was introduced by Sherry Arnstein in 1969. The rationale behind the ladder was to conceptualize how participation works in development. According to Tritter and McCallum (2006), Arnstein identified a number of rungs in the participation ladder, indicating that people can be manipulated or they can participate actively in a project. The ladder of participation can be applied to community participation in various stages of the project cycle. Figure 1 illustrates the different levels of the Ladder of Participation.

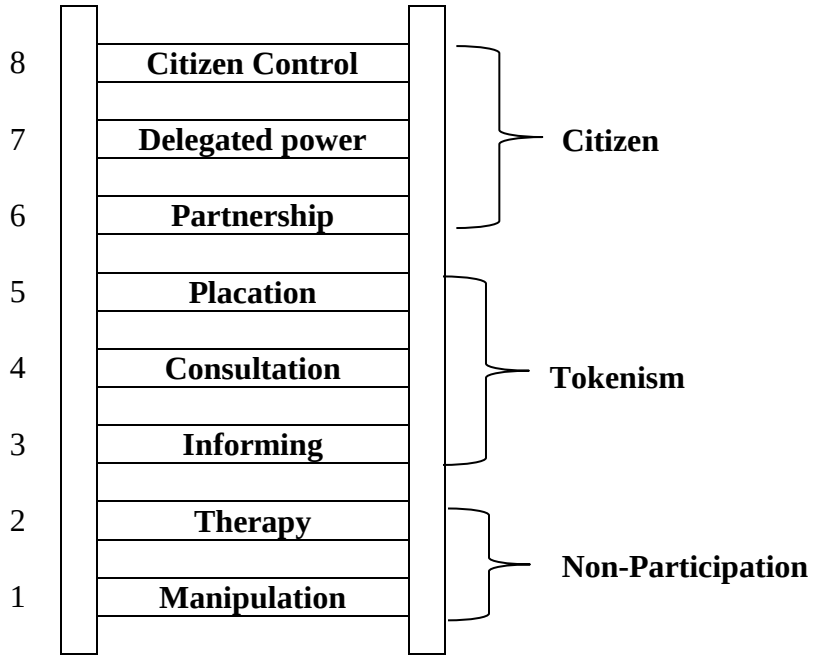

Figure 1. Ladder of Participation

Source: Sherry, 1969

The first two rungs represent non-participation at a technical level, though, superficially, community members may be said to participate. Manipulation may involve project beneficiaries being invited to meetings where they rubber stamp decisions of the donor(s) or project committees which they did not participate in making. For example, they may be asked to sign a petition or document seeking for more donor funding with the promise of improved services. The second rung represents Therapy, whereby project committee leaders and donors do not give practical solutions to the problems faced by project beneficiaries. Instead leaders blame community members and direct the latter to seek alternative solutions to their problems, for example attributing water shortage to climate change and asking the community to plant more trees instead of dealing with operations and maintenance problems.

The third to fifth rungs entail tokenism as a form of participation. Rung three entails informing people about projects and issues that concern them. While sensitization and dissemination of information to community members is critical for project to attain their objectives, communication should be two-way and intended beneficiaries should be given

opportunities to air their views. In the context of water projects, it is not enough to inform the community that a certain amount of money was collected during a specified period, without allowing for scrutiny of the information. Consultation goes a notch higher but fails to meet the threshold of active participation. Seeking the opinions of the community on water project problems and solutions is inadequate if those solutions will not be implemented and feedback provided. Under placation, community members may be invited to participate in planning meetings to feel part of the project but the final decision on what is to be implemented lies with the donor(s) and / or project committee members, making this a superficial process, though an improvement on participation in lower levels.

The final three rungs of the Participation Ladder represent more active community participation, thus the 'citizen control'. Partnership entails sharing power and responsibilities between the community and project leaders / donors. A mutual agreement exists and community members feel they have a stake in water projects as equal partners with water management committee members. This is the ideal situation for most rural water projects since leaders of various committees are elected to serve the needs of the community and can be removed if their actions and decisions are not in tandem with community needs. Under delegated power, the community holds greater sway over the project and delegates it to project committee members. While this is an ideal situation, it requires superior conceptual and implementation skills on the part of the community. This is rarely the case in most Kenyan water management project. The highest and final rung entails absolute control by citizens. This situation exists when citizens do not depend on external support to run the project. They also actively run the day-to-day affairs of the project. While this is an ideal situation, it is impracticable in local water management projects since the community does not own the water in real sense and has to depend on donor and government support in perpetuity.

In essence, community participation in water projects demands reasonable practical participation by community members. This entails not just being informed but attending meetings, giving opinion, scrutinizing documents, contributing financial and materials resources, offering labour, demanding for accountability for funds, electing officials and

making decisions for on all aspects of the project. Despite this, owing to the levels of understanding and literacy of different members of the community, and the fact that they also have jobs and other commitments to attend to, a water project may not attain the highest rung of community participation.

2.8 Conceptual Framework

Figure 2 summarizes the relationship between various variables of the study.

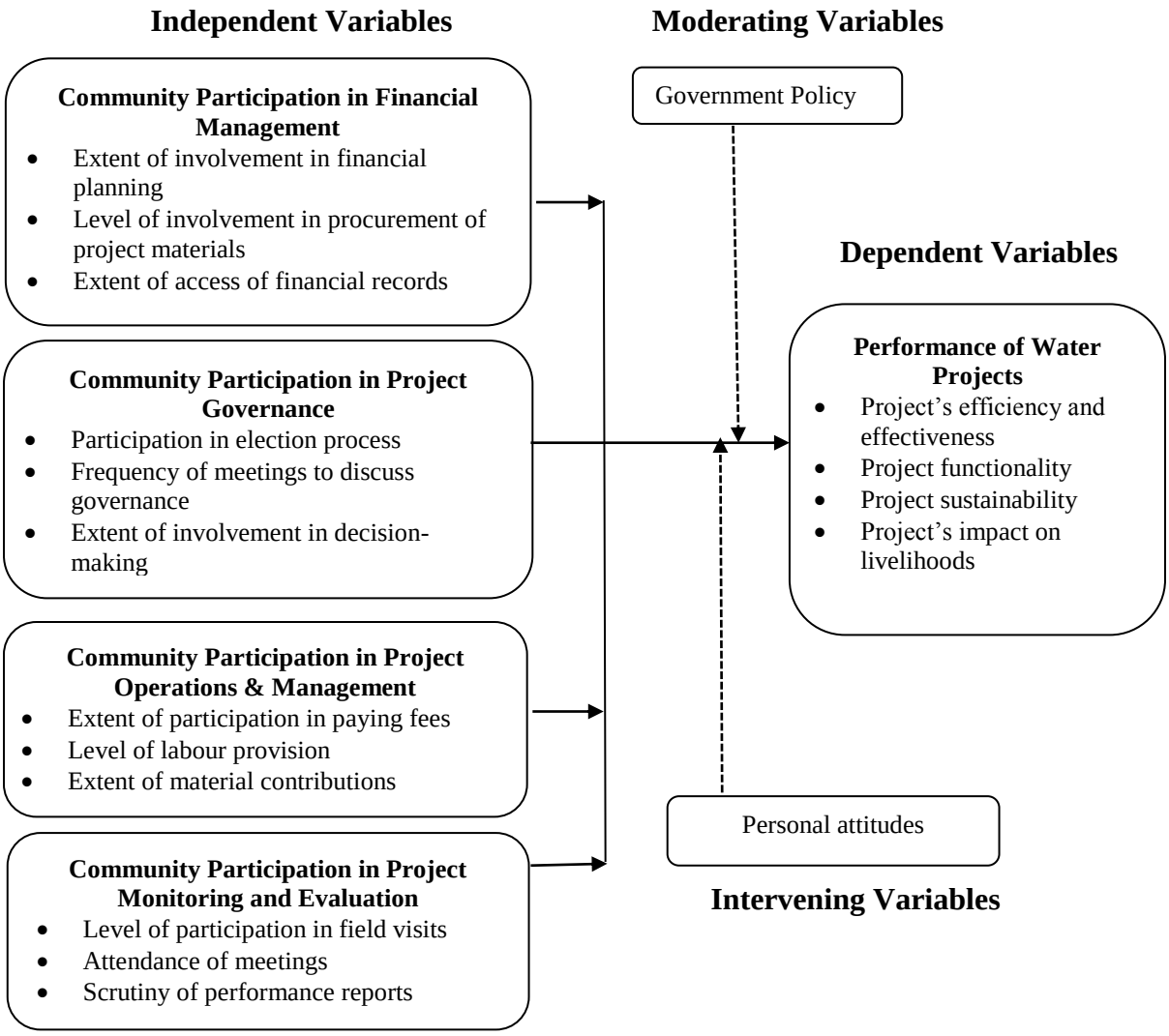

Figure 2. Conceptual Framework

Source – Author (2018)

2.9 Relationship between Variables

The dependent variable in this study is Performance of Water Projects. It entails the criteria used to determine the level of performance of a water project i.e. efficiency and effectiveness, functionality, sustainability and impact on livelihoods. The first independent variable is Participation in Project Financial Management. It is a measure of the extent to which community members / project beneficiaries are involved in deciding on and controlling the manner in which their monetary contributions are utilized. The second independent variable is Project Governance, which is a measure of the level to which community members decide on the people to head various committees as well as the extent to which the public is involved in decision-making. The third independent variable is Operations and Maintenance (O&M), denoting monetary, materials and human capital contributions of community members to the project and how these contributions influence project performance. The last independent variable is Participatory monitoring and evaluation, entailing the role community members play in ensuring their project is executed in a manner that meets the goals and objectives of the project. Government Policy is the moderating variable since decisions made by government, including legislation may have a role to play in determining the performance of a project, though this variable is not being studied. The intervening variable is political interference, considering water projects are often funded through political processes and politics may determine the extent to which a project achieves its objectives.

