

Community Participation and Sustainability of Projects Funded by Non-Governmental Organizations in Turkana County, Kenya

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Abstract: The sustainability of projects funded by Non-Governmental Organizations (NGOs) continues to be a critical issue, particularly in marginalized and arid areas such as Turkana County, Kenya. Many development initiatives in such regions face challenges of continuity once donor funding ends, often due to limited community involvement and weak ownership structures. This study examined how community participation influences the sustainability of NGO-funded projects in Turkana County by focusing on four key dimensions of participation: needs assessment, project planning, implementation, and monitoring and evaluation (M&E). Guided by the principles of Structural Functionalism, Resource Dependency, and Stakeholder theories, the study adopted a descriptive research design targeting project beneficiaries, local leaders, and NGO personnel. Data were collected from a sample of 212 respondents using structured questionnaires and analyzed through descriptive and inferential statistics with the aid of SPSS (version 26). The findings revealed that community participation has a significant and positive effect on the long-term sustainability of NGO-funded projects. However, participation was found to be limited, particularly in the initial stages of needs assessment and planning, where most community members played passive roles such as providing labor rather than contributing to decision-making. The regression analysis demonstrated a strong positive relationship ($R = 0.909$; $R^2 = 0.825$) between the four dimensions of community participation and project sustainability, indicating that 82.5% of variations in sustainability were explained by the level of community involvement. The study concludes that sustainable project outcomes are more likely when communities are actively engaged throughout the entire project cycle. It recommends that NGOs strengthen participatory approaches by integrating local knowledge, fostering accountability, and building community capacity in planning and monitoring processes. Such inclusive strategies can enhance project ownership, align interventions with local priorities, and ensure that development initiatives continue to deliver value long after external support ends.

Keywords: Community participation, sustainability, NGO, Turkana County, Kenya.

1. INTRODUCTION

The sustainability of NGO-funded projects is critical for addressing global, regional, and local development challenges such as poverty, food insecurity, health, and education. Globally, sustainability has become a major focus within the framework of the Sustainable Development Goals (SDGs), which emphasize inclusive and equitable access to basic services (United Nations, 2015). Research shows that community participation significantly improves project sustainability; projects involving communities in all stages of the project cycle including planning, implementation, and management tend to achieve longer-term success (Josephson Institute of Ethics, 2010; World Bank, 2018). Effective community engagement fosters ownership, enhances local capacity, and promotes equitable distribution of resources (UNDP, 2018; Karlsen, Grae & Massoud, 2018). However, it can also lead to inefficiencies if poorly managed (Uphoff, 2016). Globally, organizations like the World Bank and USAID have emphasized participatory approaches as a means to ensure the sustainability of development initiatives (Gonzales, 2018; USAID, 2020).

In Africa, studies reveal that projects with strong community participation are more likely to remain functional beyond donor withdrawal. For example, World Bank evaluations in Malawi found higher sustainability in projects employing participatory approaches (Sara & Katz, 2020). In Kenya, however, project sustainability remains a persistent challenge. Despite extensive NGO support, many projects collapse after donor exit due to limited community involvement, inadequate monitoring, and weak institutional capacity (Karimi, 2020; TISA, 2019). In Turkana County—a drought-prone, arid region with widespread poverty—numerous NGOs operate to improve health, food security, and livelihoods. Yet, many of these projects fail to sustain operations post-funding, as evidenced by the collapse of the Kaikor drip irrigation project initiated by the Kenya Red Cross Society in 2013. A 2021 county water audit revealed that 40% of boreholes were non-functional, underscoring the sustainability crisis (Turkana County Water Audit Report, 2021).

The concept of sustainability extends beyond financial stability to include social, environmental, and institutional dimensions (Thompson et al., 2011; Morfaw, 2014). Community participation across all project phases—needs assessment, planning, implementation, and monitoring & evaluation—is fundamental to achieving sustainable outcomes (Kerote, 2020). Empirical evidence shows that participatory approaches foster ownership, enhance accountability, and improve the long-term impact of development projects (Cheick, 2006; Kerzner, 2018; Preskill & Catsambas, 2019).

