Influence of Participatory Monitoring and Evaluation on Sustainability of Water Projects in Rorya District Council

George Faraja^{1*} and Harrieth Mtae¹

¹The Open University of Tanzania *Corresponding Author: <u>farajageo@gmail.com</u>

Abstract

This study investigates the role of participatory monitoring and evaluation (PM&E) in promoting the sustainability of rural water supply projects in Rorya District, Tanzania. It focuses on four critical dimensions of participation: goal understanding, activity identification, progress measurement, and results reporting. Data were collected using structured questionnaire from random sample of 349 participants. Multiple regression analysis was specifically employed to examine the nature and strength of the relationship between participatory monitoring and evaluation components and the sustainability of rural water projects. The findings demonstrate that all four PM&E components—goal understanding, activity identification, progress measurement, and results significantly reporting—positively and contribute sustainability. Progress measurement had the strongest impact, reinforcing the role of accountability and informed decision-making. To enhance rural water project sustainability, project implementers should raise community awareness of project goals through sensitization campaigns; local leaders should facilitate inclusive planning; project managers must adopt simple monitoring tools and involve communities in tracking progress; and donors should ensure transparent, accessible reporting to build trust and accountability.

Keywords: Participatory Monitoring and Evaluation, Rural Water Supply, Community Participation, Tanzania,

INTRODUCTION

Access to sustainable and clean water is essential for life and community development (Mgoba & Kabote, 2020). Globally, governments have intensified efforts to ensure a reliable water supply through the implementation of various projects, particularly in rural areas where water scarcity hampers socioeconomic development and quality of life (Muniu, 2017). Despite these efforts, many regions in Sub-Saharan Africa (SSA)

continue to face severe water shortages, especially in rural communities. According to the World Bank (2018), only 56% of the rural population in SSA had access to improved water sources in 2015. In Tanzania, the figure was even lower at 46% (Kamara et al., 2017), highlighting a significant gap in water accessibility across the region.

One of the critical challenges lies not only in the availability but also in the quality of water used for household, agricultural, and other purposes (Chebet et al., 2020). Although government and development partners continue to invest in clean water projects, ensuring their sustainability remains a major concern (Minyiri & Muchelule, 2018). Sustainable water supply is vital for the well-being of rural communities, and as such, the long-term success of water projects depends heavily on community involvement and ownership (Oduor & Murei, 2020).

To address this, participatory monitoring and evaluation (PM&E) has emerged as a key strategy, encouraging communities to engage in project planning, implementation, and assessment actively. This participatory approach fosters stakeholder involvement in managing water projects and enhances project sustainability (Maimula, 2017). However, studies show that low levels of beneficiary engagement and willingness to participate in PM&E processes pose a challenge (Iddi & Nuhu, 2018). This lack of involvement can undermine project outcomes, limit community ownership, and prevent implementers from accessing valuable local knowledge that could improve sustainability (Jamaal, 2018; Agbenyo et al., 2021).

This study focuses on evaluating the effectiveness of participatory monitoring and evaluation in rural water projects in Tanzania, with a particular focus on Rorya District. The research emphasizes community understanding of project goals, activity identification, progress tracking, and outcome reporting. In Rorya District, water scarcity remains a pressing issue, disproportionately affecting women, who often collect water from unsafe sources. In response, the Government of Tanzania continues to invest in water supply projects in the region. Given these ongoing efforts, it is crucial to assess and strengthen participatory monitoring and evaluation mechanisms to enhance the sustainability and impact of such projects among beneficiaries.

LITERATURE REVIEW

Theoretical Framework

This study is grounded in Resource Dependency Theory (RDT), which explores how access to external resources shapes organizational behavior (Pfeffer & Salancik, 1978). According to the theory, organizations do not operate in isolation; rather, they rely on external inputs such as funding, expertise, and community support for survival and success (Yeager et al., 2014). RDT shifts the focus from internal lifecycle assumptions to the external socio-economic and cultural interdependencies that influence project implementation and sustainability (Bryant & Davis, 2012).

