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Editorial Note

HURIA Journal, Vol 33 (3), September 2026

Background and rationale

This edition of HURIA brings together 14 papers examining how institutions, economic opportunities and public services shape development in Tanzania. The contributions span heritage and ecosystem management, land governance, literary translation, social protection, agriculture, political accountability, healthcare, enterprise technology, religious institutions and education. Across these fields, the papers draw attention to participation, equitable access and the institutional conditions needed to translate policy intentions into practical benefits.

Purpose of the edition

The edition offers empirical research and evidence syntheses to inform scholarly debate, policy and professional practice. Its shared concern is how development interventions can respond more effectively to the people they serve. The articles also identify evidence gaps and methodological limits that should guide interpretation and further research.

Article highlights

The papers appear in the following order:

"Economic Interests and Community Participation in Cultural Heritage Management: Evidence from Kilwa Kisiwani World Heritage Site, Tanzania" links employment and income opportunities to participation in heritage management. Its mixed-methods findings underline the importance of transparent recruitment and inclusive benefit sharing, with qualitative accounts revealing exclusion and unequal access to opportunities.

"Effects of the Ihefu Wetlands Ecosystem on Livelihood of Local Communities in Mbarali District, Mbeya Region, Tanzania" demonstrates the importance of wetlands for water, farming and grazing. Agricultural encroachment and overgrazing threaten these benefits, prompting calls for community involvement, conservation awareness and stronger enforcement.

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"Community Participation in Land Registration: Evidence from Kigoma-Ujiji Municipal Council, Tanzania" identifies moderate participation constrained by limited awareness, financial difficulties and inaccessible services. It recommends public education and reduced financial and procedural barriers to support inclusive land administration.

"Bridging Languages: Exploring Selected English-based African Novel Titles in Kiswahili" examines 19 novel titles and their translations through Structural Functional Translation Analysis. The paper shows how Kiswahili grammatical structures accommodate literary functions and cultural meanings, supporting cross-cultural engagement through translation.

"The Influence of Social Security Service Quality on the Socio-Economic Welfare of Retirees in Kinondoni District, Tanzania" finds that pensions and health insurance provide essential support but leave important needs unmet. It recommends pension indexation and expanded geriatric healthcare coverage to protect retirees against rising living costs.

"Economic Incentives for Climate-Smart Agriculture and Ecosystem Conservation in Tanzania: A PRISMA-Based Systematic Review" synthesises ten empirical studies. It identifies context-dependent relationships between financial access and adoption, while highlighting limited evidence on sustained conservation outcomes. Carefully monitored pilots and longitudinal research are recommended; the review does not establish the superiority of particular incentive mechanisms.

"Mapping Agricultural Marketing Information Research in Tanzania: A Bibliometric Analysis and Systematic Literature Review" maps 47 publications on market information, digital access and smallholder market engagement. It identifies research clusters and collaboration opportunities that can strengthen understanding of information flows and agricultural marketing channels.

"Evaluating Human Rights Implications of Conservation Tourism in Tanzania" reviews documentary evidence of displacement, restricted resource access and procedural exclusion. It advocates rights-based conservation, community co-governance and independent grievance mechanisms, interpreting reported patterns descriptively rather than as causal estimates.

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"Singing the King's Song? Examining Uchawa in Tanzanian Political Culture" analyses sycophancy and performative loyalty as routes to political influence and resources. It argues that these practices weaken merit and accountability, recommending transparent performance assessment and protections for dissent and whistleblowing.

"Reinforcing Accountability at the Interpersonal Level in Healthcare Delivery Settings: A Case of Mwananyamala Hospital, Tanzania" examines communication, trust and accountability. The communication–trust association is weak and statistically non-significant; qualitative findings emphasise patient feedback, complaint handling, teamwork and institutional support as practical foundations for responsive care.

"The Moderating Role of SME Owner Age in the Relationship between Technological Compatibility and SME Performance in Tanzania" reports a positive relationship between technological compatibility and enterprise performance, with owner age moderating that relationship. It encourages technology implementation that considers both business requirements and owners' demographic characteristics.

"Institutional Governance and Religious Mobility: Understanding Member Migration in Traditional Churches of Dar es Salaam" explores how transparency, participation and pastoral responsiveness shape decisions to remain, leave or return. It presents religious mobility as a continuing evaluation of institutional credibility and belonging.

"Towards Schools for All: Examining the Implementation of Inclusive Education in Tanzanian Primary Schools" highlights the pedagogical and institutional demands of supporting learners with special educational needs. Specialised teachers, adequate funding, support services and accessible infrastructure require coordinated action across education stakeholders.

"Factors Affecting Utilization of Electronic Security Technologies in University Libraries in Tanzania" identifies training gaps, insufficient funding, maintenance costs and technical failures as constraints on effective use. It recommends dedicated budgets, preventive maintenance, reliable technical support and institutional security policies.

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Expected contribution

Together, these contributions show that effective development depends on the quality of institutional relationships as well as resources and technology. Their findings inform discussion of the Sustainable Development Goals, particularly quality education, health and well-being, reduced inequalities, climate action and accountable institutions. We thank the authors, reviewers and editorial team for their contributions and invite readers to engage critically with the evidence and its implications for policy, practice and further inquiry.

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Economic Interests and Community Participation in Cultural Heritage Management: Evidence from Kilwa Kisiwani World Heritage Site, Tanzania

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Abstract
This study investigates how economic interests, specifically employment and income, influence community participation in cultural heritage management at Kilwa Kisiwani, a UNESCO World Heritage Site in Tanzania. Guided by Social Exchange Theory, the research employed a mixed-methods design comprising a household survey of 124 respondents (analyzed using PLS-SEM), complemented by 24 semi-structured interviews and four focus group discussions. Findings show that employment (β = 0.426) and income (β = 0.613) significantly strengthen economic interests, which in turn strongly predict community participation (β = 0.582) and explain 61% of its variance. Qualitative data, however, expose critical inequities: favoritism, nepotism, gendered exclusion, and elite capture undermine trust and weaken collective action despite the presence of economic incentives. Qualitative findings also indicated that unequal access to employment and income opportunities may limit how far economic benefits translate into broader community participation. The study therefore highlights benefit distribution as an important contextual dimension for understanding how economic incentives are experienced within the community. Recommendations include transparent recruitment, rotational employment systems, targeted support for women and youth, formal benefit-sharing frameworks, and integration of economic planning into heritage policy. This research contributes empirical evidence from East Africa to global debates on community-based heritage management, highlighting the importance of considering both economic opportunities and how access to those opportunities is experienced within local communities.

Keywords: *Community participation; Cultural heritage management; Economic interests; Social Exchange Theory; World Heritage Site; Kilwa Kisiwani; Tanzania.*

INTRODUCTION

Community participation has become a defining principle of contemporary heritage management practice, widely recognized as essential for ensuring the sustainability and legitimacy of conservation efforts. Scholars and international frameworks alike emphasize that heritage cannot be safeguarded solely through expert-driven or technocratic approaches; rather, its sustainability requires the active involvement of communities who live with, use, and attribute meaning to heritage sites (Smith, 2006; Harrison, 2010; Waterton & Watson, 2013). In particular, the World Heritage Convention and subsequent UNESCO guidelines stress the need to recognize communities as "primary stakeholders" rather than peripheral beneficiaries (Cleere, 2006; Munjeri, 2004).

Despite this consensus, the drivers of community participation remain contested. In much of the literature, economic incentives are foregrounded as the most critical motivators of participation. Participation in heritage activities is often framed through a utilitarian lens, where communities weigh costs and benefits before engaging in conservation or tourism initiatives (Blau, 1964; Andereck et al., 2005). Empirical evidence from both developed and developing contexts supports this perspective. In Europe and Asia, for example, employment opportunities, heritage cooperatives, and income from tourism consistently increase local support for conservation (Galluccio, 2024; Candeloro, 2025; Cerisola, et al. 2024). In sub-Saharan Africa, where poverty and livelihood insecurity remain pressing realities, heritage-related economic opportunities are often perceived as essential for motivating engagement (Banda et al., 2024; Mpofu & Van der Merwe, 2025).

However, while economic incentives are widely acknowledged, their distribution and accessibility have emerged as critical challenges. Evidence from Botswana, Zimbabwe, Malawi, and Tanzania indicates that heritage-related benefits are often monopolized by elites, skewed towards men over women, or concentrated in families with political connections (Mbaiwa, 2017; Platteau, 2004; Lwoga, 2018). Such inequities undermine trust, exacerbate tensions, and erode collective willingness to participate. Consequently, economic incentives, though necessary, are not sufficient in themselves to sustain participation. In this study, fairness refers specifically to community members' perceptions regarding whether access to heritage-related employment and income opportunities is inclusive and whether economic benefits are distributed without favoritism, exclusion, or undue concentration among particular groups. Importantly, fairness

was not specified as a separate latent construct in the quantitative PLS-SEM model; rather, perceptions of fairness emerged from the qualitative component and are used to contextualize and explain the quantitative relationships.

At Kilwa Kisiwani, a UNESCO World Heritage Site on Tanzania's southern coast, these dynamics are particularly evident (Ichumbaki & Lwoga, 2021). The site offers various income-generating opportunities, including guiding, vending, casual conservation labor, and artisanal production. Yet local accounts reveal frustrations over exclusion, favoritism, and the seasonal or temporary nature of employment (Lwoga, 2018). Women report limited access to guiding and formal jobs, youth describe being overlooked in favor of older men, and many residents express a sense that only those with personal connections benefit from heritage-related opportunities (Ichumbaki & Lwoga, 2021). Such grievances highlight the complex interplay between economic incentives, equity, and participation. These qualitative accounts are important because they indicate that the presence of economic opportunities and the perceived fairness of access to those opportunities may represent different dimensions of community experience.

Despite growing recognition of the importance of economic incentives in heritage management, important knowledge gaps remain. Existing studies have largely focused on the general relationship between tourism benefits and community support for conservation, with limited attention to the specific roles of employment and income as distinct dimensions of economic interests. Furthermore, although concerns regarding unequal benefit distribution, elite capture, and exclusion have been documented in several African heritage and tourism contexts, few studies have systematically examined how these economic interests translate into community participation in cultural heritage management. In Tanzania, empirical evidence remains particularly limited, and studies at Kilwa Kisiwani have primarily described community perceptions and governance challenges without quantitatively testing the relationships between employment, income, economic interests, and participation. Consequently, there is insufficient understanding of the mechanisms through which economic benefits influence participation and how perceived inequities shape these relationships. This study addresses this gap by employing a mixed-methods approach to examine the influence of employment and income on economic interests and their subsequent effect on community participation in cultural heritage management at Kilwa Kisiwani World Heritage Site. The

quantitative component assesses the hypothesized relationships among employment, income, economic interests, and participation, while the qualitative component provides contextual evidence on how residents experience access to and distribution of economic benefits. This distinction allows the study to discuss fairness as an explanatory qualitative theme without implying that its independent statistical effect on participation was directly tested.

Theoretical and Conceptual Framework

The Social Exchange Theory (Blau 1964) was used to guide this study. The theory provides a widely used framework for explaining why individuals and communities choose to participate in collective endeavors such as tourism and heritage conservation. SET posits that participation occurs when perceived benefits outweigh the costs, whether those costs are measured in time, labor, or opportunity. Applied to heritage contexts, SET suggests that communities are more likely to support conservation efforts when they perceive tangible rewards such as employment, income, or access to resources (Andereck et al. 2005). Conversely, when benefits are absent, minimal, or perceived as unfairly distributed, participation declines.

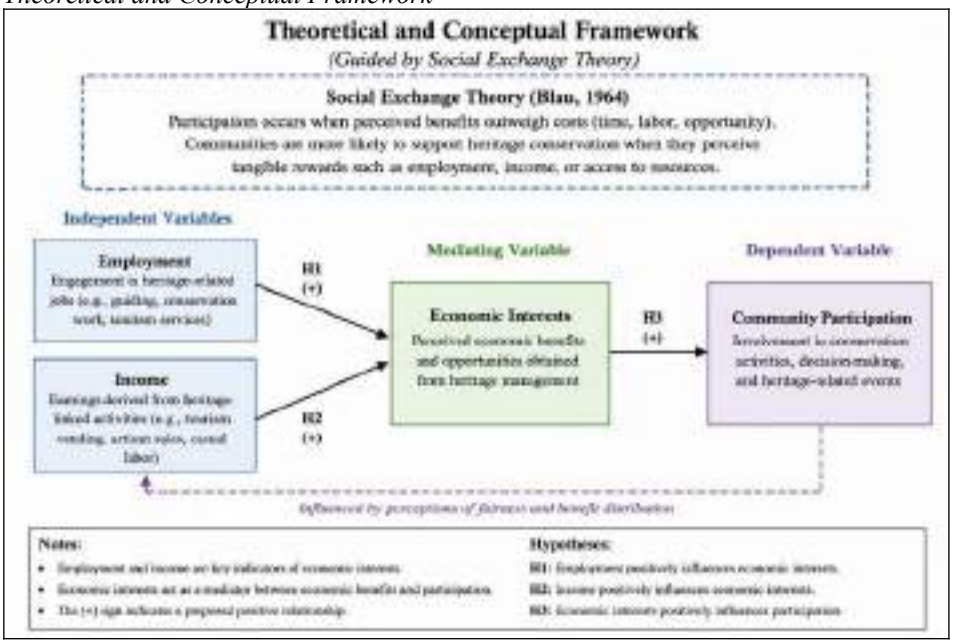
In heritage studies, SET has been applied across diverse contexts. For example, in European rural areas, economic cooperatives tied to heritage tourism foster strong community participation (Candeloro, 2025). Similarly, Galluccio (2024) shows how museum-based employment in Italy enhanced household incomes and motivated support for preservation initiatives. In the global South, SET has been used to explain why residents engage in heritage-based tourism when it provides supplementary income or livelihood diversification (Cerisola, et al. 2024).

Critics of SET argue that it overemphasizes rational, utilitarian decision-making while neglecting cultural and symbolic motivations (Deacon & Smeets, 2013). However, its explanatory power remains strong in contexts where poverty and livelihood insecurity are prevalent, making material incentives a crucial determinant of behavior. For this reason, SET provides a useful lens for examining economic interests at Kilwa Kisiwani.

Based on social exchange theory and previous empirical studies, this study proposes that employment and income represent key dimensions of economic interests, which subsequently influence community participation in cultural heritage management. Figure 1 illustrates the hypothesized relationships among the study constructs.

Although the conceptual framework focuses on the hypothesized quantitative relationships, the qualitative component also examined residents' perceptions of how economic benefits were distributed. Thus, fairness is treated in this study as a qualitative explanatory theme rather than as a separately tested construct in the PLS-SEM model. This distinction is important because the study provides evidence on the perceived fairness of benefit distribution but does not estimate a separate statistical path from fairness to participation.

Figure 1:
Theoretical and Conceptual Framework



Source: Adapted from Odege (2012) with modifications

Hypotheses Development

Drawing on the principles of Social Exchange Theory (SET) and the reviewed literature, this study proposes that community members who derive employment and income from heritage-related activities are more likely to develop stronger economic interests in cultural heritage management. These economic interests, in turn, are expected to encourage active participation in heritage conservation and management. Based on this theoretical and empirical foundation, the following hypotheses were formulated:

H1: Employment positively influences economic interests in cultural heritage management at Kilwa Kisiwani World Heritage Site.
H2: Income positively influences economic interests in cultural heritage management at Kilwa Kisiwani World Heritage Site.
H3: Economic interests positively influence community participation in cultural heritage management at Kilwa Kisiwani World Heritage Site.

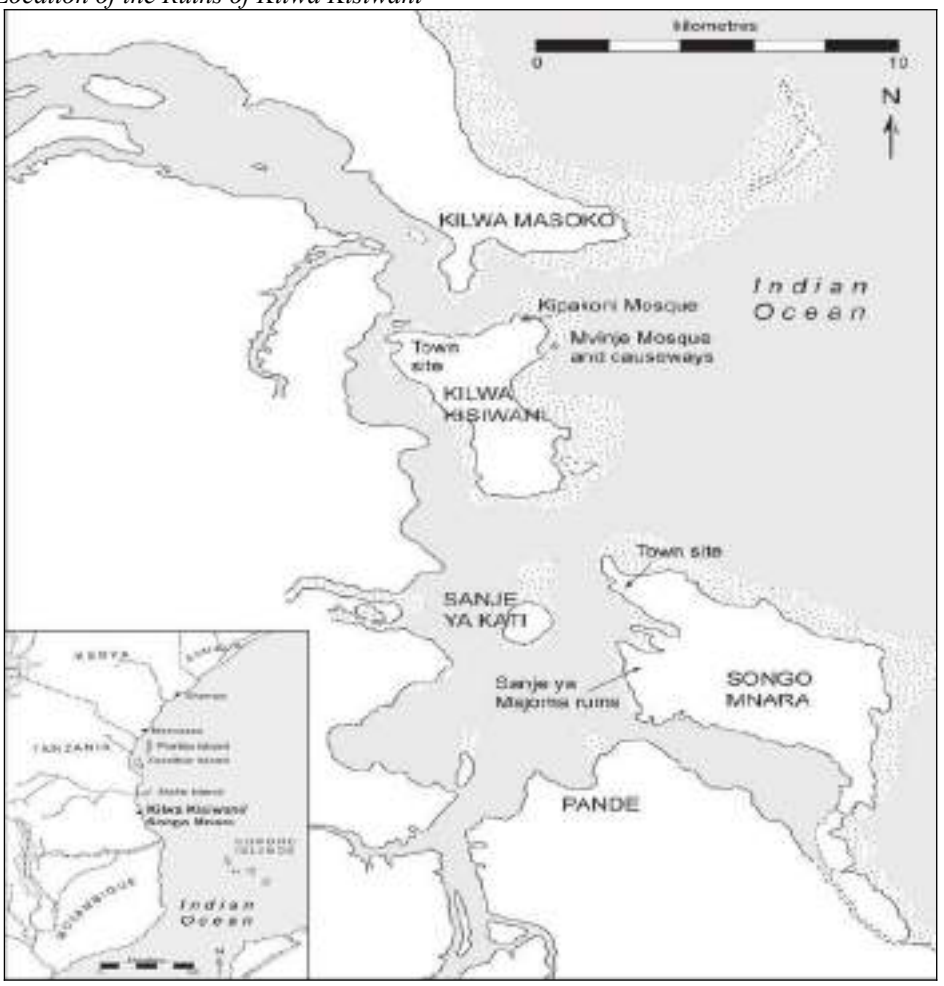
Figure 1 illustrates the conceptual framework underpinning the study. In the conceptual framework, employment and income are treated as economic factors that influence economic interests, which subsequently influence community participation. Accordingly, the model examines whether employment and income contribute to residents' economic interests and whether these economic interests are associated with participation in cultural heritage management.

METHODOLOGY

Study Area

Kilwa Kisiwani is an island in Kilwa District, Lindi Region, along Tanzania's southern coast. Geographically, it lies between 8°55′S and 9°00′S latitude and 39°28′E and 39°32′E longitude**.** Administratively, Kilwa District is divided into 6 divisions, 21 wards, and 93 villages. Kilwa Kisiwani falls within the Kilwa Masoko Division and Kilwa Masoko Ward, making it one of the district's central localities. Today, it is a UNESCO World Heritage Site recognized for its archaeological and architectural remains, including the Great Mosque and Husuni Kubwa palace. The community of Kilwa Kisiwani comprises small-scale fishers, farmers, artisans, and vendors who are directly or indirectly connected to the heritage economy. Despite international recognition, the site continues to face challenges of underfunding, limited local involvement in decision-making, and unequal access to benefits from conservation and tourism initiatives (Lwoga, 2018).

Figure 2:
Location of the Ruins of Kilwa Kisiwani



Research Design

This study adopted a mixed-methods design, combining quantitative and qualitative approaches to provide both measurable and interpretive insights into how economic interests shape participation. The quantitative component tested hypotheses derived from Social Exchange Theory using survey data analyzed with Partial Least Squares Structural Equation Modelling (PLS-SEM). This approach was chosen because PLS-SEM is well suited for predictive modelling of complex relationships among latent constructs, particularly with relatively small sample sizes and non-normal data distributions (Hair et al. 2017).

The qualitative component, comprising in-depth interviews and focus group discussions (FGDs), captured lived experiences, narratives, and perceptions of exclusion or inclusion in economic opportunities. This design ensured triangulation, where statistical findings were contextualized and enriched by community voices.

Population, Sampling Procedure, and Sample Size

The study population comprised adult residents (18 years and above) living in communities surrounding Kilwa Kisiwani World Heritage Site who had resided in the area for at least one year. The qualitative component included key stakeholders, including officials from the Antiquities Department, village ruins committee members, and local government leaders, because of their direct involvement in heritage management.

For the quantitative component, stratified random sampling was employed to ensure representation across gender, age groups, and primary occupation. Households were selected using simple random sampling from the village register. The population size of approximately 1,300 residents was based on the 2012 Population and Housing Census, which was the most recent official population information available at the time of data collection in 2021. Rather than relying solely on a large population-based sample-size estimate, the adequacy of the final survey sample was assessed in relation to the requirements of the PLS-SEM analysis.

A post-hoc statistical power analysis using G*Power was conducted using a medium effect size of 0.15, a significance level of 0.05, and three predictors. The analysis indicated a minimum required sample of 119 respondents at a statistical power of 0.95. The study obtained 124 valid questionnaires, which exceeded the minimum sample required by the power analysis. The final sample was therefore considered adequate for the PLS-SEM analysis.

The achieved sample was 124 respondents. The number of valid responses was affected by field-access and response challenges, including difficulties accessing some households, residents' unwillingness to participate, incomplete questionnaires, and logistical and time constraints during data collection. The final sample therefore reflects the valid responses obtained during the fieldwork period.

For the qualitative component, purposive sampling was used to recruit 24 key informants representing community leaders, women vendors, youth,

tour guides, Antiquities Department officials, village ruins committee members, and local government representatives. In addition, four focus group discussions were conducted with adult men, adult women, youth, and community elders to capture diverse perspectives on employment opportunities, income generation, and participation in heritage management. No participant took part in more than one qualitative method or in both the qualitative and quantitative phases, thereby enhancing the independence of the data sources used for triangulation.

Data Collection

Quantitative data were collected using a structured questionnaire consisting of closed-ended items measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire measured employment, income, economic interests, and community participation. Data were collected in 2021.

Qualitative data were collected through semi-structured interviews and focus group discussions. Interview and discussion guides contained open-ended questions focusing on employment opportunities, income generation, perceptions of benefit distribution, barriers to participation, and experiences with heritage management. All interviews and discussions were conducted in Kiswahili, recorded with participants' consent, and later transcribed for analysis. The qualitative findings were used to provide contextual explanations for the quantitative relationships, particularly participants' experiences of access to economic opportunities and the distribution of benefits.

Measurement of Constructs

The measurement items were adapted from previous studies on community participation and heritage management (e.g., Odege, 2012; Rasoolimanesh et al., 2023) and modified to suit the Kilwa Kisiwani context. Employment was measured using items assessing respondents' engagement in heritage-related employment opportunities, while income captured the financial benefits obtained from heritage-based activities such as tour guiding, handicraft production, vending, boat transportation, and casual labor. Economic interests were conceptualized as a distinct construct representing residents' economic motivations and perceived economic benefits associated with cultural heritage management. In the structural model, employment and income were specified as antecedent constructs influencing economic interests, while economic interests were specified as a predictor of community participation. Community participation was

measured using indicators assessing involvement in conservation activities, participation in decision-making, attendance at community meetings, and engagement in heritage-related events. All items were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Thus, employment and income represent economic dimensions through which residents experience economic interests, while community participation refers to residents' involvement in heritage management activities. Perceptions of fairness or unequal benefit distribution were examined qualitatively rather than as a separate latent construct in the PLS-SEM model.

Data Analysis

Quantitative data were analyzed using SmartPLS software. The analysis followed a two-stage procedure involving assessment of the measurement model and structural model. Reliability was evaluated using Cronbach's Alpha and Composite Reliability, while convergent validity was assessed using Average Variance Extracted (AVE). Discriminant validity was examined using the Heterotrait-Monotrait Ratio (HTMT). Collinearity was assessed using variance inflation factor (VIF) values.

The structural model was evaluated through bootstrapping with 5,000 subsamples to determine the significance of hypothesised relationships. Path coefficients (β), t-values, p-values, and coefficients of determination (R^2) were used to assess model performance and explanatory power. The adequacy of the quantitative sample was also considered using the PLS-SEM sample-size requirements and a post-hoc G*Power analysis. The latter indicated that a minimum sample of 119 was required for an effect size of 0.15, $\alpha = 0.05$, three predictors, and statistical power of 0.95; the final sample of 124 therefore exceeded this requirement.

Qualitative data were analyzed using thematic analysis. Interview and focus group transcripts were coded and organized into themes reflecting economic motivations, perceived benefits, barriers to participation, and experiences of inclusion and exclusion in heritage-related opportunities. The qualitative findings were used to contextualize and explain the quantitative results. This integration enabled qualitative evidence on benefit distribution, inclusion, and exclusion to be used to interpret the statistical relationships without treating fairness as a quantitatively tested predictor**.**

Ethical Considerations

Prior to data collection, formal research clearance and permission were obtained from relevant authorities, including the Open University of Tan-

zania, the Department of Antiquities, the Lindi Regional Administrative Office, the Kilwa District authorities, and the Kilwa Kisiwani local government. Participation was voluntary, and participants were informed about the purpose, objectives, and procedures of the study, including their right to decline or withdraw at any stage without penalty. Informed consent was obtained before interviews, focus group discussions, and questionnaire administration. Participants' anonymity and confidentiality were maintained, and the data were handled securely and used solely for academic purposes. The study also respected the dignity, values, norms, and socio-cultural practices of the local community, as well as the authenticity and integrity of the cultural heritage resources examined.

RESULTS

Demographic Characteristics of Respondents

The study involved 124 respondents from communities surrounding Kilwa Kisiwani World Heritage Site. Respondents included men, women, youth, elders, tourism workers, traders, artisans, and local leaders. Most respondents depended on fishing, farming, petty trade, and tourism-related activities for their livelihoods. Several respondents reported involvement in heritage-related economic activities such as tour guiding, vending, handicraft production, boat transportation, and casual labor connected to tourism and conservation activities.

As shown in Table 1, the majority of respondents were male (66.1%), while female respondents constituted 33.9% of the sample. The largest age group was 25–34 years (41.9%), followed by 18–24 years (23.4%) and 35–44 years (19.4%). Respondents aged 45–59 years (7.3%) and those aged 60 years and above (8.1%) were less represented. In terms of primary occupation, fishing was the most common livelihood activity (22.6%), followed by farming (19.4%) and petty trade or vending (17.7%). Tourism-related activities, including guiding and boat transport, accounted for 14.5% of respondents' primary occupations, while artisan or handicraft production (11.3%) and casual conservation labor (8.1%) were also reported. Other occupations made up 6.5% of the sample.

Respondents with direct involvement in heritage-related activities generally reported higher levels of participation in heritage management compared to those without such involvement. As explained by a 42-year-old male boat operator:

> "*Tourism activities contribute significantly to household livelihoods here because people get jobs and customers for their businesses.*" (R12, Male, 42 years)

Another respondent noted:

> "*When* visitors *come, we benefit through selling crafts, food, and transport services.*" (R27, female vendor, 36 years old)

Table 1:
Demographic Characteristics of Survey Respondents (N = 124)

Variable	Category	Frequency (n)	Percent (%)
Gender	Male	82	66.1
	Female	42	33.9
Age	18–24 years	29	23.4
	25–34 years	52	41.9
	35–44 years	24	19.4
	45–59 years	9	7.3
	60+ years	10	8.1
Primary Occupatiin	Fishing	28	22.6
	Farming	24	19.4
	Petty Trade/Vending	22	17.7
	Tourism-Related (guiding, boat transport)	18	14.5
	Artisan/Handicraft Production	14	11.3
	Casual Conservation Labor	10	8.1
	Other	8	6.5

Source: Field Data (2021).

Note: Percentages may not sum to exactly 100% due to rounding. N = total number of survey respondents

Reliability and Validity of the Measurement Model

Reliability and validity tests were conducted before structural analysis using Partial Least Squares Structural Equation Modelling (PLS-SEM). Cronbach's alpha and Composite Reliability values for all constructs exceeded the acceptable threshold of 0.70, indicating satisfactory internal consistency. Convergent validity was assessed using Average Variance Extracted (AVE), and all constructs recorded values above 0.50. Discrimi-

nant validity tests confirmed that employment, income, economic interests, and community participation were distinct constructs. The measurement model results, presented in Table 2, confirm satisfactory reliability and validity.

Table 2:
Measurement Model Results

Construct	Loadings	Cronbach's α	CR	AVE
Employment	>0.70	0.81	0.86	0.62
Income	>0.75	0.89	0.92	0.68
Economic Interests	>0.70	0.87	0.91	0.66
Participation	>0.70	0.87	0.91	0.66

Source: Research Data (2021), SEM-PLS Output.

