



**MONITORING AND EVALUATION PROCESSES AND PERFORMANCE OF  
KAKIMIKI WATER DEVELOPMENT PROGRAM IN THARAKA NITHI COUNTY,  
KENYA**

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**ABSTRACT**

Monitoring and evaluation (M&E) processes helps address the issue of measuring performance and achievement of projects. M&E has become imperative in all organization's project. No organisation pursuing development initiatives would proceed at all without M&E framework in place. Therefore, this study aimed at examining the role of monitoring and evaluation processes on performance of Kakimiki water development program in Tharaka Nithi county, Kenya. The study focused on four objectives; examining how community engagement affects the performance of Kakimiki water development program, determining how allocation of resources affects the performance of Kakimiki water development program, examining how sustainability contributes to the performance of Kakimiki water development program and determining how quality service affects the performance of Kakimiki water development program. Community engagement, resources allocation, M&E sustainability and M&E service quality. The main gap in this study was the success of Monitoring and Evaluation process in Kakimiki water development program in Tharaka Nithi County. The validity and reliability of M&E processes were compromised by inadequate data collection techniques and irregular monitoring procedures. Lack of stakeholders' involvement in M&E activities is a noticeable gap. This disparity weakens program implementers' accountability to the communities they serve in addition to jeopardizing the veracity of data and feedback. These problems were made worse by the problem of resource limitations. This study will therefore, fill gaps in understanding the effectiveness of M&E processes in Tharaka Nithi County and provide insights for improving the design and implementation of Kakimiki water development initiatives implemented by the county. The researcher used a descriptive research design as it generates accurate information for a large number of people over a wide area using a small sample. The researcher also used simple random sampling in selection of respondents who participated in this study.  $N =$  target population (400) and the sample size was calculated at precision level of 5% ( $e = 0.05$ ) with  $n =$  Sample size (200). The findings offer significant contributions to the field of processes of monitoring and evaluations, particularly in understanding the relationships between independent and dependent variables. Further, researcher findings indicated that community participation was not well structured and opinion leaders and policy makers were targeted to represent the whole population during participation. Recommendation; the County government of Tharaka Nithi develop a well-structured monitoring and evaluation processes that provide rooms for community participation rather than the selected few.

**Key Words:** Monitoring and Evaluation Processes, Community Engagement and Resource Allocation

## **Background of Study**

Program accountability is a core part of international and regional development. The United Nations Development Program implements M&E frameworks to track program advancement toward the intended objectives to assist the organization and program donors (UNDP, 2023). The World Health Organization has extensively applied the M&E framework in Africa to tackle outbreaks of infectious diseases like Ebola (WHO AFRO, 2024). Since ancient times, international aspects of monitoring and evaluation coordination have been present (Kusek and Rist, 2004). The Australian government, particularly through the Department of Finance, has been a pioneer in the evaluation system. This initiative achieved success due to various advantages enjoyed by the Australian government, including robust human resources, strong institutional and management capabilities in the public sector, a public service recognized for its integrity, honesty, and professionalism, well-established financial and budgetary accounting systems, a tradition of accountability and transparency, and the presence of competent political leaders (Mona, 2009).

The Ghanaian government recognizes the crucial role of Monitoring & Evaluation in fostering effective governance. The civil service law, designed to shape civil service policies, mandates the implementation of policy planning, Monitoring, and Evaluation frameworks throughout the various sectors of the economy. Currently, monitoring efforts are constrained in terms of both scope and coverage (Koranteng, 2000). Several research endeavors have delved into the realm of project success, seeking to identify key markers of achievement. Raymond and Bergeron (2008) outlined various metrics gleaned from literature, which encompassed the reduction of task completion time, enhanced control over activity costs, improved budget management, refined activity planning, more effective activity monitoring, efficient resource allocation, and enhanced project schedule oversight. Scholarly discourse has framed project success around several dimensions: meeting or surpassing the promised scope, adhering to schedules and budgets, achieving specified quality standards, attaining project objectives, and ultimately generating substantial organizational value post-project completion (Papke-Shields, Beise, Quan, 2010; Pretorius, Steyn, Jordaan, 2012).

Monitoring and evaluation (M&E) stand out as pivotal components within projects, recognized as critical success factors. Kontinen and Robinson (2014) revealed that despite the existence of M&E functions, a majority of sampled projects were perceived as successful. This success was attributed to proficient management of scope, time, cost, quality, and human relations.

In Kenya, the landscape of project outcomes includes notorious instances termed "white elephants," denoting failures like the abandoned fertilizer plant in Mombasa, maize cob processing factory in Eldoret, and molasses plant in Kisumu. Conversely, there are projects, like the Mombasa-Nairobi oil pipeline, initially met with political opposition but eventually proved productive (Kihoro, 2012). Beyond political dynamics, various factors shape project outcomes. Kontinen and Robinson (2014) highlighted challenges confronting M&E functions, such as inadequate monitoring tools, ambiguity in defining performance indicators, and insufficient time allocation. When M&E encounters such hurdles, its efficacy diminishes, impacting project success. In Kenya, empirical studies showcase instances of successful projects, exemplified by initiatives like the Youth Enterprise Development Fund, aimed at bolstering economic opportunities for the youth and fostering their participation in nation-building (Kihoro, 2012).