While originally applied to organizational contexts, RDT has also been used to understand how traditional knowledge systems and indigenous cultural practices contribute to sustainable development (Bhatt et al., 2015). In this light, it acknowledges the legitimacy of multiple epistemic perspectives, including local knowledge and practices within project management and impact assessment frameworks.

This theoretical lens is particularly relevant to rural water projects, which frequently depend on external resources such as donor funding, technical skills, and policy support. At the same time, their long-term sustainability hinges on internal community participation and ownership. By applying RDT, this study underscores the importance of identifying, managing, and aligning both external dependencies and internal capacities through participatory approaches such as monitoring and evaluation.

Empirical Literature Review

Understanding Project Goals and Their Role in Sustainability

Several studies emphasize the central role of community understanding of project goals in achieving sustainability. Mgoba and Kabote (2020) examined community-based water projects in Tanzania and found that participatory monitoring and evaluation (PM&E) significantly contributed to achieving project goals, particularly in NGO-funded initiatives. However, they also noted gaps in capacity development, which hindered full project success.

Similarly, Macharia et al. (2015), in a study of rural water projects in Naivasha, Kenya, concluded that understanding existing conditions, identifying service gaps, and addressing institutional limitations were foundational to sustained access to clean water. They emphasized that

community comprehension of project goals fosters a sense of ownership, which is crucial for long-term impact.

Jamaal (2018), evaluating projects at the Kenya Marine and Fisheries Research Institute, found that stakeholder involvement in planning and evaluation processes under PM&E frameworks enhanced project effectiveness. Importantly, Jamaal also highlighted how participatory strategies encouraged community resource mobilization, which further supported project sustainability.

Kibukho (2021) added that citizen empowerment, when integrated with PM&E, plays a more substantial role in achieving social sustainability than PM&E alone. His study emphasized the need for governments and development practitioners to prioritize empowerment initiatives alongside participatory practices.

Activity Identification and Its Effect on Sustainability

The identification and involvement in project activities are another critical factor in sustainability. Broad and Mulyungi (2018) studied food security projects in Rwanda and found that beneficiary participation in setting goals, designing monitoring tools, and collecting data significantly enhanced sustainability outcomes. Their regression analysis revealed a positive correlation between beneficiary engagement in all project phases and sustained project success. They recommend comprehensive involvement of beneficiaries at every stage, from planning to performance measurement.

However, Bakari and Mbunda (2022) observed a disconnect between participation and understanding in rural water delivery projects in Naivasha, Kenya. Many community members only participated during implementation phases due to the availability of financial incentives, not because of a genuine understanding or commitment to project goals. This suggests that participation alone is insufficient without parallel efforts to build awareness and foster ownership.

In Tanzania, Mgulo et al. (2022) examined rural water projects funded by NGOs in Chamwino District and found that weak community engagement across design, execution, and monitoring stages undermined sustainability. The study called for stronger involvement by village water committees and community structures to ensure long-term success.

Etongo et al. (2024) assessed community-managed water delivery systems and reported similar findings: many households lacked an understanding of project sustainability. Evidence such as decommissioned boreholes and poorly maintained infrastructure pointed to insufficient community involvement and unclear project goals. The authors recommended targeted capacity-building interventions, especially those focused on setting project objectives and integrating community members throughout the implementation process.

Contribution of Progress Measurement to the Sustainability of Rural Water Projects

Progress measurement plays a pivotal role in ensuring the sustainability of rural water projects. Several studies have demonstrated that the integration of participatory monitoring and evaluation (PM&E) mechanisms positively influences project outcomes by fostering transparency, ownership, and accountability.