2.10 Research Gaps

The study sought to fill a gap that had been left out by previous researcher in the area of community participation in water projects. Sabastian (2017) studied factors that determine performance of community water projects in Tigania Central District in Meru County Kenya. However, the study considered community participation as a factor, while the current study examines community participation broadly. Njogu (2014) studied how community participation influenced performance of borehole projects constructed by NG-CDF in Kiambu County, Kenya. This study, while sharing some similarities with the proposed one, studied projects funded using public money and not a community initiative like the current study proposes. Mbevi (2016) studied community participation in performance of development projects funded by the national government in Makueni County, and not

specifically water project. Ngondo (2014) mirrors the studies conducted by Njogu and Mbevi in studying community participation in timely completion of projects funded by the NG-CDF in Kirinyaga County, Kenya. It is evident all the mentioned studies examined community participation from different perspectives while focusing on projects funded by the government. Consequently, they left a gap that the current study has filled, since it examined community participation in a project that was owned and run by a community through various forms of contribution.

2.11 Summary of Literature Review

The foregoing review of pertinent literature reveals that the performance of community development projects (especially water projects) is intricately linked to the participation of the beneficiary community. In particular, the review establishes that when community members participate actively in financial management, governance, operations and maintenance and monitoring and evaluation, projects are more likely to deliver predetermined outcomes and vice versa. Further, the theoretical framework proposes the Ladder of Participation is the guiding framework of the study, owing to the ladder's ability to delineate different levels of community participation in development projects. This section also presents the conceptual framework, a grammatical depiction of the relationship between the dependent variable and the independent variables. Finally, it is evident that there are critical research gaps that previous researchers left out, which the current bridges.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter details how data was collected, analysed and presented. It entails the research design, target population, sample size and sampling procedure, data collection instruments, data collection procedure, data analysis technique, ethical issues and operational definition of variables.

3.2 Research design

Denscombe (2007) asserts that a research design is the overarching strategy a researcher adopts to assemble various components of a study in a manner that is rational and intelligible with the intention of deal exhaustively with the research problem. A research design is likened to a map that explains the path to be taken in collecting data and measurement and pertinent analysis of the data to the point where the study is concluded. The research problem is the key determinant of the type of research design to be adopted in a study. This study adopted the descriptive survey design. Mertler (2006) opines that descriptive studies as meant to portray the subject of the study accurately at a given point in time. Surveys entail interacting with people and eliciting information from them using methods such as interviews and questionnaires. The study sought to investigate the role of community participation in the performance of community water projects in Ruiri, Tigania West Sub-County, Meru County. The survey research design is appropriate for the study because data was collected from the implementers and beneficiaries of the projects by use of a questionnaire and data was collated, analysed and presented as collected from respondents without any manipulation.

3.3 Target population

All the items of individuals that possess the characteristics the study is looking for a referred to as the population (McBurney and White, 2009). The population of this study comprised 400 households benefit directly from Ruiri-Thau Water Project, 11 management committees and two project sponsors / donors. Table 3.1. summarises the distribution of the population of the study across different sub-locations in Buuri and Tigania West Constituencies.

Table 3.1 Target Population

Households Sub-Location	No.	No. of Management Committees	Donors Name	No.
1. Thao	30	1	Diocese of Meru	1
2. Mituntu	47	1	County Government of Meru	1
3. Muramba	41	2		
4. Kabutukii	45	1		
5. Tigiji	44	1		
6. Nchoroiboro	40	1		
7. Tutua	43	1		
8. Kanthungu	57	1		
9. Ruiri Market	53	2		
Total	**400**	**11**	**Total**	**2**

3.4 Sample Size and Sampling Procedure

The following section describes the procedure that was used to select a representative sample from the population.

3.4.1 Sample Size

The "Table for Determining Sample Size for a Given Population" that was developed by Krejcie and Morgan (1970), was used to derive a sample for. The following formula was used by Krejcie & Morgan to develop a table that explains how to derive a sample form a specified population (Sahu, 2013):

$S = X^2NP(1-P) / d^2(N-1) + X^2P(1-P)$

Where:

S = the required sample size

X^2 = the table value of chi-square for one degree of freedom at the desired confidence level.

N = the population size.

P = the population (assumed to be 50 since this would provide the maximum sample size)

d= the degree of accuracy expressed as a proportion (.05)

The population of the current study is 400 households. According to the "Table for Determining Sample Size for a Given Population", a population of 400 requires a sample of

196 individuals, hence 196 households. Proportionate stratified sampling method was used to distribute the population of 400 households across different sub-locations, from which a sample of 196 households will be derived proportionately across the stratums (sub-locations).

Moreover, the study applied census sampling to select all the 11 water management committees and the two donors / sponsors as sample populations respectively. Census sampling is appropriate when the population is minimal and sampling is unnecessary (Kumar, 2008).

In essence, the sample population of the study comprised 196 households, 11 sub-location water management committees and two donors. Table 3.2. Summarizes the population of the study.

Table 3.2 Sampling Frame

Sub-location	N	Sample (N × 400) ÷ 196	Management Committees	Sample (100%)	Donors	Sample (100%)
Thao	30	14	1	1	2	2
Mituntu	47	23	1	1		
Muramba	41	20	2	2		
Kabutukii	45	22	1	1		
Tigiji	44	22	1	1		
Nchoroiboro	40	20	1	1		
Tutua	43	21	1	1		
Kanthungu	57	28	1	1		
Ruiri Market	53	26	2	2		
Total	**400**	**196**	**11**	**11**	**2**	**2**

3.4.2. Sampling Procedure

Simple random sampling was used to select 196 households from which to collect data. Further, purposive sampling was used to select the head of the household as the primary respondent. For water management committees, census sampling was used to collect data from all the officials. For project donors, purposive sampling was used to select the person the donor organization had assigned to the project as the respondent on behalf of the donor. Data was, therefore, gathered from a total of 209 individuals.

3.5 Data collection instruments

The study used two types of tools to collect data from respondents. A questionnaire was used to collect data from household heads and sub-location committee members. Structured questionnaires are appropriate for collecting data from large samples because the instrument yields uniform responses. Moreover, this tool enables the collection of both qualitative and quantitative data. The questionnaire were structured based on the four objectives of the study. It had six sections – personal information, four sections for the four independent variables and one section for the dependent variable. Further, donors volunteered information for the study through an interview schedule. Interview schedules are appropriate for smaller population and allow the interview to probe for more information from the respondents and also observe non-verbal cues. The interview schedule was also designed to collect information on each of the objectives.

3.5.1 Pilot Study

A pilot study was carried out to test the two sets of questionnaires before the real study. The pilot study will comprised 10% of the sample population (Achari, 2014). This implied 20 households (10% of 196 households). Participants in the pilot study were derived from households that would not participate in the actual study. Questionnaires for the pilot study were issued and collected in one sitting to avert losses.

3.5.2 Validity of instruments

Validity is a measure of the ability of a data collection instrument to measure what it was designed to (Connaway & Powell, 2010). To ensure validity in the questionnaire and interview schedules, the instruments was structured based on the variables of the study. The study's supervisor participated in identifying gaps that needed to be filled in the instruments. This ensured the research instruments had content and context validity.

3.5.3 Reliability of data instruments

Consistency in measuring variables by a data collection instrument is referred to as reliability. Using Cronbach Coefficient Alpha, the study assessed the test-retest questionnaires to ascertain reliability. Andrew, Pedersen and McEvoy (2011) assert that Cronbach's Coefficient Alpha above 7.0 represents the lower limit of reliability. The study

analysed the final questionnaires to be used in the study using Statistical Package for Social Scientists (SPSS), and arrived at a Cronbach Coefficient Alpha of 0.75.

The formula for calculating Cronbach's Alpa is:

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum \sigma_i^2}{\sigma_y^2}\right)$$

Where

$\boldsymbol{k}$ is the number of items

$\boldsymbol{\Sigma\sigma_i^2}$ is the sum of the item variances (i.e., the diagonal elements of the covariance matrix) and

$\boldsymbol{\sigma_y^2}$ is the variance of the total test score (which equals the sum of all elements in the covariance matrix).