Many organizations have pointed out the importance of M&E frameworks in program implementation. Government initiatives and programs in Kenya are overseen and assessed at the

county and national levels, relying on frameworks such as the National Integrated Monitoring and Evaluation System (NIMES) and the County Integrated Monitoring and Evaluation System (CIMES) (State Department for Economic Planning, 2022). The CIMES framework guides the M&E structure establishment, development, implementation, and maintenance to monitor the development initiatives. The M&E framework moderates the achievement of national and county initiatives. Tharaka Nithi County, through the County Integrated Development Plans (CIDPs), aims to achieve positive socioeconomic outcomes for the residents (County Government of Tharaka Nithi, 2023). Various social development programs are geared towards realizing this objective, such as increasing access to safe water for the county's residents, increasing access to basic healthcare, and activating dormant cooperative societies. Against this backdrop, the researcher sets out to discover the impact of M&E on the performance of Kakimiki water development program in Tharaka Nithi.

### **Statement of the Problem**

The 2010 Constitution created 47 new decentralized administrative units in the form of counties. Improving the efficiency of decentralized functions and allocating resources to enhance the delivery of services in a more streamlined and effective manner is a core issue of devolution. M&E forms an essential part of enhancing service delivery in counties. The CIMES approach guides this initiative. Studies show that nearly 30% of counties continue to face challenges in resource management and service efficiency, largely due to a lack of structured Monitoring and Evaluation (M&E) processes (KIPPRA, 2023). Lack of capacity and poor coordination between national and county governments are key barriers to optimizing devolution (World Bank, 2021). As of 2023, only 51% of counties had fully updated their e-CIMES platforms, with 49% of counties including Tharaka Nithi failing to meet basic reporting standards due to data collection issues affecting accountability and performance evaluation (KIPPRA, 2024). This statistic highlights the gaps in adopting technological tools to streamline M&E practices.

According to the Revenue Administration (CRA, 2022), 60% of County governments do not have a Monitoring and Evaluation system to track service results. This failure leads to poor performance in key sectors such as health, agriculture and infrastructure, directly affecting the overall development of the economy. Further, according to Cooper and Schindler, (2011), research shows that 35% of Counties have low community participation in monitoring and evaluation activities. This lack of participation reduces transparency and accountability in government projects and undermines the trust of local communities and local governments. Limited resources are very challenging. According to the Council of Governments (COG, 2023), 43% of counties reported that financial constraints hinder their ability to hire skilled monitoring and evaluation staff and invest in equipment that can collect accurate information. Counties such as Tharaka Nithi are particularly affected by these financial constraints.

Conducting cost-benefit analysis remains an important issue. Data shows that 42% of counties have difficulty in measuring the benefits of monitoring and evaluation activities, while 35% face difficulties in determining and measuring their effectiveness (Oballa, 2014). This impacts the importance of program development and efficient allocation of resources. A report by the United Nations Development Program (UNDP) (2022) shows that 48% of Counties continue to struggle to align their monitoring and evaluation frameworks in achieving Sustainable Development Goals (SDGs) especially in poverty reduction, health, education and development. Tharaka Nithi is one of the economic regions that lag behind in achieving sustainable development goals due to weak monitoring and evaluation.

The success of the Monitoring and Evaluation process in Kakimiki water development program is still a major worry in Tharaka Nithi County, as it affects the long-term provision and impact of services to the community. M&E frameworks are being implemented, but problems still exist that prevent them from working as effectively and as efficiently as they could. Orodho and Kombo (2002) state that the main problem is the insufficient assessment and measurement of program results, which makes it difficult for the county to determine the actual effectiveness of its water development efforts. The validity and reliability of M&E processes are compromised by inadequate data collection techniques and irregular monitoring procedures, which makes it more difficult to make well-informed decisions and develop strategic plans (Mugenda & Mugenda, 2017). These problems are made worse by the problem of resource limitations. According to Downing (2004), the county is unable to carry out thorough evaluations and carry out the required improvements due to a lack of funding and human resources devoted to and functions. The overall effectiveness and impact of social development programs are put at risk when financial strain prevents the acquisition of necessary tools, technologies, and personnel for the execution of M&E activities. This study therefore aims to examine how M&E processes affects performance of Kakimiki water development program in Tharaka Nithi County. Specifically, it seeks to understand how community engagement in M&E, resource allocation, sustainability and quality service delivery, affects the performance of this water development program. This study will therefore, fill gaps in understanding the effectiveness of M&E processes in Tharaka Nithi County and provide insights for improving the design and implementation of Kakimiki water development initiatives implemented by the County.

### **Objective of the study**

To determine how M&E processes affect the performance of Kakimiki water development program in Tharaka Nithi County.

### **Specific Objectives**

- i. To examine how community engagement affects the performance of Kakimiki water development program.
- ii. To determine how allocation of resources affects the performance of Kakimiki water development program.

### **Theoretical Review**

#### **Program Theory**

The program theory was developed by Weiss 1972 and defined by Bickman (1987) and further elaborated by Lipsey (1993), Rossi (2004), and Rogers (cited in Uitto, 2000), outlines a conceptual model for how a program is expected to function and bring about desired changes. It involves the strategic deployment of resources, organization of program activities, and assessment of outcomes to ensure the intended social benefits are achieved. This theory serves as a framework for understanding and evaluating program effectiveness by examining how resources are allocated, utilized, and how interventions are delivered to target populations.

In this study, the selected objectives are aligned with the principles of program theory. The theory emphasizes the importance of resource deployment and organization to achieve intended outcomes, as well as the significance of monitoring and evaluation in ensuring program effectiveness. Specifically, the theory guides the exploration of how the organization manages its resources, including personnel and funding, to enhance monitoring and evaluation systems.