Discriminant Validity and Model Fit

Table 3 presents the results of the discriminant validity assessment using the HTMT criterion. All HTMT ratios were below the threshold of 0.85, with values ranging from 0.68 to 0.74, supporting discriminant validity among the study constructs (Hair et al., 2022). Multicollinearity was assessed using the Variance Inflation Factor (VIF). The reported VIF values for the inner and outer models ranged from 1.24 to 2.87, indicating no evidence of problematic collinearity. The standardized root mean square residual (SRMR) for the estimated model was 0.068, which was below the commonly used 0.08 reference value and therefore indicated an acceptable level of residual discrepancy. Together, these diagnostics provide evidence supporting the adequacy of the measurement and structural model for the reported PLS-SEM analysis.

Table 3:
Discriminant Validity and Model Fit Indices

Criterion	Value	Threshold	Conclusion
Highest HTMT	0.74	< 0.85	Achieved
Maximum VIF	2.87	< 5.0	Achieved
SRMR	0.068	< 0.08	Achieved

Source: Research Data (2021), SEM-PLS Output.

Influence of Employment on Economic Interests

The first hypothesis (H1) examined whether employment positively influences economic interests in heritage management at Kilwa Kisiwani. The results showed a significant positive relationship between employment and economic interests ($\beta = 0.426$, $p < 0.001$), as shown in Table 4.

Table 4:
Structural Path Analysis of Employment and Economic Interests

Path	β (Original Sample)	Sample Mean (M)	Standard Deviation (STDEV)	t-Statistic	p-Value
Employment → Economic Interests	0.426	0.426	0.012	34.463	0.000

Source: Research Data (2021), SEM-PLS Output

Respondents identified several heritage-related employment opportunities, including tour guiding, conservation work, security services, transportation, accommodation services, vending, and handicraft production. Interview participants reported that employment opportunities associated with tourism and heritage activities contributed to household welfare and daily income generation.

A 29-year-old male tour guide explained:

> "Many *young people depend on tourism jobs during the high season because employment opportunities are limited here*." (R41, male, 29 years old)

Another participant stated:

> "*The ruins create jobs for guides, boat operators, and vendors, so people see the importance of protecting the site.*" (R33, male conservation worker, 47 years old).

Some respondents also reported challenges related to limited employment opportunities and unequal access to jobs within the heritage and tourism sector. As explained by a 31-year-old female vendor:

> "*Most of the better jobs go to people with connections, while women remain in small vending activities.*" (R58, female, 31 years old)

Influence of Income on Economic Interests

The second hypothesis (H2) tested whether income positively influences economic interests in heritage management. The findings revealed a significant positive relationship between income and economic interests ($\beta = 0.613$, $p < 0.001$) (Table 5). Income had the larger standardized path coefficient for economic interests among the two antecedent relationships examined.

Table 5:
Structural Path Analysis of Income and Economic Interests

Path	β (Original Sample)	Sample Mean (M)	Standard Deviation (STDEV)	t-Statistic	p-Value
Income → Economic Interests	0.613	0.613	0.013	47.807	0.000

Source: Research Data (2021), SEM-PLS Output.

Respondents reported earning income through tourism-related activities such as handicraft sales, tour guiding, accommodation services, vending, and transportation. Several participants stated that tourism-related income supported household expenses, including school fees, food, and healthcare.

According to a 38-year-old male artisan:

> "*Tourists* are *our main customers. Without them, selling our products becomes very difficult*." (R19, male artisan, 38 years old)

Similarly, another respondent explained:

> "*When visitors increase, our income also increases because we transport tourists to the island.*" (R52, male boat operator, 44 years old)

Interview and focus group participants indicated that fluctuations in tourism activities directly affected household income levels. Some respondents also reported concerns regarding unequal distribution of tourism income and limited access to profitable tourism opportunities. One female trader noted:

> *"Only a few people benefit from tourism income while many others remain excluded."* (R67, female trader, 35 years old)

Influence of Economic Interests on Community Participation

The third hypothesis (H3) examined whether economic interests positively influence community participation in heritage management. As shown in Table 6, the results revealed a significant positive relationship between economic interests and community participation ($\beta = 0.582$, $t = 7.676$, $p < 0.001$). The path coefficient indicates a positive effect of economic interests on community participation. Since the p-value is less than 0.05, the relationship is statistically significant, supporting H3.

Table 6:
Path Coefficients for Economic Interests and Participation

Path	β (Original Sample)	Sample Mean (M)	Standard Deviation (STDEV)	t-Statistic	p-Value
Economic Interests → Participation	0.582	0.581	0.076	7.676	0.000

Source: Research Data (2021), SEM-PLS Output.

Community participation was reflected in activities such as attending meetings, participating in conservation campaigns, engaging in tourism-related activities, supporting site protection initiatives, and involvement in local heritage events. Respondents who reported receiving economic benefits from heritage activities also reported higher levels of participation in heritage management activities.

As explained by a 63-year-old elder:

> "*The ruins* are *important because they attract visitors and help our children get opportunities in the future*." (R08, male elder, 63 years old)

Another participant commented:

> "People *are willing to support conservation when they see direct benefits from tourism."* (R71, female community member, 40 years old)

However, some participants expressed dissatisfaction regarding limited involvement in decision-making processes and concerns about transparency in benefit distribution. One fisherman explained:

> "*We* are *told to protect the site, but local people are rarely involved in important decisions*." (R84, male fisherman, 50 years old)

Similarly, a youth representative added:

> "*There is little transparency in how opportunities and benefits are distributed."* (R92, female youth representative, 33 years old)

Structural Model Explanatory Power

The structural model explained 61% of the variance in community participation ($R^2 = 0.61$), indicating that economic interests account for a considerable proportion of the variance in community participation. These findings demonstrate that economic factors play a substantial role in influencing community participation in cultural heritage management at Kilwa Kisiwani.

Table 7:
Path Coefficients and Hypothesis Testing

Hypothesis	Relationship	B	t-value	p-value	Decision
H1	Employment → Economic Interests	0.426	34.463	0.000	Supported
H2	Income → Economic Interests	0.613	47.807	0.000	Supported
H3	Economic Interests → Participation	0.582	7.676	0.000	Supported

Source: Research Data (2021), SEM-PLS Output.

The results revealed that employment had a positive and significant effect on economic interests ($\beta = 0.426$, $p < 0.05$), supporting H1. Income also exerted a positive and significant influence on economic interests ($\beta = 0.613$, $p < 0.05$), supporting H2. Furthermore, economic interests significantly influenced community participation in cultural heritage management ($\beta = 0.582$, $p < 0.05$), supporting H3. The findings suggest that access to employment and income opportunities enhances community economic interests, which subsequently encourage participation in heritage management activities.

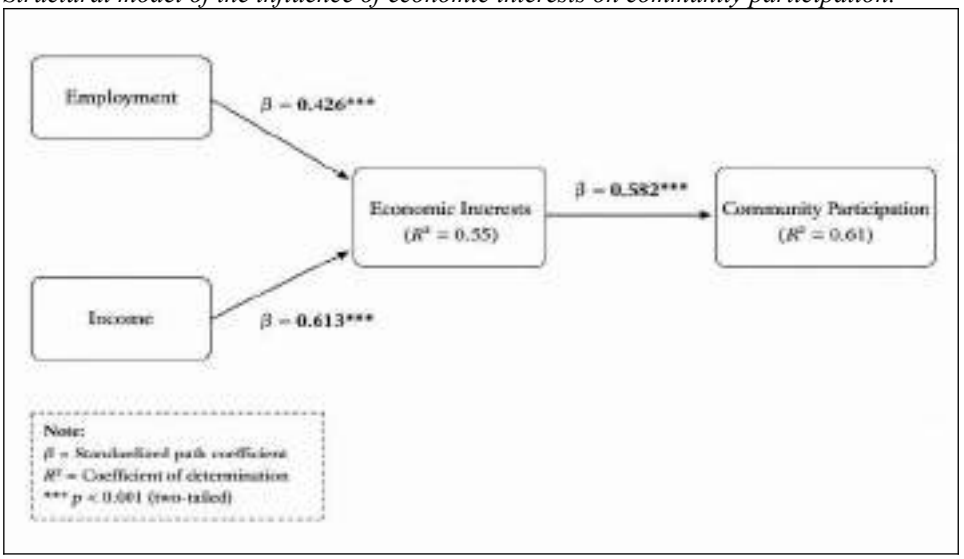
Table 8:
Integration of Quantitative and Qualitative Findings

Quantitative relationship	β	Statistical finding	Qualitative explanation	Integrated interpretation
Employment → Economic Interests (H1)	0.426	Significant ($p < .05$)	Participants reported that employment opportunities associated with heritage activities contributed to their economic interests. However, access to some opportunities was perceived to be uneven, particularly among women and youth.	Employment contributes positively to economic interests, while qualitative evidence indicates that unequal access may affect how these opportunities are experienced across community groups.
Income → Economic Interests (H2)	0.613	Significant ($p < .05$)	Participants identified income from guiding, handicrafts, vending, boat transport, and other heritage-related activities as important sources of household livelihood. Some income opportunities were described as seasonal or temporary.	Income has a positive relationship with economic interests and represents an important economic incentive, although the availability and stability of income opportunities vary among residents.
Economic Interests → Community Participation (H3)	0.582	Significant ($p < .05$); $R^2 = 0.61$	Participants linked economic benefits with willingness to participate in conservation activities, community meetings, tourism activities, and protection of the heritage site. Qualitative accounts also raised concerns about unequal benefit distribution, consultation, transparency, and exclusion.	Economic interests are positively associated with community participation. The qualitative evidence provides contextual insight into how access to and distribution of economic benefits may shape residents' experiences of participation.

Source: Research Data (2021).
Note: β = standardized path coefficient; R^2 = coefficient of determination. Quantitative findings are based on PLS-SEM, while qualitative explanations are derived from interviews and focus-group discussions.

The quantitative relationships summarized in Table 8 are visually presented in the structural model shown in Figure 3.

Figure 3:
Structural model of the influence of economic interests on community participation.



Source: Research Data (2021), SEM-PLS Output.

DISCUSSION

This study examined the influence of economic interests on community participation in cultural heritage management at Kilwa Kisiwani World Heritage Site, Tanzania. The findings revealed that employment and income significantly enhanced community economic interests, while economic interests, in turn, positively influenced participation in heritage management activities. These results support the central proposition of Social Exchange Theory (SET), which argues that individuals are more likely to support collective initiatives when the perceived benefits outweigh the associated costs (Blau, 1964; Ap, 1992). The findings therefore reinforce the importance of economic benefits in shaping community engagement with heritage management.

The study found that employment opportunities generated through heritage tourism significantly influenced economic interests among residents. Heritage-related activities such as tour guiding, transportation services, handicraft production, conservation work, accommodation services, and vending provided important livelihood opportunities for community

members. In a context such as Kilwa Kisiwani, where formal employment opportunities remain limited, these activities represent valuable sources of income and economic security. Consequently, residents who benefited from heritage-related employment developed stronger economic interests in the preservation and management of heritage resources. These findings are consistent with previous studies that have identified tourism-related employment as an important driver of positive community attitudes toward conservation and tourism development (Andereck et al., 2005; Mbaiwa, 2011; Mensah et al., 2023). Similarly, Ashley and Roe (2002) and Musavengane and Kloppers (2020) observed that heritage tourism creates alternative livelihood opportunities that increase local dependence on and support for heritage resources.

Nevertheless, the qualitative findings revealed that access to employment opportunities was not always equitable. Several respondents reported that women and young people often faced barriers in accessing more rewarding tourism-related jobs, while opportunities were sometimes perceived to favour individuals with personal connections or social influence. These findings suggest that employment opportunities alone may not guarantee broad-based community participation if recruitment processes are perceived as unfair. Similar concerns regarding unequal access to tourism benefits have been reported in other tourism destinations in Tanzania and elsewhere in Africa (Lwoga, 2017; Mbaiwa, 2017). Thus, while employment contributes positively to economic interests, its ability to foster long-term participation may depend on transparent and inclusive access mechanisms.

Income emerged as the strongest predictor of economic interests in the study. This finding suggests that community members place considerable value on the direct financial benefits derived from heritage-related activities. Income earned through tourism-related enterprises supported household needs such as food security, healthcare, education expenses, and small-scale business investments. For many residents, heritage tourism functions as an important livelihood diversification strategy that reduces economic vulnerability. The strong influence of income observed in this study is consistent with findings from UNESCO World Heritage destinations and other heritage tourism contexts where tourism-generated revenues have been shown to strengthen local support for conservation initiatives (Biddulph, 2021; Rasoolimanesh et al., 2023; Cerisola et al., 2024; Galluccio, 2024).

The stronger influence of income compared to employment may reflect the fact that employment opportunities at Kilwa Kisiwani are often seasonal, temporary, or limited in number, whereas income directly affects household welfare and living standards. Residents may therefore evaluate heritage-related opportunities primarily in terms of their actual financial returns rather than simply the availability of jobs. This finding highlights the importance of considering not only employment creation but also the quality and economic value of employment opportunities when designing community-based heritage management strategies.

The present findings are also consistent with evidence from heritage destinations beyond Africa, where economic incentives have been shown to encourage community participation in heritage conservation. For example, studies in Italy and other European heritage sites found that employment opportunities generated through museums and cultural tourism strengthened residents' support for heritage conservation by improving household livelihoods (Galluccio, 2024). Similarly, research conducted in European rural heritage destinations demonstrated that income generated through heritage-based enterprises and cultural tourism enhanced local commitment to conservation initiatives by increasing the perceived economic value of heritage resources (Cerisola et al., 2024). Comparable findings have also been reported in Asian heritage destinations, where tourism-related employment and income positively influenced residents' willingness to participate in heritage protection and sustainable tourism development (Rasoolimanesh et al., 2023). These international studies reinforce the argument that economic incentives constitute an important mechanism for fostering community participation across diverse heritage contexts.

Despite the positive contribution of tourism income, the qualitative findings revealed concerns regarding unequal benefit distribution. Some respondents perceived that tourism revenues were concentrated among a small group of individuals, while many community members remained excluded from profitable opportunities. Such perceptions are important because they indicate that economic benefits can encourage participation for some residents while generating dissatisfaction among others. Similar challenges of elite capture, unequal benefit-sharing, and exclusion have been documented in community-based tourism and heritage management initiatives across Africa (Platteau, 2004; Mbaiwa, 2017). This finding adds an important contextual dimension to the quantitative results by

showing that the economic benefits associated with heritage tourism are not experienced uniformly across the community.

The study further demonstrated that economic interests significantly influenced community participation in heritage management. Respondents who perceived direct economic benefits from heritage resources were more likely to engage in conservation activities, attend meetings, support site protection initiatives, and participate in tourism-related programs. This finding strongly supports the assumptions of Social Exchange Theory and aligns with previous studies showing that perceived benefits enhance local support for conservation and tourism development (Gursoy et al., 2002; Rasoolimanesh et al., 2023; Makoni & Musavengane, 2024). In the context of Kilwa Kisiwani, heritage resources are not viewed solely as cultural assets but also as important economic resources that contribute to household livelihoods. Consequently, residents who derive tangible benefits from heritage are more willing to invest their time and effort in its protection and management.

However, the qualitative findings indicate that economic incentives alone are insufficient to sustain participation. Respondents frequently expressed concerns regarding limited consultation, inadequate transparency, and exclusion from important decision-making processes. These concerns suggest that participation is influenced not only by economic considerations but also by governance-related factors such as trust, accountability, and procedural fairness. This observation is consistent with participatory heritage management literature, which emphasizes that sustainable conservation requires meaningful community involvement in decision-making processes rather than merely the distribution of benefits (Labadi et al., 2021; Waterton & Smith, 2020).

An important theoretical contribution of this study is its extension of Social Exchange Theory within the context of heritage management in developing countries. While SET traditionally emphasizes the exchange of costs and benefits, the qualitative evidence from Kilwa Kisiwani indicates that residents also consider how opportunities and benefits are accessed and distributed. Importantly, these perceptions were not tested as a separate fairness construct in the PLS-SEM model; rather, they emerged from the qualitative component and help explain differences in how economic opportunities are experienced. The study therefore points to benefit distri-

bution as a potentially important dimension for future extensions and quantitative testing of SET in heritage management.

The integration of the quantitative and qualitative findings is summarized in Table 8. The joint display distinguishes the statistically tested relationships from the qualitative explanations provided by participants, thereby showing how the two strands of evidence complement one another.
Overall, the findings demonstrate that economic empowerment remains a critical driver of community participation in cultural heritage management at Kilwa Kisiwani. However, the study also highlights that economic incentives operate within broader social and governance conditions. Sustainable heritage management therefore requires attention to economic opportunities alongside transparent governance, inclusive decision-making, and mechanisms that broaden access to heritage-related benefits. These findings are particularly relevant to Kilwa Kisiwani, while their applicability to other heritage destinations should be assessed through comparative research.

Conclusion and Recommendations

This study examined how economic interests, specifically employment and income, affect community participation in cultural heritage management at Kilwa Kisiwani, Tanzania. Guided by social exchange theory and using a mixed-methods approach, the findings showed that employment and income significantly strengthened economic interests, which in turn positively influenced community participation. Income emerged as a stronger predictor than employment ($\beta = 0.613$ vs. $\beta = 0.426$), indicating that direct financial benefits are a key motivation for local communities to engage in heritage management activities.

Despite the positive influence of economic incentives, the study also revealed important challenges related to inequitable benefit distribution, including favouritism, elite capture, and gender exclusion. The qualitative findings further showed that some community members experienced limited access to employment opportunities, tourism income, and decision-making processes. These findings indicate that the presence of economic opportunities does not necessarily translate into broad-based participation when access to those opportunities is uneven.
The study contributes to the growing body of knowledge on community-based cultural heritage management by providing empirical evidence from the underrepresented East African context. It demonstrates that

while economic incentives are essential for encouraging participation, they should be complemented by transparent governance, inclusive decision-making, and equitable benefit-sharing mechanisms. The quantitative findings establish the positive relationships among employment, income, economic interests, and participation, while the qualitative evidence provides contextual insight into the conditions under which these relationships are experienced by different community groups. These findings have important implications for heritage policies that seek to operationalize community participation as promoted by UNESCO and other international heritage organizations.

The study has several limitations that should be considered when interpreting its findings. First, the quantitative analysis was based on 124 respondents from the Kilwa Kisiwani context; therefore, the findings should not be assumed to represent all communities living around heritage sites in Tanzania or elsewhere. Second, the qualitative findings were used to provide contextual explanations of the quantitative relationships, and perceptions concerning unequal access and benefit distribution were not modelled as a separate quantitative construct. Third, the study focused primarily on economic interests, employment, income, and participation; other factors such as governance, cultural values, institutional trust, and social identity may also influence community participation. These limitations provide opportunities for future research to test additional explanatory factors and examine the relationships across multiple heritage sites.

Based on these findings, several recommendations are proposed. Heritage authorities and tourism stakeholders should strengthen local employment opportunities through transparent and inclusive recruitment processes, with particular emphasis on women and youth, while investing in capacity-building programs in conservation, tour guiding, hospitality, and cultural entrepreneurship. Mechanisms for equitable distribution of tourism benefits should also be established through community benefit-sharing schemes, local development funds, and support for community-based enterprises to reduce perceptions of inequality.

Furthermore, heritage management institutions should strengthen community involvement in decision-making by creating formal consultation platforms, ensuring local representation in heritage management committees, and promoting participatory planning processes that enhance trust and collective ownership. Heritage education and awareness programs should

also be expanded to improve community understanding of the value of cultural heritage, encourage responsible tourism, and strengthen local stewardship.

These recommendations are primarily relevant to the Kilwa Kisiwani context, where the study identified specific concerns regarding access to employment, tourism income, and participation in decision-making. Their applicability to other heritage destinations should be assessed according to local institutional, economic, and social conditions. Finally, future studies should investigate additional factors influencing community participation, including governance systems, cultural values, social identity, institutional trust, and environmental perceptions, while undertaking comparative studies across different heritage sites in Tanzania and other African countries to improve the generalizability of the findings.

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Effects of the Ihefu Wetlands Ecosystem on Livelihood of Local Communities in Mbarali District, Mbeya Region, Tanzania

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Abstract
This study examines the effects of Ihefu Wetlands ecosystem on livelihood of local communities in Mbarali District, Mbeya Region, Tanzania. Wetlands are vital life-support ecosystems, providing water year-round and fertile land for farming and grazing. The research addressed two objectives: challenges facing Ihefu Wetlands and their importance in supporting livelihoods of local communities. A mixed-methods approach was used, combining qualitative and quantitative techniques where an exploratory descriptive design was adopted. Sampling techniques used in this paper was purposive and simple random sampling. Data were collected from 150 respondents through questionnaires, interviews, and observations, while 31 journal articles were reviewed for documentary analysis. Statistical software used in this study was SPSS version 25 where data were analysed using Chi-square test, percentages, frequencies and narratives. Findings revealed that 74.7% of respondents identified wetlands as the primary source of water, 65.3% considered wetlands as wildlife habitats, while 65% identified agricultural encroachment as the major threat. However, unsustainable farming and overgrazing threaten their integrity. The study emphasises raising awareness, enforcing laws, and involving local communities in conservation efforts. Recommendations include reducing livestock numbers, controlling grazing, and penalising wetland degradation. These results highlight key factors contributing to wetland decline and inform future conservation efforts.

Keywords: *Ecosystem, Ihefu Wetlands, Life support, Livelihoods, Wetlands, Mbarali District*

INTRODUCTION

Wetlands are among the most productive and diverse ecosystems in the world providing essential ecological services that support life on the earth (Balwan and Kour, 2021). They are important ecosystem that acts as the kidneys of the earth (Kaushalya, 2020). According to Mitsch and Gosselink (2015), wetlands are described as the kidneys of the landscape because they function as downstream receptors of water and waste from both natural and human sources. Wetlands are also important habitat for migratory birds and waterfowl, including ducks, egrets, and geese. More than one-third of the species listed as threatened or endangered in the United States live solely in wetlands and nearly half use wetlands at some point in their lives (U.S. Fish & Wildlife Service, 2024; Xu *et al.,* 2024). However, many wetlands are often recognised as important conservation or restoration targets for endemic plants, animals and micro-organisms. Wetlands also host crocodiles, Hippos, flamingos, fish species, and waterbucks, among others.

A wetland is defined as areas of marsh, fen, peatlands or water, natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water; the depth of which at low tide does not exceed six metres (Ramsar Convention Secretariat, 2022; 2024). In other words, wetlands are dynamic ecosystems characterised by the presence of water, whether permanent or intermittent (Dixon *et al.,* 2016; Mandishona and Knight, 2022). A wetland is also loosely defined as a vegetated area that is flooded either permanently or seasonally (Balwan, 2021). Wetlands range in size from less than one acre to thousands of acres (Balliett, 2026) and can take many forms. Livelihood refers to the means and resources through which individuals or households secure the necessities of life, such as food, water, shelter, and income (Singh & Mishra, 2025). It encompasses various activities, assets, and strategies that people employ to sustain themselves economically and socially. This paper adopts the definition suggested by Chambers and Conway, which defines livelihood as the capabilities, assets (including both material and social resources), and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks, and maintain or enhance its capabilities and assets both now and in the future, without undermining the natural resource base (Chambers & Conway, 1991; Scoones, 2022).

Wetlands are among the most important ecosystems on Earth because they provide essential ecological services and sustain biodiveristy, water

resources, and humans' livelihoods (Mitsch and Gosselink, 2015; Mitsch, 2021). The wetland ecosystem is valuable for flood control, water quality improvement, shoreline erosion control, a source of natural products, and recreation and aesthetics (Fischbach, 2023). In African countries, wetlands are critically important to the livelihoods of millions of people (Kipkemboi, 2025) and other living organisms. Wetlands are diverse, including a range of ecosystems such as mangrove forests, peatlands, and floodplains (Ramsar Convention Secretariat, 2016). They contribute in diverse ways to the livelihoods of millions of people in Sub-Saharan Africa (Kipkemboi, 2025). One of the most important functions of wetlands is their ability to support a diverse life of plants, animals and microbes (Mitsch and Gosselink, 2015). Wetlands also provide habitats for a variety of plant and animal species, including migratory birds and endangered species such as gorillas and chimpanzees (UNEP, 2020). Wetlands are home to large mammals such as elephants and hippos, which play an important role in supporting local tourism industries (UNESCO, 2021). Wetlands provide essential habitat for a wide range of species, many of which are unique to these environments, such as flamingos and ducks. Wetlands support life, as they provide various services and are the main source of water throughout the year.

Wetlands are also used for the cultivation of crops such as rice (paddy) which is a staple food for many people. For example, the Inner Niger Delta in Mali, wetland supports an estimated 1.5 million people through rice cultivation and fishing (UNESCO, 2021). Wetlands also provide grazing land for livestock, which is an important source of income for many pastoralist communities in Africa (Wangui, 2024). Wetlands are also important in mitigating the impacts of climate change, as they store water during droughts and dry seasons. It stores large amounts of carbon in its soils and vegetation, which helps reduce greenhouse gas emissions and slow the rate of climate change (UNEP, 2020).

Furthermore, wetlands help to mitigate the impacts of extreme weather events such as floods, storms, and droughts, which are becoming increasingly common in many African countries (Babaniyi et al., 2025). However, wetlands are vital ecosystems that support a wide range of life and provide numerous benefits to humans. In African countries, wetlands are important for the roles they play in supporting biodiversity, traditional livelihoods, agriculture, and climate change mitigation. However, wet-

lands in Africa are under threat from a variety of human activities, including farming, grazing, and settlement.

Tanzania is rich in wetland resources, including the Great Lakes system, inland drainage systems, major river networks, and deltaic mangrove areas. About 10% of the country's land is covered by wetlands, mainly floodplains and rivers such as the Usangu, Pangani, lower Rufiji, Wami, and Ruvuma floodplains, and the Kilombero wetland (Vice President's Office, 2022). Ihefu wetland is one of the wetlands in Tanzania. Ihefu wetland is an important ecosystem to the local community and to the national economy at large (National Environment Management Council, 2022; Tanzania Electric Supply Company, 2024). About 65% of national hydropower in Tanzania is generated from waters originating from the Ihefu wetland (Tanzania Electric Supply Company, 2024; Ministry of Water and Energy, 2023). Despite the ecological importance of the Ihefu wetland ecosystem, it faces various challenges, both human-induced and natural. The wetland is threatened by population growth, urbanisation, pollution, and the expansion of farmland, grazing land, and settlements (Ramsar Convention Secretariat, 2016; Ministry of Natural Resources and Tourism, 2025). Natural wetlands are in decline through-out the world (Ramsar Convention Secretariat, 2021) and in Tanzania as well (National Environment Management Council, 2023). Although numerous studies have documented the ecological importance of wetlands in Africa, few empirical studies have quantitatively examined how the Ihefu Wetland specifically contributes to local livelihoods while simultaneously facing increasing anthropogenic pressures. This study addresses this gap by integrating household survey data with qualitative evidence to evaluate both the socio-economic importance and conservation challenges of the Ihefu Wetland. This paper responds to two specific objectives; (i) to examine challenges facing Ihefu Wetland Ecosystem and (ii) to assess the importance of Ihefu Wetland on the livelihoods of local community in Ihefu Wetland.

RESEARCH METHODOLOGY

This paper explores the effects of the life-support ecosystem in Ihefu Wetland, Mbarali District, Mbeya Region. The Great Ruaha River feeds the Ihefu wetlands. The study was conducted in Ihefu Wetland Ecosystem in March and April 2025. A total of 150 respondents were involved in this study. The sample size for this paper was calculated using Yamane's (1967) formula:

$n = N/(1+Ne^2)$

where: n represent sample size; N represents the study population and e is the desired level of precision i.e. 0.05.
Given: Population size of 240; Margin error of 0.05, the obtained sample size is 150

$$n = 240/1 + 240*(0.05)^2 = 150$$

$$n = 240/1+240(0.0025)$$
$$n = 240/1+0.6$$
$$n = 240/1.5$$
$$n = 150$$

The sample size for this paper is 150 respondents.

Data and information in this study was collected in the field using questionnaires, in-depth interviews and observations. The questionnaire was developed based on the study objectives and the review of the relevant literature on wetland ecosystems, livelihood activities and ecosystem services. The set of the questionnaire consisted of questions covering respondents' socio-economic characteristics, livelihood activities, utilisation of Ihefu wetland resources and challenges affecting livelihoods. Both closed-ended and open-ended questions were included. The questions were designed to correspond directly with the study objectives. For the validity, the questionnaire was reviewed by experts with knowledge and experience in environmental management, wetland ecosystems and rural livelihoods. The reviewers assessed whether the questions were clear and adequately covered the concepts and variables under investigation. Their comments and recommendations were incorporated before the questionnaire was administered to respondents. This process helped improve the relevance, clarity, and comprehensiveness of the questionnaires.