However, studies in Kenya reveal that despite constitutional provisions for public participation, genuine engagement remains limited (Rural Communities Impacting Policy, 2020). The mixed results and continued project failures highlight a significant research gap in understanding how community participation influences NGO-funded project sustainability, particularly in fragile contexts such as Turkana County. This study, therefore, seeks to examine the effect of community participation in different project phases including needs assessment, planning, implementation, and monitoring & evaluation on the sustainability of NGO-funded projects in Turkana County, Kenya.

2. LITERATURE REVIEW

2.1 Theoretical Framework

This study is grounded in three interrelated theories: Structural Functionalism Theory, Resource Dependency Theory, and Stakeholder Theory. Structural Functionalism Theory, proposed by Parsons (1979), views society as an interdependent system working toward stability (Scott, 2016; Nitisha, 2014). Applied to NGO-funded projects, it emphasizes collaboration among community members to achieve sustainability. Active community participation throughout project phases fosters ownership and long-term success in Turkana County.

Resource Dependency Theory (Pfeffer & Salancik, 1978) posits that organizations depend on external resources for survival (Bryant & Davis, 2012). For NGO-funded projects, it underscores the importance of managing donor dependence by mobilizing local human and material resources. Building community capacity helps sustain projects beyond donor withdrawal, making this theory relevant to understanding resource control and partnership dynamics in Turkana.

Stakeholder Theory, advanced by Freeman (1984), highlights creating value for all stakeholders donors, managers, and beneficiaries (Dennis, 2009; Donaldson & Preston, 2010; Miles, 2012). It argues that inclusive engagement enhances ownership, reduces conflicts, and ensures project sustainability (Phillips, 2007). This theory supports community participation as a mechanism for collaborative, long-term development success in NGO-funded initiatives.

2.2 Empirical Review

Globally, regional, and locally, evidence underscores that community participation across all project phases needs assessment, planning, implementation, and monitoring & evaluation (M&E) is vital for sustainability. Globally, studies (Smith & Taylor, 2019; Garcia & Lopez, 2020; Kumar & Sharma, 2019; Chen & Wang, 2020; World Bank, 2019; UNDP, 2016) found that projects with high community involvement report better outcomes, ownership, and continuity. However, most were limited to specific phases and did not assess full project lifecycles. In Africa, research from West and East Africa (Agyeman & Danso, 2021; Agyemang & Osei, 2020; Mugisha & Mutua, 2020; African Development Bank, 2019) revealed that participatory approaches improve alignment with local needs. Yet, many relied on secondary data and lacked focus on phase-specific participation.

Kenyan studies by (Mwangi & Ndungu, 2022; Ndungu & Wambui, 2022; Otieno & Mwangi, 2023; Ochieng & Njeri, 2023; Nyaguthii & Oyugi, 2019; Kipchumba & Njoroge, 2020) show that participation enhances sustainability and accountability. Still, they often examined isolated phases such as planning or M&E. Further, recent studies (Kipkorir & Lokwang, 2024; Lemiso & Lokuruka, 2023; Ekal & Nanyuki, 2024) confirm that involving communities in planning, implementation, and

evaluation strengthens ownership and ensures relevance to local socio-economic and cultural contexts. However, these studies did not comprehensively integrate all project stages. Overall, literature converges that community participation significantly improves the sustainability of NGO-funded projects. Nonetheless, gaps persist regarding the collective impact of participation across all project phases and the influence of local socio-cultural factors in Turkana. The current research therefore integrates all phases including needs assessment, planning, implementation, and M&E to provide a holistic understanding of community participation's role in sustaining NGO-funded projects in Turkana County, Kenya.

3. METHODOLOGY

This study adopted a descriptive research design to investigate the influence of community participation on the sustainability of projects funded by Non-Governmental Organizations (NGOs) in Turkana County, Kenya. The design was suitable because it enabled the collection of both quantitative and qualitative data describing existing relationships without manipulating variables (Saunders, Lewis, & Thornhill, 2019).

The target population comprised beneficiaries, local leaders, and NGO project officers involved in community-based projects across Turkana County. Stratified random sampling ensured proportional representation from key stakeholder groups. Based on Yamane's (1967) formula, a sample of 212 respondents was drawn to provide adequate representation and reliability.