Additionally, it helps in understanding how external factors such as regulatory compliance is addressed to support monitoring and evaluation efforts Rossi (2004). Program theory is intricately linked to the outcome of monitoring and evaluation on the performance of county-funded social development programs in Tharaka Nithi County, Kenya. Program theory serves as the underlying framework that outlines the intended outcomes, activities, and mechanisms of these social development programs. Through monitoring and evaluation, stakeholders can assess whether the actual implementation aligns with the program theory, identify areas for improvement, and measure the effectiveness of the programs in achieving their intended impacts. By understanding and applying program theory in the monitoring and evaluation process, stakeholders can make informed decisions to enhance the performance and outcomes of county-funded social development programs in Tharaka Nithi.

### **Contingency Theory**

The contingency theory of organizational structure, introduced by Henri Fayol in 1960, proposes that the most effective organizational design is one that aligns with its potential outcomes. This theory emphasizes the uniqueness of organizations and the need for management approaches to adapt to various factors. It challenges traditional management models and suggests that management should be flexible to respond to environmental factors such as stability, complexity, diversity, and hostility. Mintzberg (1979) identified 11 contingency factors, including aspects of the environment and organizational design parameters.

The study focuses on four selected variables relevant to the contingency approach. Different organizations adopt different strategic designs based on their goals and the prevailing economic, social, political, and cultural environment. Contingency theory, within the context of the enhancing effectiveness of M&E processes on social development programs in Tharaka Nithi county, Kenya, presents an insightful framework for understanding the nuanced relationship between organizational structures, environmental factors, and the effectiveness of monitoring and evaluation practices.

Contingency theory suggests that the success of monitoring and evaluation initiatives within county-funded social development programs is contingent upon various factors, including the unique characteristics of the programs, the socio-economic context of Tharaka Nithi County, and the capabilities and capacities of the implementing organizations. Contingency theory would argue that different programs may require different monitoring and evaluation approaches tailored to their distinct goals, target populations, and intervention strategies. Moreover, environmental factors such as political dynamics, resource availability, and community engagement levels can significantly influence the performance of monitoring and evaluation efforts.

### **Empirical Review**

#### **Community Engagement and Performance of Kakimiki Water Development Program**

Manusawai et al. (2020) investigated community engagement in Indonesia's nursery program, finding that involvement of community leaders significantly motivated engagement. Hermawan and Hutagalung (2020) similarly explored participation in government programs, highlighting trust, opportunity, ability, and willingness as key factors. Majee et al. (2020) focused on South Africa, linking community leadership participation to perceptions of resource provision's impact on future community. However, these studies relied solely on qualitative methods. In contrast, the

current study employs a comprehensive approach, integrating both qualitative and quantitative methodologies to enhance validity.

Another study by Hidayati et al. (2018) on the impact of women's empowerment through Corporate Social Responsibility programs in Indonesia found that community involvement strengthened the implementation process leading to better results. While projects are endeavors designed to produce a set of outcomes within planned and constraining cost and budget.

The study conducted by Abdullahi, Ahmed, and Sale (2019) investigated the impact of community participation on the sustainability of the Bauchi State Local Empowerment and Environmental Management Project in rural Nigeria. Data collection involved open-ended questionnaires and focus group interviews with various stakeholders, including project records, managers, advisory councils, and community members. The findings revealed that the level of community involvement primarily consisted of providing information, consultation, and commitment, with limited engagement in decision-making, planning, monitoring, and evaluation activities.

Bourne, (2019) in his study on effective stakeholder engagement, describes stakeholders as individuals or groups affected or who affect the attainment of a project's objectives. He suggests that stakeholders have the power to tilt the performance of any organization depending on how they are involved. Bourne proved that it is impossible to build a sustainable organization of any type, whether profitable or not, without meeting the needs of most (if not all) of its stakeholders, most of the time. His conclusion work was however based on secondary data.

Wanyera (2016) study examined the influence of community engagement on sustainability of community-based projects: A Case of Kiambu Water and Sanitation Slum Project, Nairobi County, Kenya. A descriptive survey research design was used. The selection of respondents was made using systematic random sampling methodology. Questionnaires were used to collect from the respondents both quantitative and qualitative data. Regression analysis found that there is a significant relationship between community participation and project sustainability: if community participation is low, sustainability of community-based projects is negatively influenced.

Study by Alelah and Mueke (2017) studied the degree to which community engagement impacts water and sanitation management initiatives in Rhonda Slum, Nakuru County, Kenya. Cluster sampling was the sampling method used. The collection of data included the use of questionnaires. Data were analyzed for both descriptive and inferential statistics. From the results, the study found that the community participation and sustainability of WASH projects had a significant positive impact.

Ondongo and Ombui (2019) examined governmental initiatives in Kibera, engaging 116 participants from four selected projects. They discovered that community engagement strongly influences project success, supporting Ltumbesi and Okech's (2016) view that project owners, as primary beneficiaries, are highly motivated for success. Nonetheless, the study's drawback is its limited sample size, which may compromise the applicability of its conclusions.

Wangeci, (2019) assessed elements that affect the performance of Agricultural projects with exceptional reference to the NALEP projects in Ruiru in Kiambu County. The study found that the ignorance of community engagement at the initiation stage of the project affected the enactment of the NALEP project followed by the process of planning, execution, and monitoring and evaluation. Poor project identification, selection, and preparation may kill the project at an early stage.

### **Allocation of Resources and Performance of Kakimiki Water Development program**

Sebastian (2018) conducted research in Tanzania to investigate the impact that budgeting has on the financial performance of a number of different industrial companies located in the Kinondoni District of Dar es Salaam. The study adopted a descriptive study approach, and 75 people from different industrial institutions were our participants. It was discovered that formal budgeting planning has a number of distinct categories, each of which has a unique influence on a company's financial success. When compared to the official budgetary control, this strategy has a far bigger influence on the growth of sales at institutions that are involved in manufacturing.