Ochieng and Sakwa (2018) examined the impact of participatory mobilization on the well-being of beneficiaries involved in community water projects in Kisumu County, Kenya. Using a descriptive research design and a sample of 360 households, their study found a statistically significant relationship between project execution, resource mobilization, and improved welfare among recipients. The authors recommended that implementing agencies provide targeted training to community members to enhance their capacity in managing and maintaining water projects sustainably.

Similarly, Hassenforder (2016) explored challenges associated with selecting and implementing monitoring and evaluation methodologies in Uganda's Rwenzori Region. The study identified four key barriers that participatory evaluators face and illustrated how these issues manifest in practice. It emphasized the need for context-appropriate solutions to enhance PM&E implementation.

Oduor and Murei (2020) investigated community participation in monitoring and evaluation of rural piped water supply systems in Kenya. They found that community involvement accounted for up to 58.5% of the variance in sustainability outcomes. Their findings highlighted the importance of performance report reviews and the assessment of operational and maintenance procedures in fostering project

sustainability. The study concluded that PM&E fosters shared responsibility among stakeholders and strengthens overall project effectiveness.

Mutiso and Omwenga (2020) further emphasized the need to engage target community members during the early stages of budgeting and planning. They recommended that community-based organizations prioritize inclusive financial planning as part of their PM&E frameworks to ensure long-term sustainability of interventions.

Role of Results Reporting in Enhancing Sustainability of Rural Water Projects

Reporting of results is another crucial element in participatory monitoring and evaluation. It not only enhances transparency and learning but also reinforces community accountability and empowerment.

Nduati (2021) assessed the impact of PM&E practices on the implementation of community-based water projects in Kenya. The study identified financial allocation, stakeholder engagement, and participatory decision-making as critical factors influencing PM&E effectiveness. It concluded that successful project implementation and sustainability require community involvement at every stage, and recommended greater efforts from governments and development agencies to institutionalize community participation.

Mwangi (2018) similarly found that stakeholder involvement in crafting project visions, setting goals, and developing problem-solving capacities significantly contributes to project sustainability. His study highlighted that stakeholder's ability to track and evaluate progress is a critical factor in fostering project ownership and managing long-term change. Accordingly, donors and funding agencies were urged to implement change management strategies before transferring project responsibility to the community.

Sartorius (2018) reinforced this perspective by stressing the role of evaluators in promoting stakeholder engagement throughout the entire evaluation cycle from system design and deployment to training and capacity building. Sartorius noted that successful PM&E processes depend on the degree to which local stakeholders influence evaluation procedures and benefit from increased local learning and collaboration.

Project teams, together with key PME facilitators, were advised to codevelop evaluation components that reflect stakeholder needs.

Mujuru (2018) explored stakeholder engagement, power dynamics, and PM&E within World Vision's Thusalushaka Area Development Program. Although many of the organization's initiatives were labeled as participatory, the study revealed discrepancies between intended stakeholder engagement and actual levels of community involvement. Mujuru's findings provide critical insights for organizations implementing PM&E and stress the importance of ensuring that all stakeholders, especially beneficiaries, are genuinely involved and informed.

METHODOLOGY

Research Design

This study employed a descriptive research design to explore and identify characteristics, frequencies, trends, and categories relevant to the research problem. This design was appropriate for quantitatively analyzing data and examining relationships between variables through correlation and regression analyses. It enabled the researcher to effectively summarize, interpret, and present patterns within the dataset, thereby offering a comprehensive understanding of variable distributions within the target population.

Description of the Study Area

This study was conducted in Rorya District, situated in the Mara Region of northern Tanzania. Established in 2007 after its separation from Tarime District, Rorya is one of nine administrative councils in the region. It borders Tarime District to the east, Butiama District to the south, Lake Victoria to the west, and the Republic of Kenya to the north. According to the 2012 Tanzania National Census, Rorya had a population of 265,241. Geographically, the district lies between latitudes 1°00′–1°00′ South and Longitudes 33°30′–35°00′ East.