The questionnaire was pre-tested to 10 respondents who had characteristics similar to those of the target population but were not included in the final sample. Based on the feedback obtained during the pre-test, some modifications were made to the wording and clarity of some questions before the final questionnaire was administered. The reliability of the questionnaire was enhanced through pre-testing before the main data collec-

tion. A critical documentary literature review was conducted to support the primary data collected in the field. Both qualitative and quantitative information was collected. Exploratory-descriptive research design was adopted in this study. A random sampling technique was used to obtain a sample of 150 respondents, and a purposive sampling technique was used to obtain 10 key informants. However, the collected data were analysed using SPSS version 25 and conceptual content analysis. Descriptive statistics, including frequencies and percentages, provided a summary of the findings. Results were presented in tables and narratives (verbatim).

The study obtained institutional approval before data collection. The research permit was obtained from the Open University of Tanzania to introduce the researcher in the Mbarali District. Respondents were informed about the purpose of the study and provided informed consent to particiipatein the study. Participation was voluntary, and confidentiality and anonymity of respondents' information were maintained throughout the study.

RESULTS

Socio-Economic Demographic Characteristics of the Respondents

This section presents information on the socio-economic and demographic characteristics of 150 respondents who were interviewed in the survey. Table 1 presents the characterists of the heads of households based on gender, age, education level, major sources of livelihoods and monthly income. The majority of respondents were male (72.7%) and aged 31-45 years (36.7%; Table 1). The data show that 21.3% of participants have attained primary education, while just 40.7% have reached secondary school. About 14.7% of the respondents had not attended school at all, while 23.3% had higher education. Major sources of livelihoods were diverse; the data shows that the majority of the respondents depended on farming (39.3%) and livestock keeping (31.3%), while 5.4%, a small proportion of respondents depended on tourism, forestry, petty trade, and food vendors (Table 1). The distribution of major livelihood sources varied significantly among respondents ($\chi^2 = 72.08$, df = 5, $p < 0.001$). This result indicates that respondents' major livelihood sources were not equally distributed. Farming and livestock keeping accounted for much larger proportions of respondents than the other livelihood categories.

Table 1:
Socio-economic demographic characteristics of respondents

Characteristics	Response value	Frequencies	Percentages
Gender of respondents	Male	109	72.7
	Female	41	27.3
	Total	150	100.0
Age of respondents	18 - 30	35	23.3
	31 - 45	55	36.7
	46 -60	41	27.3
	61+	19	12.7
	Total	150	100.0
Education level	Informal education	22	14.7
	Primary education	32	21.3
	Secondary education	61	40.7
	Higher education	35	23.3
	Total	150	100.0
Major sources of livelihoods	Farming	59	39.3
	Livestock keeping	47	31.3
	Fishing	15	10.0
	Tourism	11	7.3
	Forestry	10	6.7
	Others: petty trade, food vendor…..	8	5.4
	Total	150	100

Source: Field data, 2025

Challenges facing Ihefu Wetlands Ecosystem

In this paper, two main factors affecting the degradation of wetland ecosystems were identified: human and natural factors. Human factors identified included population growth leading to over-consumption of environmental resources in the wetlands. Effects on wetlands include loss of wetland area, changes in the water regime, changes in water quality, and overexploitation of wetland products. The introduction of alien/ exotic species is another threat to wetlands. The findings of this paper showed that urbanisation is associated with various socio-economic activities, as well as the destruction and pollution of wetlands. It is obvious that there is a direct relationship between urbanisation, pollution, and the degradation of wetlands.

In the past, wetlands were often viewed as wastelands because they were seen as unproductive areas of little significance to humans. In this paper, waste refers to something not useful to man (Mhache, 2012; Mwakalobo, 2022), such as garbage. As a result, wetlands were drained; others were filled or altered to other uses and activities, leading to the loss of many

wetland ecosystems and the services they provide. Some wetlands were converted to dumping site and grazing areas. Jangwani Area in Dar es Salaam is one of the wetlands in Tanzania that has been converted to other uses, such as bus parking and playgrounds. Table 2 presents challenges facing wetlands, as collected from household heads interviewed in the Ihefu Wetland Ecosystem.

Table 2:
Challenges facing Ihefu Wetland Ecosystem

Challenges	Responses (n=150)	Percentages
Farming in wetlands	97	65
Dumping area for garbage disposal	75	50
Pollution	65	43
Grazing/ overgrazing	51	34
Unsustainable development	49	33
Climate change	47	31
Tree cutting	27	18

Note: The percentages amounts to more than 100 due to multiple responses

In many areas, including the Ihefu Wetland Ecosystem, land has been converted to agricultural areas to increase production and feed the growing population. Agriculture is the backbone of most developing countries including Tanzania. Farmers rely on rainfall, which is unreliable and unstable; alternatively, people cultivate or graze in wetlands. For this case, agriculture is among the major reason for wetland degradation. The majority of the respondents (65%) raised the alarm that farming in the wetlands poses a great challenge to the Ihefu Wetland. Wetlands are regarded as a virgin land, fertile and retain water for a long time (Table 2). For this reason, farmers cultivate in wetland areas sinceno irrigation is required; the wetland remains wet throughout the year.

Wetlands are becoming areas for garbage, wastewater disposal, and other unwanted materials. About 50% of the respondents believed that dumping waste in the wetlands is a threat. Waste devalues wetlands, as toxic materials are also dumped in them, polluting water used for domestic and other purposes, as reported by 43% of the respondents (Table 2). Pollution is the contamination of wetlands. People are emptying their toilets and pouring the effluent into the wetlands, which then pollute them.

Human activities such as animal grazing, illegal construction and development have negatively affected the wetland. About 34% of the people interviewed pointed out that grazing or overgrazing is another problem to

wetlands (Table 2). Animals clear the areas by eating all the grasses and causing soil compaction, leading to the wetlands disappearing. It was said by one of the pastoralist/ shepherd that, "*Government restricted grazing in the Ihefu Wetland because of the destruction associated with large herds of animals flowing to it*". It was further disclosed that illegal construction and unsustainable development are also threats to wetlands, as pointed out by 33% of the respondents. "*Diversion of water from Ihefu Wetlands for irrigation, irrigation drain wetland then damages the wetlands",* this was said by Mbonile, a farmer in Ihefu Wetlands, Mbeya Region. Natural factors were also identified as threats to wetlands. Climate change was mentioned by 31% of respondents as a threat to wetlands. A long-term drought, coupled with a shortage of rainfall, leads to the disappearance of wetlands (Table 2). Other threats to wetlands were reported by 18% of respondents (Table 2). Other threats to wetlands include tree cutting for charcoal making, poles, timber, and fire burning. However, the respondents were asked general question that, are there challenges facing Ihefu wetlands? The response was yes or no; where 97 responded yes, while 53 responded no. The findings show that 97 respondents (64.7%) reported that Ihefu Wetland faces challenges, while 53 respondents (35.3%) reported that it does not face challenges. The Chi-square goodness-of-fit test indicates that this difference is statistically significant, $\chi^2(1, N = 150) = 12.91, p < 0.001$**.** Therefore, the study provides statistical evidence that the proportion of respondents reporting challenges was significantly higher than would be expected under an equal 50:50 distributions.

Importance of Ihefu Wetland in Supporting Local Livelihoods

Despite the numerous challenges facing wetlands, they continue to play a vital role for multiple ecological and socio-economic reasons. It was disclosed that wetlands are a main source of water for domestic use, power generation, irrigation, industrial use, and watering animals, to name a few. It acts as a sponge, releasing water very slowly and replenishing water bodies such as rivers, lakes, dams, ponds, streams, and wells. Wetlands are a source of water, as supported by 74.5% of respondents (Table 3). The old man interrogated in the Ihefu Wetland said this, "*The wetland is a life-support ecosystem because it provides water that we use for many different activities. Without it, life for all living organisms would be impossible or seriously threatened*." This argument was supported by women who were found carrying buckets of water. One of them explained, "*During the dry season, we are forced to collect water from the valleys because they usually have water throughout the year*." One pastoralist en-

countered in the Ihefu Wetland stated, "*This wetland is a life-support system for our livestock. Most of the time, we bring our animals here to access water because this area has sufficient water year-round. Especially during the dry season, this place becomes very important for the survival of our animals*."

Table 3:
Ecological and socio-economic importance of Ihefu Wetland

Importance of wetlands	Responses (N=150)	Percentages
Source of water	112	74.7
Habitats of wild	95	65.3
Flood and erosion control	89	59.3
Storage of water	87	58.0
Water purification	84	56.0
Nutrient cycling	61	40.7
Wetlands supports horticulture	60	40.0
Education	45	30.0

Note: The total percentage exceeds 100% because respondents were allowed to select multiple responses

Wetlands are habitats for many living organisms, as they provide essential ecological functions and services that support life on Earth. Wetlands also serve as important habitats for biodiversity, supporting a wide range of plant and animal species adapted to wetland ecosystems. Table 3 showed that wetlands are home to wildlife, including threatened and endangered species. About one-third of all plants and animals listed as threatened or endangered species depend on wetlands for their survival, including flamingos and several orchid species. An old woman interviewed in the Ihefu Wetland had this to say, "*We used to see frogs and other plants in areas with water, but now frogs are not seen; even plants we used to see have disappeared. I think the cause may be humans who have disturbed the area through farming, grazing and establishment of settlements.*" About 65.3% of the people interviewed supported the assertion that wetlands are habitats for several living organisms. The Officer of Tanzania Forest Services (TFS) interviewed said this, "*Some wetland areas are breeding environments for fish and other creatures like frogs. In some areas, including Ihefu Wetland, these organisms have disappeared due to human interference*". Floods and soil erosion can result from both natural processes and human activities. Human actions such as deforestation, poor agricultural practices, overgrazing, urbanisation, and inadequate land management accelerate erosion and increase flood risks. Together, these factors not only damage ecosystems and infrastructure but also threaten food security and human livelihoods.

Wetlands act as natural reservoirs that collect and store water, thereby helping to control floods and reduce soil erosion by releasing water slowly over time. About 59.3% of the respondents supported the argument that wetlands control floods and soil erosion (Table 3). The ability of wetlands to retain water during heavy rainfall helped reduce the severity of downstream floods. The dense vegetation in wetlands also helps to stabilise soils and reduce erosion, which is important in areas with steep slopes or in coastal areas (Spandana *et al.,* 2026).

A water engineer interviewed in Mbarali District said this, "*Wetlands offer number of services such as water purification, filtering sediment, nutrient cycling and carbon sequestration".* The water engineer's argument was supported by the Primary School Teacher, who said this. *"During rainy seasons, water has colour, when it is collected in the wetlands, after some time, the water released is clean, colourless, and it can be used for different uses."* About 56% of the respondents enjoyed clean water released from Ihefu Wetland (Table 3). ***"****Wetlands minimise the global warming effect, absorbing pollutants in the water, and it is the habitat for biodiversity*", said one of the village chairmen. The ecologist interviewed emphasised that, "*Wetlands act as natural filters; they remove pollutants and excessive nutrients from water before it enters lakes, rivers, and other aquatic systems.*" Nutrient cycling as a function of wetlands was appraised by 40.7% of the people interviewed (Table 3). This function (nutrient cycling) is critical for maintaining the health of freshwater ecosystems and for providing clean drinking water to millions of people worldwide (Mitsch and Gosselink, 2015). In some wetland systems, this cleansing function also enhances the quality of groundwater supplies. Nutrients and plant material flushed from wetland systems during storms provide essential food to plants, fish, and wildlife in estuaries and other downstream ecosystems. In Tanzania, paddy does much better in wetlands than in irrigated areas.

Horticulture performs well in wetlands, as indicated by 40% of respondents (Table 3). Horticulture involves growing short-term, time-limited crops like vegetables, fruits, flowers, ornamentals, and lawn grasses, typically on a smaller scale. Wetlands in different areas help recharge the aquifer, raising water tables and making the area wet and suitable for horticulture. Wetlands offer significant opportunities for education and research, as supported by 30% of respondents. Wetlands provide countless opportunities for environmental education and offer research sites for re-

searchers and university students. Ihefu Wetland supports education and research by serving as a natural laboratory for ecological studies. It provides avenues for students and scientists to explore biodiversity, water resource management, and conservation practices. Research conducted in Ihefu Wetland informs sustainable livelihoods and environmental policies, enhancing both academic knowledge and community awareness.

When respondents were asked to state whether wetland is important or not, 141 reponded it is important while 9 repondend it is not important. The results of the Chi-square goodness-of-fit test indicates a statistically significant difference between the observed and expected frequencies. The findings indicate that the majority of respondents (141; 94.0%) perceived Ihefu Wetland as ecologically and socio-economically important, while only 9 respondents (6.0%) did not consider it important. A Chi-square goodness-of-fit test showed that this distribution differed significantly from an equal distribution, $\chi^2(1, N = 150) = 116.16$, $p < 0.001$. This suggests that respondents overwhelmingly perceived Ihefu Wetland as important in ecological and socio-economic terms.

DISCUSSION OF THE RESULTS

A wetland is sometimes known as wasteland. Wetlands are considered wastelands, areas for waste disposal where effluents from industries, homes, and other institutions are disposed of, deposited, or directed due to a lack of awareness and appreciation of the importance of wetlands to life. Wasteland includes areas that cannot be immediately put to productive use, such as valleys, waterlogged areas, steep-sloped areas, rocky areas, bare land, and unfertile land. For these area to be productive, investment is a must. Previously, wetlands were neither protected nor conserved (Schuster *et al.,* 2024). Human beings undervalue, overexploit, and destroy wetland areas through unsustainable activities such as overgrazing, overutilization of wetland resources, and poor agricultural practices.

Wetlands are treated as common land; land that can be used by anyone for any activity without any restriction. The theory of common advocate this, any resources without owner or binding regulations, it can be misused, then degraded. The same can happen to wetlands since most wetlands are free resources as anyone can use it with no care. It was found that the wetland is a wasteland because it accumulates waste materials from different areas, including chemicals (toxins) and fertilisers swept from agricultural farms, litter from pits, and other unwanted materials scattered on the land. As a result, wetlands were often drained, filled, or altered to

make way for other activities, leading to loss of many wetland ecosystems and the services they offer.

However, wetlands like sponges hold or store water and release it slowly, thereby reducing the effects of major catastrophes such as floods, drought, ice melt, and sea rise (Kaushalya, 2020). Similar findings have been reported by Mitsch and Gosselink (2015), indicating that wetlands regulate hydrological cycles worldwide. However, the higher dependence observed in Ihefu may reflect the semi-arid climatic conditions of southern Tanzania. It plays an important role in nutrient cycling, serving as important carbon and nitrogen sinks. It further stores large amounts of carbon in its soils and vegetation, helping mitigate climate change by reducing the amount of carbon dioxide released into the atmosphere (Prajapati *et al.,* 2023). A closer analysis of data collected across different research indicated that community leaders and government officials are entrusted with their positions to influence community management of wetlands. These leaders are able to note the value and threats posed to wetlands. According to Kaushalya (2020), wetlands are among the most and valuable ecosystem that act as the "kidneys" of the earth. Furthermore, wetlands play an important role in providing environmental services. Human activities, including farming and grazing, disturb its functions, leading to the destruction of wetlands. Wetlands cover approximately 6% of the earth's surface (Ramsar Convention Secretariat, 2022; 2024). Wetland filters, clean and store water, and are home to aquatic life.

Wetlands have been severely affected by land-use changes across sub-Saharan Africa (UNESCO, 2021). Land-use changes have caused changes in vegetation cover, especially the conversion of wetlands to other land uses such as cropland and grazing land (UNESCO, 2021). In extreme cases, land use and land cover changes have been cited as one of the factors contributing to global climate change (Roy et al., 2022) and to the depletion of wetlands. Pristine habitats for wildlife are rapidly diminishing as human demand for land expands, and wetlands, among the most vital ecosystems, are at risk, losing their ability to support biodiversity, filter water, and buffer communities against floods. The trend in biodiversity shows that biodiversity loss caused by human population growth is driven by demand for arable land for farming and settlement (Allan *et al.,* 2019). Anthropogenic factors are the main threats to wetlands, including land-use change, population growth, and urbanisation. However, human activities, environmental factors, climate change, disasters, development activities, economic activities, and agricultural activities have been

identified as the major factors influencing the degradation of wetlands in the Ihefu Wetland Ecosystem.

CONCLUSION AND RECOMMENDATIONS

It is recognized that the value of wetlands is very high. Historically, wetlands were mistakenly regarded as wastelands; however, contemporary ecological research recognizes them as highly productive ecosystems that provide invaluable ecosystem services. Wetlands serve as nurseries for fish and other aquatic species, supporting the livelihoods of millions of wild and human beings. Wetlands are carbon sinks, helping to mitigate climate change by storing and sequestering carbon. Wetlands provide cultural, spiritual, and recreational values to communities. However, the rise of urbanisation in different areas and the impacts of humans on wetlands have also increased, as wetlands are rich in resources. Depletion of wetland resources due to deforestation, overcutting of trees, economic use, and illegal activities are the main identified reasons in this paper. For these reasons, wetland areas have decreased and failed to provide the required services.

In conclusion, a world without wetlands is a world without water. The degradation of wetlands significantly threatens water security, biodiversity conservation, and sustainable livelihoods. Without wetlands, a wide range of ecological benefits and ecosystem services would not be possible, including regulating the climate, processing nutrients, sequestering carbon, and improving habitat. It is evident that Ihefu wetlands in Tanzania have significant potential for the livelihoods of animals, people, and other organisms. The effective management of wetlands through the involvement of local people, enforcement of by-laws, and the provision of other incentives might have contributed greatly to the improvement of the Ihefu wetland ecosystems. Despite the challenges facing wetlands, the findings of this paper provide a useful benchmark for rescuing wetlands.

A wetland support life of living organisms; it should be protected and conserved at any cost. The study recommended that land-use plans and land management must be adhered to control the misuse and degradation of wetlands. Conservation and restoration of wetlands are crucial to their protection and the sustenance of ecosystems for current and future generations; to ensure this, many countries have implemented laws and policies to protect wetlands. There are also international agreements such as the Ramsar Convention on Wetlands, which seeks to conserve and use wetlands sustainably.

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Community Participation in Land Registration: Evidence from Kigoma-Ujiji Municipal Council, Tanzania

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Abstract
Community participation is central to effective land governance because it can enhance transparency, strengthen tenure security, and reduce land-related conflicts. However, limited empirical evidence exists on how institutional and socio-economic conditions shape participation in land registration within rapidly urbanising secondary municipalities. This study examined community participation in land registration activities in Kigoma-Ujiji Municipal Council, using the Political Ecology framework. Guided by pragmatism, the study employed a mixed-methods convergent parallel design and collected data from 340 respondents through questionnaires, key informant interviews, and focus group discussions. Quantitative data were analysed using descriptive statistics, while qualitative data were subjected to thematic analysis. Findings indicate a moderate level of community participation, with regular participation recording a mean score of 3.30 (SD = 1.56), while perceived increases in participation recorded a mean of 3.36 (SD = 1.41). Participation was constrained by inadequate awareness (27.9%), financial constraints (21.5%), and limited access to registration services (14.2%). The findings suggest that improving participation requires strengthened public awareness, reduced financial and procedural barriers, and more accessible registration services. The study contributes empirical evidence on community participation in land registration in an urbanising secondary municipality and underscores the importance of inclusive and responsive land administration.

Keywords: *Municipal governance, land formalisation, land governance, Political Ecology, community engagement*

INTRODUCTION

Land registration and formalisation are central to land governance reforms in developing countries because they can enhance tenure security, reduce disputes, promote investment, and strengthen land administration systems (Oates et al., 2024; Manara & Regan, 2024; Deininger et al., 2012). Secure and formally recognised land rights provide landholders

with greater certainty over ownership and use while enabling authorities to maintain systematic records of land interests ((Boone, 2014; Notess et al., 2020). However, rapid urbanisation, population growth, and expanding informal settlements continue to pressure land governance institutions, particularly where demand for urban land is increasing (UN-Habitat, 2022). These pressures intensify competing claims, increase demand for registration services, and complicate the extension of formal land rights to urban communities.

Globally, land registration programmes are promoted as instruments for economic development, poverty reduction, and conflict mitigation (World Bank, 2020; FAO, 2012). Evidence from Rwanda ((Ali et al., 2019) and Ethiopia (Deininger et al., 2012) indicates that decentralised and community-based registration systems can improve land documentation and reduce ownership disputes through public sensitisation and local participation. Community participation is therefore important for effective land governance because it can promote transparency, accountability, information sharing, and local ownership of registration processes (Oates et al., 2024). Participation enables community members to communicate land claims, verify boundaries, understand registration requirements, and interact with land administration officials (Peluso & Lund, 2011; Manara & Regan, 2024). However, participation does not automatically produce equitable outcomes because formalisation programmes may face institutional weaknesses, bureaucratic inefficiencies, limited public awareness, corruption, and elite capture (Alden Wily, 2021; Honig, 2022; Boone, 2014). Thus, formal registration programmes alone cannot guarantee meaningful and inclusive participation.

In Tanzania, land governance reforms are guided by the Land Act No. 4 and Village Land Act No. 5 of 1999 (URT, 1999a; URT, 1999b). These frameworks provide the basis for recognising, administering, and managing land rights, with registration and formalisation forming important components of broader land governance efforts. Despite ongoing formalisation initiatives, urban municipalities continue to experience informal settlements, overlapping ownership claims, delayed procedures, and inadequate public awareness (Msangi et al., 2023; Danda & Wema, 2024; Manara & Regan, 2024). Such challenges can limit landholders' understanding of procedures, access to services, and effective participation in processes affecting their land rights. Consequently, effective land registration depends not only on legal and

administrative arrangements but also on communities' ability to access and engage with these systems.

Municipal authorities play an important role in translating land governance policies and formalisation procedures into accessible services. Community participation is particularly relevant because registration requires landholders and local actors to provide information, clarify claims, verify land-related information, and meet administrative requirements. Participation may be shaped by institutional arrangements and socio-economic circumstances, including access to information, awareness of procedures, leadership support, availability of registration services, financial capacity, and administrative practices. Kigoma-Ujiji Municipal Council provides a relevant setting for examining these processes because land registration and formalisation involve interactions between communities and land administration institutions within an urbanising municipal context.

Existing Tanzanian studies have examined land governance and formalisation, including institutional processes, urban land administration, and challenges related to access, awareness, and administrative procedures (Msangi et al., 2023; Danda & Wema, 2024; Manara & Regan, 2024). However, limited empirical attention has focused on community participation in land registration within rapidly urbanising secondary municipalities. Insufficient attention has been given to participation levels, mechanisms through which communities engage with land registration institutions, and institutional and socio-economic barriers constraining such engagement. This gap is significant because participation can determine whether local knowledge, land claims, concerns, and experiences are incorporated into land administration processes.

This study addresses this gap by examining community participation in land registration in Kigoma-Ujiji Municipal Council, focusing on participation levels, mechanisms, and barriers to effective engagement. Guided by the Political Ecology framework, the study considers participation within institutional and socio-economic relations that structure access to land administration services and decision-making opportunities. It therefore moves beyond viewing participation as mere attendance or involvement and examines the conditions enabling or constraining community engagement. The study contributes empirical evidence on community participation in land registration within an

urbanising secondary municipality in Tanzania. It provides context-specific understanding of how institutional procedures, information access, administrative practices, and socio-economic conditions shape community engagement, while identifying awareness, accessibility, financial, and procedural barriers relevant to strengthening participation.

The objectives of the study were thus to: (1) assess the level and forms of community participation in land registration activities; (2) examine the effectiveness of participation mechanisms and the institutional, socio-economic, and administrative conditions associated with participation; and (3) identify major barriers and measures for strengthening effective and inclusive community participation in land registration processes.

THEORETICAL FRAMEWORK

To address the identified research gap, this study adopted the Political Ecology Framework developed by Blaikie and Brookfield (1987). The framework explains how political and economic power relations shape resource access and governance outcomes through institutional arrangements and decision-making processes (Blaikie & Brookfield, 1987; Robbins, 2020). It highlights power asymmetries, unequal access to information, and institutional structures that influence participation and access to public services (Ribot & Peluso, 2003; Robbins, 2020). This perspective is relevant to land registration because communities and institutions may have unequal access to information, resources, administrative authority, and decision-making opportunities.

Although the framework has been criticised for emphasising structural constraints while giving less attention to individual agency and local variations in decision-making (Walker, 2005; Bennett et al., 2021), it provides a useful lens for examining the institutional and socio-economic conditions shaping participation. Accordingly, participation was conceptualised as an engagement process influenced by awareness, leadership support, access to registration services, resource availability, and administrative procedures. Conversely, financial constraints, bureaucratic procedures, land disputes, and unequal access to information may constrain participation. These conditions reflect differences in power and access within land governance institutions, where administrative requirements, costs, delays, competing land claims, and unequal information can shape opportunities for engagement.

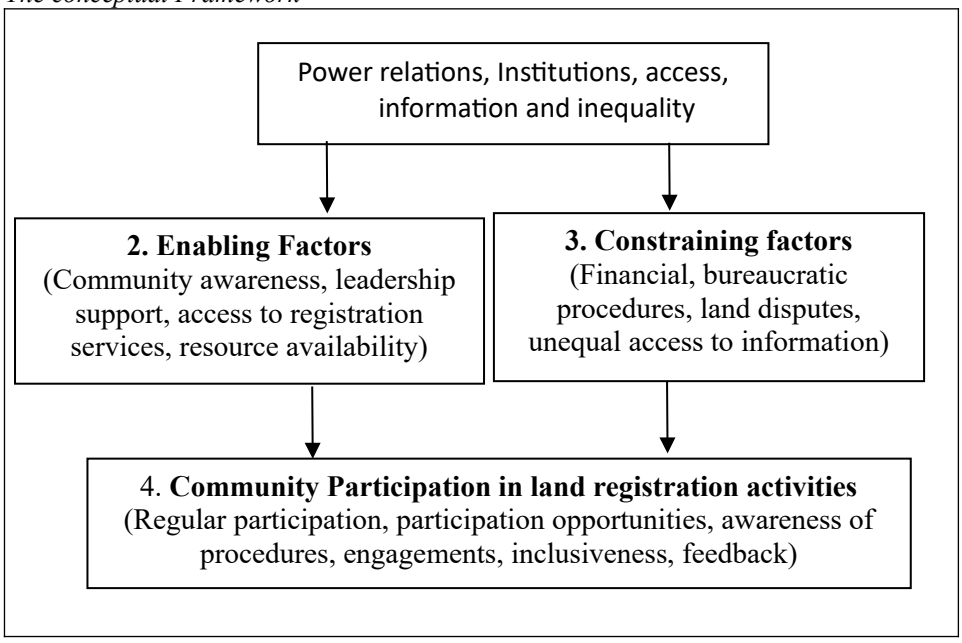
Thus, the framework guided the interpretation of enabling conditions and barriers affecting community participation in land registration. It

specifically conceptualised awareness, leadership support, service access, and resource availability as enabling conditions, while financial constraints, bureaucracy, land disputes, and unequal information access were treated as potential barriers. The framework guided interpretation without assuming direct causal relationships.

3.0 THE CONCEPTUAL FRAMEWORK

The study utilised a conceptual framework which links enabling and constraining factors to community participation in land registration activities. Community awareness, leadership support, access to registration services, and resource availability are conceptualised as enabling conditions, while financial constraints, bureaucratic procedures, land disputes, and unequal access to information represent constraints. Participation is reflected through engagement, awareness, opportunities, inclusiveness, and feedback. Grounded in Political Ecology, the framework recognises that institutional structures, power relations, and unequal access shape participation opportunities.

Figure 1:
The conceptual Framework



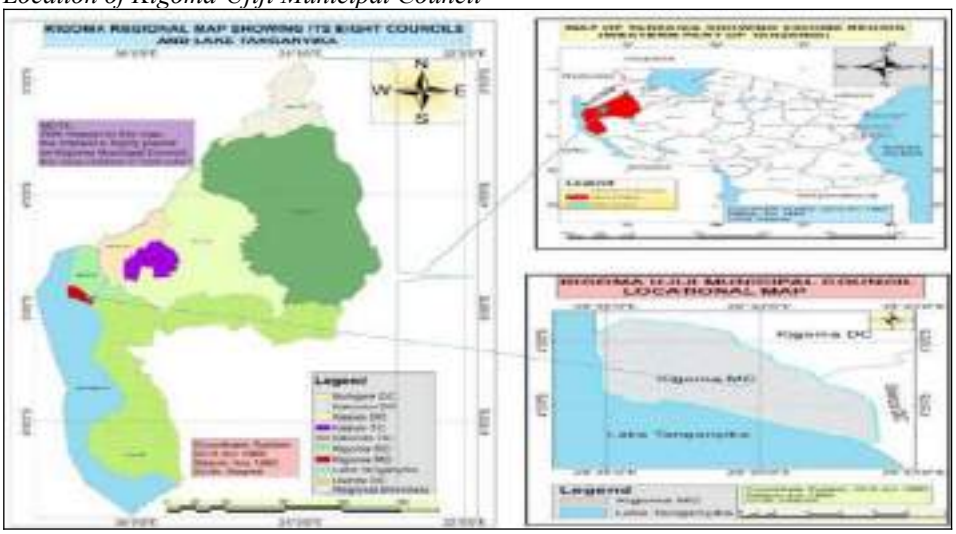
(*Adopted and Modified from the Political Ecology Framework)*

MATERIALS AND METHODS

The Study Area

The study was conducted in Kigoma-Ujiji Municipal Council, Kigoma Region. The municipality lies on the eastern shore of Lake Tanganyika and covers approximately 128 km², with coordinates ranging from 29°34′ to 29°43′ E and 4°47′ to 4°53′ S (Figure 2).

Figure 2:
Location of Kigoma-Ujiji Municipal Council



Source: URT, 2022

According to the 2022 Population and Housing Census, the municipality had 232,388 inhabitants comprising 109,188 males and 123,200 females distributed across 49,656 households, with an average household size of 4.7 persons. The entire municipal population is classified as urban (URT, 2022). The municipality was purposively selected because its rapid urbanisation, increasing demand for land, and continuing land-governance challenges provide a relevant context for examining community participation in land registration. The National Bureau of Statistics (NBS) projections indicate that the population increased to an estimated 269,409 in 2026. In April 2026, the Ministry of Lands, Housing and Human Settlements Development reported 1,092 land disputes in the municipality, of which 1,046 had been resolved administratively, and 46 remained under resolution. These conditions demonstrate the relevance of land administration, dispute management, and community engagement in the study area.

Research Design, Sampling and Data Collection

The study adopted a pragmatist philosophy and a mixed-methods approach using a cross-sectional research design. Data were collected

from 340 respondents comprising 319 household respondents, seven municipal officers, four ward leaders, and ten key informants. Household respondents were selected through simple random sampling, while municipal officers, ward leaders, and key informants were selected purposively based on their involvement in land administration, registration, and community engagement. The sample size was initially determined using Cochran's (1977) formula for large populations (n=Z^2pq/e^2), where Z = 1.96, p = 0.5, q = 0.5, and e = 0.05, producing a minimum sample of 384 respondents. However, 340 respondents were ultimately included because of fieldwork and logistical constraints. The respondent categories, sampling techniques, and sample sizes are presented in Table 1.

Table 1:
Distribution of the respondents in the study area

Respondent category	Sampling technique	Number
1. Household respondents	Simple random sampling	319
2. Municipal officers	Purposive sampling	7
3. Ward leaders	Purposive sampling	4
4. Key informants	Purposive sampling	10
Total		**340**

Source: Field data, 2026.

Structured questionnaires were used to collect quantitative data from household respondents, while qualitative information was obtained through key informant interviews and focus group discussions. The questionnaire was subjected to expert review to assess the clarity, relevance, and coverage of the items and was subsequently pilot-tested in a neighbouring ward excluded from the main study. Feedback from the review and pilot test was used to revise ambiguous wording and response difficulties before the main data collection.

Data Analysis

Quantitative data were coded and analysed using descriptive statistics, including frequencies, percentages, means, and standard deviations. These statistics were used to examine respondents' characteristics, levels and forms of participation, participation mechanisms, institutional and socio-economic conditions, and barriers to community participation in land registration. Qualitative data from interviews and focus group discussions were analysed thematically through repeated review of transcripts and field notes, coding of meaningful responses, grouping of related codes,

and development of themes corresponding to the study objectives. The qualitative findings were compared with the quantitative results to identify convergence, complementarity, and contextual explanations. Selected participant quotations were used to illustrate major themes and contextualise the survey findings.

RESULTS AND DISCUSSION

This section presents and discusses the findings according to the study objectives. Quantitative findings from the household survey are integrated with qualitative evidence from interviews and focus group discussions and interpreted through the Political Ecology Framework. The discussion focuses on the level and forms of community participation, institutional and socio-economic conditions shaping participation, and barriers affecting engagement in land registration.

Socio-demographic Characteristics and Participation Context

The socio-demographic characteristics provide the context within which community participation in land registration should be understood (Table 2).

Table 2:
Socio-demographic characteristics of respondents

Data Set	Category	Frequency (%)
Age	<30 years	39 (11.5)
	30–44 years	109 (32.1)
	45–59 years	104 (30.6)
	≥60 years	88 (25.9)
Sex	Male	196 (59.4)
	Female	134 (40.6)
Education	No formal/Primary	214 (66.7)
	Secondary	85 (26.5)
	Post-secondary/Adult	22 (6.9)
Occupation	Farming	108 (35.0)
	Fishing/Herding	46 (14.9)
	Trade/Entrepreneurship	99 (32.0)
	Artisanry/Driving	54 (17.5)
	Formal employment	2 (0.6)

Source: Field data, 2026.

The information depicted by Table 5.1 illustrates that respondents were predominantly aged between 30 and 44 years (32.1%), followed by those aged between 45 and 59 years (30.6%). Respondents that were aged 60 years and above comprised only 25.9%. sex wise, males constituted 59.4% and while females comprised 40.6%. Educational attainment was relatively low, with 66.7% having no formal education or only primary

education, while 6.9% had post-secondary or adult education. Likewise, farming (35.0%) and trade/entrepreneurship (32.0%) were reported as the most common occupations.

The demographic profile is relevant because education, occupation, age and sex may shape access to information, time, financial resources and opportunities to engage with land administration institutions. However, because no inferential tests were conducted to establish statistical associations between these characteristics and participation, the findings are interpreted as contextual rather than causal.

The predominance of respondents with primary-level education is broadly comparable with recent Tanzanian evidence. Owens *et al.* (2025) reported a strong concentration of respondents at primary and below-primary educational levels across several Tanzanian regions, while Nyamhanga *et al.* (2025) similarly identified primary education as the dominant category in selected communities in Kilosa and Mvomero. These findings indicate that land-registration communication needs to accommodate different levels of formal education.

From a Political Ecology perspective, the characteristics of the respondent population matter because participation is shaped by unequal access to information and resources rather than by the formal existence of participatory institutions alone. The high proportion of respondents engaged in farming and informal economic activities may also mean that participation competes with livelihood demands and transport or administrative costs. Similarly, the sex distribution demonstrates representation of women, but representation alone does not establish equal influence over land-related decisions. These characteristics therefore provide an important context for interpreting the subsequent findings on awareness, institutional accessibility and participation.

Level and Institutional Conditions of Community Participation

Community participation was examined in relation to institutional conditions affecting land registration. Table 3 presents respondents' perceptions of governance, transparency, bureaucracy, infrastructure, institutional capacity and community involvement.

Table 3:
Perception on the levels and forms of local communities' participation

Institutional/community participation condition	N	Disagree n (%)	Neutral n (%)	Agree n (%)	Mean (SD)
1. Local governance enables secure ownership	345	126 (36.5)	42 (12.2)	177 (51.3)	3.26 (1.60)
2. Bureaucracy hinders title acquisition	326	78 (23.9)	67 (20.6)	181 (55.5)	3.59 (1.30)
3. Local land policies facilitate ownership	324	82 (25.3)	50 (15.4)	192 (59.3)	3.56 (1.43)
4. Corruption adversely affects titling	319	128 (40.1)	50 (15.7)	141 (44.2)	3.11 (1.49)
5. State transparency facilitates title acquisition	317	42 (13.3)	54 (17.0)	221 (69.7)	3.91 (1.22)
6. Poor infrastructure negatively affects titling	315	87 (27.6)	50 (15.9)	178 (56.5)	3.54 (1.41)
7. Corrupted infrastructure creates differential procedures	311	98 (31.6)	63 (20.3)	150 (48.2)	3.18 (1.32)
8. Land officers are well trained	315	144 (45.7)	59 (18.7)	112 (35.6)	2.73 (1.42)
9. State–NGO collaboration enhances transparency	316	54 (17.1)	34 (10.8)	228 (72.2)	3.95 (1.26)

Source: Field Data (2026)

The findings in Table 5.1 indicate both enabling and constraining institutional conditions. Community involvement received strong support, with 72.5% agreeing that it facilitates titling. Similarly, 72.2% agreed that state–NGO collaboration enhances transparency and 69.7% agreed that state transparency facilitates title acquisition. Local land policies were also viewed positively, with 59.3% agreeing that they facilitate ownership. However, 55.5% reported that bureaucracy hinders title acquisition, while 56.5% indicated that poor infrastructure negatively affects titling. Only 35.6% agreed that land officers were well trained, compared with 45.7% who disagreed. These findings suggest that opportunities for participation coexist with institutional constraints that can limit the effectiveness of engagement.

The qualitative findings reinforce this interpretation. Focus group participants and key informants identified inadequate awareness of registration procedures, title-deed requirements and the benefits of formal ownership as important constraints. One key informant explained that limited knowledge causes residents to delay registration or fail to complete procedures correctly. This evidence suggests that formal

opportunities to participate do not necessarily translate into effective participation when residents lack the information required to navigate administrative processes.

The findings are consistent with recent empirical evidence. Gwaleba *et al.* (2023) found that limited participation and weak communication constrained participatory land-use planning in Tanzania. Ho *et al.* (2023) similarly showed that institutional arrangements, local capacity and power relations can affect the depth of participation in land administration. In Dar es Salaam, recent evidence indicates that institutional gaps, high formalisation costs and limited community involvement can undermine land-formalisation outcomes (Lucian & Semindu, 2025). Together, these studies support the present finding that participation depends not only on the availability of participatory structures but also on institutional capacity, communication and the conditions under which communities interact with land authorities.

The Political Ecology interpretation is therefore particularly relevant. The relatively high support for community involvement and transparency indicates opportunities for greater community engagement, whereas bureaucracy, infrastructure limitations and perceived weaknesses in institutional capacity reveal unequal conditions of access. Participation should consequently be understood as an institutional and social process in which access to information, administrative authority and resources influences the ability of different groups to engage effectively.

Effectiveness, Resources and Participation Mechanisms

Table 5.2 shows that respondents generally regarded participation as useful for land registration, particularly in improving accuracy (M = 3.79). However, resource availability received the lowest mean (M = 2.93), while feedback consideration (M = 3.21) and overall satisfaction (M = 3.39) were moderate.

Table 4:

Perceptions on Effectiveness and Support for Community Participation Activities

Data Set	N	Mean	Std. Dev
1. Participation improves accuracy	314	3.79	1.268
2. Feedback considered	316	3.21	1.537
3. Resources availability	321	2.93	1.469
4. Overall satisfaction	317	3.39	1.484

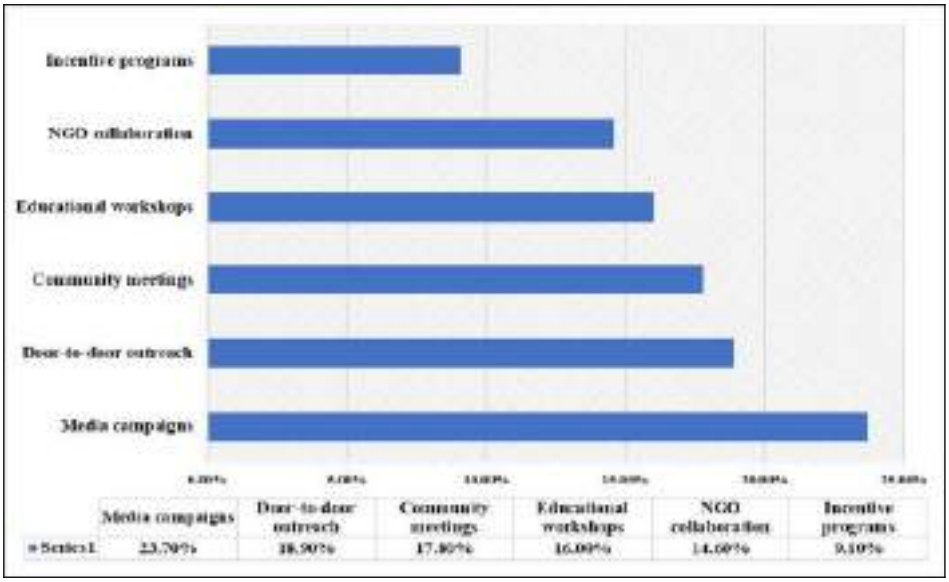
Source: Field Data (2026)

The high score for improving accuracy suggests that community involvement can contribute local information relevant to land identification and registration. However, the low resource score indicates that participation is constrained by the costs and practical requirements associated with registration. Focus group participants and key informants particularly identified registration fees, transport costs, repeated visits to administrative offices and lengthy procedures as discouraging factors. One key informant noted that the expense and duration of obtaining title deeds discourage citizens who cannot afford the associated costs or wait for lengthy procedures. Another identified unresolved disputes among families and neighbours as a source of delay in ownership verification and title issuance.

These findings correspond with evidence from Tanzania. Stein (2024), based on research covering rural communities including Kigoma, found that the CCRO registration process could be cumbersome, involved multiple actors and generated delays. Mwamlangala (2025) likewise reported high costs and bureaucratic hurdles as important challenges to customary land titling, alongside limited awareness and weak institutional communication. Recent evidence from Dar es Salaam further shows that high formalisation costs, technical deficiencies and weak community involvement can discourage completion of land registration and contribute to continuing disputes (Lucian & Semindu, 2025). The convergence of these findings suggests that affordability, administrative efficiency and institutional accessibility are important conditions for meaningful participation.

From a Political Ecology perspective, these constraints demonstrate how formally open registration systems may nevertheless produce differentiated participation because households have unequal financial resources and unequal access to administrative services. Thus, the opportunity to participate is not equivalent to the capacity to participate effectively. The moderate score for feedback consideration also suggests that participation may be stronger at the information and consultation stages than at the point where community views influence administrative decisions. Figure 5.1 presents the mechanisms through which communities participated in land titling.

Figure 2:
Local community participation means in land titling processes

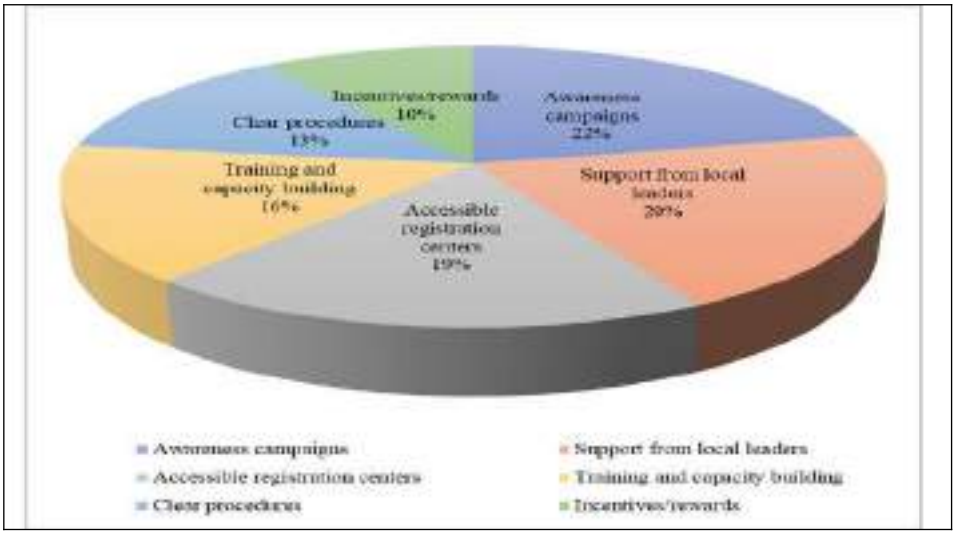


Source: Field Data (2026)

The most frequently identified mechanisms were media campaigns, door-to-door outreach and community meetings, while education workshops, NGO collaboration and incentives were less frequently reported. These mechanisms demonstrate the importance of accessible communication channels and direct interaction between communities and land authorities. Media campaigns can broaden information access, whereas door-to-door outreach and community meetings can provide opportunities to clarify procedures and address locally specific concerns. However, information dissemination should not automatically be equated with meaningful participation because receiving information does not necessarily give community members influence over decisions. Figure 5.2 identifies the factors motivating participation.

Figure 5.2:

Motivating Factors for the local community participation in the land tilting process



Source: Field data, 2026

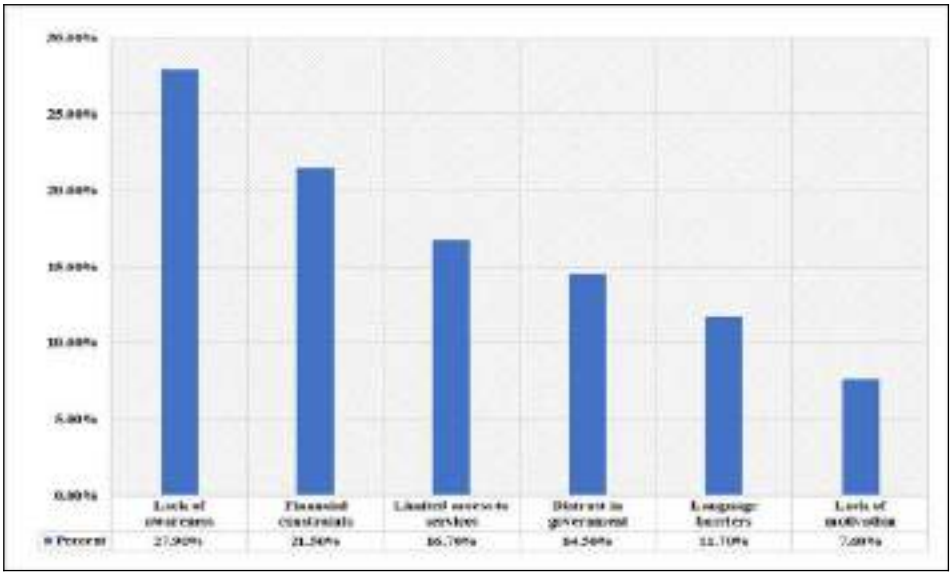
Awareness campaigns and support from local leaders were prominent motivating factors, while accessible registration centres also played an important role. Training, clear procedures and incentives received comparatively lower proportions. This indicates that awareness and trusted local leadership provide important entry points for participation, but their effectiveness may be limited when residents lack practical procedural knowledge or face difficulties accessing registration services. Recent Tanzanian evidence similarly identifies limited awareness, weak institutional communication and bureaucratic barriers as constraints on customary land titling (Mwamlangala, 2026).

From a Political Ecology perspective, these mechanisms also demonstrate that participation is partly shaped by control over information and institutional access. Local leaders and communication channels can facilitate participation, but they can also influence whose concerns reach formal institutions. Participation mechanisms therefore need to extend beyond information dissemination towards opportunities for communities to express concerns and receive feedback.

Barriers, Improvement Measures and Political Ecology Implications

Despite the enabling role of awareness, local leadership and participation mechanisms, important barriers remained (Figure 5.3).

Figure 5.3:
Perceived Barriers to Local Community Participation



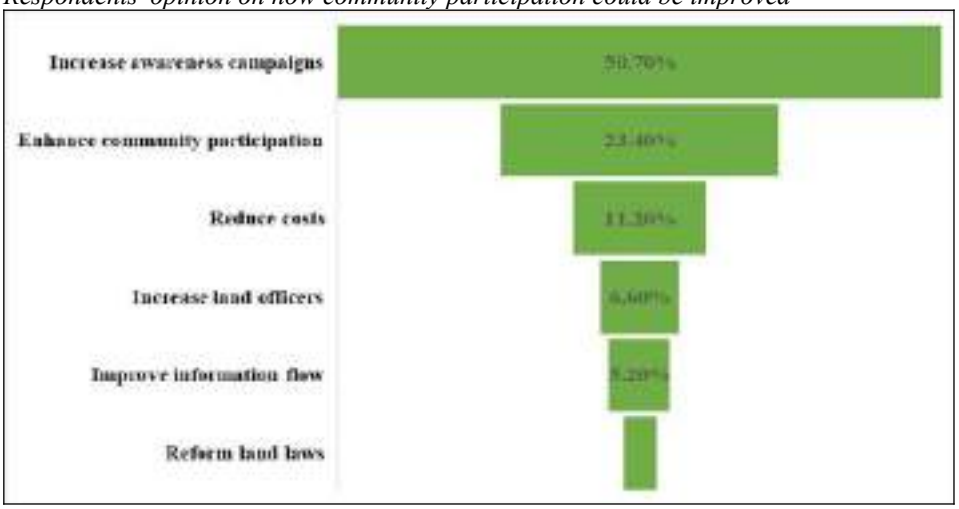
Source: Field Data (2026)

Information in Figure 5.3 illustrates that inadequate awareness was the most frequently reported barrier (27.9%), followed by financial constraints (21.5%) and limited access to registration services (14.2%). The dominance of inadequate awareness indicates that information deficits may prevent residents from initiating or completing registration. Financial constraints suggest that even informed households may be unable to proceed when registration fees, transport expenses and documentation costs are unaffordable. Limited access to services further indicates that physical and institutional accessibility can constrain participation. The barriers therefore operate at different stages: inadequate information may limit initial engagement, while financial and service-access constraints may prevent completion.

The qualitative findings support these survey results, with focus group participants identifying prolonged bureaucratic procedures, high costs and unresolved land conflicts as major constraints. Recent evidence supports this pattern. Mwamlangala (2026) reported limited awareness, high costs and bureaucratic hurdles in customary land titling in Tanzania. Stein (2024) similarly documented cumbersome procedures and delays in Tanzanian rural titling, including the involvement of multiple actors and inadequate advance notice to affected landholders. Lucian and Semindu (2025) found that high formalisation costs, limited community involvement and institutional weaknesses contributed to continuing land

disputes in Dar es Salaam. The consistency of these findings suggests that barriers to participation extend beyond individual willingness and are embedded in the accessibility and organisation of land-administration systems. Figure 4 presents respondents' proposed measures for improving participation.

Figure 4:
Respondents' opinion on how community participation could be improved



Source: Field Data (2026)

Improved information and public awareness constituted the largest proposed intervention (50.7%), followed by increasing the number of land officers (6.6%), strengthening information-dissemination channels (5.2%), and reforming land laws and administrative procedures (2.8%). The consistency between inadequate awareness being the leading barrier and improved awareness being the leading proposed solution strengthens the interpretation that information is a major entry point to participation. The findings also indicate the need for supply-side improvements, particularly accessible services and adequate institutional staffing.

Overall, the results demonstrate that community participation in land registration is moderate but uneven. Community involvement, transparency, local leadership and communication mechanisms create opportunities for engagement, while inadequate awareness, financial constraints, bureaucratic procedures, limited service access, infrastructure limitations and unresolved disputes restrict effective participation. This pattern is consistent with the Political Ecology Framework because

participation is shown to be embedded in unequal access to information, resources, institutional services and decision-making opportunities.

The findings also provide a more specific empirical application of Political Ecology to urban land registration. Rather than treating registration as a purely technical or administrative process, the evidence shows that the capacity to participate depends on the distribution of information, resources and institutional access. Households with fewer resources may face greater difficulty meeting registration costs or repeatedly accessing administrative offices, while limited awareness may restrict their ability to understand and navigate procedures. Consequently, formal participatory opportunities do not necessarily produce equal participation.

The policy implications follow directly from these findings. Municipal authorities may strengthen continuous public education, use accessible communication channels, decentralise or bring registration services closer to communities, reduce unnecessary procedural costs and delays, and strengthen the capacity of land officers. Greater attention to feedback mechanisms and accessible dispute-resolution processes could also improve the extent to which community engagement contributes to responsive land administration. These measures address the institutional and socio-economic constraints identified by respondents without assuming that participation alone produces particular governance outcomes.

Taken together, the findings demonstrate that improving participation requires attention to both community capacity and institutional responsiveness. Awareness campaigns can create the basis for engagement, but they are unlikely to be sufficient where registration remains costly, procedurally complex or physically inaccessible. More inclusive land registration therefore depends on combining accessible information with responsive institutions, affordable services and meaningful opportunities for communities to communicate their interests and receive feedback.

CONCLUSION AND WAY FORWARD

This study concludes that community participation is an important component of land registration in Kigoma-Ujiji Municipal Council, although its effectiveness remains uneven. Participation is supported by community involvement, public awareness and institutional collaboration,

but is constrained by inadequate information, financial limitations, limited access to registration services, bureaucratic procedures and institutional capacity.

From a Political Ecology perspective, the findings show that land registration is not merely a technical administrative process but is also shaped by unequal access to information, resources, services and decision-making opportunities. The study therefore highlights the importance of strengthening public awareness, simplifying registration procedures, improving the accessibility and affordability of services, and enhancing the capacity and responsiveness of land administration institutions. Future research should employ longitudinal and comparative designs to examine changes in participation over time and across different urban settings.

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Bridging Languages: Exploring Selected English-based African Novel Titles in Kiswahili Abstract

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Abstract
African literature is a compelling medium through which the intricate tapestry of the region's cultures, traditions, and historical narratives is conveyed. The narratives often reflect the socio-political landscapes and cultural identities inherent in African societies, which makes these works important resources for understanding the region's historical trajectory and contemporary issues. African English-based novels serve as an important conduit for conveying the region's cultural and socio-political narratives. Translating their titles into Kiswahili facilitates cross-cultural engagement by bridging the linguistic and cultural gaps. This study conducts a linguistic analysis of 19 selected African English-based novel titles and their Kiswahili translations. It focuses on how language, culture, and literature intersect in the translation process. The analysis applies the Structural Functional Translation Analysis (SFTA) framework to examine how Kiswahili morphological and syntactic structures accommodate and preserve the literary function and cultural resemblance of the original English titles. The study argues that the translated titles maintain both linguistic integrity and cultural relevance within the target language. The study contributes to the discourse on how Kiswahili functions as a cultural and linguistic bridge in African literary translation.

Keywords: *English-based African Novels, Structural Functional Translation Analysis, Kiswahili Translations, Bridging Languages*

INTRODUCTION

African literature is a rich and diverse tapestry of narratives that reflect the region's cultures, traditions, and histories. These works encompass

various genres and employ unique linguistic features and storytelling techniques. They often address socio-political and cultural identities (Omuteche, 2015, 2019; Sone, 2018). Kiswahili, widely spoken in East Africa, serves as a linguistic bridge that facilitates access to English-based African literature and promotes cross-cultural understanding and solidarity. It functions as a unifying lingua franca across ethnic groups and permeates education, the media, and the government (Sebonde, 2018; Marjie, 2021). Bridging the linguistic gap between English and Kiswahili requires effective translation. The growing prevalence of Kiswahili translations of English texts highlights the increasing scholarly and cultural importance of Kiswahili (Feruzi & Japhari, 2022). Flavia (2014) comments that literary translation into Kiswahili carries symbolic cultural significance, exemplified by Nyerere's Kiswahili translations of Shakespeare. However, despite the enormous cultural, lexical, and grammatical features in African English novel titles that complicate direct translation into Kiswahili (Marjie, 2024), available literature (Flavia, 2014) has focused more on full texts than on titles.

This study applies the Structural-Functional Translation Analysis (SFTA) framework to a corpus of African English novel titles translated into Kiswahili. SFTA emphasizes structural mapping to achieve functional equivalence by reconstructing the source title within Kiswahili's morphological and syntactic framework. It balances sociocultural factors with linguistic norms to ensure that translated titles function appropriately within Kiswahili culture, align with local socio-literary standards, and preserve both meaning and reception. The Structural-Functional Translation Analysis (SFTA) framework was developed to meet specific analytical needs in studying translated texts, especially African literature translated into Kiswahili. It integrates structural linguistic and functionalist perspectives to analyze both form and communicative purpose. It emphasises the relationship between source and target language structures while considering cultural and contextual factors. Refined through corpus-based research, SFTA offers novel methodological tools that link structural features to their functional roles in translation. Bakrim (2023) links this approach to Toury's (2012) norm-governed translation process and Hermans' (1999) concept of translation norms as social constructs. The framework assumes that Kiswahili morphology can substitute for English syntactic structures, a position supported by Hurskainen (2019) and computational studies. Esher (2022) identifies specific rules for subject markers, object marking, and negation, showing how lexical adaptation and structural preservation

intersect in evaluating translated titles. The selected titles reflect key African literary themes, colonialism, post-colonial identity, gender roles, cultural conflict, and socio-political issues, and often incorporate proverbs and idioms to create cultural resonance (Kumar & Gladwin, 2025). A textual analysis method was employed to examine the linguistic and stylistic devices in these titles.

This study focuses on grammatical shifts, lexical recalibration, functional preservation, and typology variation in the translation of novel titles from English into Kiswahili. This study contributes to African literary translation by deepening the understanding of Kiswahili patterns and expanding the application of the SFTA framework within East African literary contexts. It diverges from a translation of a literary work to one that looks at the linguistic perspective of the titles. The analysis is limited to nineteen novel titles translated into Kiswahili, focusing exclusively on titles and considering the East African literary language as the target cultural context.

LITERATURE REVIEW

This literature review examines the key scholarship that underpins the analytical framework of the present study. It begins by situating the study within the sociocultural and institutional contexts of African-to-African translation on Kiswahili title translation practices and the unique perspectives they offer. Subsequently, it outlines the theoretical traditions informing the framework, including functionalist and norm-governed perspectives, and discusses the methodological contributions of the Systemic Functional Translation Analysis (SFTA) framework under the Systemic Functional Linguistics (SFL). The review also addresses the typological differences between English and Kiswahili morphology that impact translation strategies. Finally, it highlights prior applications of structural-functional approaches to related translation problems and identifies the research gap this study aims to fill through a multi-title corpus analysis of African English novel titles translated into Kiswahili.

Title Translation in Africa-to-Africa Context

African literature holds a significant place in global literary discourse because of its rich exploration of complex societal issues, identity dynamics and human experiences (Kumar & Gladwin, 2025). Renowned authors such as Chinua Achebe, Wole Soyinka, and Chimamanda Ngozi Adichie have shaped narratives that address colonialism, gender roles, cultural

identity, and independence struggles. These themes offer insights into cultural heritage, historical injustices, and post-colonial identity, as reflected in titles such as Achebe's 'Things Fall Apart' and Soyinka's 'A Death in the King's Horse' (Chen, 2023). Obobolo (2016), Gheorghiu (2001), Bazzi (2022), Wu et al. (2022), and Mounassar (2023) discuss the symbolic power of titles in European books. They note that these serve as initial points of contact that capture core narrative motifs. This symbolic significance underscores the importance of translation. Translation plays a crucial role in bridging linguistic divides, particularly between English and Kiswahili, with Kiswahili serving as a unifying lingua franca in East Africa (Sebonde, 2018; Marjie, 2021). Kiswahili translations of African English literature facilitate cross-cultural understanding and solidarity, extending the reach of African narratives to a broader audience. However, discussions by Flavia (2014), Marjie (2024), and Kabio-Danlebo & Marjie (2025) posit that translating titles presents unique challenges because of their dense cultural, lexical, and grammatical features, which complicate direct transposition into Kiswahili. Despite the growing importance of Kiswahili literary translation, scholarship has predominantly focused on full texts rather than titles, leaving a gap in our understanding of how titles function within the translation process.

Within African-to-African translation contexts, Kiswahili title translations carry significant socio-cultural influence. Mazrui (2016) argued that translation is a complex interaction among culture, history, and politics, in which the title's cultural language influences the reader's engagement. This development is supported by the emergence of a distinct Kiswahili literary style, shaped by historical translation efforts and influential figures such as Sheikh Shaaban Robert, which continue to guide current practices in title translation (Maitaria & Momanyi, 2018). Empirical studies, such as Marjie's (2024) and Kabio-Danlebo and Marjie's (2025) analyses of Nollywood movie titles, reveal strategies, including ellipsis, borrowing, and paraphrasing, noting that they do so to adapt to Kiswahili audiences rather than to preserve literal meaning. Similarly, Flavia (2014) and Waliaula (2019) documented cultural-lexical substitutions in Kiswahili literary translation. This shows a norm-governed approach focused on audience recognition. For the present study, Kabio-Danlebo and Marjie's (2025) parallel framing is relevant because title translation is not a surface-faithful operation but a balance between preserving the source and repositioning it for recognition in the target cultural space. These

findings position Kiswahili-title translation from English-language novels as a literary event that requires dedicated scholarly attention.

Theoretical and Methodological Foundations

The theoretical foundation for analyzing title translation integrates functionalist and norm-governed perspectives. Nord (1997) frames translation as purposeful. Its success is measured by the effect of the target text on its audience, a principle that Sdobnikov (2019) and Remonato (2022) extend to title translation. They posit that the title's role is a paratextual and commercial decision point. Hermans (1999) and Bakrim (2023) contribute to norm theory by describing translation choices as governed by social and cultural constructs. Socio-cultural dynamics influence operational decisions throughout the process. Their framework prioritizes preserving hierarchical social meanings to meet the cultural expectations of the target readership. Zuo & Peng (2014) show SFL's applicability to literary title translation. It links contextual source configurations to typological adjustments in the target titles. Structural-functionalism further informs this approach by treating titles as semiotic networks whose internal balance must be preserved in translation.

Methodologically, this study draws on Structural-Functional Translation Analysis (SFTA) as a focused framework that adapts its principles specifically to translation. SFTA examines how Kiswahili morphological and syntactic structures are adjusted to preserve the communicative functions and literary meanings of English novel titles. The SFTA framework was developed to analyse translated texts, particularly African literature, and in our case, English translations into Kiswahili. Integrating structural linguistic and functionalist perspectives, it examines form and communicative purpose by relating source–target language structures to cultural and contextual functions. Refined through corpus-based studies, it provides tools for systematically linking structural features with their functional roles in translation processes and outcomes.

Linguistic and Contextual Considerations in Kiswahili-English Translation

A critical linguistic consideration is the typological asymmetry between English and Kiswahili. Kituku & Muchemi (2023) and Lusekelo (2025) discuss Kiswahili's complex morphology, characterized by noun-class systems and head-marking (subject prefixing) and agglutinative verb structures. These may contrast with English's syntactic reliance on word

order and function words. Hurskainen's (2019) computational analysis highlights Kiswahili's morphological capacity to encode grammatical information that English expresses syntactically, necessitating restructuring of information during translation. This asymmetry is supported by broader Bantu linguistic research (Gibson, 2019; Marten et al., 2007; Wal, 2015). Prior applications of structural-functional frameworks to translation studies include Liu and Li's (2022) tracing of SFL-based translation analysis, and studies such as Arenberg's (2016) examination of Kiswahili translations of 'Things Fall Apart', which interprets renaming decisions as audience-oriented. Flavia's (2014) cataloguing of East African Kiswahili literary translations provides empirical grounding for cultural-lexical substitution patterns expected in title translation. Other studies, including John's (2023) work on sign-language translation and Alex's (2022) research on Kiswahili drama translations, highlight the broader cultural and performative dimensions of translation in East Africa.

Despite these contributions, a gap remains in title corpus analyses that apply a unified structural-functional framework to African English novel titles translated into Kiswahili. Existing research tends to focus on single texts or different registers (Marjie, 2024; Flavia, 2014; Arenberg, 2016). This study addresses this gap by combining theoretical traditions and operationalizing them through a systematic procedure that moves from morphological analysis to functional profiling and typology classification. These thereby elucidate translation strategies found in English-Kiswahili title pairs.

THEORETICAL FRAMEWORK

The Structural-Functional Translation Analysis (SFTA) model integrates structuralist linguistics with functionalist translation theory (Nord, 1997; Luo, 2025) to analyze how cultural and linguistic norms influence the translation of African English literary titles into Kiswahili. Xiao et al. (2024) posit that the model aligns with the Parsonian action framework in translation studies, which views translation as social action governed by the norms and conventions of the target culture. The core tenet of SFTA treats literary titles as semiotic systems whose stability depends on balancing the source text's semantic intensity with the socio-literary conventions of the target culture (Gheorghiu, 2001). Briffa & Caruana (2009) and Marjie (2024) admit that titles function as communicative stimuli that must preserve the informative, expressive, and appellative functions of the original within the translated context. The framework centers on the

linguistic mechanics of semantic and structural mapping. Pym (2016) holds that functional equivalence is achieved through precise transposition of linguistic features between language systems. The analytical process systematically identifies the core semantic markers within the source title and re-establishes them within the morphological and syntactic constraints of the target language. According to Briffa & Caruana (2009), a translated title should be juxtaposed to check for equivalence in the target reader rather than the surface correspondence of its lexical items. Linguistically (Pym, 2016), the framework focuses on comparing the structure of languages to achieve similar functions in translation.

SFTA views socio-cultural factors as essential constraints that must be balanced against linguistic rules to ensure that the translated title functions appropriately within the target culture. Bakrim (2023) argues that this perspective aligns with Toury's (2012) concept of translation as a norm-governed process, where operational, preliminary, and initial norms guide the translator’s decisions at every stage. It also corresponds to Hermans' (1999) view of translation norms as a socio-cultural construct that collectively influences all translation acts within a given system. The framework assumes that variations in Kiswahili morphology can functionally replace the syntactic nuances found in English literary titles. According to Hurskainen (2019), the morphological features of Kiswahili serve as equivalents to syntactic structures expressed differently in English, a concept supported by computational and contrastive studies of Kiswahili-English translation.

In Kiswahili, the verb encodes information that English distributes across auxiliary verbs, tense markers, and aspectual adverbs; this contrast is observable in applicative, causative, stative, and reciprocal extensions, as well as in extended verb forms (Stump, 2022). Where this dense agglutinating morphology meets the analytic morphology of English, morphotactic rules govern the surface form of the translated title. Esher (2022) explains that this framework includes specific rules for placing subject markers, marking objects, and expressing negation. This contrastive approach to morphology clarifies how lexical changes and structural consistency interact, offering a detailed classification system to assess how effectively translated literary titles function. The framework positions the translator as a mediator reconciling the source language's structural demands with the target reader's pragmatic expectations. Nord (2019) contends that this mediating role is particularly evident in title translation,

where the title serves as the initial point of cultural contact between the work and its new audience.

Analytical Framework Under SFTA

The study adopts the Structural-Functional Translation Analysis (henceforth SFTA) framework to examine how English titles are translated into Kiswahili. Rather than approaching title translation from a cultural or ideological perspective, SFTA is grounded in two complementary linguistic dimensions: grammatical structure and the communicative function that the title must serve**.** The first principle of SFTA prioritises a translation's function and communicative purpose over word-for-word equivalence (Arenberg, 2016; Flavia, 2014). Literature on African translation (Mazrui, 2016; Mbithi et al., 2025) frames this principle socially, as enabling communication across languages, and a title identifies and sells a book even when wording changes. Marjie (2024) observes that translating between English and African languages, such as rendering titles into Kiswahili, often amounts to information repackaging, making the title catchy for the target market.

Another tenet of SFTA acknowledges that English and Kiswahili are varieties, with direct consequences for title translation. Kituku & Muchemi (2023), Lusekelo (2025) and John (2023) explain that English is largely analytic, with grammatical relations indicated by relatively fixed word order and separate function words. Kiswahili, by contrast, is a Bantu language with SVO order and rich morphology. It has grammatical relations marked by prefixes and suffixes, nouns are organised into classes, and concordial agreement appears on adjectives, demonstratives, and verbs (Kituku & Muchemi, 2023; Lusekelo, 2025). Mbithi et al. (2025) and Nyangeri (2014) claim that, in Kiswahili-focused translation, adjustments typically involve shifts in nouns, objects, or abstract concepts. It treats these shifts as expected linguistic responses that align the English surface with Kiswahili grammar rather than as losses. Beyond reordering words and prefixes, SFTA treats two adjustments as central: transposition[1] and lexical recalibration[2]. Transposition is a shift in which a word changes

[1] Transposition refers to a translation strategy where a word or phrase changes its grammatical category during the translation process.

[2] Recalibratory translation, as described in the study's analysis of African English novel titles translated into Kiswahili, refers to a translation strategy where the translated title aligns structurally with the source title at one level but adjusts one or more lexical items to better fit the target language's literary and cultural norms.

grammatical category during translation; for instance, an English conjunction may be replaced in Kiswahili by a verbal process (Mbithi et al., 2025; Nyangeri, 2014).

METHODOLOGY

This study employed a qualitative comparative textual-analysis design to examine English-language African novel titles and their Kiswahili translations. The design was appropriate because the study focused on interpreting the linguistic, semantic, functional, and cultural changes that occur when literary titles are translated from English into Kiswahili. Rather than measuring numerical patterns, the study compared each English title with its corresponding Kiswahili rendition to establish how meaning, form, literary effect, and culture-specific references were represented in the target language. The unit of analysis was the novel title and its Kiswahili translation. Each title pair was examined as a linguistic and literary text. The analysis considered the grammatical structure of the titles, lexical choices, semantic meanings, pragmatic or communicative functions, and culturally marked expressions. Attention was also given to translation shifts, including additions, omissions, substitutions, and restructuring, where these affected the meaning or effect of the title. The study used a comparative approach. First, the English title was examined to identify its structural form, key lexical items, literal and implied meanings, and literary or cultural significance. The corresponding Kiswahili title was then analysed using the same criteria. The two versions were compared to determine whether the Kiswahili translation retained, modified, reduced, or expanded the meaning and function of the English title. The findings were subsequently interpreted in relation to the cultural and linguistic contexts of both languages.

Data Collection Process

Data were collected purposively from nineteen (19) English-language African novels and their corresponding Kiswahili translations. Purposive sampling was used because the study required texts that were relevant to the research objectives and that allowed direct comparison between an English title and its Kiswahili version. Only novels written by African authors and accompanied by verified Kiswahili translations were included in the corpus. Data were collected purposively from nineteen (19) English-language African novels and their corresponding Kiswahili translations. These nineteen (19) paired titles formed the study corpus and were selected because they were relevant to the research objectives and allowed dir-

ect comparison between each English title and its Kiswahili rendition. To guide the selection of the novels, each selected novel had to have an available Kiswahili translation in order to facilitate comparison between the source and target titles. The corpus included titles addressing diverse African experiences, such as colonial encounter, cultural conflict, gender relations, religion, political change, migration, social inequality, and personal identity. These themes were relevant because they often contain cultural and ideological meanings that may influence the translation of literary titles into Kiswahili.

For each selected novel, bibliographic information was recorded, including the author's name, the publication date of the English version, the title of the Kiswahili translation, the translator's name, and publication details for both versions. The English and Kiswahili titles were then arranged in paired form to enable systematic comparison. The complete list of the nineteen (19) novels and their publication details is provided in Appendix 1.

The collected title pairs were analysed qualitatively in stages. First, each English title was examined to identify its syntactic structure, lexical components, literal meaning, implied meaning, and possible cultural references. Second, the Kiswahili version was analysed to establish how these features had been rendered in translation. Third, the two titles were compared to identify similarities, differences, and translation shifts. The analysis focused on four main areas: structural shift, functional effect, cultural implication, and overall evaluation. Structural shift referred to changes in grammatical form, word order, length, or lexical composition between the English and Kiswahili titles. Functional effect examined whether the Kiswahili title retained the communicative and literary purpose of the original title. It included its ability to suggest theme, create curiosity, or convey a particular tone. Cultural implication considered how culture-specific meanings, values, symbols, and references were transferred, adapted, or omitted in the Kiswahili translation. The evaluation assessed the extent to which the Kiswahili title represented the meaning and effect of the English title.

The findings were organised in a comparative table showing each English title, its Kiswahili translation, the identified translation shift, the resulting functional effect, and relevant cultural implications. This procedure en-

abled the study to identify recurring patterns in the translation of African literary titles from English into Kiswahili.

DATA ANALYSIS

This section presents the analysis of 19 selected English-based African novel titles and their Kiswahili translations using the SFTA framework. The corpus includes titles associated with themes such as colonialism, post-colonial identity, gender roles, cultural conflict, and socio-political change. The analysis focuses on how linguistic structure, lexical meaning, literary function and cultural implications are retained, modified, or substituted in the Kiswahili renditions.

The analysis was conducted in four stages. First, each English title and its Kiswahili equivalent were classified according to grammatical structure such as a noun phrase, verb phrase, adjectival phrase, or prepositional phrase. It specifically focused on the internal morphological structure. It looked at the classification of the Kiswahili equivalent in the same manner. Their internal morphological structures were then compared to identify structural shifts between the source and the target titles. Second, lexical and semantic choices were examined, including literal and figurative meanings, idiomatic expressions and culturally specific references. Third, the literal and cultural functions of each English title were identified in relation to its source readership. Finally, the Kiswahili translation was assessed to determine whether it preserved, modified, or replaced the source title's linguistic, literary and cultural functions. See the summary in Table 1.

Table 1:
Structural Shifts, Functional Effects, Cultural Implications, and Evaluation of the 19 English–Kiswahili Novel Title Pairs

Source Title	Target Title	Structural Shift and Functional Effect	Cultural Implication	Evaluation
Arrow ofGod	Mshale wa Mungu	Preserves original possessive meaning with Kiswahili linker *wa,* replacing English genitive 's'	Preserves cultural reference to divine arrow	Effective preservation of grammar with Kiswahili possessive construction
No Longer at Ease	Hakuna Tena Tulizo	Expansion from English adverbial phrase to Kiswahili existential-negation construction; gives more explicit and expanded in Kiswahili	*hakuna* and *tulizo* convey calm/relief	Functional equivalence maintained
Weep Not, Child	Usilie, Mtoto	English verb phrase fused with negator into single Kiswahili verb form plus noun; preserves imperative verbal negation form	Direct cultural alignment in comforting expressions	Structural fidelity of Kiswahili verbal morphology with the English phrase
Petals of Blood	Machozi ya Damu	Lexical shift from floral metaphor (*petals*) to embodied human imagery (*tears*); changes metaphor from beauty to grief/emotion	Shift reflects cultural preference for emotional imagery over floral metaphor	Creative adaptation preserving literary function through culturally resonant metaphor
The Trials of Brother Jero	Masaibu ya Ndugu Jero	Structural preservation (possessive noun phrase) with lexical substitution using kinship term; maintains notion of hardship/trials	*Ndugu* used to reflect local religious/social role, title adapted for stage performance	Effective cultural adaptation with structural fidelity
Kongi's Harvest	Mavuno ya Kongi	Transposes English genitive 's' to Kiswahili possessive construction with *ya*; retains possessive with Kiswahili noun phrase construction	Uses a culturally appropriate linguistic form	Accurate and structural adaptation preserving original meaning
The River Between	Njia Panda	Lexical substitution and semantic shift: *river* → *path*, *between* → *intersection*; preserves literary function of division between communities	Cultural adaptation replaced with more familiar spatial metaphor in Kiswahili context	Functional equivalence achieved through culturally relevant metaphorical recalibration

Source Title	Target Title	Structural Shift and Functional Effect	Cultural Implication	Evaluation
A Grain of Wheat	Ngano Isiy-omera	Expands quantifier-noun phrase to relative clause; preserves image of grain through description of ungerminated wheat	Uses Kiswahili relative clause to reflect cultural preference for descriptive imagery	Effective preservation of literary function with Kiswahili morphological structure
The Concubine	Mke Mtukufu	Paraphrase Lexical substitution: *Concubine → Honoured wife*; softens ambiguity of source term, shifts from intimate/ ambiguous to honourable status	Adapts title to a culturally positive term in Kiswahili, enhancing reader accessibility	Successful cultural recalibration balancing fidelity and audience reception
Things Fall Apart	Shujaa Okonkwo	Adaptive reconfiguration: English metaphor → Kiswahili protagonist-centered title with adjective + name; shifts focus from abstract collapse to heroic figure	Reflects Kiswahili audience preference for protagonist focus; aligned with cultural values	Deliberate audience-oriented adaptation; functional inversion introduces affective language
The Beautiful Ones Are Not Yet Born	Wema Hawa-jazaliwa	Structural shift from relative clause to noun compound; lexical substitution: changes focus from physical beauty → *moral goodness* to moral/ethical quality	Reflects cultural emphasis on moral virtues over physical appearance	Communicative equivalence achieved with culturally resonant lexical and structural choices
The Lion and the Jewel	Simba na Mwanamwali	Lexical substitution and metaphor shift: natural images → social personifications preserves juxtaposition of strength and value using culturally familiar social roles	Metaphor moves from animal/precious object to male elder and maiden social archetypes	Culturally meaningful adaptation preserving thematic contrast
So Long a Letter	Barua Ndefu kama Hii	Structural shift: noun phrase plus simile suffix added (*like this one*); adds comparative explicitness, shifts from attributive modifier to simile construction	Reflects Kiswahili cultural norms where the address (kama hii) points the text within shared social space.	Highly effective; Kiswahili comparative structure provides a concrete, engaging title that aligns with the novel's epistolary form

Structural Translation

The study investigated and found that six of the nineteen titles in the corpus preserve the grammatical category of the source title while substituting only the lexical items. The following titles illustrate structural translation, in which the Kiswahili version broadly preserves the grammatical function of the English source title.

1. Arrow2 of God - *Mshale wa Mungu*
2. No Longer at Ease - *Hakuna Tena Tulizo*
3. Weep Not, Child - *Usilie, Mtoto*
4. Petals of Blood -*Machozi ya Damu*
5. The Trials of Brother Jero -*Masaibu ya Ndugu Jero*
6. Kongi's Harvest - *Mavuno ya Kongi*

In examples 1-6, the English title, a possessive or verb-modification structure, is translated by Kiswahili patterns: a linker wa, negative verb form and the object-marker construction. The titles in examples (3) *Usilie, Mtoto*, and (4) 'Kongi's Harvest' *Mavuno ya Kongi*, are the most linguistically instructive of the six. The English title is a verb-apposition construction 'weep' with a negator, then 'child'. Kiswahili affixes the negation to the verb stem itself through the form *usilie*, which comprises the second-person singular subject marker *u-*, the negative *si-*, and the verb root *-lia*. The *lia* 'cry' then becomes *lie* because it uses the subjunctive form. This results in a single Kiswahili verbal form, *usilie*, for the two English items 'weep' and 'not'. 'Kongi's Harvest' *Mavuno ya Kongi* also uses the Kiswahili possessive form with the *wa* linker instead of the English genitive 's' marker. It is worth noting that Kiswahili does not have the genitive 's. The study notes that the linguistic function of the source title is preserved. In this case, the reader is addressed, and the addressee's identity is established, especially for *mtoto*. The English adverbial phrase in example (2), 'No Longer at Ease', is expressed as *Hakuna Tena Tulizo*. It is expanded into a full Kiswahili existential-negation construction: *hakuna* prefixed with *tena* 'again/still' and qualified by the noun *tulizo* (relief, calm). While the English form has fourteen letters, the Kiswahili version has sixteen. The Kiswahili rendition uses five syllables plus an existential predicate. The function is identical to its English equivalent.

Recalibration of Literary Translation

The remaining titles in the corpus structurally align with the source at one level but adjust one or more lexical items. This is done in a manner that the target language corresponds to the literary language of the source.

7. *The River Between - Njia Panda*

8. *A Grain of Wheat - Ngano Isiyomera ((*countable also in this category for its lexemic shift)
9. *Petals of Blood - Machozi ya Damu*
10. *Mine Boy - Mfanyakazi wa Migodini*
11. *The Great Ponds - Maziwa Makuu*
12. *The Concubine - Mke Mtukufu*
13. *The Outcasts - Waliotengwa*
14. *The Downfall of Gods - Kuanguka kwa Miungu*

Six examples (7-12) from the eight titles fall under the recalibration typology. 'Petals of Blood' may be retained in both Sections 5.1 and 5.2 because it preserves a comparable noun-phrase structure while also shifting the central lexical image from *petals* to *machozi* ("tears"). The most prominent one is 'The River Between 'Njia *Panda*. The English title contains a natural image (river) and the spatial preposition 'between'. The Kiswahili rendition translates the meaning of the image. The translator chose *njia* 'path, way' and *panda* 'intersection, crossing' in place of the original word 'between'. The literary function of the title, which is to render the division between two communities, is preserved by the Kiswahili rendition. The source cultural marker, 'the river ', is replaced by a more accessible verbal noun *panda*, which describes the meeting rather than the landscape that frames it. Example (8) 'A Grain of Wheat' *Ngano Isiyomera* preserves the literary function through a different nominal class process. The English title is a quantifier-noun construction. The Kiswahili version retains the quantifier *ngano* 'grain/wheat'. It uses the relative-clause marker *isiyo* with the verb *mera* 'germinate'. Here the construction becomes 'wheat that has not germinated'. The English image of the single grain is recast as an image of an ungerminated harvest. Kiswahili uses the morpheme *isiyo* meaning 'not... that is...', but the literary function is preserved.

Additionally, 'tears' translated into *machozi* for the English source's petals in example (9), is analysed as a lexemic field shift. The English 'petals' is used culturally for beauty. In Kiswahili, *machozi* means 'grief', which embodies emotion. The two-word sequence *machozi ya damu* is grammatically equivalent to the source 'Petals of blood', but the metaphor shifts from floral imagery to embodied human imagery. The title in example (12), 'The Concubine' *Mke Mtukufu* illustrates a subtler lexical choice. The English source word 'Concubine' is rendered as *Mke Mtukufu*, a phrase meaning 'the honoured/venerated wife'. The translator opts for a paraphrase of a source word that the reader would otherwise receive in an

unfamiliar register. *Mtukufu* 'honoured' supplies the structural equivalent of the English title's ambiguity between intimacy and honour.

Protagonist-Based and Communicative-Equivalence Literary Translation

The following titles exemplify protagonist-based or communicative-equivalence translation, in which the Kiswahili version prioritises audience accessibility, social meaning, or literary effect over close lexical correspondence.

15. Things Fall Apart -Shujaa Okonkwo
16. The Beautyful Ones Are Not Yet Born -Wema Hawajazaliwa
17. The Trials of Brother Jero -Masaibu ya Ndugu Jero
18. The Lion and the Jewel - Simba na Mwanamwali
19. Kongi's Harvest -Mavuno ya Kongi

The Kiswahili translation of 'Things Fall Apart' is *Shujaa Okonkwo in example* (15). The lexical transfer involves introducing the proper name *Okonkwo* into the title, whereas the English title did not include a proper name. The literary function is inverted. The English title reflects the novel's tragic end, whereas the Kiswahili title centers on the protagonist's name. The Kiswahili adjective *Shujaa* 'warrior', 'hero' rather uses the affective language that the English title sets up indirectly through the imagery of collapse. This translation is classified as adaptive reconfiguration. The findings corroborate Arenberg's (2016) and Herman's (1999) documentation of the Kiswahili translation of Achebe's novel as a deliberate, audience-oriented readjustment. Furthermore, 'The Beautyful Ones Are Not Yet Born' is translated as *Wema Hawajazaliwa* in Kiswahili, as shown in example (16). The translation involves two simultaneous structural moves. The first is a shift from a relative-clause predication in English, a clausal structure involving an adjectival phrase and a negative perfect construction, to a noun-compound phrase in Kiswahili. The second is a language recast. The translator chose the Kiswahili word *wema*, which means moral goodness and abstract ethical quality, in preference to the cosmetic word *urembo* (physical beauty). The Kiswahili version uses a 'moral gift that has not yet entered the world', which is absent from the English title. The analysis resonates with John's (2023) study, which examines the equivalence-oriented choice of title communicative function in Kiswahili literary reception.

Another communicative translation is seen in the translated version of 'The Trials of Brother Jero' in Kiswahili as *Masaibu ya Ndugu Jero* (example 17). The structural pattern of the Kiswahili version mirrors the

English source. This is a possessive noun phrase framed by a noun of personal 'hardship', ‘trials’ as *masaibu*, and a title name compound *Ndugu Jero*, ‘Kinsman/Brother Jero’. The choice of *Ndugu* as the title for a religious brother in English is significant. The Kiswahili word denotes familiar kinship as a role of the trickster-pastor in Soyinka's play is locally convertible to that of *ndugu* 'kinsman', brother''. Alex (2022) argues that this type of classification translation practice is exemplary of language for stage performance rather than reflective reading. Also, ‘The Lion and the Jewel' is translated as ‘Simba na Mwanamwali’ as seen in example (18). The English source juxtaposes an animal image, a ‘lion’, with a precious object image, a ‘jewel’. The Kiswahili version juxtaposes a male social image, Simba, a man's name, standing for the village elder figure. This is used with a female social image, *Mwanamwali*, a ‘maiden’. The metaphor moves from a natural image to a social image. 'Kongi's Harvest' in example (19) is rendered as *Mavuno ya Kongi*. With this, the translation proceeds with lexical substitution. The possessive with the genitive or ‘s is used in Kiswahili with what is known as the ‘a of association’ or the possessive prefixes. This is equivalent to ‘of’. This shows that Kiswahili does not have that direct expression with the ‘s.

Transposition Translation

'Kongi's Harvest' is translated into Kiswahili as *Mavuno ya Kongi*. This is a type of translation where Kiswahili transposes the words by the use of the 'a' of association. In such constructions, the noun ‘Harvest’ is used with a possessive prefix with the noun; hence, *mavuno ya Kongi*. More to the discussion is Mariama Bâ's 'So Long a Letter'. It is translated into Kiswahili as *Barua Ndefu kama Hii*. The title passes through two translation strategies. It is worth noting that Bâ's original French *Une si longue lettre* was translated into English as *So Long a Letter* (Amissine, 2015; Warner, 2016 and Igbinovia et al., 2025). The Kiswahili version structurally shifts from the English source through the noun-phrase construction *barua ndefu* ‘a letter long’. It then adds the simile suffix *kama hii* 'like this one', a comparative form which shifts the language from the attributive in English 'so long a letter'. 'The Concubine' *Mke Mtukufu* is also transposed with different words. Other words with structural transposition are 'Things Fall Apart’ *Shujaa Okonkwo,* Petals of Blood’ *Machozi ya Damu* where the petals are changed with machozi, The River Between ‘*Njia Panda etc.*

DISCUSSION

This section interprets the corpus findings by examining how structural, recalibratory, transpositional, and functional-substitution strategies pre-

serve the literary and communicative functions of English titles in Kiswahili through different grammatical and lexical resources.

Functional Equivalence and Linguistic Mechanisms

The study found that Kiswahili translations of African English novel titles operate on the principle of functional equivalence (Flavia, 2014). Across the corpus, the literary function that an English title performs for its source audience (forecasting, addressing, anchoring, evoking, narrating) is preserved in Kiswahili. At the same time, the formal resources through which the function is realised vary widely (Marjie, 2024). The pattern is most visible in the comparison between structural translation *Mshale wa Mungu*, *Usilie*, *Mtoto* and recalibrated and transposed titles such as *Njia Panda*, *Mke Mtukufu, shujaa Okonkwo etc*. The most distinctive case in the corpus, *Shujaa Okonkwo*, shows that functional equivalence can also be achieved through functional substitution or transposition. The English title forecasts an end state of social collapse, 'things fall apart', while the Kiswahili title anchors the reader on the protagonist and proposes heroic stature rather than collapse. The function is not the same, so the substitution is strategic. This choice is corroborated by Arenberg (2016) and Doosti (2015) as a strategic and audience-oriented adaptation.

The corpus shows how Kiswahili morphology and syntax realise functional equivalence (Flavia, 2014). While Kiswahili expresses negation within the verb form *usilie*, English uses an auxiliary and a separate negative marker. The genitive linker *wa* in Kiswahili corresponds functionally to the English possessive marker 's'. Existential negation constructions such as *hakuna* allow Kiswahili titles to express negation through a predicate. In *Ngano Isiyomera*, *isiyo* functions as a relative clause marker that supports adjectival predication. The lexical choices *wema* ‘moral goodness’, *machozi* ‘tears’, and *panda* ‘crossing’ recalibrate the source imagery while preserving literary, affective, or spatial function for Kiswahili readers. These examples show that translators make functional decisions with the target reader in mind rather than following the source text word for word (Gheorghiu, 2001; Amissine, 2015; Igbinovia et al.,2025; Kabio-Danlebo and Marjie, 2025). This target-oriented approach is also evident in *Mke Mtukufu,* where ‘concubine’ is rendered through a moderate paraphrase and in *Barua Ndefu kama Hii*, where the comparative suffix element is added to enhance the title.

CONCLUSION

This study has shown that the translation of African English novel titles into Kiswahili functions as a language functional practice rather than as a word-for-word substitution. Across a corpus of nineteen titles, the English

title is examined for its grammatical category, its lexemic content, and the literary function it performs for the source reader. The Kiswahili title is examined for the same three dimensions in the target language. The SFTA framework shows its analytical ability to accommodate the corpus. They identify functional strategies where they exist and indicate functional substitution. The findings situate Kiswahili literary translation within the broader African-to-African translation practice, in which African titles treat their source English titles as guides to the work rather than as templates for form. The translation choices documented in this corpus reveal a stable pattern of functional preservation under formal variation, with one principled case of functional substitution marking the strategic boundary. Thus, the underlying claim is that African English novel titles translated into Kiswahili are rendered through language functional strategies that reference the target reader rather than through word-for-word substitution.

This study contributes to the ongoing debate about how Kiswahili functions as a cultural and linguistic bridge in African literary translation, supporting audience engagement through culturally resonant adaptations. The study validates the SFTA framework as a strong tool for analyzing translation beyond surface equivalence. It reiterates the importance of sociocultural norms in shaping translation decisions. These findings have practical implications for translators and publishers aiming to balance fidelity with cultural relevance, encouraging culturally sensitive and audience-oriented translation practices.

The study acknowledges inherent limitations in the corpus that influence the breadth and applicability of its conclusions. The relatively modest number of titles and the exclusive focus on Kiswahili translations narrow the extent to which the findings can be generalized to other African literary works or linguistic contexts. Moreover, the analysis reveals that equivalence between source and target titles is not uniformly complete. There are instances where translation involves nuanced negotiation, resulting in partial or contested equivalence. These variations arise from deliberate choices that balance linguistic, cultural, and functional considerations. This has to do with the complexity of achieving straightforward equivalence in literary title translation. Recognizing these factors provides a balanced context for interpreting the results and identifies clear directions for future research. This study, thus, lays a foundational groundwork for further exploration of African literary translation practices.

Future research could expand this analysis to other literary genres and target languages and investigate audience reception to assess the effectiveness of functional translation strategies.

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Appendix 1

Table of Summary Data

No.	English Book Title and Author	Kiswahili Translation, Translator and Year (where applicable)	Translation Typology and Grammatical Mechanics Applied
1.	Things Fall Apart (Chinua Achebe, Nigeria 1958)	Shujaa Okonkwo (Clement Ndulute, 1973)	Protagonist-centred adaptive reconfiguration: Process to Entity transposition. Replaces a literal geographical relationship phrase with a single, stationary noun that captures the abstract idea of a crossroads.
2.	Arrow of God (Chinua Achebe,	Mshale wa Mungu (Hafid Shamte,1987)	Adaptive reconfiguration: Symmetrical Structural Alignment. Direct word-for-

	Nigeria, 1964)		word matching where the connecting word shifts its form naturally to match the specific noun class of the arrow.
3.	No Longer at Ease Chinua, Achebe Nigeria)	Hakuna Tena Tulizo (Standard Curricular Edition,1993)	Communicative translation: Process-to-Entity Transposition. Negative adverbial phrase to an existential negative clause, Hakuna.
4.	The Beautyful Ones Are Not Yet Born (Ayi Kwei Armah, Ghana)	Wema hawajazaliwa (Abdilatif Abdalla, 1976)	Communicative-equivalence literary translation: Syntactic-to-Morphological Compression. Condenses a long, seven-word English sentence structure into a two-word phrase by using Kiswahili's agglutinative verb structure.
5.	The trials of Brother Jero (Wole Soyinka, Nigeria)	Masaiba ya Ndugu Jero (A. S Yahya, 1971)	Communicative translation: Symmetrical Structural Alignment. Keeps the exact phrase structure of the original title but uses a stronger semantic noun in Kiswahili.
6.	The lion and the Jewels (Wole Soyinka, Nigeria)	Simba na Mwanamwali (Kuria Ngugi, 1975)	Communicative translation: Symmetrical Structural Alignment. Keeps the simple noun-and-noun structure unchanged.
7.	Kongi's Harvest (Wole Soyinka, Nigeria)	Mavuno ya Kongi (T.S. Sengo, 1982)	Communicative translation: Symmetrical Structural Alignment. Flips the English possessive structure to match the Kiswahili possessive rule of placing the item owned before the person who owns it.
8.	Song of Lawino (Okot p'Bitek, Uganda)	Wimbo wa Lawino (Paul Sozigwa, 1975)	Translation with structural retention: Symmetrical Structural Alignment. Direct word-for-word structure symmetrical with the Kiswahili possessive structure.
9.	Song of Ocol ((Okot p'Bitek, Uganda)	Wimbo wa Ocol (Paul Sozigwa, 1977)	Translation with structural retention: Symmetrical Structural Alignment. Direct word-for-word structure symmetrical with the Kiswahili possessive structure.
10.	Weep Not, Child (Ngũgĩ wa Thiong'o, Kenya)	Usilie, Mtoto (also known as Mtafiti Mja na Kijana) (John William Murila, 1971)	Symmetrical Structural Alignment: Communicative literary translation. Preserves the imperative negative structure.
11.	The River Between (Ngũgĩ wa Thiong'o, Kenya)	Njia Panda (John Ndugu Githuku, 1974)	Communicative literary translation: Process-to-Entity Transposition. Replaces a literal phrase with a single noun that captures the abstract idea of a crossroads.
12.	A Grain of Wheat (Ngũgĩ wa Thiong'o, Kenya)	Ngano Isiyomera (Samuel Mushi, 1979)	Communicative literary translation: Phrasal-to-Clausal Expansion / Reshaping. Expands a simple English description phrase into a metaphorical clause (active, detailed description clause that explicitly states what the grain is doing)
13.	Petals of Blood (Ngũgĩ wa Thiong'o, Kenya)	Machozi ya Damu (Peter Ngugi, 1999)	Communicative literary translation: Symmetrical Structural Alignment. Keeps the identical phrase layout intact but changes the literal word "petals" for "tears.

14.	The Outcasts (Bonnie Lubega, Uganda)	Waliotengwa (Juma R.R. Alidina, 1975)	Communicative literary translation: Syntactic-to-Morphological Compression. Collapses an English plural noun and its article into a single Swahili verb form that functions perfectly as a standalone descriptive name.
15.	Mine Boy (Peter Abrahams, South Africa)	Mfanyakazi wa Migodini (S. A Kandoro, 1976)	Communicative literary translation: Syntactic-to-Morphological Compression. Collapses an English plural noun and its article into a single Swahili verb form that functions descriptively.
16.	The Downfall of Gods (Timothy Wangusa, Uganda)	Kuanguka kwa Miungu (Isaac Mrina, 1984)	Communicative literary translation: Symmetrical Structural Alignment. Maintains the exact structure as Kiswahili but uses a noun gerund (an action word that behaves like a noun base in the phrase.)
17.	The Great Ponds (Elechi Amadi, Nigeria)	Maziwa Makuu (East African Publishing House, 1978)	Communicative literary translation: Symmetrical Structural Alignment. Uses the direct noun-and-adjective structure as well as uses a specific water body from ponds to lakes.
18.	The Concubine (Elechi Amadi, Nigeria)	Mke Mtukufu (Standard Secondary Edition, 1981)	Communicative literary translation: Symmetrical Structural Alignment. Uses the noun-adjective structure and upgrades the word's underlying meaning from an unofficial partner to an exalted wife.
19.	So Long a Letter (Mariama Bâ, Senegal)	Barua Ndefu kama Hii (Mkuki na Nyota Publishers, 2011, Reprint)	Functional transposition via English intermediary. Phrasal-to-Clausal Expansion / Reshaping. Transforms an abstract English exclamation about size into a clear, direct comparison phrase that references the physical letter.

The Influence of Social Security Service Quality on the Socio-Economic Welfare of Retirees in Kinondoni District, Tanzania

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Abstract
This study assessed the quality of social security services in improving the socio-economic welfare of retirees in Kinondoni District, Dar es Salaam, Tanzania. Guided by the Continuity Theory of Ageing and Institutional Theory, the study examined the adequacy of lump-sum payments, monthly pensions, and health insurance coverage. Adopting a convergent mixed-methods research design, the study utilised a sample of 364 retirees selected through simple random sampling and 30 key informants selected purposively. Data were collected using structured questionnaires and open-ended interviews, followed by descriptive statistical and thematic analyses. Quantitative findings revealed mixed perceptions of financial benefits. While 54.67% of respondents considered lump-sum payments satisfactory, 45.33% perceived them as inadequate, mainly due to high urban inflation. Furthermore, 55.50% of retirees expressed dissatisfaction with health insurance coverage, citing limited coverage for chronic conditions associated with ageing and high out-of-pocket expenses. Qualitative evidence triangulated these findings, highlighting that stagnant monthly pensions often necessitated reliance on informal family support. The study concluded that, while social security services provided a foundational safety net, the existing service quality was insufficient to ensure long-term socio-economic well-being and dignity in an inflationary environment. It was recommended that the Ministry of Labour, Youth, Employment and Persons with Disabilities, under the Prime Minister's Office, in coordination with PSSSF and NSSF, implement automatic pension indexation and expand health insurance packages to include comprehensive geriatric care to align social security benefits with the rising cost of living in urban Tanzania.

Keywords: *Social Security Quality, Retiree Welfare, Pension Adequacy, Health Insurance, Kinondoni District, Tanzania.*

INTRODUCTION

The socio-economic welfare of retirees remains a central development concern, particularly in the context of ageing populations, urbanization, and evolving labor markets (ILO, 2022; ISSA, 2023). It encompasses the ability of retired individuals to maintain a decent standard of living, access essential services such as healthcare and housing, and sustain psychological well-being after exiting formal employment (ISSA, 2024; Temba, 2025). Globally, nearly 40% of older persons lack any form of pension income, and in low and middle-income countries, over 65% of retirees depend on informal support systems, highlighting systemic vulnerabilities in old-age security (ILO, 2024; World Bank, 2025a). In urban settings, rising living costs further strain retirees' welfare, with expenditures on healthcare alone accounting for 20–30% of household income among the retirees in many developing economies (ISSA, 2024; NSSF, 2026).

Social security is universally recognized as a critical pillar for achieving the United Nations Sustainable Development Goals (SDGs), specifically Target 1.3, which mandates the implementation of nationally appropriate social protection systems for all. Globally, only about 47% of the population had access to at least one social protection benefit as of 2024, leaving approximately 4.1 billion people (over 53%) without adequate coverage (ILO, 2024). Furthermore, effective coverage drops to roughly 30% of the global population, underscoring what the International Labour Organization describes as a "profound global injustice" (ILO, 1952; ILO, 2024). This gap is increasingly exacerbated by demographic shifts such as global ageing with persons aged 65+ projected to reach 1.6 billion by 2050 and the rise of non-standard platform work, which now accounts for an estimated 10–15% of the global labor force in some regions (ISSA, 2025a). Modern global trends emphasize a transition from "unit-based" to "society-based" models that integrate individual savings with collective social pooling, aiming to improve resilience against global inflation averaging 6.8% in 2023 and about 5.9% in 2024, alongside geopolitical uncertainty (World Bank, 2025b; ISSA, 2025b).

In Sub-Saharan Africa (SSA), the challenge of ensuring socio-economic welfare in retirement is particularly acute. Only about 17% of the population is covered by at least one social protection benefit, while over 80% of workers operate within the informal sector, limiting their access to contributory pension schemes (ILO, 2024; World Bank, 2025a). Social protection expenditure remains low at approximately 1.2–1.8% of GDP, constraining the scope and adequacy of benefits (ISSA, 2025b). Although countries such as Botswana and Namibia have achieved old-age pension

coverage rates above 85–90%, many SSA nations continue to experience fragmented systems and fiscal limitations. At the same time, urban inflation rates exceeding 8–10% and climate-related shocks reducing household incomes by up to 20–30% further erode retirees' purchasing power and economic security (World Bank, 2025a; ISSA, 2025b). These pressures make the delivery of reliable, inclusive, and "shock-proof" social protection systems essential for safeguarding retirees welfare. In Tanzania, significant reforms have been undertaken to strengthen the socio-economic welfare of retirees by consolidating social security schemes into the Public Service Social Security Fund (PSSSF) and the National Social Security Fund (NSSF) (Temba, 2025; URT, 2025). The 2025 NSSF Amendments (GN No. 695) introduced expanded lump-sum access and enhanced survivor benefits, reflecting a shift toward more inclusive and responsive systems (URT, 2025; NSSF, 2026).

However, coverage remains limited to approximately 8–12% of the labor force, largely due to the dominance of the informal sector, which accounts for 70–75% of total employment (SSRA, 2024). Additionally, pension replacement rates averaging 30–40% of pre-retirement income are often insufficient to meet the demands of urban living (Nyamwero & Kadigi, 2024; Mushi, 2025). In cities like Dar es Salaam, monthly expenditures for retirees can reach TZS 400,000–600,000, while pension payments frequently fall short, and benefit processing delays can extend from weeks to several months, undermining financial stability (NSSF, 2026). Kinondoni District exemplifies the intersection between policy intent and lived reality. As a major urban and economic hub, the district presents a high cost of living environment where retirees rely heavily on efficient and responsive social security services. Despite improvements in financial sustainability such as a reported reduction in pension arrears by over 60% between 2020 and 2025 many retirees continue to face administrative inefficiencies and service delivery challenges that compromise their welfare (PSSSF, 2025; NSSF, 2026). This highlights a critical gap between macro-level reforms and micro-level outcomes, particularly in terms of service quality, accessibility, and timeliness.

From a theoretical perspective, this study is grounded on two theories: Institutional Theory and Continuity Theory of Aging. Institutional Theory explains how rules, social expectations, and shared beliefs shape the way social security systems function (Scott, 2022; World Bank, 2025). It shows that the success of institutions like NSSF and PSSSF depends not only on the policies written down but also on how those policies are carried out and understood (Mushi, 2025; ISSA, 2025a). Alongside this,

Continuity Theory of Aging adds that retirees try to maintain stability in their daily lives, relationships, and routines even after retirement (URT, 2025). This means that social security systems are most effective when they are not only following regulations but also help retirees maintain familiar patterns of income security and access to services, thereby reducing disruption to their well-being.

The regulative pillar covers laws and reforms; the normative pillar reflects expectations of fairness and accountability; and the cognitive pillar relates to retirees' trust and understanding (Temba, 2025; NSSF, 2026). When these pillars do not align, for example, if policies promise timely payments but delays occur, service quality declines and retirees' welfare is directly affected (Nyamwero & Kadigi, 2024; ISSA, 2025a). Institutional Theory also shows how bureaucratic rigidity and similarity across institutions can limit innovation (DiMaggio & Powell, 1983; World Bank, 2025b). By adding Continuity Theory, the analysis highlights that such weaknesses not only reduce service quality but also disrupt retirees' ability to maintain stable routines, which worsens their welfare outcomes.

The main objective of this paper is to assess the quality of social security service delivery and examine its influence on the socio-economic welfare of retirees in Kinondoni District, Dar es Salaam. Specifically, the study looks at how service quality dimensions such as reliability, responsiveness, and administrative efficiency affect retirees' income security, access to essential services, and overall well-being, while also identifying institutional factors that support or limit effective service delivery in Tanzania's social security system (URT, 2025; NSSF, 2026). In this analytical relationship, Institutional Theory provides the basis for examining how institutional rules, expectations, and practices shape service quality, while Continuity Theory explains how the resulting quality of services contributes to the maintenance of retirees' income security, access to essential services, and overall well-being.

THEORETICAL FRAMEWORK

This study is anchored in a multi-dimensional theoretical framework that integrates Institutional Theory and the Continuity Theory of Aging to examine the quality of social security service delivery and its influence on retirees' socio-economic welfare in Kinondoni District, Dar es Salaam. Institutional Theory provides a robust lens for analyzing how formal structures, regulatory systems, and social norms shape organizational behavior and service outcomes within public institutions (DiMaggio et al, 1991). It emphasizes three interrelated pillars regulative, normative, and

cognitive that collectively determines how institutions function and how stakeholders perceive their effectiveness. In the context of Tanzania's social security system, this theory highlights the tension between well-designed statutory reforms and the persistent implementation gaps that undermine service quality. It also underscores the role of institutional isomorphism, where organizations adopt standardized practices to gain legitimacy rather than to enhance responsiveness, thereby constraining adaptability to retirees' needs.

This perspective establishes a direct link between institutional structures, service delivery quality, and welfare outcomes, showing that retirees' well-being depends not only on policy design but also on the operational realities of institutional environments (ILO, 2024a). Continuity Theory of Aging, on the other hand, emphasizes the importance of stability in older adults' social roles, routines, and relationships as they transition into retirement. Retirees rely heavily on predictable and consistent social security services to sustain their established lifestyles, preserve dignity, and remain socially active (ILO, 2024b). Disruptions such as delayed pensions or bureaucratic inefficiencies undermine this continuity, leading to stress, exclusion, and vulnerability (ILO, 2024c). By highlighting the necessity of reliable institutional support, continuity theory reinforces the argument that effective governance and predictable service delivery are essential for retirees to maintain socio-economic stability and quality of life. Together, these theories provide a complementary framework: Institutional Theory explains the structural and systemic determinants of service delivery, while Continuity Theory illuminates the lived experiences of retirees and the importance of consistent support for their welfare (ILO, 2022). This synthesis enables a holistic assessment of how institutional arrangements and service quality interact to shape retirees' socio-economic outcomes in Kinondoni District.

Institutional Theory

This study is guided by Institutional Theory to explain how the quality of social security service delivery influences the socio-economic welfare of retirees (DiMaggio et al, 1991). Institutional Theory provides a comprehensive framework for understanding how organizations such as social security institutions are shaped by formal rules, societal expectations, and shared beliefs, and how these factors affect service outcomes and individual well-being (Scott, 2022; World Bank, 2025b; NSSF, 2026). At its core, Institutional Theory argues that organizational behavior is not driven solely by efficiency or technical goals, but also by the need to conform to institutional pressures within their environment (Mushi, 2025).

These pressures are categorized into three key pillars: regulative, normative, and cognitive. The regulative pillar refers to formal laws, policies, and administrative procedures that govern social security systems. In this study, it explains how government regulations such as pension policies, benefit structures, and eligibility criteria shape the quality of services delivered to retirees (PSSSF, 2025). For example, improvements in lumpsum payments, monthly pensions, and health insurance coverage are outcomes of regulatory frameworks (NSSF, 2026).

However, when there are implementation gaps such as delays in payments or bureaucratic inefficiencies, the intended benefits are undermined, negatively affecting retirees' financial stability and welfare (Nyamwero & Kadigi, 2024). The normative pillar focuses on societal values and expectations regarding how institutions should operate. In the context of social security, there is a strong expectation that institutions should provide fair, timely, and adequate support to retirees. These expectations influence how service quality is perceived (World Bank, 2025a). If retirees experience poor responsiveness, lack of transparency, or inadequate benefits, it leads to dissatisfaction and erodes trust in the system (Mushi, 2025). Thus, the ability of social security institutions to meet these expectations is critical in determining their effectiveness in improving welfare. The cognitive pillar relates to individuals' perceptions, beliefs, and understanding of institutional processes. In this study, it explains how retirees interpret the quality of social security services based on their experiences, awareness of entitlements, and level of trust in the system (Scott, 2022; NSSF, 2026). Even when services are available, negative perceptions such as uncertainty about procedures or lack of confidence in institutions can reduce utilization and limit the positive influence on socio-economic welfare (PSSSF, 2025). Furthermore, Institutional Theory introduces the concept of institutional isomorphism, which suggests that organizations often adopt similar structures and practices to gain legitimacy rather than improve efficiency (DiMaggio & Powell, 1983; World Bank, 2025b).

In social security systems, this may result in rigid and standardized procedures that prioritize compliance over responsiveness to retirees' needs. Consequently, reforms aimed at improving financial sustainability may not necessarily lead to improved service quality or better welfare outcomes (NSSF, 2026). In guiding this study, Institutional Theory establishes a clear relationship between service quality and socio-economic welfare. It posits that the effectiveness of social security services measured through reliability, responsiveness, and adequacy of benefits depends on how well institutions align their regulatory frameworks, societal

expectations, and operational practices (Mushi, 2025; PSSSF, 2025). When these elements are well-coordinated, retirees are more likely to experience improved access to essential services such as healthcare, food, shelter, and overall financial security. Conversely, institutional weaknesses can lead to poor service delivery, thereby exacerbating vulnerability among retirees (NSSF, 2026). Therefore, Institutional Theory provides a strong foundation for analyzing how institutional structures and service delivery mechanisms influence the socio-economic welfare of retirees, making it highly relevant for examining social security systems in contexts such as Kinondoni District, Tanzania.

Continuity Theory of Aging

Continuity Theory of Aging, as advanced by Atchley (1970), emphasizes that older adults strive to maintain stability in their social roles, daily routines, and relationships even as they transition into retirement. The theory posits that successful aging is achieved when individuals are able to preserve patterns of behavior, identity, and lifestyle established earlier in life. In the context of Kinondoni District, Tanzania, this theoretical lens is particularly relevant because retirees depend heavily on social security services to sustain their socio-economic welfare. The quality and consistency of pension delivery directly influence their ability to maintain continuity across multiple dimensions of life. The first dimension is internal continuity, which refers to the preservation of personal identity, values, and psychological patterns. For retirees in Kinondoni District, reliable pension services reinforce their sense of dignity and self-worth, enabling them to sustain psychological stability. Conversely, delays or inefficiencies in service delivery disrupt this continuity, leading to stress and insecurity (Kijanga, Lyanga & Rangi, 2026). The second dimension is external continuity, which involves sustaining social roles, relationships, and community participation. When pensions are delivered consistently, retirees are able to remain active in their communities, maintain social ties, and continue contributing socially and economically. Inefficient service delivery, however, weakens social integration and fosters exclusion, undermining retirees' ability to participate meaningfully in society.

A related dimension is role continuity, which focuses on maintaining established roles such as family provider, community elder, or mentor. Timely pension disbursement ensures that retirees can fulfill obligations to dependents and uphold their social responsibilities. Service disruptions, however, erode their capacity to perform these roles, diminishing their influence and social standing. The dimension of lifestyle continuity highlights the importance of sustaining daily routines and living standards. In

Kinondoni District, where the cost of living is relatively high, predictable pension payments allow retirees to maintain housing, healthcare access, and basic consumption patterns. When pensions are delayed, retirees are forced to compromise their lifestyles, which increases vulnerability and reduce quality of life. Finally, socioeconomic continuity relates to financial stability and economic participation. Social security services are central to retirees' ability to sustain income security and resilience. Efficient pension systems strengthen welfare outcomes by ensuring predictable financial support, while bureaucratic bottlenecks undermine retirees' economic stability and increase dependency.

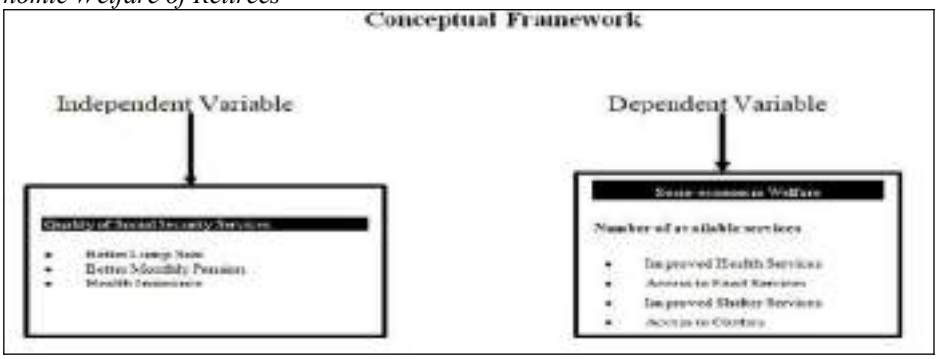
Conceptual Framework Description

Figure 1 illustrates the conceptual framework for this study, showing the relationship between the quality of social security services (independent variable) and the socio-economic welfare of retirees (dependent variable) in Kinondoni District, Tanzania. The quality of social security services encompasses key components such as better lump-sum payments, improved monthly pensions, and access to health insurance (URT, 2024). These elements reflect the effectiveness and responsiveness of social security institutions in delivering benefits that meet retirees' financial and health needs (NSSF, 2026; PSSSF, 2025). Service quality is influenced by institutional factors including policies, administrative efficiency, and communication with beneficiaries (Nyamwero & Kadigi, 2024; Mushi, 2025). The socio-economic welfare of retirees is measured by their ability to access essential services and maintain an adequate standard of living (URT, 2018b). This includes improved health services, reliable access to food, adequate shelter, and clothing basic needs that determine overall well-being and dignity in retirement (NSSF, 2026). The framework posits that improvements in the quality of social security services lead directly to enhance socio-economic welfare outcomes.

For example, timely and adequate pension payments enable retirees to afford food and healthcare, while health insurance coverage reduces out-of-pocket medical expenses (PSSSF, 2025). Conversely, poor service quality such as delays, insufficient benefits, or limited access negatively influences retirees' ability to meet their basic needs, increasing vulnerability and poverty risk (Mushi, 2025). Based on Institutional Theory, this framework acknowledges that the quality of social security service delivery is shaped by formal regulations (regulative pillar), societal expectations (normative pillar), and retirees' perceptions and trust (cognitive pillar). These institutional dimensions' influence how effectively social security

systems translate policy into practice, ultimately affecting retirees' welfare (Scott, 2025; NSSF, 2026).

Figure 1:
The Relationship between the Quality of Social Security Services and the Socio-Economic Welfare of Retirees



Source: Researcher, 2025.

EMPIRICAL LITERATURE AND INSTITUTIONAL FRAMEWORKS

Empirical Review

The discourse on social security and retiree welfare is increasingly shaped by contemporary empirical evidence regarding benefit adequacy and institutional efficacy. Dean (2025) investigated the nexus between terminal benefits and post-retirement transitions in Dar es Salaam, utilizing a mixed-methods approach. The study established a significant positive correlation between lump-sum payment adequacy and immediate housing stability. However, a critical vulnerability was identified: approximately 65% of retirees exhausted their capital within 24 months, driven by high urban inflation and a deficiency in diversified investment literacy. Consequently, the study advocated for the Public Service Social Security Fund (PSSSF) and the National Social Security Fund (NSSF) to institutionalize mandatory pre-retirement financial consultancy to safeguard long-term asset growth.

From a regional perspective, Masuku et al. (2025) conducted a comparative analysis of East African urban centers, employing Multiple Regression Analysis to determine the predictors of food security. Their findings underscored that the "replacement rate", the ratio of monthly pensions to pre-retirement earnings is the primary determinant of psychological and nutritional health. Notably, the study revealed that the absence of a Consumer Price Index (CPI) indexation mechanism in Tanzania has led to a significant erosion of purchasing power. The authors recommended the

adoption of automatic annual indexation to insulate benefits against macroeconomic fluctuations. Regarding health-related welfare, Perez (2025) explored geriatric care outcomes among social security beneficiaries. Through a longitudinal analysis (2020–2024), the research elucidated that while current health insurance effectively covers acute medical episodes, it remains largely insufficient for specialized geriatric care. Retirees in urban districts such as Kinondoni District often face prohibitive out-of-pocket expenses for chronic conditions, including cardiovascular and oncological treatments. Perez concluded that the prevailing "quality" of health coverage is service-limited, necessitating a policy expansion to include specialized long-term medication and diagnostics.

Finally, the International Social Security Association (ISSA, 2024) evaluated the influence of digital transformation on service delivery. While digital automation has significantly enhanced the timeliness and transparency of benefit processing, the findings highlighted a "digital divide." Elderly retirees, often lacking technological proficiency, perceived a decline in service quality due to diminished human interaction. The report concluded that administrative quality is a cornerstone of welfare, recommending a hybrid delivery model that integrates digital efficiency with person-centered localized support.

Policy Review

International and national policy frameworks emphasize a tripartite responsibility involving the State, employers, and employees (ILO, 2022). The ILO Social Security Convention No. 102 (1952) remains the global benchmark, advocating for a collaborative structure to ensure the sustainability of pension systems. This is complemented by the Madrid International Plan of Action on Ageing (2002), which mandates the integration of retirees into national development strategies to protect their income security and fundamental rights. Domestically, the National Aging Policy (2003) and the National Social Security Policy (2003) reflect Tanzania's commitment to these international standards. These instruments aim to optimize service delivery by addressing historical inefficiencies, such as payment delays and benefit inadequacy. However, critical gaps persist in policy implementation. Current frameworks largely overlook tax-financed schemes, which are essential for income redistribution and covering vulnerable populations who were unable to contribute during their formal careers. The continued reliance of retirees on post-retirement labor suggests that existing policy outputs have yet to achieve the desired level of economic stability.

The legal and regulatory architecture in Tanzania provides the formal mandate for social security design and delivery (URT, 2018a). Underpinned by ILO Convention No. 102, the framework establishes minimum qualifying periods to ensure income security during old age. This mandate is operationalized locally through the PSSSF Act, No. 2 of 2018, which legalizes the mandatory collection of contributions and the investment of funds to guarantee the timely payment of pensions for public servants. Simultaneously, the NSSF Act, Cap 50 R.E. 2018 governs the private and informal sectors, mandating a 20% total contribution rate and facilitating voluntary registration for the self-employed. The Act empowers a Board of Trustees to manage assets with fiduciary diligence, prioritizing safety and profitability in diversified portfolios. Furthermore, the health welfare of retirees is governed by the NHIF Act, No. 8 of 1999, as recently enhanced by the Universal Health Insurance (UHI) Act of 2023 and the NHIF Amendment of 2025. These legislative updates signal a shift from restrictive post-retirement coverage toward a more inclusive, life-long health protection model, ensuring that the legal right to health aligns with the practical needs of an aging population.

MATERIALS AND METHODS

Study Area

The study was conducted in Kinondoni District, Dar es Salaam, Tanzania. This location was purposively selected due to its high density of retirees approximately 4,075 individuals and its role as a strategic hub for major social security institutions, including the PSSSF, NSSF, and HelpAge Tanzania. The district's heterogeneous population provides a representative urban environment to examine the delivery of social security services amidst the high cost of living characteristic of a market-driven economy.

Research Philosophy and Design

The study is grounded in the pragmatism research philosophy, which advocates for the integration of diverse methods to address complex social phenomena. Consequently, a convergent mixed-methods design (QUAL + QUAN) was adopted. This design allowed for the simultaneous collection and triangulation of objective quantitative data (e.g., pension scales) and subjective qualitative insights (retiree lived experiences), providing a holistic understanding of the nexus between institutional support and socio-economic welfare.

Sampling Framework and Sample Size

A dual sampling strategy was employed to ensure statistical reliability and qualitative depth, thus; Quantitative Phase: Simple random sampling

was applied to the retiree population. Using the Yamane (1967) formula for a population of 4,075 (field data, 2025) at a 95% confidence level, a sample size of 364 participants was determined. Qualitative Phase: Purposive sampling was used to select 30 key informants, including senior managers from PSSSF, NSSF, and Tanzania Union of Industrial and Commercial Workers (TUICO), to provide expert insights into policy execution and administrative frameworks. The sampling frame was clearly identified from the relevant retirees' records and used as the basis for selecting study participants. The response rate was determined by comparing the number of questionnaires distributed with the number returned and found usable for analysis. Questionnaire validity was established through expert review and pre-testing, while reliability was assessed using Cronbach's alpha. Interview data were transcribed, coded, categorised, and analysed thematically according to the study objectives. Ethical procedures included informed consent, voluntary participation, confidentiality, anonymity, and protection of participants' information. The quantitative and qualitative strands were integrated during interpretation, whereby qualitative findings were used to explain, complement, and triangulate the quantitative results. Convergence, complementarity, and divergence between the two strands were examined to provide a comprehensive interpretation of the study findings.

Using a population of 4,075 retirees and a 5% margin of error, Yamane's formula is:

$$n = N \Big/ 1 + N\left(\ell\right)^2$$

Thus, 364 retirees constituted the required quantitative sample size.

Data Collection Instruments

Triangulation was achieved through three primary channels: Structured Questionnaires were administered to retirees using a five-point Likert scale. Instruments were provided in both English and Kiswahili to ensure linguistic inclusivity and minimize response bias. Open ended Interviews were conducted with key stakeholders to capture in-depth perspectives on institutional leadership and fiscal challenges. Document Review was Secondary data from internal reports, social security regulations, and library archives were analyzed to contextualize the field findings.

Data Analysis and Model Specification

Quantitative data collected from 364 retirees were analysed using SPSS version 26. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarise respondents' characteristics and perceptions of social security services and socio-economic welfare. One-Way ANOVA was used as a preliminary bivariate procedure to examine whether statistically significant differences existed in welfare perceptions across relevant retiree sub-groups. To model the continuous composite index of socio-economic welfare, Multiple Linear Regression (OLS) was employed to estimate the linear impact of social security service dimensions; Lump-sum payments (LS), health insurance (HI), and monthly pensions (MP) were specified as the independent variables. The OLS model was specified as $Y = \beta_0 + \beta_1 LS + \beta_2 HI + \beta_3 MP + \varepsilon$, where Y represents the continuous socio-economic welfare score, β_0 represents the intercept, and β_1, β_2, β_3 represent the estimated partial regression coefficients. Multicollinearity was assessed using tolerance and Variance Inflation Factor (VIF) statistics. Overall model significance was evaluated using the ANOVA F-statistic, while explanatory power was determined using the coefficient of determination (R^2) and adjusted R^2, supplemented by the Root Mean Squared Error (Root MSE) and residual diagnostics. Individual predictors were evaluated using unstandardized coefficients (β), standard errors, standardized coefficients (β), t-statistics, and significance levels. Qualitative data from 30 key informants were analysed thematically through systematic coding, categorisation, and development of themes. The qualitative findings were integrated with the quantitative results during interpretation, with key-informant accounts providing contextual explanations of how lump-sum payments, health insurance, and monthly pensions influenced retirees' experiences of socio-economic welfare, while examining convergence and divergence. Ethical procedures included institutional ethical approval, informed consent, voluntary participation, confidentiality, anonymity, and structured recruitment of retirees through the approved sampling frame, while key informants were purposively selected based on their relevant knowledge and experience.

RESULTS AND DISCUSSION

The study assessed the quality of social security services on improving socioeconomic welfare of retirees in the Kinondoni District of Dar es Salaam, Tanzania. The analysis focused on three primary dimensions: the adequacy of lump-sum payments, the quality of health insurance coverage, and the influence of monthly pensions.

Demographic Characteristics

The study involved 364 retirees, and the demographic characteristics (Table 1) reveal a slightly higher proportion of females (57.7%) than males (42.3%), with ages ranging from 55 to over 75 years; the largest groups were aged 60–62 years (20.9%) and 63–65 years (18.7%), while 28.6% were over 69 years. The findings reveal that most respondents had attained secondary school education (34.1%), followed by bachelor's degrees (20.6%) and postgraduate qualifications (master's 11.0%, PhD 3.6%), indicating a generally well-educated population. The data further reveal that the majority were married (61.3%), with widowed participants comprising 28.8% and singles 9.9%. Regarding social security membership, the results reveal that 63.7% belonged to the Public Service Social Security Fund (PSSSF) and 36.3% to the National Social Security Fund (NSSF), reflecting predominantly public-sector employment.

Household Headship distribution reveals that most families were father-headed (67.3%), while 31.9% were mother-headed and 0.8% under guardianship. The analysis also reveals that most retirees continued to support dependents, with 45.1% having 4–7 and 41.8% having 1–3 dependents. In terms of economic activity, the data reveal that 40.8% engaged in entrepreneurship, 19.3% in small-scale agriculture, and 40.7% reported no economic activity. Overall, the demographic profile reveals a diverse and representative sample of retirees, providing a solid foundation for examining the **assessment of the influence of social security service quality on the socio-economic welfare of retirees in Kinondoni district**, including leadership effectiveness, financial subsidies, scheme investments, and the quality of services delivered.

Table 1:
Demographic Characteristics of Respondents (n = 364)

Characteristic	Category	Frequency	Percent (%)
Gender	Male	154	42.3
	Female	210	57.7
Age (years)	55–59	26	7.1
	60–62	76	20.9
	63–65	68	18.7
	66–68	45	12.4
	69–71	52	14.3
	72–74	45	12.4
	75+	52	14.3
Education Level	Primary School	58	15.9
	Secondary School	124	34.1
	Certificate	34	9.3
	Diploma	20	5.5
	Bachelor Degree	75	20.6
	Master's Degree	40	11.0
	PhD	13	3.6
Marital Status	Single	36	9.9
	Married	223	61.3
	Widow/Widower	105	28.8
Social Security Scheme	PSSSF	232	63.7
	NSSF	132	36.3
Household Headship	Father	245	67.3
	Mother	116	31.9
	Guardian	3	0.8
Number of Dependents	None	24	6.6
	1–3	152	41.8
	4–7	164	45.1
	8–11	24	6.6
Current Economic Activity	None	146	40.7
	Agriculture	70	19.3
	Entrepreneurship	148	40.8

Descriptive Analysis of Retiree Perceptions

The descriptive findings presented in Tables 2 and 3 reflect retirees' perceptions of the adequacy of social security benefits. Regarding lump-sum payments, 54.7% of respondents expressed satisfaction, while 45.3% reported dissatisfaction. These results indicate that perceptions of lump-sum adequacy were mixed, with a slightly higher proportion reporting satisfaction. The qualitative findings further indicated that some retirees considered the purchasing power of lump-sum benefits insufficient in relation to

their post-retirement needs. Inflation was identified by some participants as a factor that may reduce the real value of retirement benefits; however, inflation was not directly measured as an explanatory variable in the quantitative analysis.

Regarding health insurance, 55.5% of respondents disagreed that retirees had better health insurance coverage, while 44.5% expressed agreement. These results indicate a generally negative perception of the adequacy of health insurance services among the respondents. Qualitative evidence further indicated concerns about limited coverage and out-of-pocket expenditure for some medical services. Thus, the descriptive findings demonstrate retirees' perceptions of health insurance adequacy but, by themselves, do not establish an economic effect on welfare. For monthly pensions, 51.6% of respondents expressed satisfaction, while 48.4% reported dissatisfaction. These findings indicate relatively divided perceptions regarding the adequacy of monthly pension payments. Qualitative accounts suggested that some retirees experienced difficulties meeting household and medical expenses and, in some cases, relied on family support. These findings describe the experiences and perceptions reported by respondents and do not, on their own, establish a causal effect of monthly pensions on welfare. The statistical relationship between the three social security benefit dimensions and overall retiree welfare was therefore examined using multiple regression analysis.

Table 2:
Summary of Retirees' Perceptions on Social Security Benefits (n=364)

Statement	1 (SD)	2 (D)	3 (MA)	4 (A)	5 (SA)	Total
Lump Sum Payments: Retirees are paid better lump sums upon retirement.	39 *(10.7%)*	126 *(34.6%)*	27 *(7.4%)*	153 *(42.0%)*	19 *(5.2%)*	364 *(100%)*
Health Insurance: Retirees have better health insurance for medical treatment.	154 *(42.3%)*	48 *(13.2%)*	35 *(9.6%)*	103 *(28.3%)*	24 *(6.6%)*	364 *(100%)*
Monthly Pension: Retirees are paid better monthly pensions.	58 *(15.9%)*	118 *(32.4%)*	17 *(4.7%)*	156 *(42.9%)*	15 *(4.1%)*	364 *(100%)*

Note: SD = Strongly Disagree, D = Disagree, MA = Moderately Agree, A = Agree, SA = Strongly Agree
Source: Field Data (2025.

Table 3:
Retirement Benefit Indicators – Perceptions (Consolidated) (N = 364)

Indicator	Total Agree (A+SA+MA)	% Agree	Total Disagree (SD+D)	% Disagree	Total (N)	Total (%)
Lump Sum Payments	199 (MA+Agree+SA)	54.7	165 (SD+D)	45.3	364	100
Health Insurance	162 (MA+Agree+SA)	44.5	202 (SD+D)	55.5	364	100
Monthly Pension	188 (MA+Agree+SA)	51.6	176 (SD+D)	48.4	364	100

Note: Percentages are rounded to one decimal place. "Satisfactory" includes combined Agree, Strongly Agree, and Moderately Agree responses compared to combined Disagree and Strongly Disagree responses.
Source: Field Data (2025).

Triangulation of Quantitative and Qualitative Data

By applying a convergent mixed methods approach, the study integrates both quantitative survey results (Table 2 and Table 3) and qualitative interview evidence to provide a comprehensive understanding of retirees' perceptions of social security services. The two strands of data comple-

ment each other, showing both the scale of satisfaction and dissatisfaction and the lived experiences behind those numbers. When examining lump sum payments, the quantitative data show that 54.7% of retirees expressed satisfaction, while 45.3% reported dissatisfaction. This near balance is reinforced by qualitative accounts, such as Mr. Mantama's testimony, which emphasized that the reduction in lump sum formulas from 50% to 35–40% coincided with inflation, eroding retirees' purchasing power. Together, these findings suggest that while some retirees manage with current lump sums, many perceive them as inadequate and misaligned with economic realities. For health insurance coverage, the quantitative evidence reveals that 55.5% of retirees disagreed that they have better medical coverage, with only 44.5% expressing satisfaction. Qualitative narratives, particularly from Mr. Ntaghe, confirm this dissatisfaction, describing coverage as limited, exclusionary, and often requiring out-of-pocket payments for essential treatments.

The convergence of data highlights a consistent theme: health insurance is widely perceived as insufficient, leaving retirees vulnerable to medical and financial risks. Regarding monthly pensions, the quantitative results show a nearly balanced perception, with 51.6% satisfied and 48.4% dissatisfied. Qualitative accounts add depth, noting that pensions are considered a lifeline but often fail to cover basic needs, especially in urban areas with high living costs. Retirees reported relying on family support, which undermines the independence pensions are meant to provide. The triangulated evidence suggests that pensions provide a foundational safety net but remain fragile and inadequate in practice. Taken together, the integrated findings from both data sets point to three overarching issues: economic misalignment, where lump sums and pensions fail to reflect inflation; healthcare vulnerability, where insurance coverage is limited and inequitable; and structural inequities, where low-income retirees are disproportionately disadvantaged.

Diagnostics and Validity

To ensure the integrity of the econometric estimates, several diagnostic tests were conducted. The results of these assessments are summarized in Table 4. First, the Linearity assumption was verified using the Box-Tidwell procedure. This test ensures a linear relationship exists between the independent variables and the logit of the dependent variable. As shown in Table 4, all continuous predictors yielded non-significant p-values ($p > 0.05$), indicating that linearity is satisfied and the predictors are appropriately modeled for the logit function.

Second, Multicollinearity was assessed using the Variance Inflation Factor (VIF) and its reciprocal, 1/VIF (Tolerance). The results for the three primary indicators were: B_1 Lump Sum (VIF = 1.183, 1/VIF = 0.845), B_2 Health Insurance (VIF = 1.215, 1/VIF = 0.823), and B_3 Monthly Pension (VIF = 1.262, 1/VIF = 0.792). All VIF values are well below the threshold of 5.0, confirming that there is no multicollinearity bias and the predictors are sufficiently distinct to isolate their individual influences on the socio-economic welfare of retirees. Finally, Heteroscedasticity was tested through Residual plots and the Breusch-Pagan test. The analysis revealed randomly scattered residuals with no systematic pattern or funnel shape. This confirms that Homoscedasticity is satisfied, meaning the model estimates have constant variance. Consequently, the standard errors are reliable, and the estimated coefficients for retirees in Kinondoni District are efficient and unbiased.

Table 4:
Diagnostic Test Results for the Econometric Model

Diagnostic Test	Variable / Method	Value / Observation	Decision / Interpretation
Linearity	Box-Tidwell procedure	All continuous predictors ($p > 0.05$)	Linearity satisfied; predictors are appropriately modeled for the logit function.
Multicollinearity	Variance Inflation Factor (VIF)	**B_1 Lump Sum:** VIF = 1.183, 1/VIF = 0.845 **B_2 Health Insurance:** VIF = 1.215, 1/VIF = 0.823 **B_3 Monthly Pension:** VIF = 1.262, 1/VIF = 0.792	No multicollinearity bias; all VIF values are well below the 5.0 threshold.
Heteroscedasticity	Residual plots / Breusch-Pagan	Randomly scattered residuals	Homoscedasticity satisfied; model estimates are efficient and have constant variance

Econometric Analysis: Ordinal Logistic Regression Results

Ordinal Logistic Regression (OLR) was employed to examine the influence of social security benefit dimensions on the ordered categories of overall retiree welfare. The model included lump-sum payments, health insurance, and monthly pension as explanatory variables. As presented in Table 5, the model was statistically significant, with a Likelihood-Ratio Chi-Square of 78.64 on 3 degrees of freedom ($p < 0.001$). This result indicated that the model containing the three social security benefit dimen-

sions provided a significantly better fit to the data than the intercept-only model. The Cox and Snell Pseudo-R^2 was 0.286, while the Nagelkerke Pseudo-R^2 was 0.331, indicating that the model provided meaningful explanatory power for the variation in the ordered levels of overall retiree welfare.

Health Insurance had a positive and statistically significant relationship with overall retiree welfare (B = 1.067, Wald $\chi^2 = 15.96$, $p < 0.001$). The odds ratio, Exp(B) = 2.907, indicated that a one-unit increase in perceived health insurance adequacy was associated with approximately 2.91 times higher odds of being in a higher welfare category, holding lump-sum payments and monthly pension constant. The 95% confidence interval for the odds ratio ranged from 1.720 to 4.916, which did not include 1, further supporting the statistical significance of the relationship. Health insurance therefore emerged as the strongest predictor among the three social security benefit dimensions.

Lump-Sum Payments also showed a positive and statistically significant relationship with overall retiree welfare (B = 0.842, Wald $\chi^2 = 8.78$, $p = 0.003$). Its odds ratio, Exp(B) = 2.321, indicated that a one-unit increase in perceived adequacy of lump-sum payments was associated with approximately 2.32 times higher odds of retirees being in a higher welfare category, controlling for health insurance and monthly pension. The 95% confidence interval of 1.329–4.055 excluded 1, confirming the statistical significance of the predictor. This finding suggested that adequate lump-sum benefits were positively associated with retirees' welfare, particularly in supporting financial needs during the transition into retirement.

Monthly Pension similarly had a positive and statistically significant relationship with overall retiree welfare (B = 0.716, Wald $\chi^2 = 8.13$, $p = 0.004$). The odds ratio of 2.046 indicated that a one-unit increase in perceived adequacy of monthly pension was associated with approximately 2.05 times higher odds of being in a higher welfare category, holding the other predictors constant. The 95% confidence interval ranged from 1.252 to 3.344 and did not include 1, confirming a statistically significant positive relationship. Although its coefficient was smaller than those of health insurance and lump-sum payments, the result demonstrated that monthly pension adequacy remained an important factor associated with higher levels of retiree welfare.

The goodness-of-fit statistics further indicated that the ordinal logistic model fitted the observed data adequately. The Pearson goodness-of-fit

test was not statistically significant, $\chi^2(356) = 348.62$, $p = 0.606$, and the Deviance goodness-of-fit test was also not statistically significant, $\chi^2(356) = 329.47$, $p = 0.841$. These results suggested no statistically significant evidence of poor model fit. Furthermore, the Test of Parallel Lines produced $\chi^2(3) = 7.82$, $p = 0.050$. Since the result was at the conventional 5% significance boundary, the proportional-odds assumption was treated as marginally acceptable, although the result should be interpreted cautiously and verified against the exact SPSS output and decision rule adopted in the study.

Overall, the findings indicated that all three social security benefit dimensions were positively and significantly associated with higher levels of overall retiree welfare. Health insurance demonstrated the strongest association, followed by lump-sum payments and monthly pension. These findings provided inferential evidence that the adequacy of social security benefits was related to retirees' socio-economic welfare. However, the results should be interpreted as statistical associations rather than causal effects. In addition, although qualitative findings identified inflation and rising living costs as factors affecting retirees' experiences, inflation was not included as a predictor in the ordinal logistic regression model. Therefore, its role should be regarded as a contextual explanation from the qualitative evidence rather than a statistically tested determinant of retiree welfare.

Table 5:
Ordinal Logistic Regression Results for Overall Retiree Welfare

Variables	Coefficient (B)	Std. Error	Wald χ^2	p-value	Exp(B)	95% CI for Exp(B)
Lump Sum Payments	0.842	0.284	8.78	0.003	2.321	1.329–4.055
Health Insurance	1.067	0.267	15.96	<0.001	2.907	1.720–4.916
Monthly Pension	0.716	0.251	8.13	0.004	2.046	1.252–3.344
Threshold 1	-1.584	0.331	22.91	<0.001	—	—
Threshold 2	1.127	0.319	12.48	<0.001	—	—

Model-Fit Statistics	
Statistic	**Value**
Model Likelihood-Ratio χ^2	78.64
Degrees of freedom	3
p-value	<0.001
−2 Log Likelihood	541.27
Cox & Snell Pseudo-(R^2)	**0.286**
Nagelkerke Pseudo-(R^2)	**0.331**
Pearson Goodness-of-Fit χ^2	348.62
Pearson df	356
Pearson p-value	0.606
Deviance Goodness-of-Fit χ^2	329.47
Deviance df	356
Deviance p-value	0.841
Test of Parallel Lines χ^2	7.82
Degrees of freedom	3
p-value	0.050

Source: Field Data (2025).

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study finds that although Tanzania has built a strong framework for social security, the adequacy and quality of services remain important factors in shaping the welfare of retirees. The evidence shows a gap between the formal availability of benefits and their practical usefulness in meeting everyday needs. The findings indicate that perceptions of lump-sum payments and monthly pensions were mixed, while health insurance coverage was generally perceived as inadequate. Qualitative evidence further indicated concerns about purchasing power, medical expenses, and reliance on family support. These findings highlight challenges related to economic security, healthcare adequacy, and inequalities among retirees. By combining quantitative findings with qualitative evidence, the study provides a comprehensive understanding of retirees' experiences with social security services.

To support a dignified post-retirement life, policy attention may be directed towards improving the adequacy and quality of social security services. Potential areas include reviewing mechanisms for protecting the real value of benefits, strengthening health insurance coverage for age-related healthcare needs, and improving fairness and efficiency across social security schemes. However, the financial costs, affordability, and fiscal sustainability of these potential reforms were not assessed in this study. Therefore, their implementation would require further actuarial, financial, and policy assessment. The study concludes that strengthening the quality of social security services could contribute to improved economic security, healthcare protection, and well-being among retirees.

Recommendations

Based on the findings, the following policy implications are proposed. First, social security institutions could strengthen client-centred and digitised service delivery by improving transparency and reducing administrative delays in benefit processing. Second, the Ministry of Labour, Youth, Employment and Persons with Disabilities, under the Prime Minister's Office, together with PSSSF and NSSF, could consider regular actuarial reviews to assess the appropriateness of pension adjustments in relation to changes in the cost of living. Third, relevant authorities could explore the possibility of harmonising health insurance benefits and expanding coverage for age-related and specialised medical services, subject to affordability and actuarial assessment. Fourth, the government and social security funds could strengthen financial literacy and retirement planning programmes to help workers prepare for post-retirement financial needs. These recommendations should be considered as policy implications arising from the study findings rather than as financially validated interventions, since the study did not assess their implementation costs, affordability, or fiscal sustainability. Further research should therefore examine the actuarial, financial, and institutional feasibility of the proposed measures before large-scale implementation.

LIMITATIONS AND FUTURE RESEARCH

Limitations of this study have been explicitly acknowledged, including sample size, methodological boundaries, and contextual specificity, to ensure transparency and balanced interpretation. Future research directions for this study; Future research could focus on the modernization of social security institutions through digital service delivery models and actuarial review mechanisms. Studies examining the adoption of digitized, client-centric frameworks would provide insights into barriers, user satis-

faction, and efficiency in benefit processing. At the same time, investigations into dynamic actuarial reviews particularly the indexing of pensions to the Consumer Price Index (CPI) would help determine sustainability and effectiveness in safeguarding retirees' purchasing power. Together, these inquiries would strengthen institutional resilience and ensure that retirees experience smoother transitions into post-employment life.

Another important avenue lies in healthcare benefit standardization and pre-retirement financial literacy programs. Research could evaluate the socio-economic and health outcomes of harmonizing health insurance packages, exploring equity, cost-effectiveness, and the feasibility of integrating comprehensive geriatric care. Simultaneously, longitudinal studies on financial literacy initiatives introduced during mid-career employment would reveal their influence on long-term resilience and preparedness. These strands of inquiry would highlight how both institutional reforms and individual empowerment contribute to retirees' welfare. Finally, broader systemic perspectives could be advanced through comparative policy analysis, socio-economic influence assessment, and gender and vulnerable groups studies. Cross-national comparisons within Sub-Saharan Africa would provide lessons on scalability and adaptability, while socio-economic assessments could measure influences on poverty reduction, social inclusion, and quality of life. Moreover, targeted research on women, informal sector workers, and other vulnerable populations would ensure that reforms are inclusive and equitable. Collectively, these directions would enrich the evidence base for policy refinement and foster a retirement system that is both sustainable and socially just.

ETHICAL DECLARATIONS AND ACKNOWLEDGMENTS

AI Disclosure Statement

I hereby affirm that this manuscript is an original work. During the drafting process, ChatGPT 3.5 was utilized solely as a sophisticated linguistic tool to refine the narrative flow, enhance readability, and ensure grammatical precision. I maintained full accountability for the integrity and factual accuracy of the final content.

Informed Consent

In accordance with international ethical protocols and institutional guidelines, written informed consent was obtained from all study participants. Documentation of this consent has been securely preserved by the author (s) and is available for verification upon request.

Competing Interests

The author declares that there are no financial, personal, or professional competing interests that could be perceived as influencing the research findings or the interpretation of the data presented in this study.

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Economic Incentives for Climate-Smart Agriculture and Ecosystem Conservation in Tanzania: A PRISMA-Based Systematic Review

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Abstract
This study systematically reviews empirical evidence on economic factors associated with the adoption of climate-smart agriculture (CSA) and ecosystem conservation practices in Tanzania. A PRISMA-guided approach was used to identify and synthesise studies published between 2018 and 2025. Ten Tanzania-specific empirical studies were included in the qualitative synthesis. The studies varied in design, setting, economic mechanism and measured outcome. Access to finance was associated with the adoption of some CSA practices, although findings differed by practice. Land-tenure security and extension support also featured in the adoption evidence as institutional and informational conditions, respectively, rather than financial incentives. Evidence on market-based instruments, including payments for ecosystem services, was more limited, and few studies measured sustained adoption or ecosystem outcomes. The available evidence therefore does not establish that financial incentives are more effective than market-based instruments or that combined approaches outperform individual interventions. By bringing these studies together, the review identifies context-specific patterns and gaps in evidence relevant to policy design. Recommendations include addressing locally identified barriers to financial access and piloting payments for ecosystem services (PES) and carbon-market arrangements with careful monitoring of participation, funding and conservation outcomes. Further longitudinal and comparative research is needed to assess the lasting effects of economic instruments on CSA adoption and ecosystem conservation.

Keywords: *Climate-smart agriculture, financial incentives, market-based instruments, ecosystem conservation, Tanzania*

INTRODUCTION

Climate change has persistently put a lot of strain on agricultural systems and natural ecosystems, especially in developing countries where people rely on climate-sensitive resources. In turn, climate-smart agriculture (CSA) has already evolved into a holistic strategy that will help improve productivity, resilience, and reduce greenhouse gas emissions (Ma & Rahut, 2024; Ariom et al., 2022). Meanwhile, ecosystem conservation is necessary to ensure soil quality, the availability of water resources, and biodiversity, which are the basis for agricultural productivity in the long term (Akamani, 2021). More economic arguments, particularly financial incentives and market-based instruments, are needed to influence land-use decisions and to enhance sustainable agriculture (Pineiro et al., 2020; van Asseldonk et al., 2023).

Empirical data from Africa show that CSA practices can increase productivity, adaptation, and mitigation outcomes; however, adoption remains uneven because the practice is constrained by financial, institutional, and market aspects (Mnukwa et al., 2025; Adimassu et al., 2025). Similar trends are observed in Tanzania, where the use of CSA technologies has high potential for enhancing agricultural performance and resilience; however, there has been low adoption due to a lack of access to credit, poor market relations, and high implementation costs (Kurgat et al., 2020; Bai & Magembe, 2025). Studies also indicate that, to make agriculture sustainable in Tanzania, technological and institutional innovations, including precision agriculture and improved resource management methods, will only be possible when combined with economic incentives (Massawe & Mmbando, 2025; Anami, 2026).

The agricultural sector in Tanzania is highly vulnerable to climate change. Despite its potential, there have been persistent issues with productivity and the sustainability of resources. Empirical studies (i.e., Jones et al., 2023; Silas & Ndaki, 2022) have shown that CSA has the potential to increase the resilience of smallholder farmers; however, the adoption rate of CSA is limited due to a lack of financial incentives, insufficient extension services, and access to credit. Despite the increasing focus of policy frameworks on economic tools, including subsidies, rural finance, and market-based conservation mechanisms, a gap persists in the existing studies. Specifically, there is a paucity of systematic evidence that summarises the relative impact of financial incentives and market-based instruments on CSA and the adoption of ecosystem conservation in Tanzania.

Although limited access to finance and markets can constrain farmers' adoption of climate-smart agriculture in Tanzania, this practical challenge is distinct from the evidence gap addressed by this review. Tanzania-focused studies examine particular practices and economic factors, while broader reviews provide context across countries. This review brings together Tanzania-specific empirical studies to identify which financial and market-related mechanisms have been examined, which adoption and conservation outcomes were measured, and where evidence for comparing instruments remains limited. Regional reviews and other contextual sources inform the background and discussion but are not counted among the ten studies in the synthesis. The contribution is a clearer account of the scope and limits of the Tanzania-specific evidence, rather than an estimate of the relative effectiveness of financial and market-based instruments. This review addresses three questions: (1) Which financial, market-related and institutional economic factors have been examined in Tanzania-specific empirical studies of climate-smart agriculture and ecosystem conservation? (2) What adoption or conservation outcomes do these studies report, and how were those outcomes measured? (3) How do the reported findings vary by practice and setting, and what limits the conclusions that can be drawn about the effects of economic instruments?

LITERATURE REVIEW

Theoretical Literature Review

Incentive theory provides a basis for considering how expected costs, returns and risks may enter farmers' adoption decisions (Milgrom & Roberts, 1992). Credit, subsidies and payments may change these considerations, but the existence of a plausible mechanism does not establish that providing an incentive caused adoption. For example, Pamuk et al. (2022) examine savings group support delivered alongside training; the contribution of finance cannot be separated from that of the combined programme. Studies of farmers' resources and practice adoption likewise report associations that may differ across technologies and settings (Erick et al., 2025; Kurgat et al., 2020).

Institutional perspectives draw attention to the conditions under which economic mechanisms operate. Land-tenure security is an institutional condition, while extension provides information and technical support; neither is itself a financial incentive. Governance and programme arrangements may also matter for market-based instruments. Discussions of

Tanzania's REDD+ experience and wider PES arrangements provide context for these issues, but do not establish the effect of a payment on adoption in the studies synthesised here (Scheba, 2018; Osewe et al., 2023; Matekele et al., 2025).

Together, these perspectives guide the review's examination of the economic factors studied, the outcomes reported and differences across settings. They are used to interpret the evidence, not to infer a causal pathway or rank instruments by effectiveness.

Conceptual Framework

Based on the Theory of Incentives and supporting institutional perspectives, this study developed a conceptual framework illustrating the relationship between economic instruments and the adoption of climate-smart agriculture and ecosystem conservation practices (Figure 1).

Figure 1:
Conceptual framework for examining economic mechanisms, contextual conditions and reported adoption and conservation outcomes

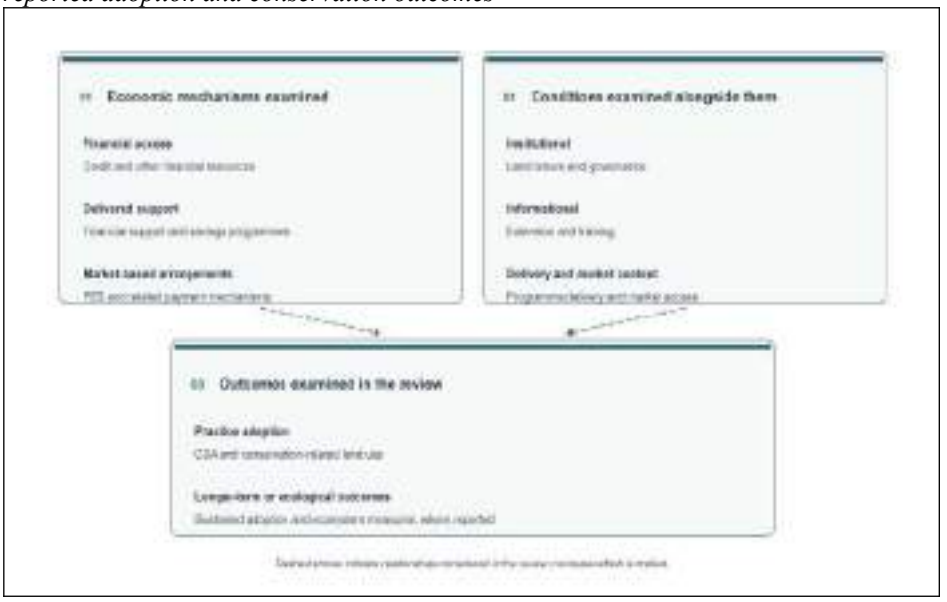


Figure 1 organises the review around the economic mechanisms examined, the institutional and informational conditions reported alongside them, and the adoption or conservation outcomes measured. Its arrows

represent relationships to investigate in the included studies, not causal effects established by this review.

Empirical Literature Review

Financial Incentives and Adoption of Climate-Smart Agriculture

The reviewed literature indicates that financial incentives play a role in driving the introduction of climate-smart agriculture (CSA), but they fail due to the institutional context and design. According to Van Asseldonk et al. (2023) and Rurii, M. W., & Nzengya Daniel, M. (2026) tools such as subsidies, credit, and risk-sharing mechanisms decrease barriers to the adoption of CSA in Sub-Saharan Africa. These studies consistently agree that monetary rewards reduce liquidity and financial constraints and perceived risks. However, a study by Van Asseldonk et al. (2023) is not focused on country-specific empirical estimates with regard to Tanzania. On the other hand, Rurii, M. W., & Nzengya Daniel, M. (2026) provide general conclusions for the country, thus falling short of providing country-specific impacts of institutions. Nevertheless, both studies indicate that isolated incentives are likely to be less effective, as they need to be supported and coordinated by institutions. This means that both studies converge on effectiveness, but they also share a common limitation in terms of standalone interventions.

Evidence from Kurgat et al. (2020) and Silas and Ndaki (2022) indicates that this trend is prevalent in Tanzania, where barriers such as financial constraints, insufficient access to credit, and institutional support are singled out. Though these studies confirm that increasing financial access increases the uptake of CSA, they also indicate that most of the interventions are short-term and not well designed to sustain long-term uptake. In this case, the literature reveals agreement in terms of short-term positive impacts but disagreement in the sustainability of uptake in the long term. Quantitative research such as Kurgat et al., (2020) empirically demonstrates a positive correlation between financial incentives and adoption, whereas qualitative research (Silas & Ndaki, 2022) is more contextual and its findings cannot be generalised. However, the gap lies in the fact that researchers such as Kurgat et al. (2020) focus on the determinants of adoption without assessing the sustainability of adoption in the long term or the environmental effects. On the other hand, Silas and Ndaki (2022) provide little evidence on generalisability or quantitative validation of the financial effects. This is an aspect of the strength of evidence, not the conclusions.

In general, it is widely believed that financial incentives have a positive impact on the adoption of CSA by alleviating liquidity restraints and exposure to risk. Nevertheless, the main gap arises in terms of sustainability over the long term and in terms of its connection to ecosystem conservation outcomes, which have not yet been studied in the context of Tanzania.

Influence of Market-Based Instruments on the Adoption of Climate-Smart Agriculture and Ecosystem Conservation Practices

The evidence for market-based instruments is more varied and context-dependent. At the regional level, Van Asseldonk et al. (2023) and Rurii, M. W., & Nzengya Daniel, M. (2026) highlight that mechanisms such as carbon pricing, payments for ecosystem services (PES), and market integration have the potential of aiding the adoption by increasing expected returns. There is partial agreement on their theoretical potential. Nevertheless, these studies do not measure long-term conservation effects and do not empirically provide evidence in Tanzania, which restricts their policy applicability.

Kurgat et al. (2020) and Silas and Ndaki (2022) show that market access in Tanzania, to a large extent, influences the adoption of CSA, and that more connected farmers choose to engage in better practices. Nevertheless, market incentives are not very reliable due to weak value chains, price volatility, and inefficient cooperative forms. This reflects a clear contradiction: market access promotes adoption, while unstable market systems undermine sustained outcomes.

Notably, the current literature is more concerned with adoption rates, but not with the overall conservation of the ecosystems related to market-based mechanisms. Another significant difference in the literature is the trustworthiness of market-based incentives. Whereas some studies have indicated that better access to the market can trigger adoption, other studies have indicated that structural constraints can undermine their efficacy. This implies that market-based instruments do not necessarily work, but depend on well-established institutions, infrastructure, and systems of governance. This divergence suggests that outcomes depend heavily on institutional and governance conditions.

The studies examine different economic factors, practices and outcomes. Evidence on access to finance or household resources is more common than direct evaluation of a delivered incentive, while evidence on market-based conservation instruments and measured ecosystem outcomes is limited. These differences guide the qualitative synthesis but do not support a ranking of the instruments' effects.

METHODOLOGY

This study adopted a systematic review design guided by the PRISMA 2020 framework to synthesise empirical evidence on the role of economic incentives in the adoption of climate-smart agriculture (CSA) and ecosystem conservation practices in Tanzania. The four PRISMA stages, identification, screening, eligibility, and inclusion, were followed as recommended by Page et al. (2021). This was chosen in order to improve transparency, decrease selection bias, and improve replicability of the review process.

Searches were conducted in Springer, Google Scholar, ScienceDirect, Emerald and Scopus were searched for studies published between 2018 and 2025. This range defines the publication eligibility period, not the dates on which the searches were conducted. The available records do not establish the exact search dates or complete source-specific queries and result limits. These details cannot therefore be reported or independently reproduced from the present documentation. The review screened titles and abstracts against the predefined eligibility criteria and then assessed potentially eligible articles in full text.

Eligible studies were English-language empirical journal articles published between 2018 and 2025 that reported Tanzania-specific findings on an economic factor or instrument in relation to the adoption of a climate-smart agriculture or ecosystem conservation practice. Articles were excluded if they addressed agronomic outcomes alone, lacked a clear adoption outcome or adequate methodological description, or did not report separately identifiable Tanzanian findings. Reviews, policy reviews and grey literature, including reports, theses and working papers, were excluded from the synthesis. Review and regional sources cited elsewhere in the manuscript provide background context only. While one reviewer screened titles, abstracts and assessed full-text articles against these criteria, a second reviewer subsequently checked the eligibility decisions and confirmed the final set of included studies.

Methodological quality was considered using the Mixed Methods Appraisal Tool (MMAT), version 2018 (Hong et al., 2018). The tool's criteria differ by study design, so the included studies should be appraised using the criteria appropriate to their respective designs. Item-level appraisal records for the final ten-study set are unavailable; consequently, MMAT scores and a quality-based inclusion threshold are not reported. Table 1 describes each study's design and appraisal status, while methodological limitations are considered in the interpretation of the findings. The Mixed Methods Appraisal Tool (MMAT), version 2018, was identified as a framework for considering methodological quality (Hong et al., 2018). Table 1 describes the studies' designs and limitations relevant to interpreting their findings; it does not present a completed MMAT appraisal.

Table 1:
Characteristics and methodological considerations of included studies

Study	Design and setting	Consideration for interpretation
Kagata et al. (2018)	Uluguru Mountains; 219 households; survey, interviews and logistic regression	Land-use adoption followed a PES project; the payment effect cannot be isolated.
Kurgat et al. (2020)	Four Tanzanian regions; cross-sectional household analysis	Observational associations; no causal estimate of a delivered incentive.
Jha et al. (2021)	Morogoro and Dodoma; survey of 697 smallholders	Observational survey; adoption associations do not establish causal effects.
Ogada et al. (2021)	Lushoto; survey of 264 households; multivariate probit	Cross-sectional, practice-specific associations; no causal estimate.
Pamuk et al. (2022)	Tanzania; comparison of farmer-group interventions	Savings support and training combined; separate credit effect cannot be isolated.
Bongole (2023)	Mbeya and Songwe; 1,443 households	Plot-ownership association; no incentive payment evaluated.
Selya et al. (2023)	Chamwino; survey of 260 households; logistic regression	Cross-sectional credit association; causation not established.
Utonga et al. (2024)	Dodoma grape farmers; multivariate probit	Cross-sectional analysis; associations differ by practice.
Awoke et al. (2025)	Dodoma; observational study of gender and CSA adoption	Resource-related associations; causal effects not established.
Erick et al. (2025)	Semi-arid central Tanzania; adoption and intensity analysis	Observational associations; no causal incentive estimate.

Data were extracted into a standardised matrix recording each study's authors, publication year, location, design, sample, economic factor or instrument, measured adoption or conservation outcome, and findings. The studies were compared by economic mechanism, distinguishing access to resources from delivered interventions and market-based arrangements. Land tenure, extension and governance were considered institutional or informational conditions rather than financial incentives. The synthesis examined differences across practices and settings and considered the limitations of each study's design and outcome measures.

Meta-analysis was not appropriate because the studies differed in design, economic factors, practices and reported outcomes. Findings were therefore synthesised narratively. Associations were distinguished from evaluations of delivered interventions, and conclusions about effectiveness were limited to what the study designs could support. PRISMA 2020 guided the reporting of study identification and selection. The search and screening totals reported in an earlier draft have not been reconciled with the final study set and are not presented as verified selection counts.

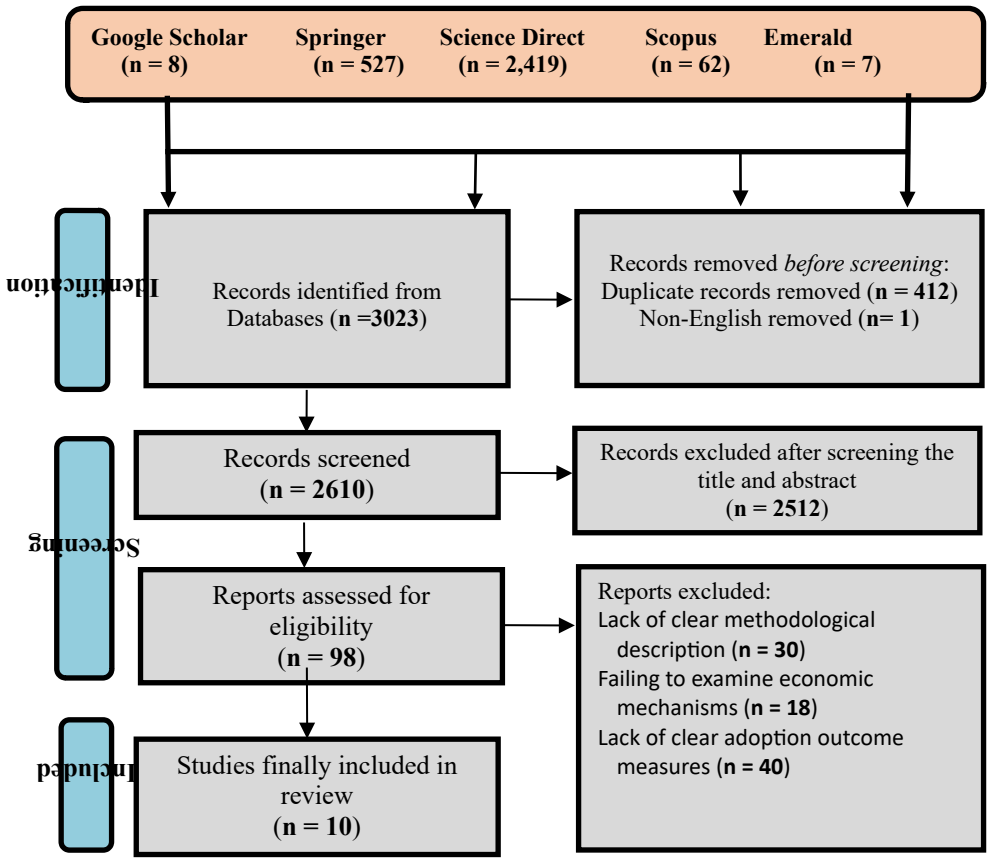
The review has several limitations. Incomplete records of source-specific searches and duplicate removal limit reproducibility. Screening and full-text assessment by one reviewer increase the possibility of selection error. The small and heterogeneous evidence base, together with limited evidence on sustained adoption and measured ecosystem outcomes, prevents a pooled effect estimate or a reliable ranking of financial and market-based instruments. The Tanzania-specific scope also limits the direct applicability of findings to other settings.

FINDINGS

The searches identified 3,023 records: 527 from Springer, 8 from Google Scholar, 2,419 from ScienceDirect, 7 from Emerald and 62 from Scopus. After duplicates and one non-English record were removed, 2,610 records remained for title and abstract screening. Of these, 2,512 were excluded because they did not meet the review's objectives. Most focused solely on agronomic performance, examined climate change without considering economic instruments, or were outside Tanzania. The remaining 98 reports were assessed in full text. Eighty-eight were excluded: 30 did not adequately describe their methods, 18 did not examine financial incentives or market-based instruments, and 40 did not report a clear adoption outcome. The remaining 10 articles were included in the qualitative syn-

thesis. Their differences in design, incentives and outcomes limit confidence in comparing the relative effectiveness of financial and market-based instruments. The findings are therefore presented as patterns in the available evidence, rather than firm estimates of comparative effectiveness. Bibliographic details, study characteristics and findings were organised in Microsoft Excel. The study-selection process is shown in the PRISMA flow diagram.

Figure 2:
PRISMA flow diagram of study identification and selection



Financial Incentives and the Adoption of Climate-Smart Agriculture

In a quasi-experimental study, Pamuk et al. (2022) compared the effects of Farmer Field Business Schools (FFBS) and Village Savings and Loan Associations (VSLAs) on CSA adoption in Iringa, Tanzania. The researcher found that farmer training, access to microfinance, and women's empowerment positively contributed to increased use of mulching, com-

posting manure, crop rotation, and rhizobium inoculation. VSLAs provided greater liquidity, which lowered financial barriers to adoption. This suggests that community-based financial mechanisms are highly influential in CSA adoption when paired with capacity building.

Van Asseldonk et al. (2023) conducted a policy review and found that subsidies, rural finance, land rights security, and training are important tools for influencing adoption. Moreover, the study also emphasises that single policy instruments are less effective when used alone, and that integrated and well-timed incentives are more effective than individual measures.

Bongole (2023), using multivariate and ordered probit models, revealed that climate-smart agriculture (CSA) practices are complementary rather than substitutionary, with plot ownership and gender playing critical roles in adoption decisions. Although the study did not directly examine financial incentives, the findings suggest that institutional and economic conditions moderately influence the level of adoption.

Erick et al. (2025) conducted a study using a double-hurdle model and found that land tenure security, extension services, and access to markets have a strong positive effect on both the probability of adoption and intensity. But not all the practices were very common because capital requirements were high. Thus, while financial incentives may lessen risk, they might not be sufficient to overcome the cost barrier, which implies a high but conditional effect.

Rurii, M. W., & Nzengya Daniel, M. (2026) found that poor access to credit and financial constraints are major hurdles in Africa. They note that credit schemes and subsidies enhance adoption in combination with extension services, and thus support the observation that integrated financial and informational support systems have more effective results.

Kurgat et al. (2020) showed that financial capital, information accessibility, and institutional support have a positive influence on the adoption of CSA by reducing the cost of transactions and uncertainty; it also suggested that the impact of financial resources is moderate to high.

In cases where farmers are willing despite the inadequacy or poorly designed financial incentives, a study by Silas and Ndaki (2022) found that

the lack of capital, the lack of extension services, and the high prices of inputs were limitations to this willingness to adopt.

There is overall agreement that financial incentives have a significant impact on the adoption of CSA, particularly in the reduction of liquidity and risk. Their effectiveness, however, needs to be combined with institutional support; however, there is a lack of evidence on long-term effectiveness.

Market-Based Instruments and Adoption of CSA and Ecosystem Conservation

Scheba (2018) critically evaluated the application of REDD+ in Tanzania and found that income instability, governance issues, and institutional misfits compromised the effectiveness of REDD+. This indicates that carbon market incentives are weak and conditional in weak institutional settings. According to Osewe et al. (2023), Payments for Ecosystem Services (PES) are more efficient in long-term financing, bundling ecosystem services, and the involvement of both state and non-state actors. The mixed transaction model (cash and in-kind) showed better livelihood and conservation outcomes, thus suggesting a moderate to high impact under organised conditions.

A study by Matekele et al. (2025) found that carbon trading increases income where there is good community-level institutional integration. However, poor institutional anchoring reduces trust and sustainability, which means that it has a conditional effect that depends on institutional strength.

Market-based instruments are shown to be conditional in the sense that they will have more effects when there are stable institutions, trusted markets, and long-term funding, but they perform worse when there are governance and market constraints. To further generalise these findings, Table 2 provides a comparative analysis of economic tools, their observed outcomes, and their comparative level of impact in the reviewed literature.

Table 2:
Characteristics and Findings of Included Tanzanian Studies

Study	Design and setting	Economic mechanism and outcome	Interpretation and limits	Outcome category
Kagata et al. (2018)	Uluguru Mountains; 219 households; survey, interviews and logistic regression	PES payments, land rights; adoption of promoted land-use interventions	Adoption observed after a PES project; payment effect not isolated.	Land-use adoption
Kurgat et al. (2020)	Four Tanzanian regions; cross-sectional household analysis	Tenure, household resources; adoption of specific CSA technologies	Technology-specific associations; no delivered incentive effect estimated.	Practice adoption
Jha et al. (2021)	Morogoro and Dodoma; survey of 697 smallholders	Land access, project-related factors; agroforestry uptake	Observational evidence; directions of individual economic predictors require full-text check.	Practice adoption
Ogada et al. (2021)	Lushoto; survey of 264 households; multivariate probit	Credit, off-farm income and landholding; CSA technology uptake	Practice-specific associations; causal effects not established.	Practice adoption
Pamuk et al. (2022)	Tanzania; comparison of farmer-group interventions	Village savings and loan associations plus training; CSA uptake	Combined programme; independent credit effect not isolated.	Practice adoption
Bongole (2023)	Mbeya and Songwe; 1,443 households	Plot ownership; adoption of multiple CSA practices	Tenure-related association; no payment assessed.	Practice adoption
Selya et al. (2023)	Chamwino; survey of 260 households; logistic regression	Agricultural credit; conservation-agriculture adoption	Credit associated with adoption; causal effect not established.	Practice adoption

Study	Design and setting	Economic mechanism and outcome	Interpretation and limits	Outcome category
Utonga et al. (2024)	Dodoma grape farmers; multivariate probit	Finance access; rotation and diversification uptake	Positive association for rotation, negative for diversification.	Practice adoption
Awoke et al. (2025)	Dodoma; empirical study of gender and CSA adoption	Land and livelihood resources; practice adoption	Gendered resource associations; observational design.	Practice adoption
Erick et al. (2025)	Semi-arid central Tanzania; adoption/intensity analysis	Tenure and market access; leafy-vegetable CSA uptake	Associations with adoption and intensity; no causal effect established.	Practice adoption

The studies differed in location, design, economic mechanism and measured outcome (Table 2). Most examined associations between farmers' resources or access to finance and adoption of specific agricultural practices; fewer evaluated an implemented incentive or measured a conservation outcome. The direction of association varied by practice. For example, access to finance was positively associated with crop rotation but negatively associated with crop diversification in the Dodoma grape-farming study (Utonga et al., 2024). The evidence does not support a single estimate of how economic incentives affect adoption across Tanzania.

DISCUSSION

The ten studies examine different crops, farming systems, regions and economic factors. They also measure different outcomes, from the adoption of a particular practice to the intensity of its use. These differences limit direct comparison. For example, studies of land tenure, household resources and market access identify factors associated with adoption, but they do not show what would happen if farmers were given a loan, subsidy or payment (Bongole, 2023; Kurgat et al., 2020; Erick et al., 2025). Evidence from agroforestry and other CSA technologies likewise shows that adoption depends on the practice and the circumstances of the household (Jha et al., 2021; Ogada et al., 2021; Awoke et al., 2025). The findings are therefore better understood as context-specific associations than as estimates of the effectiveness of financial incentives.

The evidence on access to finance illustrates why the type of practice matters. Pamuk et al. (2022) examined a programme combining farmer training with village savings and loan associations. Although the programme supported CSA uptake, its design does not allow the contribution of finance to be separated from that of training and other support. In Chamwino, access to agricultural credit was associated with conservation-agriculture adoption (Selya et al., 2023). Among grape farmers in Dodoma, however, access to finance was positively associated with crop rotation and negatively associated with crop diversification (Utonga et al., 2024). These findings do not justify a general claim that credit increases adoption of all CSA practices. They suggest that the costs, risks and practical requirements of each practice should be considered when designing financial support. A broader African review also describes variation in adoption conditions (Rurii et al. 2026); it provides context only, as it was published outside this review's 2018–2025 eligibility period.

The evidence on market-based conservation instruments is narrower. Kagata et al. (2018) observed adoption of promoted land-use interventions

following a payment for ecosystem services (PES) project in the Uluguru Mountains. Because the study could not separate payments from other aspects of the project, it does not establish the effect of PES payments alone. The other sources discussed here address related, but different, questions: Scheba (2018) examines governance challenges in Tanzania's REDD+ experience; Osewe et al. (2023) compares PES arrangements across Kenya, Uganda and Tanzania; and Matekele et al. (2025) examines carbon trading in relation to community income. These studies help explain why governance, participation and reliable returns may matter, but they cannot establish whether PES or carbon trading increases CSA adoption or improves ecosystem outcomes more effectively than financial support.

These findings can be interpreted through incentive and institutional perspectives. Expected costs, returns and risks may influence a farmer's decision to adopt a practice (Milgrom & Roberts, 1992). Whether an incentive can be used as intended may also depend on land rights, access to services and programme governance. The reviewed studies are consistent with these possible relationships, but they do not test a common causal model. In particular, evidence from a combined programme should not be taken to mean that combining interventions is necessarily more effective than providing any one component separately.

For policy, the clearest implication is to identify the local barrier and the specific practice before choosing an instrument. Access to appropriate finance, secure land tenure and extension support are reasonable priorities where the evidence identifies these as constraints. Their expected benefits should nevertheless be assessed in the settings where they are introduced. The ten studies do not establish that financial incentives are generally superior to market-based instruments, nor do they identify a national sequence for introducing them. PES and carbon-market programmes may be considered for monitored pilots that record who participates, how benefits are distributed, whether funding and governance remain reliable, and whether adoption and ecosystem conditions improve over time. Expanding such programmes would require stronger evidence on those outcomes. The small number of studies, their predominantly observational designs and the variation in measured outcomes limit confidence in comparisons between instruments. Evidence on sustained adoption and directly measured conservation outcomes is particularly scarce. Future research should compare clearly defined interventions over time and measure both farmers continued use of practices and changes in ecosystem conditions. Until then, the review supports context-sensitive policy design and identifies

evidence gaps; it does not provide a causal ranking of economic instruments.

CONCLUSION

This review identifies context-specific associations between economic conditions and the adoption of climate-smart agriculture and conservation practices in Tanzania. Access to finance, land tenure and extension support recur in the adoption studies, while evidence on payments for ecosystem services and carbon trading is limited and addresses different outcomes. The ten-study qualitative synthesis cannot determine whether one type of instrument is more effective than another.

The findings are consistent with incentive theory and institutional economics: farmers' decisions appear to depend on available resources as well as the institutions through which support is delivered. Evidence-informed policy priorities are to identify local barriers to adoption and improve access to appropriate finance, secure land tenure and extension services. The review does not establish the effect of any single intervention or combined policy package. Expansion of PES and carbon-market programmes should therefore proceed through monitored pilots that assess governance, equitable participation, funding reliability and measurable conservation outcomes.

Confidence in broader conclusions is limited by the small evidence base, differences in study design and outcome measures, and the predominance of observational studies. Evidence on sustained adoption and ecosystem outcomes remains particularly scarce. