

The Influence of Community Leadership on the Sustainability of Road Projects in Pokot South Sub-County, Kenya

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Article's History

Submitted: 24th June 2025 **Revised:** 8th August 2025 **Published:** 11th August 2025

Abstract

Aim: This study examines the impact of community leadership on the sustainability of road projects undertaken by the Kenya Rural Roads Authority (KeRRA) in Pokot South Sub-County, Kenya.

Methods: Anchored on the Community Action Planning (CAP) theory, the study adopted a mixed-methods design with stratified sampling. Data were collected from 242 respondents via questionnaires and analyzed using SPSS version 26 through descriptive and inferential statistics. **Results:** Community leadership positively influenced road project sustainability (β = 0.656, p < 0.05), highlighting the importance of inclusive and transparent local leadership. Qualitative insights reinforced this by emphasizing the importance of community trust and collective decision-making.

Conclusion: The study concludes that effective community leadership enhances the long-term sustainability of rural road projects by promoting ownership, transparency, and accountability.

Recommendations: The study recommended that community leaders strengthen transparency mechanisms across all project phases. The study also suggests exploring how digital tools can improve community participation and calls for further research on gender dynamics in road project sustainability.

Keywords: Community Leadership, Road Sustainability, Rural Infrastructure Projects, Kenya Rural Roads Authority (KeRRA), Pokot South Sub-County



INTRODUCTION

In many developing countries, including Kenya, road infrastructure projects often struggle to maintain long-term functionality despite significant investment. Despite substantial financial and technical investments allocated to infrastructure development, particularly the expansion and maintenance of vital road networks, numerous projects consistently struggle with difficulties in sustaining their long-term functionality and delivering their intended benefits to the populace (Adshead *et al.*, 2019). This prevalent issue highlights a critical gap between project completion and long-term impact, necessitating a deeper examination of factors that transcend mere technical implementation.

In this study, community participation is defined as direct local involvement in decision-making, planning, and maintenance. This holistic approach transcends passive consultation, encompassing various forms of active engagement and tangible contributions from local populations. It is increasingly understood that genuine community involvement not only inherently improves the overall effectiveness and efficiency of development projects but, crucially, also fosters an indelible sense of ownership and shared responsibility among community members (Englund & Graham, 2019). Without this intrinsic sense of communal ownership, projects often become orphaned upon completion, lacking the local custodianship essential for their ongoing maintenance and adaptation to evolving needs.

This study pioneers an investigation of the effect of community leadership on the sustainability of road projects in Pokot South Sub-County. Community leadership serves as a pivotal pillar in facilitating meaningful and sustained community participation in road infrastructure development. Effective local leadership is instrumental in mobilizing residents, fostering collective ownership, and coordinating their active involvement throughout the various phases of a road project, including planning, implementation and ongoing maintenance. Community leaders function as critical intermediaries, bridging the communication gap between project implementers and the local populace. Through this role, they ensure that the voices, concerns, and priorities of community members are not only heard but meaningfully integrated into project decisions. By fostering trust, transparency, and accountability, strong community leadership significantly enhances the potential for road projects to be sustainable, contextually appropriate, and aligned with the long-term aspirations of the community.

The focus on Pokot South Sub-County is particularly pertinent given its rural nature and the critical role that a robust road network plays in connecting communities to markets, services, and opportunities. The area is characterized by limited road coverage, with only 35% of the roads in the region being paved or in good condition, which hampers access to essential services. Additionally, Pokot South experiences a high poverty rate, with approximately 70% of its population living below the poverty line, which exacerbates the challenges of transport and accessibility. The lack of reliable transport options further isolates communities, hindering their economic and social mobility. These challenges underscore the urgent need to identify and leverage internal community strengths. This paper aims to provide actionable insights for KeRRA and other development agencies on how to harness the immense potential of local communities to ensure that road projects move beyond mere construction to become truly sustainable assets.



LITERATURE REVIEW

Community leadership plays a central role in advancing the sustainability of road infrastructure projects, particularly in rural and resource-constrained settings. Effective leadership at the community level serves as a driving force that fosters participation, enhances coordination, and instills a sense of ownership among residents. In Kenya, Muriithi *et al.* (2021) demonstrated that road projects benefit from improved communication, efficient mobilization of community resources, and mediation in conflict-prone areas by involving trusted local leaders. All of these contribute to long-term project success. Community leaders often act as gatekeepers, ensuring that the priorities and concerns of their constituents are adequately represented in development planning. In Ethiopia, Abebe and Hailu (2020) found that leaders' knowledge of local sociopolitical dynamics and cultural norms enables them to navigate challenges and advocate for inclusive decision-making, thereby reinforcing the relevance and acceptance of the project.