Rorya District was purposively selected as the case study for several compelling reasons. First, the district has been the focus of numerous rural water supply initiatives implemented by both government and non-governmental actors, making it a relevant and practical setting for evaluating the sustainability of such projects. Second, Rorya faces persistent challenges related to access, maintenance, and long-term

viability of rural water infrastructure issues that are central to this study. Lastly, the district's demographic diversity and cross-border dynamics provide a unique context for understanding community participation in development initiatives.

Target Population

As defined by Kumar (2019), a study population comprises the entire group of individuals or elements from which a researcher intends to conclude. In this study, the target population consists of all 354,490 residents of Rorya District, as recorded in the 2022 National Census (NBS, 2022). This population forms the basis for sampling and data collection relevant to assessing community experiences with rural water project sustainability.

Sample Size and Sampling Techniques Sample Size

In this study, the sample size was obtained using Yamane's (1967) formula.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \text{sample size}$$

$$N = \text{total population}$$

$$e = \text{acceptable sampling error } 0.05$$

$$n = \frac{265,241}{1 + 265,241(0.05)^2}$$

$$n = \frac{265,241}{1 + 265,241 \times 0.0025}$$

$$n = \frac{265,241}{1 + 663.1025}$$

$$n = \frac{265,241}{664.1025}$$

$$n = 399$$

Therefore, the Sample size for this study is 399.

Sampling Techniques

This study employed a combination of simple random sampling to ensure both representativeness and relevance in participant selection. Simple random sampling was applied to select participants from the broader population of Rorya District. This probabilistic method ensured that each individual within the target population had an equal and independent chance of being selected, thereby minimizing selection bias. It allowed the researcher to obtain a representative sample that supports valid statistical generalizations about the larger population. The random selection was conducted using available lists from community records.

Data Collection Methods

Primary data were collected exclusively through structured questionnaires. These questionnaires were designed to capture relevant quantitative information from community members regarding their participation in and perceptions of rural water project sustainability. The use of questionnaires allowed for efficient data collection from a large number of respondents while maintaining consistency across responses.

Validity and Reliability

To ensure the reliability of the research instruments, the Split-Half method was employed during a pilot study involving 20 participants. These participants were randomly divided into two subgroups, and responses from each half were compared. The results showed a strong correlation between the two sets, indicating a satisfactory level of reliability. The Split-Half method was particularly suitable for this study as it avoided the need for repeat testing or alternative forms. Furthermore, internal consistency was assessed using Cronbach's Alpha coefficient, which yielded a reliability score of $r \geq 0.7$. This result indicated a high level of internal consistency and confirmed that the instruments were suitable for full-scale data collection and analysis.

Data Analysis

Quantitative data collected from the questionnaires were coded and analyzed using Statistical Package for the Social Sciences (SPSS), Version 25. The analysis involved the use of descriptive statistics and inferential statistics to identify patterns, trends, and relationships within the data. Descriptive statistics were used to summarize the data, while inferential statistics provided insights into the significance of observed relationships. Multiple regression analysis was specifically employed to examine the nature and strength of the relationship between participatory

monitoring and evaluation components and the sustainability of rural water projects. The regression model used in the study was as follows:

General form:

 $Y=\alpha+\beta1x1+\beta2x2+\cdots+\beta nxn+\epsilon$ (Equation 1) $Y=\alpha+\beta1x1+\beta2x2+\cdots+\beta nxn+\epsilon$ (Equation 1)

Model applied to the study:

SWP= α + β 1GU+ β 2AI+ β 3PM+ β 4RR+ ϵ (Equation 2)SWP= α + β 1GU+ β 2 AI+ β 3PM+ β 4RR+ ϵ (Equation 2)

Where:

- SWP = Sustainability of Water Projects
- GU = Goals Understanding
- AI = Activities Identification
- PM = Progress Measurement
- RR = Results Reporting
- $\alpha = Constant$
- $\varepsilon = Standard Error$

This model enabled the researcher to quantify the influence of each independent variable on the dependent variable, thereby providing a clear picture of how participatory monitoring and evaluation practices impact the sustainability of rural water projects.