3.6. Data collection procedure

The researcher liaised with project committees and donors to establish meeting days of various committees. With the help of trained graduate assistants from the locality, the researcher administered questionnaires during respective meeting days of locational sub-location committees. Questionnaires were filled and collected in one session to minimize losses and increase the return rate. The researcher also interviewed representatives of the two project donors on different dates.

3.7. Data analysis technique

De Vaus, Fouche and Delport (2005) assert that data collection targets reduction of information collected from respondents into smaller units amenable to logical and scientific interpretation, hence aiding in drawing concomitant conclusions. Data from questionnaires was coded, edited, categorized and entered into SPSS Version 20. The researcher generated frequency tables, graphs, charts and other descriptive means of presenting and analysing data. Findings were presented in frequency tables and analysed based on respective objectives.

3.8. Ethical issues

The researcher obtained written authorization from University of Nairobi, National Council for Science and Technology (NACOSTI), Diocese of Meru, Meru County Government and the Ministry of Interior and Coordination of National Government before embarking on data collection. Respondents were informed, before agreeing to participate in the study, that the information they volunteered was to be used for academic purposes only. Moreover, respondents were not required to indicate their names anywhere on the questionnaires.

3.9. Operational Definition of variables

Table 3.3. presents the four independent and one dependent variables, listing respective indicators, methods of measurement, scale of measurement and type of analysis.

Table 3.3 Operationalization of Variables

	Research Objective	Type of Variable	Indicator	How to Measure Indicator	Scale	Data Collection method	Level of Analysis
1.	To investigate the influence of community participation in financial management on performance of Ruiri Water Projects, Meru County.	Independent: community participation in financial management	Financial planning	Extent of participation	Ordinal	Questionnaire / Interview Guide	Inferential
			Procurement	Extent of participation	Ordinal	Questionnaire / Interview Guide	Descriptive
			Financial record keeping	Extent of participation in scrutiny	Ordinal	Questionnaire / Interview Guide	Descriptive
2.	To establish the role of community participation in project governance on performance of Ruiri Water Projects, Meru County.	Independent: community participation in project governance	Elections	Extent of participation in elections	Ordinal	Questionnaire / Interview Guide	Descriptive
			Meetings	Level of participation in governance meetings	Ordinal	Questionnaire / Interview Guide	Descriptive
			Decision-making	Level of participation in decision-making	Ordinal	Questionnaire / Interview Guide	Descriptive
3.	To assess the role of community participation in operations and maintenance on performance of Ruiri Water Projects, Meru County.	Independent: community participation in operations and maintenance	Payment	Level of participation in payment	Ordinal	Questionnaire / Interview Guide	Descriptive
			Labour	Extent of labour provision	Ordinal	Questionnaire / Interview Guide	Descriptive
			Materials	Extent of contribution	Ordinal	Questionnaire / Interview Guide	Descriptive

4	To evaluate the role of community participation in monitoring and evaluation on performance of Ruiri Water Projects, Meru County.	Independent: community participation in monitoring and evaluation	Field Visits	Level of participation	Ordinal	Questionnaire / Interview Guide	Descriptive
			Progress reports	Extent of attendance of meetings	Ordinal	Questionnaire / Interview Guide	Descriptive
				Level of scrutiny of performance reports	Ordinal	Questionnaire / Interview Guide	Descriptive
5.	Performance of Ruiri Water Projects, Meru County.	Dependent: Project Performance	Efficiency and effectiveness	Level of project performance	Ordinal	Questionnaire / Interview Guide	Descriptive
			Functionality	Degree of functionality of project	Ordinal	Questionnaire / Interview Guide	Descriptive
			Sustainability	Extent to which project will last	Ordinal	Questionnaire / Interview Guide	Descriptive
			Impact on livelihoods	Extent of improvement in livelihoods	Ordinal	Questionnaire / Interview Guide	Descriptive

CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1. Introduction

This chapter entails presentation of data, relevant analysis and interpretation. Data is presented in frequency tables, with pertinent presentations after each table. Further, the chapter is arranged thematically, beginning with personal data and followed by respective objectives. Moreover, data from questionnaires is discussed first, followed by information derived from interviews. The purpose of this study was to establish the influence of community participation in the performance of community water projects in Ruiri, Meru County, with specific focus on Ruiri-Thau Water Project.

4.2. Data Collection Instruments' Return Rate

The study administered two different data collection instruments. Two hundred and seven (207) questionnaires were issued to heads of households (196) and project committee members (11). Of the questionnaires issued, 189 (representing 91.3%) were returned, a number that is relatively higher than the minimum 70% return rate recommended by Mugenda & Mugenda (2003) for descriptive studies. Further, an interview schedule was administered on the two main sponsors of the project – the County Government of Meru and the Catholic Diocese of Meru. This represented a 100% return rate.

4.3. Demographic Information

The study sought to establish the gender, educational level, age, occupation, role in Ruiri-Thau water project and duration the respective respondents had accessed water from the project. Their responses are presented in the following frequency tables.

4.3.1. Gender of Respondents

The study sought to establish the genders of respective respondents. Table 4.1 presents their responses.

Table 4.1 Gender of Respondents

Responses	Frequency	Percent
Male	93	49.3
Female	96	50.7
Total	**189**	**100.0**

According to Table 4.1, majority of the participants (50.7%) were women, with an equally significant number (49.3%) being men. These findings owed to the fact that women were more informed about water usage issues, considering they perform most household chores involving water, for example, washing clothes and utensils, cooking and providing water to domestic animals. Similarly, since data was collected during daytime, some men may have been away from home and women acted as household heads.

4.3.2. Age of Respondents

Respondents were asked to indicate their ages. Table 4.2 summarizes their responses.

Table 4.2 Age of Respondents

Age	Frequency	Percent
20-29 years	47	25.4
30-39 years	35	18.3
40-49 years	67	35.2
50-59 years	27	14.1
60-69 years	8	4.2
70 years and above	5	2.8
Total	**189**	**100.0**

It is evident from Table 4.2 that majority of the respondents (35.2%) were aged between 40 and 49 years. Cumulatively 93% of the respondents were aged between 20 and 59 years, an indicator that people from a cross-section of age groups relied upon water from Ruiri-Thau Water Project. It is also evident that water from the project had continued to benefit different generations over the 26 years the project had been in existence, thus making this initiative a critical feature of community life in the project area.

4.3.3. Educational Levels of Respondents

The study also requested for information on the educational levels of respondents. Table 4.3 presents their responses.

Table 4.3 Educational Levels of Respondents

Highest Educational Level	Frequency	Percent
None	18	9.5
Primary School Education	73	38.6
Secondary Education	59	31.2
Certificate	15	8.0
Diploma	11	5.8
Undergraduate degree	8	4.2
Master's degree	5	2.6
Total	189	100.0

According to Table 4.3, a cumulative majority of the beneficiaries of Ruiri-Thau Water Project (69.8%) had attained either primary school or secondary school education levels. While this fact may not affect their water usage habits, it indicates that most of the respondents understood the questions in the questionnaire and their answers were likely to have a high degree of accuracy.

4.3.4. Occupations of Respondents

The study also sought to establish the occupations of respective respondents. Table 4.4 summarizes their responses.

Table 4.4 Occupations of Respondents

Occupation	Frequency	Percent
Formally employed	55	29.1
Self-employed	104	55.0
Unemployed	27	14.3
Retired	3	1.6
Total	**189**	**100.0**

As is evident in Table 4.4, majority of Ruiri-Thau Water Project beneficiaries' household heads (55%) were self-employed. This may indicate a relatively high reliance on water from

the project for small-scale irrigation activities, a mainstay of the many people living in the project area.

4.3.5. Role in Ruiri-Thau Water Project

The study also sought to establish the role played by various respondents in the project. Table 4.5 summarizes their respondents.

Table 4.5 Role in Ruiri-Thau Water Project

Role	Frequency	Percent
Committee member	11	5.8
General member	178	94.2
Total	**189**	**100.0**

According to Table 4.5, majority of the respondents (94.2%) were general members while the rest were committee members. This was a fair representation since the study would elicit relevant information from both the project's management and other intended beneficiaries. This distribution of respondents also augured well with the study, which was investigating community participation aspects of the project.

Further, the two project donors indicated their respective roles in the project. The Catholic Diocese of Meru (D.O.M.) respondent asserted, "Apart from being the initiators of the project, we have offered financial assistance and technical support to the project management on a need basis over the years."

On its part, the County Government of Meru opined, "We have organized fundraising events for the project in the past, especially towards purchase of pipes. We also report to the management whenever there are burst pipes and this enables rapid reconnection of water."

4.3.6. Duration of Accessing Water from Ruiri-Thau Water Project

The study further sought information on the duration respective respondents had accessed water from the project. Table 4.6 captures their responses.

Table 4.6 Duration of Access of Water from Project

Duration	Frequency	Percent
1-5 years	43	22.8
6-10 years	32	16.9
11-15 years	37	19.6
16-20 years	40	21.2
21 years and above	37	19.6
Total	**189**	**100.0**

It is evident from Table 4.6 that most respondents (22.8%) had accessed water from the project for a period of between one and five years. However, the numbers distributed almost evenly across various durations. This indicates the projects had continued to connect residents of the project area to water over the years. In essence, the project was active and operational despite challenges that intended beneficiaries might have been experiencing.