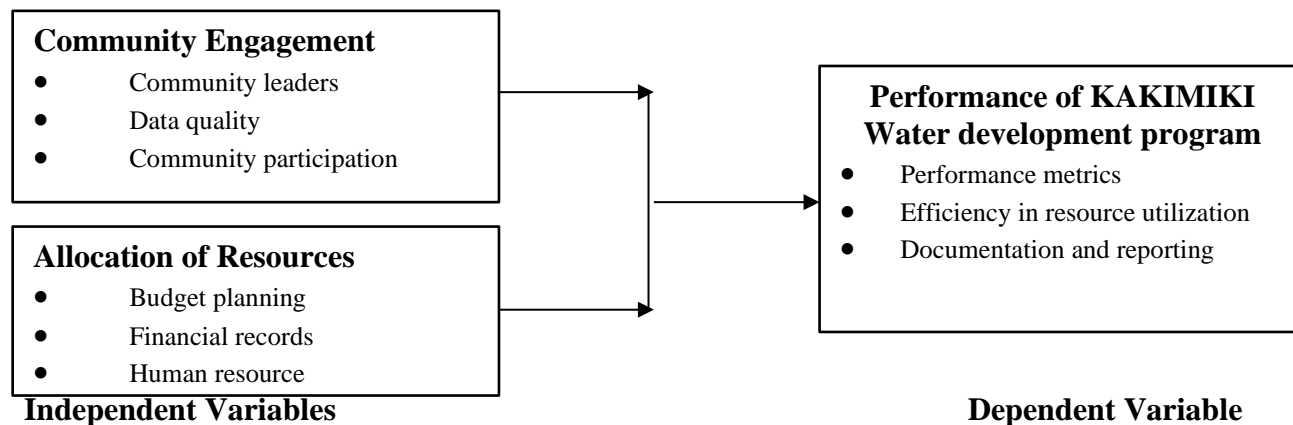
Study by Wachira and James (2018) in Kiambu, Kenya found that keeping proper financial records, good budgeting and funds mobilization greatly influence the community-based projects implementation. The study further revealed that budgeting and keeping proper financial records plays a significant role in ensuring transparency that give donors confidence in the projects who continue donating more, which contribute to making their implementation process successful. The study majored on the management of the availed funds but did not shed light on donor project's fundraising and the effects of program efficiency which is associated with donor funds restrictions common to the majority of donor development projects.

According to a study on M&E factors impacting development project performance conducted in Kenya (Wachaiyu, 2016), budgetary allocation, the size of the monitoring team, the technique and device selection, and the M&E plan were all crucial in determining the success of development projects. The study found that M&E has a significant impact on project performance, although many important development projects have not used it to its full potential.

In Kenya, Kimunguyi et al, (2015) researched on the impact of budgetary planning on financial tasks of NGOs in the Health sector. The researchers used descriptive research design and found that budgetary planning has a significant effect on financial takes of NGOs in the Health sector. Results also revealed that budgeting guides' management planning, gives a good framework for assessing performance and also encourages effective coordination and communication among diverse departments of NGOs.

### **Conceptual Framework**

A conceptual framework is a theoretical structure that provides a systematic and organized way of understanding, analyzing, and interpreting a particular phenomenon, problem, or research topic. It serves as a blueprint or guide for conceptualizing ideas, organizing thoughts, and formulating hypotheses or theories. In regard to this study, it will include key concepts, variables, relationships, assumptions, and propositions that underpin the study. The study will be an appropriate case study for examining the impact of M&E on performance outcomes within the context of water development program in Tharaka-Nithi County. The conceptual framework informs the understanding of key concepts essential to the research program as illustrated below:



**Figure 2. 1: Conceptual Framework**

### Community Engagement

Community engagement refers to the process of actively involving individuals and groups in decision-making, planning, and actions that affect their community. It emphasizes collaboration between local residents, organizations, and institutions to foster a sense of ownership, accountability, and empowerment (Wanyera, 2016). This engagement can take various forms, such as public meetings, workshops, volunteer opportunities, and partnerships with local organizations (Bourne, 2019). Community leaders play a vital role in fostering collaboration, guiding initiatives, and advocating for the needs and interests of their constituents. These individuals often emerge from within the community, possessing a deep understanding of local issues, culture, and dynamics. Effective community leaders engage with diverse groups, facilitate discussions, and build consensus around common goals. They serve as a bridge between residents and external stakeholders, such as government entities or nonprofit organizations, ensuring that community voices are heard in decision-making processes. By inspiring and mobilizing community members, leaders help cultivate a sense of belonging and collective responsibility, ultimately driving positive change and development (Abdullahi, Ahmed, & Sale, 2019).

Data quality is crucial for informed decision-making and effective program implementation within communities. High-quality data is accurate, reliable, and relevant, providing a solid foundation for understanding community needs, assessing resources, and measuring outcomes. Poor data quality can lead to misguided strategies, wasted resources, and missed opportunities for improvement. To ensure data quality, it is essential to establish robust data collection methods, maintain data integrity, and regularly evaluate the relevance and timeliness of information. Communities that prioritize data quality can better identify challenges, track progress, and make evidence-based decisions that lead to meaningful, sustainable impacts (Hidayati *et al.*, 2018). Community participation is the active involvement of residents in the processes that affect their lives and environments. This engagement can take many forms, including attending public meetings, joining local organizations, or participating in community projects. When community members are encouraged to contribute their perspectives and expertise, it fosters a sense of ownership and responsibility for local initiatives (Manusawai *et al*, 2020). Effective community participation enhances transparency, builds trust, and ensures that diverse voices are considered in decision-making. Moreover, it empowers residents by validating their experiences and knowledge, leading to more responsive and effective solutions. Ultimately, robust community participation is essential for creating vibrant, resilient communities that reflect the needs and aspirations of all their members (Kimando, Njogu, & Kihoro, 2018).