Demographic Characteristics

This section presents an analysis of the demographic characteristics of the respondents who participated in the study. These characteristics are crucial for assessing the validity and reliability of the data collected.

With respect to gender distribution, the majority of respondents were male (62.5%), while females constituted 37.5%, reflecting a higher level of male participation in the study. In terms of age, a substantial proportion (61%) of respondents fell within the 23-27 age bracket, followed by 12.6% aged 28-32, 12.3% aged 33-47, 7.4% aged 18-22, and 6.6% aged 48 years and above. This suggests that the sample was predominantly composed of young adults, a demographic often actively involved in community development initiatives. Regarding educational attainment, 24.9% of respondents completed secondary education, 12.9% had a certificate qualification, 12.6% possessed a bachelor's degree, and 24.1% reported having no formal education. The respondents exhibited diverse

educational backgrounds, which is likely to have influenced their perspectives and levels of engagement with participatory monitoring and evaluation processes.

 Table 2

 Demographic Characteristics of the Respondents

Character	Category	Frequency	Percentage
Gender	Male	218	62.5
	Female	131	37.5
	Total	349	100.0
Age	18-22 years	26	7.4
	23-27 years	213	61.0
	28-32 years	44	12.6
	33-47 years	43	12.3
	48+ years	23	6.6
	Total	349	100.0
Level of Education	Bachelor Degree	44	12.6
	Diploma	45	12.9
	Certificate	45	12.9
	Secondary	87	24.9
	Primary	44	12.6
	Non-Formal	84	24.1
	Total	349	100.0

Source: Field Data (2025)

Relationship Between Participatory Monitoring and Evaluation (PM&E) and Sustainability of Water Projects

Correlation Analysis

Table 3 illustrates the statistically significant correlations between various components of PM&E and the sustainability of water projects.

A strong positive correlation was found between knowledge of project objectives and sustainability of water projects (r(349) = 0.658, p < 0.001). The more community members understand the objectives of the water project, the more likely the project is to be sustainable. Similarly, activity showed a significant positive relationship identification sustainability (r(349) = 0.351, p < 0.001). When stakeholders are involved in identifying activities for the project, sustainability improves, but the effect is not as strong as with objective knowledge. Progress measurement demonstrated a particularly strong positive correlation with project sustainability (r(349) = 0.693, p < 0.001). Projects that consistently measure and track progress are significantly more likely to be sustainable. Results reporting also had a significant positive correlation (r(349) =0.569, p < 0.001). Sharing results with stakeholders enhances trust,

learning, and accountability, which contributes to sustainability. These findings collectively suggest that participatory monitoring and evaluation components particularly progress measurement and results reporting are significantly associated with the sustainability of rural water projects.

Table 3 summarizes these relationships and highlights the critical role that PM&E plays in ensuring the long-term success and sustainability of community-based water initiatives.

Table 3 *Relationship between PM&E and sustainability of community-based water initiatives*

		SWP	GU	ΑI	PM	RR
SWP	Correlation (r) Sig. (2-tailed)	1				
	N	349				
GU	Correlation (r) Sig. (2-tailed)	.400** .000	1			
	N	349	349			
AI	Correlation (r) Sig. (2-tailed)	.658** .000	.211** .000	1		
	N	349	349	349		
PM	Correlation (r) Sig. (2-tailed) N	.835** .000 349	.351** .000 349	.693** .000 349	1 349	
	~	CO 4**	000	4=0**	= co**	_
RR	Correlation (r) Sig. (2-tailed) N	.604** .000 349	.089 .097 349	.479** .000 349	.569** .000 349	1 349
**. Correl	ation is significant at th	e 0.01 level (2-tailed).			