On the part of donors, the Catholic Diocese of Meru (D.O.M.) asserted having initiated the project in 1992 and continuing to be a sponsor over the years. The County Government of Meru asserted it had come on board the project nine years before (2009) through its predecessor, the County Council of Meru. This is in tandem with assertions of Ruiri-Thau Water Project members on the durations they had benefitted from the project.

4.4. Community Participation in Project Financial Management

The first objective of the study was to investigate the influence of community participation in financial management on performance of Ruiri Water Projects, Meru County. To this end, the study sought to establish the extent to which intended beneficiaries of Ruiri-Thau Water Project had participated in various aspects of project financial management.

4.4.1. Community Participation in Project Budgeting

The study inquired from respondents the extent to which they participated in budgeting for Ruiri-Thau Water Project. Table 4.7 summarizes their responses.

Table 4.7 Extent of Participation in Project Budgeting

Responses	Frequency	Percent
No extent all	96	39.4
Low extent	27	16.9
Moderate extent	45	22.5
High extent	13	16.9
Very high extent	8	4.2
Total	**189**	**100.0**

According to Table 4.7, a cumulative majority of the respondents (78.8%) were not involved in project budgeting or were involved to a low or a moderate extent. Considering this was a community project that involved members contributing money towards various project aspects, this trend was likely to affect project performance negatively.

4.4.2. Purchase of Project Materials

The study further sought to establish the extent to which targeted project beneficiaries participated in purchase of project materials. Table 4.8 summarizes the responses.

Table 4.8 Extent of Participation in Purchasing Project Materials

Responses	Frequency	Percent
No extent all	75	39.4
Low extent	32	16.9
Moderate extent	43	22.5
High extent	32	16.9
Very high extent	7	4.2
Total	**189**	**100.0**

From Table 4.8, it is evident that majority of the respondents (39.4%) were not involved in purchasing project materials. These findings, when understood in light of those in Table 4.7, shed light on the lack of participation in in financial matters, which, apparently, were left to project committee members and leaders.

4.4.3. Scrutiny of Financial Documents

Respondents were also required to indicate the extent to which they participated in scrutinizing project financial documents. Respective responses are presented in Table 4.9.

Table 4.9 Extent of Scrutiny of Financial Reports

Responses	Frequency	Percent
No extent all	77	40.8
Low extent	29	15.5
Moderate extent	56	29.6
High extent	16	8.5
Very high extent	11	5.6
Total	**189**	**100.0**

According to Table 4.9, majority of the respondents (40.8%) were never involved in scrutinizing financial documents. It is evident that water users in the community did not have access to financial records, nor were they interested in scrutinizing those records. Such a situation could have created fecund ground for unscrupulous project managers to embezzle project funds.

Table 4.10 Participation in Financial Planning Results in Project Effectiveness

Responses	Frequency	Percent
Strongly Agree	67	35.2
Agree	93	49.3
Neutral	21	11.3
Disagree	5	2.8
Strongly Disagree	3	1.4
Total	**189**	**100.0**

4.4.4. Participation in Financial Planning and Project Effectiveness and Efficiency

The study further sought to know from beneficiaries of Ruiri-Thau Water Project the extent to which they agreed that community participation in project financial planning activities increased the effectiveness and efficiency of the project. Table 4.10 summarizes their responses.

Based on Table 4.10, majority of Ruiri-Thau Water Project beneficiaries (84.5%) either Strongly Agreed or Agreed that community participation in financial planning of the water project would have resulted in efficiency and effectiveness. By implication, members of the community did not participate adequately in the project's financial activities, hence affirming findings discussed earlier in this analysis.

4.4.5. Strategies for Improving Financial Planning in Ruiri-Thau Water Project

The study further requested beneficiaries of Ruiri-Thau Water Project to suggest strategies for improving financial planning in the project. Respective responses are presented in Table 4.11.

Table 4.11 Strategies for Improving Project Financial Planning

Responses	Frequency	Percent
Carry out market research to ascertain prices of materials	27	14.1
Sensitize members on need to participate in project financial planning	56	29.6
Expand the project management committee	21	11.3
Change project management team	13	7.0
Committees to present financial reports regularly	72	38.0
Total	**189**	**100.0**

According to Table 4.11, majority of the respondents (38%) recommended getting regular financial reports from the project committee. Another significant number of respondents (29.6%) suggested sensitization of project members on the need to participate in project financial planning. Other critical recommendations were to conduct market research out

before buying project equipment and that the project committee should be expanded or changed.

From the interviews with the two donors, it is evident that the relationship between community participation in project planning and performance of the Ruiri-Thau Water Project is intricate and interdependent.

According to the Diocese of Meru, "When members of the community realize their funds are not used for the right purposes or there is embezzlement, they tend either to complain directly to the project leaders or to withdraw their support for the project. There is need for closer monitoring of funds and prudent management of project resources. Project managers should provide annual financial reports to members to avert suspicion and to promote transparency and accountability."

The County Government of Meru, on its part, commented, "Financial Management is a key area of conflict between project managers and the rest of Ruiri-Thau Water Project beneficiaries."

4.4.6. Pearson Product-Moment Correlation on Community Participation in Project Financial Management and Project Performance

To establish the relationship between community participation in project financial management and the performance of Ruiri-Thau Water Project, Pearson-Product-Moment Correlation was computed. Table 4.12 presents the results.

Table 4.12 Correlation of Community Participation in Financial Management and Project Performance

		Community Participation in Financial Management	**Project Performance**
Pearson	Participation in Financial Management	1.000	0.49
Si 2 - tailed	Project Performance	0.49	1.000
N	**189**	**189**	

Correlation is significant at the 0.01 level (2-tailed).

Based on Table 4.12, community participation had a moderate positive influence (0.49) on performance of Ruiri-Thau Water Project, with the results significant at 0.01. In essence, the greater and more active the participation of community members in this project the better the performance.

4.5. Community Participation in Project Governance

The second objective of the study was to determine the influence of community participation in project governance on performance of Ruiri Water Projects, Meru County. To this end, members of Ruiri-Thau Water Project were asked to respond to a series of questions related to community participation in various project governance issues.

4.5.1. Election of Project Committee Members

The study sought to establish the extent to which respondents participated in the election of project committee members. Table 4.13 summarizes their responses.

Table 4.13 Extent of Participation in Election of Project Committee Members

Responses	Frequency	Percent
No extent all	43	22.5
Low extent	35	18.3
Moderate extent	45	23.9
High extent	50	26.8
Very high extent	16	8.5
Total	**189**	**100.0**

It is evident from Table 4.13 that majority of the respondents (26.8%) participated to a high extent in election of project members. However, it is noteworthy that 64.7% either did not participate, participated to a low extent or participated moderately. This data indicates apathy towards elections of committee members, a practice that was likely to impact project performance negatively since project committee members were not elected by majority of project members.

Data from the interviews with two project donors indicated that elections of project committee members were not conducted in a free and fair manner, and many Ruiri-Thau Water Project members were apathetic towards the election process. While both project sponsors indicated that leaders were elected during Annual General Meetings (AGMs), the County Government of Meru observed that, "Some leaders have been in office for more than twenty years. There is need to inject new and young blood into project leadership and management if the project is to perform optimally. We always urge leaders to conduct elections according to the constitution of the project organization, but we are limited in terms of enforcing this requirement."

4.5.2. Attendance of Governance Meetings

The study additionally sought for information on the extent to which members of the Ruiri-Thau Water Project attended governance meeting during which various issues affecting leadership and management of the project would be discussed. Respective responses are summarized in Table 4.14.

Table 4.14 Extent of Attendance of Governance Meetings

Responses	Frequency	Percent
No extent all	43	22.5
Low extent	27	14.1
Moderate extent	77	40.8
High extent	31	16.9
Very high extent	11	5.6
Total	**189**	**100.0**

Table 4.14 indicates that majority of the respondents (40.8%) attended governance meetings to a moderate extent. However, it is significant that 36.6% either did not attend these meetings or attended to a low extent. This data implies absenteeism or absconding of meetings altogether, a worrying trend for a project that was owned by and managed by community members. Further, these findings are in tandem with earlier ones, which indicated that members of Ruiri-Thau Water Project were not actively involved in electing project committee members.

4.5.3. Project Decision Making

The study also sought to establish the extent to which members of Ruiri-Thau Water Project participated in decision making on issues affecting the project. Table 4.15 summarizes their responses.

Table 4.15 Extent of Participation in Decision Making

Responses	Frequency	Percent
No extent all	64	33.8
Low extent	45	23.9
Moderate extent	37	19.7
High extent	16	8.5
Very high extent	27	14.1
Total	**189**	**100.0**

Majority of respondents (33.8%), according to Table 4.15, did not participate in decision-making. Moreover, 23.9% were rarely involved in decision-making while 19.7% participated intermittently. These findings accentuate the trend established earlier whereby members of this project were apathetic to governance aspects of the project. In a situation where only 26.6% of project beneficiaries were actively involved in decision-making, project performance was likely to lag behind in performance.