## **Allocation of Resources**

Allocation of resources refers to the systematic distribution of available assets, such as finances, personnel, time, and materials, to various programs, projects, or departments within an organization or community (Alelah & Mueke, 2017). This process involves assessing needs, setting priorities, and making strategic decisions to ensure that resources are used efficiently and effectively to achieve desired outcomes. Effective allocation considers factors such as urgency, potential impact, and alignment with overarching goals. It aims to optimize the use of limited resources, ensuring that they are directed toward areas that will yield the greatest benefit, support sustainability, and enhance overall productivity. Budget planning is the process of creating a financial framework that outlines an organization's expected income and expenditures over a specific period, typically a fiscal year (Ondongo & Ombui, 2019). This critical activity involves assessing current financial status, forecasting future revenues, and identifying necessary expenses to support programs and initiatives. Effective budget planning ensures that resources are allocated efficiently, priorities are set, and financial goals are met. It also includes monitoring actual spending against the budget, allowing for adjustments as needed. By engaging stakeholders in the budgeting process, organizations can foster transparency, build trust, and ensure that the budget reflects the community's needs and strategic objectives (Wangeeci, 2019).

Financial records are essential documents that track an organization's financial transactions and provide a clear picture of its financial health. These records typically include income statements, balance sheets, cash flow statements, and detailed transaction logs. Maintaining accurate and up-to-date financial records is crucial for accountability, compliance with regulations, and informed decision-making (Sebastian, 2018). They enable organizations to analyze trends, assess performance, and identify areas for improvement. Additionally, well-organized financial records facilitate external audits and support funding applications by demonstrating fiscal responsibility and transparency. Ultimately, robust financial record-keeping underpins effective budget management and strategic planning (Wachira & James, 2018). Human resources (HR) encompass the strategies, practices, and systems involved in managing an organization's workforce. This includes recruitment, training, performance management, and employee relations, all aimed at maximizing employee potential and fostering a positive work environment. Effective HR practices ensure that the right talent is acquired, developed, and retained, aligning individual skills and goals with organizational objectives. Additionally, HR plays a key role in promoting workplace culture, addressing employee needs, and ensuring compliance with labor laws and regulations. By prioritizing human resource management, organizations can enhance employee engagement, productivity, and overall organizational effectiveness, ultimately driving success and sustainability (Kimunguyi et al, 2019).

## **RESEARCH METHODOLOGY**

### **Research Design**

Research design was defined as a framework of methods and techniques chosen by a researcher to combine various components of research in a reasonably logical manner so that the research problem is efficiently handled. It provided insights about "how" to conduct research using a particular methodology. Every researcher has a list of research questions which need to be assessed which can be done with research design. The sketch of how research should be conducted can be prepared using research design (Blaikie, 2000).

The study employed a descriptive research design. This design was adapted because of its ability to determine the frequency of how something occurs or the relationship between variables (Polit & Beck, 2013). Further, its ability to generate accurate information for a large number of people over a wide area using a small sample, explore relationships between variables and allow generalizations across populations (Orodho (2005).

According to Sekaran and Bougie (2010), a population is the total collection of elements about which we wish to make inferences. The study plans to work with a target population of 400 composed of the county representatives, contractors and project management and the community who are the direct beneficiaries of this project. Committee members in Tharaka Nithi County. The target population was found important because they directly or indirectly benefit from the social development program in Tharaka Nithi.

**Table 3.3: Target Population**

Category	Frequency of target population
Community members	320
Project officers	20
Project committee	10
Project Stakeholders	50
Total	400

**Sampling Frame**

In relation to this study, a sampling frame is a set of source materials from which the sample was selected. The researcher administered the questionnaire to project officers, the community members, Project Stakeholders who have directly or indirectly benefited from the water project and project committee who implemented or planned for execution of Kakimiki Water development program. Target population were the residents of Tharaka.

**Sample and Sampling Technique**

Sampling was a deliberate choice of a number of people who were to provide the data from which a study drew conclusions about some larger group whom these people represent. The section focused on the sampling size and sampling procedures. Sample size was defined as the number of observations used for calculating estimates of a given population (Smith, 2009). The researcher also used simple random sampling in selection of respondents who participated in this study. For the sake of this research, the researcher applied the Yamane formula (1967) which elucidates that sample size can be calculated at 3%, 5%, 7% and 10% precision (e) levels. The researcher's confidence level was 95% with degree of variability (p) equivalent to 50% (0.5).

n = sample size N= target population (400) e = margin error of 5% in the proposed study, the sample size was calculated at precision level of 10% (e = 0.05). Sample size in this study was formulated as;

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{400}{1 + 400(0.05)^2}$$

$$n=400$$

$$1+1$$

$$n=200$$

**Table 3.2: Sample Size**

Category	Target population is (400): Frequency of target population is represented by;	% of sample size
Community Members	320	$320/400*200=160$
Project Officers	20	$20/400*200=10$
Project committee	10	$10/400*200=5$
Project Stakeholders	50	$50/400*200=25$
Total	400	200

### Data Collection Instruments

The researcher utilized a combination of primary and secondary data collection methods, facilitated through the customization of structured and semi-structured data collection instruments. The questionnaire had five sections including demographic characteristics, community engagement, Resource Allocation, Role of Monitoring and Evaluation and Effects of M&E on Quality Service Delivery. The researcher included both closed and open-ended questions. The questionnaire was the most used instrument because it was found to be more objective and convenient. Further, this approach aligns well with the chosen study design and is deemed suitable for generating referenced data.