Source: Field Data (2024)

Regression Analysis

A regression analysis was conducted to examine whether the selected independent variables, Goals Understanding (GU), Activities Identification (AI), Progress Measurement (PM), and Results Reporting (RR), collectively explain the variance in the sustainability of rural water projects. Preliminary results revealed that these variables account for approximately 86.3% of the variation in the dependent variable. This high R-square value indicates that the model has strong explanatory power. However, the remaining 13.7% of the variance remains unexplained, suggesting the presence of other influencing factors not captured in the

model. According to Saunders et al. (2016), an R-square value between 50% and 70% typically reflects a moderate effect size; thus, the 86.3% observed in this study suggests a very strong influence of the selected variables on project sustainability.

Table 4

Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.865ª	.749	.746	.635	2.329

a. Predictors: (Constant), RR, GU, AI, PM

ANOVA Test

An Analysis of Variance (ANOVA) was performed to test the overall significance of the regression model. The F-test yielded a value of 26.56 with a p-value of 0.00, indicating that the model is statistically significant. This means that the observed differences in means across groups are unlikely to be due to chance, confirming that the independent variables collectively have a significant effect on the sustainability of rural water projects.

Table 5
ANOVA^a

Model		Sum of	df	Mean	F	Sig.
		Squares		Square		
	Regression	413.601	4	103.400	26.59	.000 ^b
1	Residual	138.622	344	.403		
	Total	552.223	348			

a. Dependent Variable: SWP

Source: Field Data (2024)

Coefficients

The regression coefficients indicated positive and statistically significant relationships between all four independent variables and the sustainability of rural water projects. Goals Understanding (GU) has the strongest influence, with a coefficient of 1.52, suggesting that a one-unit increase in understanding of the project goals leads to a 1.52-unit increase in sustainability. Progress Measurement (PM) is also a significant predictor, with a coefficient of 0.577, indicating that better tracking of progress contributes meaningfully to project sustainability. Activities Identification

b. Dependent Variable: SWP

b. Predictors: (Constant), RR, GU, AI, PM

(AI) has a positive impact, with a coefficient of 0.150, implying that clearer identification of project activities enhances sustainability outcomes. Results Reporting (RR), though not explicitly discussed in the original version, should be included if statistically significant. These findings underscore the importance of participatory monitoring mechanisms in enhancing the long-term viability of rural water projects, particularly in strengthening goal comprehension, measuring progress, and identifying project activities. They are all crucial factors that significantly contribute to sustainable water service delivery in rural settings.

 Table 6

 Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta	_	
(Constant)	289	.128		-2.268	.024
GU	.173	.033	.152	5.206	.000
1 AI	.124	.036	.130	3.431	.001
PM	.571	.042	.577	13.545	.000
RR	.179	.030	.200	5.974	.000

a. Dependent Variable: SWP

DISCUSSION OF FINDINGS

The findings of this study reveal a strong and statistically significant relationship between participatory monitoring and evaluation (PM&E) and the sustainability of rural water projects in Rorya District. The regression model demonstrated that the four dimensions of PM&E; Goal Understanding (GU), Activities Identification (AI), Progress Measurement (PM), and Results Reporting (RR), collectively explain 86.3% of the variance in project sustainability. This high explanatory power underscores the critical role that participatory approaches play in enhancing the durability and effectiveness of community water initiatives.

In Rorya District, PM&E practices were found to foster community ownership and accountability, particularly within the context of rural water projects. These findings are consistent with Jamaal, (2018), who argued that well-structured participatory systems enhance decision-making, accountability, and long-term impact. Kibukho, (2021) similarly

noted that participatory approaches democratize the evaluation process, empower stakeholders, and contribute to sustained development outcomes by centering beneficiaries in project learning and feedback mechanisms. The correlation and regression analyses confirmed that all four PM&E components had a positive and significant influence on project sustainability, with progress measurement emerging as the most influential predictor. This aligns with Etongo et al. (2024), who observed that consistent progress monitoring not only improves project performance but also aids in early identification of risks, thereby bolstering sustainability. Sartorius (2018) also emphasized that effective tracking and feedback loops are essential for adaptive management and sustained project benefits.