4.5.4. Participation in Project Governance and Project Efficiency and Effectiveness

Additionally, the study sought the affirmations or negations of respondents on whether community participation in project governance resulted in project efficiency and effectiveness. Table 4.16 summarizes their responses.

Table 4.16 Participation in Governance and Project Efficiency and Effectiveness

Responses	Frequency	Percent
Strongly Agree	80	42.3
Agree	77	40.8
Neutral	19	9.9
Disagree	13	7.0

Total	**189**	**100.0**

According to Table 4.16, majority of the respondents (cumulatively, 83.1%) Strongly Agreed or Agreed that when the community participated in project governance the project was likely to be effective and efficient. These findings indicate that community members were aware of the impact of their participation or lack of it on project governance.

4.5.5. Strategies for Improving Governance of Ruiri-Thau Water Project

The study requested members of Ruiri-Thau Water Project to recommend approaches for enhancement of governance of the water project. Table 4.17 summarizes their responses.

Table 4.17 Strategies for Improving Governance of Ruiri-Thau Water Project

Responses	Frequency	Percent
Criteria for electing officials to include personal capabilities	21	11.3
Criteria for electing officials to include commitment to project	32	16.9
Members to participate in actual elections of committee members	82	43.7
Listening to members views	43	22.5
Timely conflict resolution	11	5.6
Total	**189**	**100.0**

According to Table 4.17, majority of the respondents (43.7%) recommended that members should participate in actual elections, an indicator of the passivity with which issues of governance were conducted. It is also significant that 22.5% of the respondents recommended that the views of beneficiaries should be listened to, raising the possibility that committee members had dictatorial tendencies.

According to the County Government of Meru, the election framework of the committee should be reviewed to ensure as many members as possible participate in electing leaders. Further, "The composition of the project management team should be representative of gender and geographical areas to enhance participation and good governance."

4.5.6. Pearson Product-Moment Correlation on Community Participation in Project Governance and Project Performance

The establish the relationship between community participation in project governance and the performance of Ruiri-Thau Water Project, Pearson-Product-Moment Correlation was computed. Table 4.18 presents the results.

Table 4.18 Correlation of Community in Project Governance and Project Performance

		Community Participation in Project Governance	**Project Performance**
Pearson	Participation in Project Governance	1.000	0.38
Si 2 - tailed	Project Performance	0.38	1.000
N	**189**	**189**	

Correlation is significant at the 0.01 level (2-tailed).

According to Table 4.18, community participation in project governance had a moderate positive influence (0.38) on performance of Ruiri-Thau Water Project. The correlation is significant at 0.01 confidence level. In essence, the project would experience improved performance if community members participated more actively in making critical decisions on the project and its leadership.

4.6. Community Participation in Project Operations and Management (O&M)

The third objective of the study was to assess the influence of community participation in operations and maintenance (O&M) on performance of Ruiri Water Projects, Meru County. The study posed several questions to members of Ruiri-Thau Water Project to elicit information on how the community participated in project O&M.

4.6.1. Payment of Project Fees

The study sought to know from respondents the level to which they paid various fees meant to ensure Ruiri-Thau Water Project produced adequate water on a regular basis. Table 4.19 summarizes their responses.

Table 4.19 Level of Participation in Paying Various Project Fees

Responses	Frequency	Percent
Poor	16	8.5
Fair	39	21.1
Good	43	22.5
Very good	43	22.5
Excellent	48	25.4
Total	**189**	**100.0**

According to Table 4.19, a cumulative majority (70.4%) of the respondents were paying various projects fees such as annual subscription, monthly fees and new connection fees among others. It is evident that members regularly funded the project and this was likely to influence project performance positively.

4.6.2. Contribution of Project Materials

The study also sought to establish the level to which the community contributed project materials. Table 4.20 presents the findings.

Table 4.20 Level of Contribution of Project Materials

Responses	Frequency	Percent
Poor	35	18.5
Fair	37	19.6
Good	37	19.6
Very good	43	22.8
Excellent	37	19.6
Total	**189**	**100.0**

It is manifest from Table 4.20 that the majority of the project members (22.8%) were committed contributors of materials to the project. Cumulatively, those who contributed materials regularly were 62%, an indicator that the project had adequate materials for effective operation and routine maintenance.

4.6.3. Provision of Labour for Project

The study further sought information on the level to which beneficiaries of Ruiri-Thau Water Project provided labour for the project. Their responses are summarized in Table 4.21.

Table 4.21 Level of Labour Provision for Project

Responses	Frequency	Percent
Poor	32	16.9
Fair	16	8.5
Good	45	23.9
Very good	40	21.1
Excellent	56	29.6
Total	**189**	**100.0**

According to Table 4.21, majority of the respondents were excellent (29.6%) in providing labour for the project. Further, a cumulative majority (74%) were providing labour regularly. In essence, the project had no major challenges when it came to getting labour on a need-basis. Apparently, the community had accepted and owned the project to the extent of volunteering their labour when called upon.

4.6.4. Participation in Operations and Project Efficiency and Effectiveness

The study also sought to know from respondents the level of agreement with the idea that active participation of the community in project operations and maintenance activities resulted in project efficiency and effectiveness. Respective responses are presented in Table 4.22.

Table 4.22 Community Participation in O&M Results in Project Efficiency

Responses	Frequency	Percent
Strongly Agree	83	43.7
Agree	80	42.3
Neutral	8	4.2
Disagree	5	2.8
Strongly Disagree	13	7.0
Total	**189**	**100.0**

According to Table 4.22, majority of the respondent (cumulatively, 86%) either agreed or strongly agreed with the statement that community participation in project operations and management activities would result in project efficiency and effectiveness. This high level of awareness was critical for Ruiri-Thau Water Project to perform optimally.

The two project sponsors corroborated the views of community members on the relationship between participation in operations and maintenance activities and performance of the water project. According to the Diocese of Meru, "Project committee members are volunteers. They cannot be everywhere at all times. They need material support from the community if water is to be adequate and flowing at all times."

On the other hand, the County Government of Meru asserted, "We provide security for project materials and water kiosks. We also give prompt reports on broken pipes and any interference with water flow. When called upon, we offer security and enforcement to project leaders as they collect various water fees from members. Without such assistance, the project would not meet its objectives."

From the interviews, it also emerged that efforts to create good working relationships between project leaders and the community had been initiated. For instance, the Catholic Diocese of Meru asserted, "We encourage members of the community to play an active role in operations and management since breakdown in project water flow affects them directly."

The Meru County Government further observed, "We organize public barazas or attend other public forums where we urge the public to own the project and support it materially, financially and morally."

4.6.5. Strategies for Improving Community Participation in Project O&M Activities

The study additional sought the views of respondents on how community participation in project operations and management could be enhanced. Table 4.23 summarizes their responses.

Table 4.23. Strategies for Improving Community Participation in Project O&M

Responses	Frequency	Percent
Timely reporting of leakages and maintenance	21	11.3
Paying bills promptly	37	19.7
Hiring professionals to run project	19	9.9
Committee to disseminate regular reports on operations and maintenance	40	21.1
Conducting regular meetings to update members on project needs	37	19.7
Pay allowances to O&M officials	35	18.3
Total	**189**	**100.0**

Based on Table 4.23, majority of the respondents (21.1%) wanted the management committee to disburse regular reports on operations and management. Conducting regular meetings for updating members on project needs and paying bills promptly (both 19.7%) were also significant recommendations.

In addition to the recommendations by community members, the County Government of Meru suggested that, "Experienced experts should be hired to help with technical expertise, especially new connections and increase in water production."

The Catholic Diocese of Meru recommended that issues of breakages and water spillage be given prominence by the project committee. "There is need for orderly and timely repairing of water pipes when leakages occur."

4.6.6. Pearson Product-Moment Correlation on Community Participation in O&M and Project Performance

The establish the relationship between community participation in project operations and management (O&M) and the performance of Ruiri-Thau Water Project, Pearson-Product-Moment Correlation was computed. Table 4.24 presents the results.

Table 4.24 Correlation of Community in O&M and Project Performance

		Community Participation in O&M	Project Performance
Pearson	Community Participation in O&M	1.000	0.26
Si 2 - tailed	Project Performance	0.26	1.000
N	**189**	**189**	

Correlation is significant at the 0.01 level (2-tailed).

It is evident from Table 4.24 that community participation in project operations and management have a weak positive influence (0.26) on the performance of Ruiri-Thau Water Project. The correlation is significant level of 0.01. The implication is that the greater the participation of the community in operations and management, the more improved the performance of Ruiri-Thau Water Project would be and vice versa.

4.7. Community Participation in Project Monitoring & Evaluation (M&E)

The fourth objective of this study was to evaluate the influence of community participation in monitoring and evaluation (M&E) on performance of Ruiri Water Projects, Meru County. To achieve this objective, the study sought responses from beneficiaries of Ruiri-Thau Water Project concerning their participation in various aspects of monitoring and evaluation.