### Primary Data

The study employed both structured and unstructured questionnaires for data collection. This approach ensured the validity and reliability of the tools used, while also allowing for clarification where needed. Structured questionnaires utilized a questionnaire for data collection. In contrast, semi-structured questionnaires involved face-to-face interviews for further clarification. The structured questionnaires were organized into three sections: Section A emphasized on demographic data, Section B addressed Community Engagement, Resource Allocation, and Section C focused primarily on Role of M&E in sustainability and M&E on service quality.

In order to ascertain validity, the instrument was tailored to align with the research objectives. Before the questionnaire was administered, scholars from the department of procurement and entrepreneur assessed the data collection instrument to ascertain it had adequately covered the relevant content area. As noted by Mugenda and Mugenda (2003), validity refers to how well the data analysis results truly represent the phenomena being studied.

Reliability of the study was ensured through use of internal consistency technique which was employed, as outlined by Mugenda and Mugenda (2003). According to this method, the score obtained from one item is correlated with scores from other items within the instrument. This approach aligns with Trochim's (2002) assertion that reliability pertains to the consistency of measured results across multiple attempts.

### Secondary Data

This research incorporated secondary data which was obtained from County published reports and from the strategic plans of program activities. This information focused on a 10 years' period from

2014-2024. This procedure made the work easy in terms of getting information and convenient in general discussion of this study.

### **Data Collection Procedure**

In order to carry out this research, the researcher received an introductory letter from the Jomo Kenyatta University of sciences and technology authority and also the permit from the National Commission of Science, Technology and Innovation (NACOSTI) before carrying out the research. The researcher then disseminated questionnaires to the target population face to face through ODK approach. The ODK helped to monitor completed questionnaires to avoid incomplete or questionnaires not being submitted.

### **Pilot Test**

In order to avoid confusion on erroneously devised data collection tools, a pilot study was conducted at Tharaka Nithi County to provide an overview of the study population. A small sample size was administered with the questionnaire to help the researcher gather some useful information which was necessary to monitor how the whole process of data collection looked like. It also helped the researcher to draw assumptions of the research, the correctness of the chosen questionnaire and the usefulness of the adopted research design and methodology in investigating the research problem.

### **Data Processing and Analysis**

Collected data from the field was sorted, grouped and analyzed. The researcher conducted quantitative data analysis using the Statistical Package for Social Sciences (SPSS). Specifically, multiple linear regression analysis based on the data and research questions. While qualitative data was interpreted and presented in the form of an idea. The researcher used SPSS to scientifically analyze all important data relevant to this study. Further, the study also used both qualitative and quantitative data analysis to explore the study more especially on the research findings. The researcher used inferential statistics for data analysis. Data analysis software, Statistical Package of Social Science (SSPS) was used to analyze, verify errors, and check consistency and completeness of data. The model shown below computes the correlation between independent and dependent variables under study. Multiple linear regression model was:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + e$$

Where:

Y = dependent variable (Performance of Kakimiki Water development Program)

a = Intercept

$\beta_i$  = Partial regression coefficient ( $i = 1, 2, 3, 4$ )

$X_i$  = independent variables

( $X_1$  =Community engagement,  $X_2$  = Resources allocation,)

e = Error term

**ANALYSIS AND PRESENTATION**

**Descriptive Statistics Analysis**

**Community Engagement**

**Table 4.1. Community Engagements**

Items	Descriptive Statistics						
	N	Min	Max	Mean	Std. D	Variance	
Community participation in M&E improves the performance of Kakimiki Water development program.	200	1.0	5.0	3.655	.7408	.549	
There are adequate opportunities for community members to participate in M&E activities.	200	1.0	5.0	3.500	.8507	.724	
The feedback from community members is taken seriously and acted upon by Kakimiki Water development program.	200	1.0	5.0	3.475	.9075	.823	
Kakimiki Water program effectively communicates its goals and objectives to the community.	200	1.0	5.0	2.740	1.4467	2.093	
Data quality is maintained through community involvement in the program.	200	1.0	5.0	2.795	1.3720	1.882	
Valid N (list-wise)	200						

The study also explored the community engagement using descriptive statistics. From the table 4.3.2 above all mean below 2.99 indicate a slight lean towards disagreement with the standard deviations while those between 3.0-3.44 indicate a neutral ground. Those above 3.55-4.00 indicated a slight lean towards agreement. On the other hand SD between (0.9-1.03 showed a moderate variability while those greater than 1.4> showed diverse range of opinion). From the findings,

From the findings whether Community participation in M&E improves the performance of Kakimiki Water development program. (Mean of 3.66, SD 0.74), There are adequate opportunities for community members to participate in M&E activities (mean=3.50, SD=0.85), the feedback from community members is taken seriously and acted upon by Kakimiki Water development program. (Mean=3.48, SD=0.91), Kakimiki Water program effectively communicates its goals and objectives to the community (mean =2.74, SD=1.45) and lastly Data quality is maintained through community involvement in the program (mean=2.79, SD 1.37). The data shows a dispersion of opinions, with a noticeable tilt towards agreement and disagreement suggesting that respondents held a variety of viewpoints. The survey results revealed a wide range of views but tended to be either agreeing or disagreeing with a few of the respondents being neutral specifically on community feedback. The diversity of responses suggests some acceptance of community participation but mixed views, suggesting room for improvement. The researcher found a positive impact on community participation in monitoring and evaluation, but the mixed responses suggest that integrated strategies are needed and have a good impact. Although the diversity of responses highlights the need for improvement in some areas, overall the study was successful in achieving of objective one.