Data were collected using structured questionnaires containing both closed- and open-ended questions aligned with the study objectives. A pilot test involving 20 respondents from West Pokot County refined the instrument for clarity and consistency. Expert review ensured content validity, while Cronbach's alpha coefficients above 0.80 confirmed internal reliability.

Primary data collection involved trained assistants distributing questionnaires in person after obtaining approval from Kenyatta University, NACOSTI, and the Turkana County Government. Respondents were informed of the study's purpose and gave informed consent. Ethical principles of voluntary participation, anonymity, and confidentiality were strictly upheld.

Quantitative data were analyzed using SPSS v26, employing descriptive statistics (means, frequencies, standard deviations) to summarize responses and inferential statistics (correlation and multiple regression) to test relationships between community participation and project sustainability.

4. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Descriptive statistics

The study strived to assess Community Involvement and Sustainability of Projects Funded by Non-Governmental Organizations in Turkana County, Kenya.

This was achieved through the examination of four objectives that include, to analyse the influence of involvement of community in needs assessment on NGO-funded projects' sustainability, to examine how community participation in project planning affects NGO-funded projects' sustainability, to examine how community participation in implementation of project affects NGO-funded projects' sustainability and to evaluate how community participation in project monitoring and evaluation affects NGO-funded projects' sustainability in Turkana County, Kenya.

4.1.1 Effect of community participation in needs assessment on NGO-funded projects' sustainability

To examine the impact of community engagement in needs assessments on the sustainability of NGO-funded projects in Turkana County, Kenya. The outcomes are presented in table 4.1.

Table 4.1: Effect of community participation in needs assessment on NGO-funded projects' sustainability.

Response	No. of respondents/ percentage of respondents					Mean	Std. Dev
I rarely participate in community meetings to discuss problems and solutions	11 (4.23%)	32 (12.31%)	43 (16.54%)	76 (29.23%)	98 (37.69%)	2.7	1.1
Community needs are identified and prioritized through community leaders	18 (6.92%)	57 (21.92%)	52 (20.00%)	79 (30.38%)	54 (20.77%)	3.0	1.3

My ideas and suggestions are not included in the design of project solutions	9 (3.46%)	7 (2.69%)	77 (29.62%)	78 (30.00%)	89 (34.23%)	2.9	1.0
Both men and women alongside youth and elders as well as community leaders are typically involved in the needs assessment discussions	78 (30.00%)	59 (22.69%)	70 (26.92%)	28 (10.77%)	35 (13.46%)	3.2	1.3
Community can mobilize for need assessment activities through public meetings and holding barazas meetings	38 (14.62%)	54 (20.77%)	69 (26.54%)	45 (17.31%)	54 (20.77%)	2.9	1.7

Source: Research data (2025)

The findings revealed varying levels of community engagement in needs assessment activities for NGO-funded projects in Turkana County. A significant proportion of respondents (66.9%) agreed that they rarely participated in community meetings to discuss local problems and potential solutions, suggesting that community involvement at this stage remains limited. Just over half (51.5%) of respondents believed that community needs were primarily identified and prioritized through community leaders, indicating a reliance on leadership structures rather than broad-based participation.

Furthermore, 64.2% of respondents agreed that their ideas and suggestions were not incorporated into project design, highlighting a gap between community input and decision-making processes. Perceptions of inclusivity were mixed while some respondents acknowledged the participation of men, women, youth, and elders in needs assessment discussions, more than half (52.7%) disagreed with this view, suggesting unequal representation. Additionally, 38.1% agreed that communities could mobilize for needs assessment activities through public meetings and barazas, though a considerable portion remained undecided or disagreed, reflecting weak mobilization mechanisms.

The qualitative data reinforced these findings. Project managers emphasized that effective needs assessment requires direct community engagement to ensure that interventions align with local priorities and social realities. One manager noted that community participation “informs project managers about how people perceive the project and whether it contributes to their well-being.” Another emphasized that “no organization can achieve sustainability without putting the community at the forefront.”

These findings align with Agyeman and Danso (2021), who found that projects involving communities in needs assessment were better aligned with local priorities and more sustainable in Ghana and Nigeria. Similarly, Mwangi and Ndung'u (2022) observed that participatory needs assessments in Kenya and Tanzania produced projects that more effectively addressed community needs and achieved greater sustainability. Overall, the results suggest that limited community participation in needs assessment undermines project ownership and sustainability, whereas inclusive and participatory approaches enhance long-term project success.