4.7.1. Participation in Site Visits

The study sought to establish the level of respondents' participation in site visits. Respective responses are presented in Table 4.25.

Table 4.25 Level of Community Participation in Site Visits

Responses	Frequency	Percent
Poor	58	31.0
Fair	40	21.1
Good	45	23.9
Very good	19	9.9
Excellent	27	14.1
Total	**189**	**100.0**

It is evident from Table 4.25 that majority of the respondents (31%) participated poorly in site visits. Cumulatively, 52.2% of the beneficiaries of Ruiri-Thau Water Project were not active in site visits, hence potentially affecting project performance negatively.

4.7.2. Participation in Project Progress Discussions

The study also sought to establish respondents' level of attendance of project progress' discussion meetings. Their responses are presented in Table 4.26.

Table 4.26 Level of Attendance of Project Progress Discussions

Responses	Frequency	Percent
Poor	48	25.4
Fair	47	24.9
Good	35	18.5
Very good	35	18.5
Excellent	24	12.7
Total	**189**	**100.0**

According to Table 4.26, majority of the respondents (25.4%) rated themselves 'poor' in relation to attending meetings to discuss the progress of the project. Cumulatively, only 49.7% of the respondents considered themselves as committed participants in attending these meetings. This data implies apathy towards the management practices of the project, which was likely to impact the project's performance negatively.

4.7.3. Progress and Performance Reports

The study further inquired from beneficiaries of Ruiri-Thau Water Project the level to which they demanded for progress and performance reports from the project's management. Table 4.27 summarizes the responses of project members.

Table 4.27 Level of Demand for Progress and Performance Reports

Responses	Frequency	Percent
Poor	77	40.8
Fair	45	23.9
Good	24	12.7
Very good	27	14.1
Excellent	16	8.5
Total	**189**	**100.0**

It is evident from Table 4.27 that majority of the respondents (40.8%) rated themselves 'poor' in relation to demanding for progress and performance reports from their leaders. This is in tandem with the preceding findings in which Ruiri-Thau Water Project members considered themselves poor in relation to attending meetings for discussing project progress. Considering the material and financial resources and the labour the community had invested in the project, these findings were disconcerting.

4.7.4. Community Participation in Monitoring and Evaluation and Project Performance

The study sought to establish from the members of Ruiri-Thau Water Project their level of agreement with the assertion that community participation in project monitoring and evaluation resulted in an efficient and effective project. Table 4.28 summarizes their responses.

Table 4.28 Community Participation in M&E Enhances Project Efficiency

Frequency	Frequency	Percent
Strongly Agree	80	42.3
Agree	74	39.4
Neutral	11	5.6
Disagree	13	7.0
Strongly Disagree	11	5.6
Total	**189**	**100.0**

As Table 4.28 illustrates, majority of the respondents (cumulatively, 81.7%) strongly agreed or agreed that when members of the community participate in project monitoring and evaluation activities, the project becmea more efficient and effective. The emerging issue is why, with this background, members of Ruiri-Thau Water Project did not participate actively in monitoring and evaluation of the project. The assertions of the Meru County Government that, "Community members are not allowed to participate in project management" shed light into the indifference of community members towards project and monitoring issues.

4.7.5. Strategies for Enhancing Community Participation in Project M&E

The study further requested members of Ruiri-Thau Water Project to suggest strategies that should be used to improve community participation in project monitoring and evaluation activities. Their recommendations are presented in Table 4.29.

Table 4.29 Strategies for Enhancing Community Participation in Project M&E

Responses	Frequency	Percent
Sensitization for community towards a feeling of project ownership	69	36.6
Conducting regular consumer satisfaction surveys	37	19.7
Revise project constitution to shorten duration of service for committee members	37	19.7
Implementation of members recommendations	27	14.1
Benchmarking trips for committee members	19	9.9
Total	**189**	**100.0**

According to Table 4.29, majority of the respondents (36.6%) recommended that community members be sensitized to feel they owned the project as a way of enhancing participation in project monitoring and activities. This suggestion, among the rest, indicates a critical attitudinal problem with community members in terms of how they viewed the project's management and ownership. Further, the other recommendations evinced a community that was aware of its obligations towards improvement of the project's performance, despite its apathetic approach.

Project sponsors also made recommendations for improvement of community monitoring and evaluation. The County Government of Meru suggested that, "The views of members expressed during site visits and review meetings should be scrutinized and implemented to engender confidence in the community towards the project and its leaders. Generally, there is a tendency by the management of Ruiri-Thau Water Project to ignore the views of the community and to limit participation of the community in the project."

On the other hand, the Catholic Diocese of Meru observed, "Part of monitoring and evaluation is the scrutiny of the performance of project leaders. Leaders must accept when they are in the wrong and implement changes that members suggest for the good of the project."

4.7.6. Pearson Product-Moment Correlation on Community Participation in M&E and Project Performance

The establish the relationship between community participation in project monitoring and evaluation (M&E) and the performance of Ruiri-Thau Water Project, Pearson-Product-Moment Correlation was computed. Table 4.30 presents the results.

Table 4.30 Correlation of Community in Project M&E and Project Performance

		Community Participation in M&E	**Project Performance**
Pearson	Community Participation in M&E	1.000	0.31
Si 2 - tailed	Project Performance	0.31	1.000
N	**189**	**189**	

Correlation is significant at the 0.01 level (2-tailed).

According to Table 4.30, there is a moderate positive correlation (0.31) between community participation in monitoring and evaluation and performance of Ruiri-Thau Water Project. These results are significant at 0.01 level of confidence. In essence, if the community would be involved more actively in M&E, the project could improve in performance.

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter encompasses the summary of findings, relevant discussions, conclusions, recommendations and suggestions for further research. The purpose of this study was to establish the influence of community participation in the performance of community water projects in Ruiri, Meru County.

5.2. Summary of Findings

The following is a summary of the main findings of the study based on respective objectives:

5.2.1. Community Participation in Project Financial Management

The first objective of the study was to investigate the influence of community participation in financial management on performance of Ruiri Water Projects, Meru County, with specific focus on Ruiri-Thau Water Project. Findings indicate a cumulative majority of the respondents (78.8%) were not involved in project budgeting or were involved to a low or moderate extent. Further, majority of the respondents (39.4%) were not involved in purchasing project materials. Moreover, majority of the respondents (40.8%) were never involved in scrutinizing financial documents. In addition, most of Ruiri-Thau Water Project beneficiaries (84.5%) either Strongly Agreed or Agreed that community participation in financial planning of the water project would have resulted in efficiency and effectiveness. Further, majority of the respondents (38%) recommended getting regular financial reports form the project committee. On the part of the project donor, the Catholic Diocese of Meru (D.O.M.) indicated that financial impropriety was a key reason for apathy among project members. The County Government, on the other hand, identified embezzlement and misuse of project funds as one of the reasons for conflict between members and managers of Ruiri-Thau Water Project. Computation of Pearson-Product-Moment Correlation on the relationship between community participation in financial management and project performance revealed a moderate positive relationship (0.49), implying that the more the community participated in managing project finances, the more improved the performance of the project and vice versa.

5.2.2. Community Participation in Project Governance

The second objective of the study was to determine the influence of community participation in project governance on performance of Ruiri Water Projects, Meru County. Findings reveal that a majority of the respondents (64.7%) did not participate, or participated to a low extent or moderately extent. In addition, while both project donors affirmed that elections were held during Annual General Meetings (AGMs), the County Government of Meru observed that some of the leaders had been at the helm for decades and this had resulted in poor leadership and management of the project. Moreover, a cumulative majority (77.4%) either did not attend project governance meetings, attended to a low extent or attended intermittently. In addition, majority of respondents (33.8%) did not participate in decision-making. Most of the respondents (81.3%) either Strongly Agreed or Agreed that when the community participated in project governance the project was likely to be effective and efficient. On measures that should be taken to improve community participation in project governance, majority of the respondents (43.7%) recommended that members should participate in actual elections. On the part of donors, the Meru County Government suggested that the project management committee be reconstituted, and gender and geographical equity should be adhered to when putting a new team in place. Pearson-Product-Moment Correlation was computed to establish the relationship between community participation in project governance and project performance. The result revealed a moderate positive correlation (0.39), implying that increased participation of project members in project governance would result in enhanced project performance.

5.2.3. Community Participation in Project Operations and Management (O&M)

The third objective of the study was to assess the influence of community participation in operations and maintenance (O&M) on performance of Ruiri Water Projects, Meru County. Findings revealed that a cumulative majority (70.4%) of the respondents remitted various projects fees such as annual subscription and monthly fees regularly. Moreover, a cumulatively majority were 62% contributed materials towards project operations and maintenance. In addition, a cumulative majority (74%) were providing labour regularly. Majority of the respondent (86%) also either agreed or strongly agreed that community participation in project operations and management activities would result in project efficiency and effectiveness. Further, the Diocese of Meru emphasized the need for members

to support the project with materials considering the project was largely self-supporting. The County Government of Meru asserted that it provided the project with materials, information on pipe breakages and water spillage, and security and enforcement for committee members involved in collecting various project fees. Both project sponsors were also involved in sensitizing project beneficiaries to support the project team in operations and management as this would ensure constant flow of water. On how to enhance project operations and management, majority of the beneficiaries of the project (21.1%) recommended that the management committee should disburse regular reports on operations and management. The County Government of Meru suggested hiring of technical experts to enhance project performance, while the Catholic Diocese of Meru recommended immediate repair of broken pipes to avert water loss. Pearson-Product-Moment Correlation was computed to establish he relationship between community participation in project operations and maintenance and project performance. It revealed a weak positive correlation (0.26) between the two variable, hence the conclusion that enhanced community participation in operations and management of Ruiri-Thau Water project would improve project performance.