The figure 4.1 above indicated the strategies used by County to engage the community members. From the figure, 74.5% were of the views that surveys and questionnaires were the major strategies used to engage the community, 17% reported the public meetings and forums while 8% were of the views that focus group discussion was the strategies employed with 0.5% of the respondents reported advisory committee as the main strategies. Based on the data above, it is evident that majority of the respondents agrees on surveys and questionnaires.

The finding indicates participatory approach being used to engage the community with mixed methodology of both qualitative and quantitative of data collection being utilized. This study findings provide different perspectives and strategies in regards to community engagements in regards to Abdullahi, Ahmed, and Sale (2014) whose findings revealed that the level of community involvement primarily consisted of providing information, consultation, and commitment, with limited engagement in decision-making, planning, monitoring, and evaluation activities. However, the study contributed in the achievement of research objectives one.

### **Resource Allocation for M&E Activities and Performance of Water Development Program.**

In terms of resource allocation for M&E activities, the figure 4.3.2, provide summary of the findings. 36.5% of the respondents took a neutral ground while 29.5% reported that resources were adequately allocated for the M&E activities in the water development projects. On the other hand, 20% of the respondents reported that the resources were inadequate on the M&E sector especially in the water development project with 11% and 3% reporting that resources were very adequately allocated and very inadequately reported.

The findings implies that resource allocation arose as an issue because the resources of a project are always limited in supply and can have many alternative uses. Based on experience and specifics of each M&E system, it is possible to determine the amount of necessary resources in regards to each M&E step. It also relates with the research of Cristina, (2012) who narrates, that resources in capacity should be included in M&E, which should be categorized into three; (a) financial capacity to do M&E; (b) Human capacity to do M&E (People, skills and knowledge) and (c) Physical capacity to do M&E (equipment, technology and machines) (UNAIDS, 2008).

This implies that, credibility of information gathered from M&E system that is underfunded would be questioned more so on the quality of that information. More likely is the fact that crucial data may have been left out. This also echoes the work of Briceno on ability to gather and interpret data to make it usable and the ability to themselves use the same is the key element of investing resources in M&E personnel (Briceño, 2010).

**Table 4.2. Degree of Agreement on Resource Allocations**

Item	Descriptive Statistics					
	N	Min	Max	Mean	Std. D	Variance
Sufficient funding is provided for M&E activities for Kakimiki program	200	1.0	5.0	3.250	.8492	.721
Financial records are accurately maintained for the Kakimiki water development program.	200	1.0	5.0	3.050	1.2103	1.465
There are enough skilled personnel available to carry out M&E activities for Kakimiki program in the county	200	1.0	5.0	2.995	1.1841	1.402
There is adequate training for staff involved in M&E	200	1.0	5.0	3.040	1.2394	1.536
Implementation of M&E does not face any obstacles financial or material challenges for Kakimiki program	200	1.0	5.0	2.670	1.4217	2.021
Resources for M&E are effectively utilized by Kakimiki program	200	1.0	5.0	2.835	1.3738	1.887
Valid N (listwise)	200					

The study also explored the degree of agreement on resource allocations using descriptive statistics. From the table 4.2 all mean below 2.99 indicate a slight lean towards disagreement with the standard deviations while those between 3.0-3.44 indicate a neutral ground. Those above 3.55-4.00 indicated a slight lean towards agreement. On the other hand SD between (0.9-1.03 showed a moderate variability while those greater than 1.4> showed diverse range of opinion).

In terms of whether Sufficient funding is provided for M&E activities for Kakimiki program (mean of 3.25, SD 0.85), Financial records are accurately maintained for the Kakimiki water development program (mean=3.05, SD=1.21, There are enough skilled personnel available to carry out M&E activities for Kakimiki program in the county (mean=2.99, SD=1.18), There is adequate training for staff involved in M&E (mean =3.04, SD=1.24), Implementation of M&E does not face any obstacles financial or material challenges for Kakimiki program (mean=2.67, SD=1.42) and Resources for M&E are effectively utilized by Kakimiki program (mean=2.84, SD=1.37). The data shows a dispersion of opinions, with a noticeable tilt towards disagreement or neutrality, suggesting that respondents held a variety of viewpoints. Confirming the achievement of answering of the one research objectives and achievement of objective one.

The findings implied and revealed nuances in understanding monitoring and evaluation (M&E) practices, as evidenced by the statistical data. There is a clear indication of disagreement of the respondents, as the average for Implementation of M&E does and obstacles on financial or material challenges for Kakimiki program 3.0, while the results for Resources for M&E are effectively utilized by Kakimiki program hover below average. The medium to high level of differences also demonstrates the diversity of views, reflecting different experiences and perspectives on M&E support in water project. Overall, these views confirm the original research objectives and suggest important points for improving resource allocation and staff training in order to improve M&E activities. The finding are also in support of Sebastian (2018) on budget planning and Kimunguyi et al, (2015).

## Regression Analysis

Table 4.3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.733a	.540	0.466	0.678	1.794

Table 4.6.2 above represented regression analysis. From the table, the following were concluded; Dependent Variable were The Performance of Kakimiki Water development program which demonstrated high performance in achieving their objectives. Predictor were community engagement, resource allocation, and sustainability and service delivery.

The regression model was as follows:  $Y = a + \beta_1X_1 + \beta_2X_2 + e$

The regression was conducted to identify how independent variables influence the dependent variables. Findings on the table above had R-square value of 0.540 which shows that 54% of the variation in the dependent variable can be explained by the independent variables in the multi regression model used. It also indicates that 46% variables are left unexplained as the researcher did not put more attention on them. According to Howell (2002), measures of goodness of fit typically summarize the discrepancy between observed values and the values expected under the model in question.