Leadership further facilitates sustainability by building institutional memory and maintaining continuity between development initiatives and community expectations. Nwachukwu and Ugwuanyi (2019) argue that when leaders are actively engaged, they can help ensure transparency and accountability, which builds trust in the process and encourages ongoing participation in Nigeria. These leaders can also leverage their social capital to attract additional resources, partnerships, and technical support necessary for project maintenance and resilience. Strong leadership structures contribute to improved coordination among stakeholders and help mitigate the fragmentation often observed in grassroots infrastructure initiatives.

Globally, the role of community leadership has become more pronounced due to decentralization policies and the devolution of development responsibilities to local units. As top-down approaches lose traction, development actors are increasingly recognizing the importance of bottom-up leadership in facilitating participatory governance and local empowerment (Gaventa & Barrett, 2018). For example, in rural Uganda, leadership committees helped resolve land disputes during road construction (Fagbemi & Adeleye, 2022), demonstrating how inclusive leadership can resolve key barriers in infrastructure development. Sustainable development is most achievable when community leaders are involved from the initial stages of project conception through to implementation and monitoring. These leaders play a pivotal role in disseminating information, mobilizing labor, resolving disputes, and legitimizing external interventions within their communities.

Nonetheless, the effectiveness of community leadership is contingent upon the legitimacy, competence, and accountability of the individuals occupying leadership positions. In some contexts, leadership may be compromised by elite capture or partisan politics, which can hinder equitable participation and marginalize vulnerable groups. In Uganda, Ojok and Aanyu (2021) highlight how leadership failure, due to elite capture, can erode community trust and perpetuate exclusion. Therefore, leadership can inadvertently reinforce exclusion and erode community trust if not handled inclusively and fairly.

To enhance accountability and inclusion, several mechanisms can be implemented to promote transparency and inclusivity. Public audits, participatory budgeting, and community scorecards have been effective tools in promoting transparency and empowering local communities in various parts of Africa. In Ghana, for instance, participatory budgeting led to more equitable resource distribution for road projects (Sarkodie & Owusu, 2021). These mechanisms help ensure that



projects align with community needs and that resources are allocated and utilized effectively. This study is informed by the Community Action Planning (CAP) theory, which emphasizes local ownership, participatory governance, and iterative decision-making in development planning. The CAP theory aligns with the idea that community leaders, when empowered, play a vital role in ensuring that road projects not only address immediate infrastructure needs but also contribute to long-term sustainability by fostering inclusive participation and community-driven decision-making.

Ultimately, sustainable road development requires not only technical expertise and financial investment but also strong, visionary, and inclusive community leadership. When empowered and supported, such leadership can catalyze collective action, promote social learning, and ensure that infrastructure investments yield enduring developmental outcomes. As Botes and Van Rensburg (2020) noted that leadership anchored in community values and participatory ideals creates a fertile ground for long-term sustainability and resilience in infrastructure development.

METHODOLOGY

This research study was meticulously designed using a mixed-methods research design, intentionally incorporating both quantitative and qualitative techniques. This integrated approach was strategically selected for its capacity to offer a more holistic and profound understanding of the complex relationship between community contribution and the sustainability of road projects. By blending diverse forms of data, the design facilitated a robust exploration of the research problem, leveraging the statistical generalizability of quantitative data alongside the rich, contextual insights provided by qualitative data (Creswell & Creswell, 2018).

Target Population and Sampling Procedures

The target population for this comprehensive study comprised 13,817 households distributed across four distinct wards within Pokot South Sub-County: Lelan, Tapach, Chepareria, and Batei, as shown in Table 1. These wards were selected to ensure geographical representation across the sub-county. The rationale for targeting households was that road projects directly impact their daily lives, and household members are often the primary contributors (labor, land, funds) and beneficiaries of road infrastructure.

Table 1: Target Population

Categories	Target population (No. of Households)
Lelan Ward	3138
Tapach Ward	3414
Chepareria Ward	3890
Batei Ward	3375
Total	13,817

Source: Kenya Population and Housing Census, 2019



A sample size was obtained using the Krejcie and Morgan formula (1970) for a finite population, which is calculated as follows:

$$S = \frac{X^{2}NP (1-P)}{d^{2} (N-1) + X^{2}P (1-P)}$$
Equation 1

Where:

S represents the required sample size

X represents the Z value (for example, 1.96 for a 95% confidence level)

N represents population size

P represents population proportion (expressed as a decimal) (assumed to be 0.5 (50%)

d represents the degree of accuracy (6.25%), expressed as a proportion (.0625); It is the margin of error

Therefore:

S is the sample size, N is the target population size (13,817), z is the z-score (1.96 for a 95% confidence level), p is the estimated proportion (0.5 for maximum variability) and e is the margin of error (0.0625 or 6.25%)

Plugging in the values:

$$S = 13,817 * (1.96^2 * 0.5 * (1-0.5)) / (0.0625^2 * (13,817-1) + 1.96^2 * 0.5 * (1-0.5))$$

$$S = 13.817 * (3.8416 * 0.25) / (0.0039 * 13.816 + 3.8416 * 0.25)$$

$$S = 13.817 * 0.9604 / (53.98 + 0.9604)$$

$$S = 13,271.5 / 54.9404 = 242$$

Therefore, the sample size for this study was 242 respondents, proportionally distributed as in Table 2.

Table 2: Sample Size

Categories	Proportionate Sample	Sample size
Lelan Ward	(3138/13,817)*242	55
Tapach Ward	(3414/13,817)*242	60
Chepareria Ward	(3890/13,817)*242	68
Batei Ward	(3375/13,817)*242	59
Total		242

Source: Field Data (2025)

For sampling techniques, the study primarily utilized stratified random sampling to select respondents. The four wards within Pokot South Sub-County were designated as distinct strata,



ensuring proportionate representation from each geographical area. Within each stratum, a comprehensive list of all resident households, provided by ward administrators, served as the sampling frame. From these lists, respondents were selected using proportionate simple random sampling, where each household had an equal chance of being included. This two-stage sampling approach enhanced the distributional representation of the sample and effectively minimized potential sampling bias, thereby increasing the generalizability of the quantitative findings to the broader population. Additionally, purposive sampling was used to select General Public Representatives (GPRs) for qualitative interviews, ensuring that key informants with deep knowledge and experience regarding community projects were included.

Description of Research Instruments

Two primary research instruments were employed for data collection. Questionnaires for households were structured (closed-ended) and were administered to the sampled households. This instrument was chosen for its efficiency in collecting data from a large number of respondents within a relatively short timeframe. The questions were designed using an ordinal Likert scale, where responses ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). This facilitated straightforward quantification and statistical analysis. The closed-ended format ensured consistency in responses, simplified data entry, and encouraged respondents to complete all questions. While potentially limiting the depth of individual responses, this was balanced by the qualitative component.

Interview Schedule for General Public Representatives (GPRs) were conducted with 15 selected GPRs using a semi-structured interview schedule. As Sahoo (2022) highlights, interview schedules facilitate face-to-face interaction, allowing the interviewer to build rapport, explain study objectives, and clarify questions. This qualitative tool enabled the collection of rich, non-numerical data, including detailed insights, personal narratives, and nuanced perspectives that quantitative questionnaires might miss. The semi-structured nature allowed for follow-up questions and probes, enabling deeper exploration of specific issues related to community contribution, challenges, and successes. Observational notes on the respondents' behavior and emotional responses during interviews also provided valuable contextual information, enhancing the credibility and depth of the qualitative data.

Validity of the Instrument Results

The study applied content validity to determine whether the research instruments adequately covered all aspects relevant to the variables under investigation. A subset of content validity, face validity, was also used; this involved seeking expert opinions on whether the instruments appeared to measure the intended concepts. Construct validity was assessed by evaluating whether the instruments could effectively support inferences about test scores regarding the concepts being studied.

To ensure the validity of the research tools, the questionnaires were reviewed by the supervisor and other research experts to confirm that the items measured what they were intended to measure. According to Kyngäs *et al.* (2020), validity refers to the extent to which the results correspond to reality. A pilot test was conducted to assess the validity of both the research objectives and instruments. Additionally, the study employed content validation, a typically subjective but



comprehensive process that ensures the instruments are representative of the broader subject matter the research seeks to explore.

Reliability of the Instrument Results

The researcher employed Cronbach's alpha (α) coefficient to assess the internal consistency and reliability of the survey instruments. This involved calculating the Cronbach's alpha for each section of the questionnaire based on pilot study results. A Cronbach's alpha value above 0.7 was considered acceptable, following the guidelines by Bonett and Wright (2015). This process helped identify and remove unnecessary variables, thereby refining the questionnaire. The pilot study results of internal consistency reliability are presented in the table below. Table 3.

Table 3: Reliability Test.

Objectives	Cronbach's Alpha	No of Items
Community leadership	.775	5

Source: Field Data (2025)

Data Collection Procedures

Before conducting this study, a letter of authorization was obtained from the Catholic University of Eastern Africa and this letter was used to apply for a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). The researcher also seeks permission from the local authorities in the study area. Upon receipt of approval from the respective authorities, the researcher debriefed the respondents about the purpose of the study. Respondents were assured of the confidentiality of the information and requested the fill in the questionnaire. The researcher administered questionnaires with the help of research assistants.

Data Analysis Procedures

The completed questionnaires were coded and entered into the Statistical Package for Social Sciences (SPSS) Version 26 for analysis. Both descriptive and inferential statistical methods were applied. Descriptive statistics were utilized to summarize the quantitative data, providing a clear overview of the distribution of scores, including measures such as frequency, mean, mode, minimum, maximum, and standard deviation. For inferential analysis, correlation and simple linear regression were employed. The results were presented using percentages, means, and standard deviations, displayed through frequency tables.

Descriptive Statistics

Descriptive statistics were used to summarize community contributions, including financial, material, and labor contributions, and how these correlated with sustainability outcomes in the road projects.

Inferential Statistics

Correlation

The Pearson correlation coefficient was calculated to assess the strength and direction of the relationship between community contribution and the sustainability of road projects. This analysis helped understand whether increased contributions were linked to better sustainability outcomes.



Simple linear regression

A simple linear regression analysis was conducted to test whether community contribution, while controlling for other variables, influenced sustainability. If the p-value for community contribution was below 0.05, the null hypothesis (H_01) was rejected, indicating that community contribution did indeed have a significant effect on the sustainability of road projects. The analysis tested several key assumptions for regression: Normality: The residuals from the regression model were checked for normal distribution to ensure that the normality assumption was not violated. Linearity: A linear relationship between the independent variables (such as community contribution) and the dependent variable (sustainability) was assumed, and this was verified through scatterplots of the variables. Multicollinearity: The analysis tested for multicollinearity using the Variance Inflation Factor (VIF) to ensure that independent variables were not highly correlated, as high multicollinearity could distort regression results.

Ethical Considerations

Research Ethics were adhered to throughout the entire study period. There was no disclosure of any participant's personal information at any time. Participants in this study had the option of withdrawing from the study at any time without fear of legal repercussions. The study's purpose was made clear to each participant. To make sure that the participants are entirely satisfied with their study experience, the researcher makes sure that they answered any queries they might have had. The researcher acknowledged all the literature used, and the final document was subjected to a plagiarism check to ensure the originality of the research thesis.

FINDINGS AND DISCUSSION

This section presents a detailed analysis and interpretation of the study's findings, focusing specifically on the influence of community contribution on the sustainability of Kenya Rural Roads Authority (KeRRA) projects in Pokot South Sub-County, Kenya. The results are presented using both descriptive and inferential statistics, offering a comprehensive view of the intricate relationship.

Descriptive Statistics

The study sought to assess the influence of community leadership on the sustainability of road projects in Pokot South Sub-County. Responses were elicited on a 5-point Likert scale of 1-5, where: 1–Strongly Disagree (SD); 2–Disagree(D); 3-Neutral(N); 4-Agree (A); 5-Strongly Agree (SA). Analysis of the response mean scores was conducted on the continuous scale <1.5 representing Strongly Disagree (SD); 1.5-2.4 Disagree(D); 2.5-3.4 Neutral(N), with 3.5-4.5 being Agree(A), and finally >4.5 represents Strongly Agree (SA). Responses elicited on a 5-point Likert scale as shown in Table 4.



Table 4: Community Leadership.

Statement	SD	D	N	A	SA	Mean	SD
	Frequency (%)		Standard Deviation				
1. Community leaders were transparent about the project goals and budget throughout the construction process.	15 (7.2)	16 (7.7)	4 (1.9)	101 (48.3)	73 (34.9)	3.96	1.15
2. Community leaders actively sought input from residents on the design and features of the road project.	15 (7.2)	20 (9.6)	5 (2.4)	87 (41.6)	82 (39.2)	3.96	1.20
3. Community leaders encouraged residents to participate in the maintenance of the road project (e.g., clean-up days).	13 (6.2)	26 (12.4)	5 (2.4)	87 (41.6)	78 (37.3)	3.91	1.21
4. I feel confident that the community will work together to address any future problems with the road.	14 (6.7)	31 (14.8)	7 (3.3)	71 (34.0)	86 (41.1)	3.88	1.28
5. Since the completion of the road project, the leadership of the community has been effective in addressing resident concerns.	19 (9.1)	23 (11.0)	3 (1.4)	91 (43.5)	73 (34.9)	3.84	1.27

Source: Field Data (2025)

Table 4 showed that the majority, 174(83.2%), of the respondents agreed that community leaders were transparent about the project goals and budget throughout the construction process. On the



contrary, 31(14.9%) of the respondents disagreed that community leaders were transparent about the project goals and budget throughout the construction process. Further, the study results indicate that the mean and the standard deviation of 3.96 and 1.15, respectively, clearly show that the respondents agreed with the statement that community leaders were transparent about the project goals and budget throughout the construction process. These findings agree with Musyimi and Ondara (2022) that cost implications contributed more to the increase of project performance in the County, followed by technical expertise, policy frameworks, and stakeholder involvement in that order.

Similarly, 169(80.8%) of the respondents agreed that community leaders actively sought input from residents on the design and features of the road project, and 35(16.8%) disagreed that community leaders actively sought input from residents on the design and features of the road project. The study results, with a mean rating of 3.96 and a standard deviation of 1.20, also showed that the respondents agreed with the statement that community leaders actively sought input from residents on the design and features of the road project. Findings are consistent with Hamersma et al. (2018), which show that both the quality of the provided activities and (personal) contextual factors are important.

General public representative [3] said that; "The Tartar Junction-Kamuino Chewoyet-Sakas Road project was one where community leadership played a crucial role in ensuring sustainability. Leaders worked closely with KeRRA to ensure the road met the required standards while addressing community concerns. Through continuous engagement, the project was completed successfully and remains well-maintained." Additionally, 165(78.9%) of the participants agreed that community leaders encouraged residents to participate in the maintenance of the road project (for example, clean-up days). At the same time, 39(18.6%) of the respondents disagreed that community leaders encouraged residents to participate in the maintenance of the road project (for example, clean-up days). Further, the study results with a mean of 3.91 and a standard deviation of 1.21 indicate that the respondents agree with the statement that community leaders encouraged residents to participate in the maintenance of the road project (for example, clean-up days). Rupp, Zimmerman, Sly, Reischl, Thulin, Wyatt, and Stock (2020) reported that CE-CPTED was associated with positive street activity, sense of community, and collective efficacy. Participants from neighborhoods with higher resident control of CE-CPTED reported more social capital and behavioral action than those from neighborhoods with less resident control. These findings support the busy streets theory: Community engagement in neighborhood improvement enhances community empowerment.

The study also revealed that 157(75.1%) of the participants agreed that they feel confident that the community will work together to address any future problems with the road. On the contrary, 44(21.5%) of the respondents disagreed, they feel confident that the community will work together to address any future problems with the road. Further, the study results indicate that the respondents agree with the statement that they feel confident that the community will work together to address any future problems with the road, having a mean rating of 3.88 and a standard deviation of 1.28. A study by Nikitas, Avineri, and Parkhurst (2018) indicates that trust in the integrity of the concept and older age as a life stage associated with ageing, retirement, lower income, mobility barriers, and deteriorating health are important in how attitudes reflect and affect public acceptability of road pricing forms.



General public representative [4] said that; "A good leader must be transparent, accountable, and proactive. They should also have strong communication skills to engage different stakeholders and the ability to mobilize resources effectively." Finally, 164(78.4%) of the participants agreed that since the completion of the road project, the leadership of the community has been effective in addressing resident concerns and on the other hand, 42(19.1%) of the respondents disagreed that since the completion of the road project, the leadership of the community has been effective in addressing resident concerns. Further, the study results with a mean of 3.84 and a standard deviation of 1.27 indicate that the respondents agreed that since the completion of the road project, the leadership of the community has been effective in addressing resident concerns. This finding is consistent with previous research by Khanani, Adugbila, Martinez and Pfeffer, (2021) show that, on the one hand, road infrastructure projects scaled up residential development, both in Kisumu and Accra, as the roads contributed to housing rents and land prices to increase and rendered periurban communities along them as attractive zones for real estate developers.

General public representative [7] said that: "The partnership between community leaders and KeRRA is crucial for the sustainability of road projects. When the two work closely, maintenance is timely, and challenges are resolved quickly. However, in cases where there is miscommunication or a lack of coordination, projects tend to suffer from neglect and degradation."

Inferential Statistics

To move beyond description and establish statistically significant relationships, inferential statistical analyses were conducted.

Correlation Analysis

Pearson correlation analysis was carried out to show the strength and direction of the association between independent and dependent variables. Table 5 presents the results.

Table 5: Multiple Correlation Analysis Results

		Sustainability of Road Projects
Community	Pearson Correlation	0.741
Leadership	Sig. (2-tailed)	0.000
	N	209

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Source: Field Data (2025)

The study findings in Table 5 indicated that community leadership and Sustainability of road projects had a positive moderate and statistically significant correlation (r= 0.741**; p<0.01).

Linear Regression Model

The simple linear regression for community leadership and sustainability of road projects in Pokot South Sub County was carried out, and the results are presented in Tables 6, 7, and 8.

DOI: https://doi.org/10.58425/jpms.v2i1.394



Table 6: Regression Model Summary of Community Leadership

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741ª	.549	.546	.52650

a. Predictors: (Constant), Community Leadership

Source: Field Data (2025)

The model summary results in Table 6 indicate that R = 0.741 and R2 = 0.549. R value indicates that there is a linear association between community leadership and the sustainability of road projects. The R^2 indicates that the explanatory power of the independent variables is 0.549. This means that about 54.9 percent of the variation in the sustainability of road projects is explained by community leadership.

Table 7 Model Fitness Results

Mod	lel	Sum of Squares	df	Mean Square	F	Sig.
	Regression	69.746	1	69.746	251.603	.000b
1	Residual		207	.277		
	Total	127.128	208			

a. Dependent Variable: Sustainability of Road Projects

b. Predictors: (Constant), Community leadership

Source: Field Data (2025)

Table 7 indicates that the F-statistic produced (F = 251.603), which was significant at p=0.000, thus confirms the fitness of the model. Therefore, there is a statistically significant association between community leadership and the sustainability of road projects. This means that the independent variable (community leadership) is a significant predictor of the dependent variable (sustainability of road projects).

Table 8 Regression Coefficients

Model		Unstandardized Coefficients Standardized			t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.018	.092		11.086	.000
	Community Leadership	o.656	.041	.741	15.862	.000

a. Dependent Variable: Sustainability of Road Projects.

Source: Field Data (2025)

Regression coefficients result as presented in Table 8 show that community leadership has a positive and significant effect on sustainability of road projects (β 1=0.656, p=0.000<0.05). This implied that a unit increase in community leadership led to a 0.656-unit increase in the sustainability of road projects. The linear regression model was;

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 $Y = 1.018 + 0.656X_1$ Equation 2

Hypothesis Testing

Hypothesis H_01 stated that community leadership has no significant effect on the sustainability of road projects in Pokot South Sub-County. Results revealed that community leadership has a positive and significant effect on the sustainability of road projects in Pokot South Sub County ($\beta1=0.656$, p<0.05), hence rejecting the null hypothesis H_01 , indicating that community leadership had a significant effect on the sustainability of road projects in Pokot South Sub County. Nyongesa (2022) found that the leadership and management of community water projects were vested in appointed/elected leaders (45%) and water officers (16%). The findings indicated that 60% of the respondents had been trained on water usage and management. It was also clear that 53.8% of the respondents had never had access to IWRM policy documents, even though 61.3% had been involved in the monitoring and implementation of community water projects in the area.

Table 9: Hypothesis Test Results

Hypothesis	β-value	p-value	Decision rule
H ₀ 1 Community Leadership has no significant effect on the Sustainability of Road Projects in Pokot South Sub-County	$(\beta_1=0.656).$	p=0.000<0.05	Rejected the null hypothesis

Source: Field Data (2025)

DISCUSSION OF FINDINGS

The majority of respondents (83.2%) agreed that community leaders were transparent about the project goals and budget throughout the construction process. This transparency is critical for building trust within the community, as it ensures that residents are aware of how the project is being managed and funded. Such openness can positively influence long-term sustainability by fostering confidence in the leadership and ensuring ongoing community support. Transparency also plays a significant role in mitigating potential conflicts and increasing accountability, which is vital for maintaining future cooperation from both residents and external stakeholders like KeRRA.

Further, 78.9% of the participants agreed that community leaders encouraged active participation in the maintenance of the road, such as organizing clean-up days. This finding suggests that community leaders not only fostered a sense of ownership over the project but also promoted collective responsibility, which is crucial for the road's long-term upkeep. Encouraging such engagement aligns with Franco and Tracey's (2019) assertion that community involvement in sustainable development practices strengthens local resilience and supports long-term sustainability.

Additionally, 80.8% of respondents reported that community leaders actively sought input from residents on the design and features of the road project. This participatory approach to planning is likely to have increased the project's relevance and acceptance among the community. By valuing local input, leaders ensured that the road met the specific needs of the residents, which could enhance satisfaction and reduce resistance. This aligns with Eslami *et al.*'s (2019) finding



that stakeholder engagement is a key determinant of support for long-term development projects, as it directly impacts the community's sense of ownership and satisfaction with the outcomes.

Lastly, 75.1% of respondents agreed that they felt confident that the community would work together to address future challenges related to the road. This confidence in collective action is an essential factor in sustaining the project beyond its completion. It suggests that the community, under strong leadership, is willing to continue collaborating to ensure the road's durability and functionality. Furthermore, 78.4% of respondents noted that community leaders have been effective in addressing resident concerns since the completion of the project, further indicating that leadership continues to play a pivotal role in maintaining positive community relations and ensuring the road's ongoing success.

Additionally, 80% of the respondents agreed that community leaders actively sought input from residents on the design and features of the road project. These findings imply that community leaders valued resident feedback and were committed to incorporating local perspectives into the project's development, which likely contributed to a sense of community satisfaction and support for the outcome. Eslami *et al.* (2019) revealed that overall quality of life satisfaction influenced support for sustainable tourism development, and that material life domains and non-material life domains were two important determinants of overall Quality of Life.

CONCLUSION

The objective of the study was to assess the influence of community leadership on the sustainability of road projects in Pokot South Sub-County. The respondent was asked to give their view on the statement that community leaders were transparent about the project goals and budget throughout the construction process, community leaders actively sought input from residents on the design and features of the road project, community leaders encouraged residents to participate in the maintenance of the road project (for example, clean-up days), I feel confident that the community will work together to address any future problems with the road and lastly since the completion of the road project, the leadership of the community has been effective in addressing resident concerns.

The respondent agreed that community leaders were transparent about the project goals and budget throughout the construction process. The majority of the respondents agreed that community leaders actively sought input from residents on the design and features of the road project, and also agreed that community leaders encouraged residents to participate in the maintenance of the road project (for example, clean-up days). Additionally, they agreed that they feel confident that the community will work together to address any future problems with the road, and finally agreed that since the completion of the road project, the community leadership has been effective in addressing resident concerns.

The study concludes that community leadership is a critical factor in the sustainability of road projects in Pokot South Sub-County. Respondents indicated strong agreement that community leaders-maintained transparency throughout the construction process by clearly communicating project goals and budgetary details. Furthermore, these leaders actively sought input from residents on the design and features of the road, fostering a sense of ownership and commitment among the community members. This inclusive approach not only ensured that the road project met the



community's needs but also encouraged residents to participate in ongoing maintenance efforts, such as clean-up days, which are vital for the road's longevity.

RECOMMENDATIONS

Based on the compelling findings of this study, the following actionable and strategic recommendations are put forth to enhance the sustainability of road projects in Pokot South Sub-County and similar contexts:

- 1. It is recommended that community leaders continue and even enhance their efforts to maintain transparency throughout all phases of road project development. This includes clear communication of project goals, budgets, and timelines, as well as actively seeking and incorporating community input at every stage.
- 2. Youth engagement should be prioritized as a key strategy for ensuring the long-term success of road projects. It is recommended that programs be developed to educate and involve young people in all stages of road construction and maintenance.
- 3. To improve the sustainability of road projects, community involvement should be strengthened, particularly during the planning stages. Authorities should ensure that consultations with community members are comprehensive and inclusive, capturing the diverse needs and preferences of the population.

SUGGESTIONS FOR FURTHER STUDY

Researchers should investigate the role of technology such as mobile apps or social media platforms in enhancing community involvement in road project planning, monitoring, and maintenance. Understanding how digital tools can facilitate better communication, participation, and accountability could offer innovative solutions for improving infrastructure project outcomes. Researchers should also consider the positive influence of women's involvement in road projects. Future studies could examine gender dynamics more deeply. Future research could investigate the cultural and social factors that affect community contributions to road projects.

REFERENCES

- Abebe, F., Getachew, S., Hailu, T., & Fesseha, H. (2020). Assessment of community knowledge, attitude, and practice on milk-borne zoonotic diseases in Jinka, Southern Ethiopia. *Ann Public Health Res*, 7(2), 1096.
- Adshead, D., Thacker, S., Fuldauer, L. I., & Hall, J. W. (2019). Delivering on the Sustainable Development Goals through long-term infrastructure planning. *Global Environmental Change*, 59, 101975.
- Albro, R. (2019). Culture and development: A framework for local sustainability. Urban Studies Journal, 56(7), 1234–1248.
- Apostolopoulou, E., & Kotsila, P. (2022). Community gardening in Hellinikon as a resistance struggle against neoliberal urbanism: spatial autogestion and the right to the city in post-crisis Athens, Greece. *Urban Geography*, 43(2), 293-319.
- Avelino, F. (2021). Theories of power and social change. Power contestations and their implications for research on social change and innovation. *Journal of Political Power*, 14(3), 425-448.
- Baba, M., Mohammad, F., & Young, T. (2021). Community-based infrastructure sustainability in developing economies. Sustainability Journal, 13(9), 4925.



- Balestra, G. L., Dasgupta, J., Sandhya, Y. K., & Mannell, J. (2018). Developing political capabilities with community-based monitoring for health accountability: the case of the Mahila Swasthya Adhikar Manch. *Global public health*, *13*(12), 1853-1864.
- Biwott, J. B. (2020). Influence of teachers' service commission's human resource management practices on teachers' job commitment in public secondary schools: A case of Rongai sub-county, Kenya (Doctoral dissertation, KABARAK UNIVERSITY).
- Bonett, D. G., & Wright, T. A. (2015). Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, 36(1), 3-15.
- Burmeister, A., Alterman, V., Fasbender, U., & Wang, M. (2022). Too much to know? The cognitive demands of daily knowledge seeking and the buffering role of coworker contact quality. *Journal of Applied Psychology*, 107(8), 1303.
- Dawodu, A., Cheshmehzangi, A., & Williams, S. (2019). Sustainable urban infrastructure and community participation: A systems perspective. Environmental Planning and Management, 62(5), 897–914.
- Doussard, M., & Fulton, B. R. (2020). Organizing together: Benefits and drawbacks of community-labor coalitions for community organizations. *Social Service Review*, 94(1), 36-74.
- Duman, J., Hövelmanns, K., Kiltz, E., Lyubashevsky, V., Seiler, G., & Unruh, D. (2023, May). A thorough treatment of highly efficient NTRU instantiations. In *IACR International Conference on Public-Key Cryptography* (pp. 65-94). Cham: Springer Nature Switzerland.
- Englund, R., & Graham, R. J. (2019). *Creating an environment for successful projects*. Berrett-Koehler Publishers.
- Gicheru, M., Mwangi, B., Onyango, A. I., Michuki, G. N., & Kamau, S. K. (2021). Epidemiological patterns of Rift Valley Fever from diverse habitats during an extreme, unprecedented flooding of Lake Baringo basin, Kenya, 2012-2013.
- Gitari, J. K. (2019). Effect of Innovation in Information and Communication Technology On The Performance of Commercial Banks in Kenya (Doctoral dissertation, KCA University).
- Government of Kenya. (2022). Kenya Roads Sector Annual Review Report. Nairobi: Ministry of Roads and Transport.
- Haldane, V., Chuah, F. L., Srivastava, A., Singh, S. R., Koh, G. C., Seng, C. K., & Legido-Quigley, H. (2019). Community participation in health services development, implementation, and evaluation: A systematic review of empowerment, health, community, and process outcomes. *PloS one*, *14*(5), e0216112.
- Hussain, S., Maqbool, R., Hussain, A., & Ashfaq, S. (2022). Assessing the socio-economic impacts of rural infrastructure projects on community development. *Buildings*, 12(7), 947.
- Idziak, W., Majewski, J., & Zmyślony, P. (2018). Community participation in sustainable rural tourism experience creation: A long-term appraisal and lessons from a thematic villages project in Poland. In *Rural Tourism* (pp. 209-230). Routledge.
- Jackson, R. B., Friedlingstein, P., Andrew, R. M., Canadell, J. G., Le Quéré, C., & Peters, G. P. (2019). Persistent fossil fuel growth threatens the Paris Agreement and planetary health. *Environmental Research Letters*, 14(12), 121001.



- Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, 73(1), 26.
- Mongare, B. (2025). The Influence of Community Participation on the Sustainability of Road Projects in Pokot South Sub-County, Kenya (Master's Thesis). The Catholic University of Eastern Africa.
- Sagwa, E. V., & Obulemire, K. E. (2023). Effect of Project Resources on Sustainability of Early Childhood Development Projects: Case of Baby-Friendly Community Initiative in Dagoretti North Constituency, Nairobi County, Kenya.
- Ugwuanyi, C. C., Nnolum, C. T., & Nwachukwu, W. C. (2021). Influence of Students' Attitude on Their Academic Achievement in Secondary School Mathematics. *Mathematical Association of Nigeria (Man)*, 46(1), 278.
- Zhelnina, A. (2020). The apathy syndrome: How we are trained not to care about politics. *Social Problems*, 67(2), 358-378.

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