5.2.4. Community Participation in Project Monitoring & Evaluation (M&E)

The fourth objective of this study was to evaluate the influence of community participation in monitoring and evaluation (M&E) on performance of Ruiri Water Projects, Meru County. Findings revealed cumulatively, 52.2% of the beneficiaries of Ruiri-Thau Water Project were not active in site visits. Moreover, a cumulative majority (50.3%) of the respondents considered did not attend meetings regularly. In addition, majority of the respondents (40.8%) did not demand progress and performance reports from their leaders. Majority of the respondents (cumulatively, 81.7%) strongly agreed or agreed that when members of the community participate in project monitoring and evaluation activities, the project becomes more efficient and effective. Further, majority of the respondents (36.6%) recommended that community members should be sensitized to feel they owned the project as a way of enhancing participation in project monitoring and activities. On its part, the County Government of Meru suggested that the views of project members should be implemented, where possible, to promote a feeling of ownership and importance. The Catholic Diocese of Meru, on the other hand, suggested that project leaders should accept constructive criticism and implement members' recommendations. The establish the relationship between

community participation in project monitoring and evaluation (M&E) and the performance of Ruiri-Thau Water Project, Pearson-Product-Moment Correlation was computed. The results revealed a moderate positive correlation (0.31) between community participation in monitoring and evaluation and performance of Ruiri-Thau Water Project, implying the need to enhance community participation in monitoring and evaluation activities.

5.3. Discussion of Findings

The following is a pertinent discussion of the findings of the study according to respective objectives.

5.3.1. Community Participation in Project Budgeting

The outcome of the Pearson-Product Moment Correlation computation indicates that the project would have performed at a higher level if project leaders had allowed community members to make key financial decisions. According to Baiocchi (2005), community project succeed when community members budget together. It is evident that Ruiri-Thau Water Project leaders / managers were not keen to involve community members in project budgeting. Funding issues are key to the definition and management of projects. The main source of funding for community water projects is project beneficiaries and not involving this critical constituency in managing their own monies creates discontent and apathy as other findings of the study revealed. This scenario is replicated in the side-lining of the community from the process of purchasing project materials. It is logical, therefore, to realize that community members did not have access to project financial records, ostensibly because such information would raise queries on the usage of funds by project leaders. The study further revealed a community that is aware of the need to play an active role in financial management but fails to do so either due to systemic weakness in project management or apathy towards the overall management of the project. The critical challenges encountered by the community and which impinge their ability to participate in this important activity are evinced by their recommendations. The demand for regular project financial records, expansion of the project management team, carrying our market research and window-shopping before purchasing project materials and change of project management team reveal a project leadership not keen to expose financial transactions to targeted project beneficiaries. Both project sponsors (Catholic Diocese of Meru and the County Government of Meru) also

cited financial impropriety among project leaders as a key hindrance to project performance. Owing to low or non-participation by the targeted beneficiaries, the project was rated 'below average' in performance by the County Government of Meru. These findings are in tandem with those by Macharia, Mbassana and Oduor (2015), who asserted that prudent financial management is a key determinant of the success of community-based projects. Other researchers who arrived at similar findings include Njogu (2014) in Kiambu, Kenya, and Twebaze (2010) in Wakiso, Uganda.

5.3.2. Community Participation in Project Governance

From the findings of this study, community participation in project governance has a moderate positive influence on performance of Ruiri-Thau Water Project. This can be attributed to the low or lack of community participation in election of committee members and project leaders. Bad governance has been identified as one of the key challenges facing community water projects in Kenya (Kenya Water for Health Organization, 2009). The fact that some Ruiri-Thau Water Project leaders had been in office for over two decades implies that the philosophy of management of the project has not undergone significant change over the years, thus impacting performance negatively. Elections held during Annual General Meetings are mere formalities, leading to apathy and a feeling of helplessness among the project sponsors. Maintenance of the status quo for long durations is probably the reason community members fail to attend governance meetings and are not involved in decision-making. Njogu (2014) asserted that where community members participated in electing their leaders, water projects performed optimally. The findings also reveal that members of the Ruiri-Thau Water Project are aware of their governance roles in the project yet they fail to exercise this privilege. Community voice are stifled by project leaders' non-responsiveness, an issue that donors have identified and raised with the project's management. The community's recommendations that the process and practice of electing leaders be reviewed and transformed are critical if this project is to perform optimally. In essence, this project suffers from lack of credible, committed and transformational leadership and community members continue to support the project because of the basic commodity they get – water. These findings lend credence to the assertions of Mbevi (2016) that one cannot divorce proper governance from the success of any community-based project.

5.3.3. Community Participation in Project Operations and Management (O&M)

The study findings reveal that community participation in project operations and management has a weak positive influence on the performance of Ruiri-Thau Water Project. Operations and Management is a critical function of any water project. According to Njogu (2014), the period after the initial project donor has pulled out and handed the project to the community is important because all the project maintenance and operations costs are covered by way of community contributions. While the Ruiri-Thau Water Project continued to connect people to the project, complains of inadequate water and lack of water for prolonged durations are common. It is incumbent upon leadership to mobilize the community and stakeholders such as the two donors (Catholic Diocese of Meru and County Government of Meru) to contributed materials to the project. The latter also provided security to the project team and project materials. The findings of this study reveal that the community was paying requisite fees, donating materials and providing labour when required to. Donors were also supplying materials for the project. Further, the community understood the importance of supporting the project financial, materially and through labour. Consequently, community participation in operations and management has the highest positive influence on project performance. However, even this aspect of community participation can be improved. For example, hiring technical experts to improve the project's functionality, conducting regular meetings and disseminating reports regularly are viable strategies for enhanced project performance. Kinyua, Mwangi, Riro and Muchiri (2015) carried out a study in Nyeri, Kenya and concluded that the performance of water projects depended on not only prudent management of resources but provision of accurate financial records to members of the community who contributed the money.

5.3.4. Community Participation in Project Monitoring & Evaluation (M&E)

The findings of this study indicate that there is a moderate positive correlation between community participation in monitoring and evaluation and performance of Ruiri-Thau Water Project. This is attributable to the non-participation of community members in activities such as site visits, project progress discussions and scrutinizing of progress and performance reports. Lawal and Onohaebi (2010) assert that participatory monitoring and evaluation is a critical determinant of the performance of community water projects. Owing to the non-responsiveness and lack of transparency and accountability of Ruiri-Thau Water Project

leaders, community members were indifferent to monitoring and evaluation activities. Failing to participate in such critical activities impacts the project negatively. As indicated by project donors, project leaders must allow themselves to be criticized by the community and to make necessary changes in the project. However, community members cannot be absolved from blame as they also fail to play their oversight and other roles hence giving project leaders the opportunity to make unilateral decisions for the project. Merely understanding the importance of community participation in project monitoring and evaluation is not helpful if community members retreat from this function and complain about poor leadership. Ngondo (2014) and Njogu (2014) conducted different studies and concluded that community members must participate in different aspects of project monitoring and evaluation if such projects are to realize their objectives.

5.4. Conclusions

The findings of this study indicate that there was a moderate positive relationship between community participation in financial management and the performance of Ruiri-Thau Water Project. The more active the community was in scrutinizing and approving financial transactions and pertinent reports, the more efficient and effective the project was and vice versa. At a practical level, though, Ruiri-Thau community members were not active participants in project financial management, partly due to deliberate marginalization by leaders and partly owing to indifference to most project issues, except access to water.

In addition, it was the study established that there was a moderate positive relationship between community participation in project governance and performance of Ruiri-Thau Water Project. In essence, the active involvement of community members in electing project leaders, attending meetings to discuss accountability and transparency and participating in decision-making resulted in enhance performance of the project. The reality, though, is that elections were mere formalities to maintain the status quo; members rarely attended project governance meetings, and were not involved in decision-making for the project.

Further, the study established that there was a weak positive relationship between community participation in operations and management and the performance of Ruiri-Thau Water Project. This variable had the most powerful positive impact on performance since project

members were active in contributing labour, relevant fees and materials for the project. Project donors were also active contributors of material and technical support, advocacy for the project and security for project staff and material. However, the operations and management aspect of the project requires the input of technical experts.

Moreover, findings established a moderate positive correlation between community participation in monitoring and evaluation and performance of Ruiri-Thau Water Project. Community members were indifferent to the project by not visiting project sites, failing to attend meetings to discuss overall performance of the project and not requesting to scrutinize performance and progress reports. Project leaders were not willing to accept criticism and implement the recommendations of water users and this contributed to apathy in the community.