Understanding project goals was also significantly associated with sustainability outcomes. Stakeholders who clearly comprehend project objectives are more likely to engage meaningfully and support long-term implementation efforts. This corroborates the findings of Macharia et al. (2015), who highlighted that stakeholder clarity on goals enhances result-based management. Similarly, Mgoba and Kabote (2020) found that participatory goal-setting strengthens community ownership and aligns project goals with local needs—key drivers of sustainability.

Activities identification was another significant predictor of sustainability. When community members are able to identify and understand project activities, they are better positioned to contribute to their implementation and ongoing maintenance. This finding is supported by Bakari and Mbunda (2022) and Broad and Mulyungi (2018), who emphasized that local participation in planning and activity identification enhances both the relevance and feasibility of development initiatives.

Finally, results reporting also showed a significant positive correlation with sustainability. Transparent and inclusive reporting mechanisms were found to enhance stakeholder engagement and facilitate long-term success. Mgulo et al. (2022) underscored that comprehensive reporting supports continuous improvement and accountability. Similarly, Nduati (2021) and Mwangi (2018) argued that effective communication of project outcomes fosters community empowerment and creates vital feedback loops necessary for sustainable development.

In summary, the study reinforces the value of participatory monitoring and evaluation in promoting the sustainability of rural water projects. Emphasizing stakeholder engagement through goal alignment, transparent reporting, activity recognition, and progress tracking can significantly strengthen the long-term success of such initiatives.

CONCLUSION AND IMPLICATIONS OF THE STUDY

This study explored the impact of Participatory Monitoring and Evaluation (PM&E) on the sustainability of rural water supply projects in Rorya District Council, revealing that all four PM&E components —goal understanding, activity identification, progress measurement, and results reporting —have a positive and statistically significant influence on project sustainability. A clear understanding of project goals fosters commitment and adaptability, while involving communities in identifying activities enhances local ownership and relevance. Progress measurement emerged as the most influential factor, promoting accountability and informed decision-making, and results reporting was shown to build trust, engagement, and institutional learning. These findings highlight the importance of embedding participatory practices throughout all phases of project implementation to improve effectiveness, transparency, and long-term sustainability.

RECOMMENDATIONS

i) Water Project Implementers and NGOs

Implement structured community sensitization and awareness campaigns to ensure all stakeholders, especially community members, clearly understand the project's goals and intended outcomes. Use participatory forums, local media, and village meetings to communicate objectives, align expectations, and strengthen community commitment and ownership.

ii) Local Government Authorities and Community Leaders

Facilitate inclusive planning sessions that actively involve community members, technical staff, and local leaders in identifying project activities. This early engagement will improve the relevance, feasibility, and cultural appropriateness of interventions, ensuring stronger local support and smoother implementation.

iii) Project Managers and M&E Officers

Institutionalize regular progress measurement by developing and deploying user-friendly monitoring tools such as checklists, dashboards, or scorecards. Train community representatives and local committees to participate in data collection and interpretation to support timely decision-making and promote a culture of accountability.

iv) Donors, Project Coordinators, and Community Facilitators

Promote transparent and inclusive results reporting through consistent communication channels, including quarterly review meetings, public notice boards, and community forums. Share achievements, challenges, and lessons learned in formats accessible to all stakeholders to enhance trust, foster learning, and reinforce shared responsibility.