**Table 4.4. Variance Analysis: Anova**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	86.823	2	43.412	197.337	.000 <sup>b</sup>
	Residual	76.998	175	0.445		
	Total	181.188	200			

Table 4.6.3 represented the variance analysis for the study. The following were the findings;

The significance value (p-value) was 0.000, which indicated that the results were statistically significant at conventional levels ( $p < 0.05$ ). The F-value was 197.337. The higher the F value suggests there was variance in the dependent variables. The model was considered a good fit for the study. Therefore, the model can be used to predict the influence of community engagement, resource allocations, sustainability and service quality on performance of Kakimiki Water social development program in Tharaka Nithi County.

Regression analysis produced the coefficient of determination and analysis of variance (ANOVA). Analysis of variance was done to show whether there is a significant mean difference between dependent and independent variables. The ANOVA was conducted at 95% confidence level. According to Katz (2006) Regression analysis generates an equation to describe the statistical relationship between one or more predictor variables and the response variable.



**Table 4.5 Coefficient of Determination**

**Coefficients**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.542	0.318		1.327	0.238
Community engagement	0.782	0.072	0.054	0.912	0.342
Resources allocation	0.458	0.053	0.371	5.535	0.000

The table 4.6.4 above was an analysis of regression analysis and coefficient. From the table, the following was concluded;

The regression equation developed was:  $Y = 0.542 + 0.782X_1 + 0.458X_2 + \epsilon$ .

$X_1$  – community engagement;  $X_2$ – resource allocation. The study findings further asserted that; Community engagement ( $\beta = 0.782$ ;  $p = 0.342$ ) and resource allocation ( $\beta = 0.458$ ;  $p = 0.000$ )

**Table 4.6. Correlation analysis – 2 tailed**

Variables being correlated	mean	SD	1	2	3	4
Community participation	3.66	0.74	1			
Allocation of resources	3.05	1.21	.585**	1		

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 b. Listwise N=200

Source: SPSS analysis

The table 4.6.5 presented findings a correlation analysis between independent and dependent variables: community participation and allocation of resources. Correlations were assessed using the Pearson correlation coefficient based on a sample size of 200.

The mean value of community participation was 3.66 with a standard deviation of 0.74. This variable showed a moderate positive correlation with other variables. Its correlation with resource allocation was 0.585, indicating a moderate correlation. This means that higher community participation was associated with better allocation of resources. It also had moderate correlations with sustainability (0.523), indicating that more communities with higher engagement were more likely to pursue sustainable practices. The correlation of service quality was 0.381, which means there was a modest relationship between community participation and service quality. Finally, the correlation with water development was 0.493, indicating that community engagement tends to improve water developmental outcomes.

In terms of resource allocation the mean was 3.05 with higher standard deviation of 1.21, indicating a wide range of knowledge regarding resource allocation. Sustainability had a higher correlation for resource allocations at (0.523), indicating a significant moderate relationship. This means that good resource allocation could results to sustainability of water project. Also, there was a moderate

lower correlation with service quality at (0.493), indicating that although resource allocation improved service quality, the relationship was less likely than other correlations.

The significant level of 0.01 indicated that the correlation among different variables were not by chance (1%) indicating a confidence level of a 99% confidence.

**Table 4.7. Correlation Analysis – 1 tailed**

Variables being correlated	Correlations <sup>b</sup>			
	Mean	SD	1	4
Community engagement	3.66	0.74	1	
Service quality	3.38	0.95	.493**	1

\*\* . Correlation is significant at the 0.01 level (1-tailed).

b. Listwise N=200

In relation to table 4.6.6 above, represents the results of the engagement of the community members into Monitoring and Evaluation revealed its effects on performance of Kakimiki water development Program. As a matter of fact, the respondent’s description on the contributions of community engagement for M&E activities ranged from an average score of 3.66 with a standard deviation of 0.74. This means that most of the participants believe that community engagement played an important role in the provision of quality service from by water development program.

In addition, the quality service provision by Kakimiki Water development program received a lower mean rating of 3.38 with a standard deviation of 0.95. This indicates that, while some programs are performing moderately above average, some programs were not meeting expectations.

The combined numerical reading of the Pearson correlation coefficient that is 0.493 signifies a moderate degree of positive correlation between the indicator of community engagement in M & E and quality of service provided by Kakimiki Water development program, which was statistically significant at the alpha 0.01 level. This means that the more the community gets involved in M and E, the better the service quality they are likely to receive.

## Conclusion

In regards to research objective and question one; the researcher findings indicated that community participation was not well structured and opinion leaders and policy makers were targeted to represent the whole population during participation.

In relation to objective and question two on’’ It was notable that resource allocation arose as an issue because the resources of a project are always limited in supply and any given resource can have many alternative uses, which emphasizes the role of budget planning, financial record and human resources in addressing how m&e processes affects performance of Kakimiki Water development program in Tharaka Nithi County.

The research also generated the following regression equation:  $Y = 0.542 + 0.782X_1 + 0.458X_2 + \epsilon$   
 $X_1$  – community engagement;  $X_2$ – resource allocation. The study findings further asserted that; Community engagement ( $\beta = 0.782$ ;  $p = 0.342$ ) and resource allocation ( $\beta = 0.458$ ;  $p = 0.000$ )

## Recommendations

Since the study concluded that the researcher findings indicated that community participation was not well structured, the County government of Tharaka Nithi should; develop a well-structured monitoring and evaluation processes that provide room for community participation rather than the selected few.

It was also noted that resource allocation arose either due to financial resources or resources being diverted to different use, the research recommends to the county government of Tharaka Nithi to provide a comprehensive budget planning and ensure monitoring and evaluation department at least receive between 5%-10% of the water development budgets and other sectors or more.

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