5.5. Recommendations

The following recommendations emanate from the findings of the study. It would be prudent from the Ruiri-Thau Water Project management committee, the beneficiary community and donors to implement the suggestions because this would enhance community participation in project financial management, project governance, project operations and management and project monitoring and evaluation to ensure Ruiri-Thau Water Project consistently produces clean and adequate water.

1. The Ruiri-Thau Water Project management team, with the active participation of community members and donors should establish a clear system of receiving and accounting for project money; develop a procurement plan; establish clear auditing procedures and organize regular meetings for the community to scrutinize the project' financial records.
2. Project donors and the government should mediate and help the Ruiri-Thau Water Project community and leaders to develop a new constitution and elections' guidelines, supervise the election of a new project team and subsequent elections of committee members, and entrench a culture of holding regular accountability meetings where the views of community members are collected, respected and implemented.

3. The community and donors must together create a framework for identifying Ruiri-Thau Water Project's material needs, reporting any anomalies in the water distribution infrastructure, accounting for all monies paid by community members, paying allowances to project teams, holding regular meetings to receive O&M reports and hiring technical experts to enhance water production and distribution.
4. All project stakeholders, under the guidance of the Ruiri-Thau Water Project's committee should organize regular meetings to discuss the progress of the project, conduct customer satisfaction surveys among project beneficiaries, benchmark with more successful community water projects in the area and entrench the notion of accountability among project leaders and community ownership of the project.

5.6. Recommendations for Further Research

This study was limited to respective objectives, but the area of community water projects is a rich research area. The following are topics that other researchers can embark on:

1. A replication of the same topic and objectives in another geographical area. This will enrich literature on community water projects and create a basis for comparison of findings.
2. A replication of the same topic but with different objectives such as project initiation, project execution, project closure and project sustainability.
3. The role of community water projects in poverty alleviation.

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APPENDICES

Appendix 1: Letter of Transmittal for Data Collection

Fr. Josphat Njogu Mbui,
OFM Conv. Ruiri Catholic Mission
P.O. Box 472 – 60200,
Meru - Kenya

Date:

Dear Respondent,

RE: RESEARCH STUDY DATA COLLECTION

I am a Master of Arts (Project Planning and Management) student at the University of Nairobi, carrying out an academic research study titled "Role of Community Participation in Project Performance: A Case of Ruiri Water Projects, Meru County."

To fulfil the objectives of my study, I am required to collect data from beneficiaries / users, projects committee members and donors / sponsors of Ruiri-Thau Community Water Project. In this regard, kindly fill the attached questionnaires as accurately and honestly as possible. This is an academic exercise. The information you give will be treated with utmost confidentiality.

Thank you for your cooperation.

Fr. Josphat Njogu Mbui, OFMConv.
L50/89588/2016

Appendix 2: Questionnaire for Ruiri-Thau Water Project Beneficiaries

Preamble

This questionnaire has six sections: I, II, III, IV, V & VI. Kindly tick (√) your preferred answer and write in the spaces provided where applicable. There are no wrong or right answers.

Do not write your name anywhere on this questionnaire.

Part I: Respondent's Personal Information

1. Indicate your Gender Male [ ] Female [ ]
2. Age bracket
   - 20 – 29 [ ]
   - 30 – 39 [ ]
   - 40 – 49 [ ]
   - 50 – 59 [ ]
   - 60 – 69 [ ]
   - Over 70 [ ]
3. Level of education
   - Certificate [ ]
   - Diploma [ ]
   - Degree [ ]
   - Masters [ ]
   - Any other specify----------
4. Your occupation

Formally employed [ ] Self-employed [ ] Unemployed [ ]

Other (Please specify)…….

5. How long have you been accessing water from RuiriThau Community Water Project?

1-5 Years [ ] 6-10 Years [ ] 11-15 Years [ ]

16-20 Years [ ] 21 Year and above [ ]

6. Please indicate your status in the water project

   Leader / Committee member [ ] General membership [ ]

PART II: Community Participation in Project Financial Management

7. Please answer the questions in the following table by ticking (√) in box that best represents your experience.

KEY - 5: Very High Extent, 4: High Extent, 3: Moderate Extent, 2: Low Extent, and 1: No extent at All

Statement	1	2	3	4	5
To what extent do you participate in budgeting for project money?					
To what extent do you participate in purchasing products and materials needed for the project?					
To what extent do you question the accuracy of financial reports					

8. When members of the community / project beneficiaries participate in financial planning (budgeting, purchasing project materials and discussing financial reports) RuiriThau Community Water Project becomes efficient and effective.

   Greatly agree [ ] Agree [ ] Undecided [ ]

   Disagree [ ] Greatly Disagree[ ]

9. Please suggest other ways of improving community participation in financial planning in Ruiri-Thau Community Water Project.

   ……

   ……

   ……

PART III: Community Participation in Project Governance

10. In the table below, please rate your participation in project governance activities.

    KEY -5: Very High Extent, 4: High Extent, 3: Moderate Extent, 2: Low Extent, and 1: No extent at All

Statement	1	2	3	4	5
Election of project committee members					
Attending meetings to discuss accountability and transparency					
Making decisions on how the project should be run					

11. When members of the community / project beneficiaries participate in decision-making, electing committee members and discussing project performance reports, Ruiri-Thau Community Water Project becomes efficient and effective.

    Greatly agree [ ] Agree [ ] Undecided [ ]

Disagree [ ] Greatly Disagree[ ]

12. Please suggest other ways of improving how Ruiri-Thau Community Water Project is managed and led; how members elect committee members and how members participate in decision-making.

……

……

……

PART IV: Community Participation in Project Operations and Management

13. In the following table, please indicate your level of participation in project operations and maintenance.

KEY - 5: Excellent, 4: Very Good, 3: Good, 2: Fair, and 1: Poor

Your contribution	1	2	3	4	5
Paying various fees e.g. subscription, annual etc					
Contributing materials (pipes, cement, land etc)					
Providing labour (digging trenches for pipes etc)					

14. When members of the community / project beneficiaries pay various fees and contribute materials and labour on time, Ruiri-Thau Community Water Project becomes efficient and effective.

Greatly agree [ ] Agree [ ] Undecided [ ]

Disagree [ ] Greatly Disagree[ ]

15. Please suggest other ways of improving community participation in operations and management in Ruiri-Thau Community Water Project.

……

……

……

PART V: Community Participation in Project Monitoring & Evaluation

16. In the following table, please indicate your level of participation in project monitoring and evaluation

KEY: 5: Excellent, 4: Very Good, 3: Good, 2: Fair, and 1: Poor

Your contribution	1	2	3	4	5
Visiting areas where project has been implemented to assess project performance					
Attending meetings to discuss the performance of the project					
Requesting for performance reports and seeking for answers and clarifications where necessary					

17. When members of the community / project beneficiaries visit project implementation areas and access and discuss performance reports, Ruiri-Thau Community Water Project becomes efficient and effective.

    Greatly agree [ ] Agree [ ] Undecided [ ]

    Disagree [ ] Greatly Disagree[ ]

18. Please suggest other ways of improving community participation in ensuring Ruiri-Thau Community Water Project is meeting its objectives.

    ……

    ……

    ……

PART VI: Performance of Ruiri-Thau Community Water Project

19. In the following table, please rate the performance of Ruiri-Thau Community Water Project to the best of your knowledge

    KEY: 5: Excellent, 4: Very Good, 3: Good, 2: Fair, and 1: Poor

Your contribution	1	2	3	4	5
Effectiveness and efficiency (proper financial management)					
Functionality (consistent provision of adequate, quality water)					
Sustainability (ability of the project to exist for a prolonged duration)					
Livelihoods improvements – bettering your life					

Appendix 3: Interview Schedule for Ruiri-Thau Water Project Donors / Sponsors

Name of Donor / Sponsor:……..

1. How long have you been collaborating with Ruiri-Thau Community Water Project?
2. Please explain how you have been helping the project e.g. through finances, materials and other ways.
3. How would you rate the performance of the project and the association?
4. What are the challenges faced by the association and the project?
5. What is your opinion on the relationship between community participation in project financial management (i.e. participating in budgeting, procurement and scrutiny of financial records kept by project leaders) and project performance?
6. How does community participation in project governance (electing project leaders, attending governance meetings and making key decisions) influence the performance of Ruiri-Thau Community Water Project?
7. What is your opinion on the manner in which the community participates in operations and management of the project? How does this affect project performance?
8. How does the community participate in monitoring and evaluation of the water project and the leadership of the project? In which ways does this affect the performance of the project?
9. What challenges emerge when members of the community demand to participate in all aspects of project management?
10. What is your organization doing to help the association overcome these and other challenges facing the project?
11. What are the benefits of community participation in the performance of Ruiri-Thau Community Water Project?
12. Kindly suggests improvements that need to be made to this project to engender greater community participation in all aspects of the project.

Appendix 4: Table for Determining Sample Size from a Given Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size "S" is sample size.

Krejcie and Morgan (1970)