REFERENCES

- Agbenyo, F., Wisdom, N., & Akanbang, B. A. A. (2021). Stakeholder Perspectives on Participatory Monitoring and Evaluation in Educational Projects in Upper West Region, Ghana. *Journal of Planning and Land Management*, 2(1), 50-64.
- Bakari, S. J., & Mbunda, F. A. (2022). Community participation in rural water supply projects: Influencing factors and challenges in Nyasa district. *African Journal of Water Conservation and Sustainability ISSN*, 10(1), 001-005.
- Bhatt, R. R., & Bhattacharya, S. (2015). Do board characteristics impact firm performance? An agency and resource dependency theory perspective. *Asia-Pacific Journal of Management Research and Innovation*, 11(4), 274-287.
- Broad, A., & Mulyungi, P. (2018). Effect of participatory monitoring and evaluation towards sustainability of donor funded food security projects in Rwanda: A Case Study of Rural Community Support Project Gasabo District, Rwanda. *The International Journal of Business & Management*, 6(5)
- Bryant, P., & Davis, C. (2012). Regulated change effects on boards of directors: A look at agency theory and resource dependency theory. *Academy of Strategic Management Journal*, 11(2), 1.
- Hassenforder, E., Ducrot, R., Ferrand, N., Barreteau, O., Daniell, K. A., & Pittock, J. (2016). Four challenges in selecting and implementing

- methods to monitor and evaluate participatory processes: an example from the Rwenzori region, Uganda. *Journal of Environmental Management*, 180, 504-516.
- Iddi, B., & Nuhu, S. (2018). Challenges and opportunities for community participation in monitoring and evaluation of government projects in Tanzania: Case of TASAF II, Bagamoyo District. *Journal of Public Policy and Administration*, 2(1), 1-10.
- Jamaal, N. (2018). Effects of participatory monitoring and evaluation on project performance at Kenya Marine and Fisheries Research Institute, Mombasa, Kenya. *International Academic Journal of Information Sciences and Project Management*, 3(1), 1-15.
- Kamau, L. W. G. (2017). Effect of monitoring and evaluation in stakeholder participation on the extent of accountability of Umande Trust projects. *International Academic Journal of Information Sciences and Project Management*, 2(1), 401-414.
- Macharia, E. W., Mbassana, M., & Oduor, J. (2015). Assessing the sustainability of rural water projects in Naivasha, Kenya, case study: Maraigushu water project. *European Journal of Business and Social Sciences*, 4(7), 52-83.
- Maimula, S. (2017). Challenges in practising monitoring and evaluation:

 The case of local government water projects in Mkuranga,

 Tanzania (Doctoral dissertation, The Open University of Tanzania).
- Mgoba, S. A., & Kabote, S. J. (2020). Effectiveness of participatory monitoring and evaluation on achievement of community-based water projects in Tanzania. *Applied Water Science*, 10, 1-13.
- Minyiri, A. C., & Muchelule, Y. (2018). Influence of Monitoring and Evaluation on Water Project Performance in Migori County, Kenya. *Africa International Journal of Multidisciplinary Research*, 2(6), 1-18.
- Mujuru, V. T. (2018). Participatory Monitoring and Evaluation, Power Dynamics and Stakeholder Participation: analysing Dynamics of Participation between World Vision and its Stakeholders in Thusalushaka Area Development Programme PM & E (Doctoral dissertation, University of Pretoria).
- Muniu, F. N. (2017). Monitoring and evaluation practices, community participation and sustainability of community water projects in Kenya: a case of Nyeri county (Doctoral dissertation, University of Nairobi).

- Ochieng, F. O & Sakwa M (2018) Impact of participation resource of mobilization in the implementation of community water project on the well-being of beneficiaries' household in Kisumu County. Journal of Management, 5, Iss. 4, pp1709-1720
- Oduor, J., & Murei, L. (2020). Community participation in monitoring and evaluation and sustainability of rural piped water supply projects. A case of Siaya County, Kenya. *Soc. Sci. China*, 25, 29-38.
- Yeager, V. A., Menachemi, N., Savage, G. T., Ginter, P. M., Sen, B. P., & Beitsch, L. M. (2014). Using resource dependency theory to measure the environment in health care organizational studies: A systematic review of the literature. *Health Care Management Review*, 39(1), 50-65.