4.1.2 Effect of Community participation in project planning and NGO-funded projects' sustainability

The study assessed the extent to which community involvement in project planning influences the sustainability of NGO-funded projects in Turkana County. The results are shown in table 4.2 below.

Table 4.2: Effect of Community participation in project planning and NGO-funded projects' sustainability

	1	2	3	4	5	Mean	Std. Dev
We don't participate in the decision-making committees for project planning	31 (11.92%)	46 (17.69%)	32 (12.31%)	64 (24.62%)	77 (29.62%)	2.7	1.0
Not always I attend planning meetings for community projects	38 (14.62%)	46 (17.69%)	32 (12.31%)	56 (21.54%)	88 (33.85%)	3.2	1.4
The water project can be used to serve domestic use and irrigation purposes	39 (15%)	47 (18.08%)	32 (12.31%)	56 (21.54%)	76 (29.23%)	3.0	1.2

Community involvement in planning influence project sustainability because it make them to believe that they are custodians and this help in safeguarding the projects sustainability	31 (11.92%)	32 (12.31%)	43 (16.54%)	65 (25.00%)	89 (34.23%)	2.7	1.0
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Source: Research data (2025)

The findings revealed that participation in planning processes remained moderate, with slightly more than half (54.2%) of respondents agreeing that they did not participate in decision-making committees for project planning. This indicates limited inclusion of community members in key planning structures. Similarly, 55.4% of respondents agreed that they do not always attend planning meetings for community projects, reflecting sporadic engagement during the planning phase. Respondents were divided on whether project planning incorporated multifunctional uses, such as designing water projects for both domestic and irrigation purposes, with 50.7% agreeing and 33.1% disagreeing. Notably, a majority (59.2%) agreed that community involvement in planning enhances project sustainability by fostering a sense of ownership and custodianship among community members. This demonstrates recognition of the link between participation and long-term project viability.

Qualitative responses supported these results. One project manager emphasized the importance of including local administrative leaders such as village elders, chiefs, and ward representatives in decision-making processes to enhance sustainability. Another manager noted that many organizations exclude community members from planning because they are perceived as illiterate, yet “these people are the ground knowledge carriers whose insights can enhance project success and sustainability.”

These findings are consistent with previous research. Smith and Kwan (2019) emphasized that participatory planning, which integrates local knowledge and cultural context, improves project outcomes in Hong Kong and Singapore. Similarly, Agyemang and Osei (2020) found that development projects in Ghana and Nigeria with high levels of community involvement in planning were better aligned with local priorities and achieved greater sustainability. Locally, Kipkorir and Lokwang (2024) observed that NGO-sponsored projects in Turkana County were more sustainable when communities were fully engaged in planning.

Overall, the findings underscore that inclusive planning not only strengthens project ownership but also enhances the likelihood of long-term sustainability by aligning project goals with community needs and local realities.

4.1.3 Determine the effect community participation in implementation of project of NGO-funded projects' sustainability

The study examined how community involvement in project implementation influences the sustainability of NGO-funded initiatives in Turkana County. The outcomes are shown in Table 4.3 below.

Table 4.3: Effect of community participation in implementation of project of NGO-funded projects' sustainability

	1	2	3	4	5	Mean	Std. Dev
I sometimes participate in the implementation of community projects	24 (9.23%)	28 (10.77%)	32 (12.31%)	76 (29.23%)	100 (38.46%)	3.2	1.0
I only play role of being labour in regards to project implementation	12 (4.62%)	8 (3.08%)	20 (7.69%)	40 (15.38%)	180 (69.23%)	2.9	1.2
Changes in the project is communicated through leaders ,project personnel's and through meetings	10 (3.84%)	9 (3.46%)	25 (9.62%)	56 (21.54%)	160 (61.54%)	3.0	1.3
I believe that community participation enhances project sustainability	6 (2.31%)	9 (3.46%)	29 (11.15%)	90 (34.62%)	126 (48.46%)	2.9	1.0

Source: Research data (2025)

The findings revealed that most community members were moderately engaged during implementation, though their roles were often limited. A majority of respondents (67.7%) agreed that they sometimes participated in implementing community projects, indicating partial involvement. However, 84.6% reported that their participation was primarily limited to providing labor, suggesting that communities were not fully integrated into supervisory or decision-making aspects of implementation.

Furthermore, 83.1% of respondents agreed that project changes were communicated through local leaders, project personnel, and public meetings indicating that communication structures were in place, though largely hierarchical. A similarly high proportion (83.1%) believed that community participation enhances project sustainability, reflecting strong awareness of the value of inclusion in implementation processes.

Qualitative insights from project managers supported these findings. One manager noted that conflicts among community members often hindered collaboration during project execution, negatively affecting sustainability. Another highlighted that community participation is “crucial because local people provide first-hand information and help in resource mobilization,” enhancing both effectiveness and sustainability.

These findings align with those of Chen and Wang (2020), who found that projects with robust community participation during implementation in rural China demonstrated higher sustainability due to effective use of local knowledge and resources. Similarly, Mugisha and Mutua (2020) established that community involvement in water project implementation in Kenya and Uganda fostered ownership, resource mobilization, and long-term maintenance.

Overall, the results suggest that while community members in Turkana County contribute to project implementation, their participation is largely functional rather than strategic. Expanding their involvement beyond labor roles to include supervision, decision-making, and coordination could significantly strengthen ownership and ensure greater project sustainability.

4.1.4 Assess how community participation in project monitoring and evaluation affects NGO-funded projects' sustainability

The study examined the influence of community participation in monitoring and evaluation (M&E) on the sustainability of NGO-funded projects in Turkana County, Kenya. Table 4.4 summarizes the outcome.

Table 4.4: Community participation in project monitoring and evaluation affects NGO-funded projects' sustainability.

	1	2	3	4	5	Mean	Std. Dev
Am involved in monitoring and evaluating community projects	34 (13.07%)	37 (14.23%)	89 (34.23%)	40 (15.38%)	60 (23.08%)	3.0	1.4
I rarely participate in monitoring and evaluation activities	3 (1.15%)	7 (2.69%)	18 (6.92%)	89 (34.23%)	143 (55%)	2.9	1.7
I sometimes contribute to monitoring and evaluation through data collection, providing feedback and participating in evaluation meetings	10 (3.85%)	14 (5.38%)	26 (10.00%)	100 (38.46%)	110 (42.31%)	3.2	1.6
Community participation in monitoring and evaluation not only help in maintaining but taking care of the sustainability of project outcome	7 (2.69%)	14 (5.38%)	12 (4.62%)	99 (38.08%)	128 (49.23%)	2.7	1.0
The welfares from the project are appreciated by many members of the community	10 (3.84%)	9 (3.46%)	15 (5.77%)	100 (38.46%)	126 (48.46%)	3.2	1.3

Source: Research data (2025)

Findings from Table 4.4 indicated mixed levels of engagement among community members in M&E activities. Approximately 38.46% of respondents (23.08% strongly agreed and 15.38% agreed) confirmed that they were engaged in community projects related to monitoring and evaluation, while 34.23% were undecided and 27.30% disagreed. This response pattern, with a mean of 3.0 and a standard deviation of 1.4, suggests that community involvement in M&E is present but not uniformly practiced across all projects.

When asked whether they rarely participate in monitoring and evaluation activities, the majority of respondents (89.23%) agreed, indicating that while some involvement exists, it is limited or inconsistent. This item recorded a mean of 2.9 and a standard deviation of 1.7, further reflecting the variability in engagement. Similarly, 80.77% of respondents agreed that they sometimes contribute to M&E through data collection, providing feedback, and participating in evaluation meetings. This suggests that communities are occasionally involved in M&E activities, particularly in data-oriented roles, rather than being central to evaluation design or decision-making. The mean for this statement was 3.2 with a standard deviation of 1.6.

A significant majority (87.31%) of participants agreed that community participation in monitoring and evaluation enhances the sustainability of project outcomes. This response, with a mean of 2.7 and a standard deviation of 1.0, highlights the perceived value of participatory M&E in ensuring long-term benefits. Similarly, 86.92% of respondents affirmed that project benefits are appreciated within the community, implying that active engagement fosters ownership and recognition of project achievements (mean = 3.2; SD = 1.3).

Qualitative responses from project managers reinforced these quantitative findings. One manager observed that, “The achievements of our projects have been obtained because of the positive and concerted engagement of community involvement in the process. When every stakeholder performs their role efficiently, the project becomes successful, and community members remain motivated and supportive.”

Another project manager added that, “Through involving the community in monitoring and evaluation, we are able to assess whether the services we provide actually reach the intended beneficiaries. Asking whether services are accessible to them helps the community feel part and parcel of the project, enhancing both its sustainability and success.”

These findings are consistent with previous research. Obara (2017) found that effective M&E practices among NGO start-ups in Kisumu County are strengthened when aligned with strategic plans and supported by robust indicator mechanisms to detect deviations from expected results. Similarly, Ekal and Nanyuki (2024) reported that community engagement in M&E of educational projects in Turkana County ensures alignment with local needs and enhances sustainability through participatory feedback mechanisms. Their study emphasized transparency and accountability as essential elements facilitated by participatory M&E processes.

Overall, the results of this study confirm that active community participation in monitoring and evaluation plays a critical role in sustaining NGO-funded projects. When communities are engaged meaningfully in assessing progress, providing feedback, and evaluating outcomes, they develop a sense of ownership and accountability that supports the long-term success of development interventions in Turkana County.

4.2 Project Sustainability

Participants were requested to provide a justification for the Project Sustainability in Turkana County, Kenya. Through the grading of presented assertions on a scale of 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly disagree. Table 4.5 presents the outcome.

Table 4.5: Level of Project Sustainability in Turkana County, Kenya

	1	2	3	4	5	Mean	Std. Dev
Sustainability of a project in my community can mean that project that is maintained for long period and providing quality service to the people	4 (1.54%)	7 (2.69%)	18 (6.92%)	99 (38.08%)	132 (50.77%)	2.9	1.0
Maximum benefits and positive sentiment by communities involved I think are the most indicators, do you think are most important for measuring the sustainability of community projects?	10 (3.84%)	12 (4.62%)	21 (8.08%)	100 (38.46%)	117 (45.00%)	3.3	1.0
Community participation has helped in maintaining the long-term success of projects by providing security.	12 (4.62%)	8 (3.08%)	21 (8.08%)	109 (41.92%)	110 (42.31%)	2.8	1.2
Lack of co-operation is main challenge I face in ensuring the sustainability of projects.	7 (2.69%)	9 (3.46%)	14 (5.38%)	100 (38.46%)	130 (50.00%)	3.2	1.0

Source: Research data (2025)

The study sought to assess the sustainability of NGO-funded projects in Turkana County by examining participants' perceptions of what constitutes sustainable outcomes. Findings revealed that 88.85% of respondents agreed that project sustainability means a project that is maintained over time while continuing to provide quality services to the community (mean = 2.9; SD = 1.0). Similarly, 83.46% of respondents identified community satisfaction and the maximization of project benefits as key indicators of sustainability (mean = 3.3; SD = 1.0). Moreover, 84.23% agreed that community participation contributes to the long-term success of projects by enhancing security and ownership (mean = 2.8; SD = 1.2). However, 88.46% of participants acknowledged that lack of cooperation among stakeholders remains a major challenge to sustaining projects (mean = 3.2; SD = 1.0).

Qualitative insights reinforced these findings. A female project manager emphasized that sustainability is achieved when a project continues to deliver quality benefits and value even after donor funding ends. Another project manager highlighted that fostering community ownership, aligning projects with local needs, and utilizing local resources are vital strategies for ensuring long-term success.

These results align with prior studies by Kipchumba and Njoroge (2022), who found that increased community engagement enhances the sustainability of health projects in Nairobi and Mombasa, and Muthoni and Kamau (2021), who established that involving communities in project planning strengthens relevance and long-term viability of water projects in Kenya and Uganda. Overall, the findings underscore that active community participation, cooperation, and local ownership are central to achieving and maintaining project sustainability in Turkana County.

4.3 Multiple Linear Regression Results

To determine the statistical relationship between community participation dimensions and project sustainability, a multiple regression model was applied. The analysis utilized key metrics namely the coefficient of determination (R^2), regression coefficients (Beta), and Analysis of Variance (ANOVA) to test the strength and significance of the association at a 5% significance level. The results indicated a strong positive correlation between the independent variables community involvement in needs assessment, participation in project planning, implementation, and engagement in monitoring and evaluation and the dependent variable, project sustainability. The Pearson correlation coefficient (R) was 0.909, signifying a high degree of association. Furthermore, the coefficient of determination (R^2) was 0.825, implying that 82.5% of the variation in project sustainability can be explained by the four aspects of community participation. The remaining 17.5% of the variance may be attributed to other factors not captured in this model.

These findings suggest that greater community participation across all stages of the project cycle significantly enhances the sustainability of NGO-funded projects in Turkana County. This aligns with prior research emphasizing the role of participatory approaches in fostering ownership, accountability, and long-term project success (Kipkorir & Lokwang, 2024; Muthoni & Kamau, 2021).

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.909 ^a	.825	21	0.037

Source: Research data (2025)

Table 4.6 presents the regression coefficients for the model estimating the influence of community participation on the sustainability of NGO-funded projects in Turkana County. The results reveal that the regression model was statistically significant and appropriate for making inferences about the population parameters, as indicated by a p-value of 0.001, which is lower than the alpha level of 0.05. This finding is consistent with the ANOVA results, which produced an F-value of 56.560, exceeding the critical value of 2.48. These results demonstrate that community participation in needs assessment, project planning, implementation, and monitoring and evaluation exerts a positive and statistically significant effect on project sustainability. The positive regression coefficients imply that improvements in any of these aspects of community involvement lead to corresponding increases in the sustainability of NGO-funded projects.

These findings are in line with those of Agyeman and Danso (2021), who examined the relationship between community participation and the sustainability of donor-funded projects in Ghana and Nigeria. Their study similarly concluded that involving community members in the needs assessment phase enhances project alignment with local priorities, thereby strengthening project ownership and sustainability.

Table 4.7: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.320	2	4.640	17.234	.003b
Residual	38.412	87	.226		
Total	40.732	89			

a. Dependent Variable: NGO-funded project sustainability

b. Predictors: (Constant), Community participation in needs assessment, community participation in project planning, community participation in implementation of project and community participation in project monitoring and evaluation

Source: Research data (2025)

Table 4.8: Regression Model coefficients

Model	Standardized Coefficients		T	Sig.	P
	B	Std. Error			
(Constant)	0.116	0.421	0.219	0.317	0.001
Community participation in needs assessment	0.31	0.023	0.511	6.226	0.002
community participation in project planning,	0.432	0.039	0.691	8.592	0.001
community participation in implementation of project	0.237	0.036	0.317	6.083	0.000
Community participation in project monitoring and evaluation	0.275	0.032	0.782	6.412	0.0002

Source: Research data (2025)

The investigator used a multiple regression analysis to examine the impact of community participation in needs assessment, project planning, implementation, and monitoring and evaluation on project sustainability in Turkana County, Kenya, funded by non-governmental organizations.

As per data above the regression equation was:

Where: Y= Sustainability of NGO-funded projects

β_0 =constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = regression coefficients

X_1 = Community participation in needs assessment

X_2 = community participation in project planning

X_3 = community participation in implementation of project

X_4 = community participation in project monitoring and evaluation relate to Sustainability of Projects

ϵ =Error Term

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4$ now becomes:

$$Y = 0.116 + 0.31X_1 + 0.432X_2 + 0.237X_3 + 0.275X_4$$

The regression findings indicate that community participation in needs assessment has a positive and significant effect on project sustainability in Turkana County. This is supported by a regression coefficient of $B = 0.31$ with a p-value of 0.002, which is less than the 0.05 significance threshold. This implies that higher levels of community involvement in needs

assessment are associated with improved project sustainability. In other words, when communities actively engage in identifying their own needs, projects are more likely to align with local priorities and achieve long-term success.

These results suggest that community participation in needs assessment significantly promotes project sustainability in Turkana County. The significance level ($p = 0.002 < 0.05$) confirms that the relationship is both positive and statistically meaningful. This finding aligns with Kipkorir and Lokwang (2024), who analyzed the impact of community participation in needs assessment on the sustainability of NGO-sponsored projects in Turkana County. Their study established that effective community involvement enhances project design and fosters local ownership—both critical determinants of sustainability.

Similarly, findings presented in Table 4.8 show that community participation in project planning is also positively and significantly related to project sustainability at the 5% level of significance ($B = 0.432, p = 0.001$). This indicates that projects incorporating community input during planning stages are more sustainable. The results concur with Smith and Kwan (2019), who studied participatory planning in Hong Kong and Singapore and found that projects involving community members in planning were more likely to remain viable after external funding ended.

In addition, the regression analysis revealed that community participation in project implementation has a statistically significant and positive effect on project sustainability ($B = 0.237, p = 0.000 < 0.05$). This suggests that when communities are actively engaged in executing project activities, sustainability outcomes improve. These results are consistent with Chen and Wang (2020), who examined community participation in project implementation and sustainability in rural China. Their study found that projects with strong local involvement in implementation recorded higher sustainability rates due to enhanced ownership and commitment.

Furthermore, the findings demonstrate that community participation in project monitoring and evaluation also exerts a positive influence on project sustainability, although the magnitude of the effect is relatively modest. At the 5% significance level, the relationship between community participation in monitoring and evaluation and project sustainability was found to be statistically significant ($p = 0.0002 < 0.05$). This implies that strengthening community engagement in tracking and assessing project performance can further enhance sustainability outcomes in Turkana County. These findings are in line with Obara (2017), who examined M&E practices among NGO start-ups in Kisumu County. Obara found that effective monitoring and evaluation processes that incorporate community feedback help organizations identify deviations early and make timely adjustments, ultimately improving sustainability.

5. RECOMMENDATIONS AND CONCLUSIONS

5.1 Conclusions

Based on the findings of this study, several key conclusions were drawn in relation to the objectives. The first objective sought to determine how community participation in needs assessment influences the sustainability of NGO-funded projects in Turkana County, Kenya. The study concluded that involving the community in needs assessment is crucial, as it enhances ownership and ensures that projects address real community needs. This participation not only promotes maintenance and continuity but also strengthens the long-term sustainability of project outcomes.

Regarding the second objective, which examined how community participation in project planning affects project sustainability, the study concluded that community involvement at this stage is vital. When communities are engaged in planning, they develop a sense of ownership and responsibility, viewing themselves as custodians of the project. This sense of belonging fosters commitment, which in turn safeguards and promotes the sustainability of the projects.

In relation to the third objective, which analyzed how community participation in project implementation affects the sustainability of NGO-funded projects, the study found that community members were often limited to labor roles. This restricted involvement denied them the opportunity to take up supervisory and decision-making roles that are essential for enhancing sustainability. Greater inclusion in implementation activities would empower community members to monitor and support projects effectively beyond the funding period.

Finally, concerning the fourth objective, which explored how community participation in project monitoring and evaluation influences project sustainability, the study concluded that NGOs rarely engage communities adequately in these processes. Limited participation in meetings and discussions reduces the community's ability to identify and address project challenges. Encouraging community mobilization through local forums such as public barazas can promote accountability, transparency, and awareness, thereby improving project sustainability in Turkana County.

5.2 Recommendations

Drawing from the study findings, several recommendations were made to enhance the sustainability of NGO-funded projects in Turkana County. First, communities should be actively involved in needs assessment activities to ensure that projects are relevant and aligned with local priorities. This inclusion fosters a sense of ownership and responsibility, which is vital for maintaining project outcomes over time. Second, NGOs should strengthen community participation in project planning. This engagement is essential because it allows community members to contribute ideas, identify priorities, and feel responsible for the project's success. Enhanced participation at this stage promotes local commitment and helps safeguard the sustainability of initiatives.

Third, the study recommends that NGOs and project managers expand community roles during project implementation. Instead of restricting locals to labor roles, they should be empowered to take part in supervision, coordination, and decision-making. Such involvement ensures better monitoring, accountability, and long-term sustainability of the projects. Lastly, NGOs should improve community involvement in project monitoring and evaluation by organizing regular public meetings and barazas. These forums should be used to discuss project progress, identify challenges, and design collective solutions. Increased engagement in monitoring and evaluation enhances community awareness, transparency, and ownership, which are critical for sustaining NGO-funded projects in Turkana County.

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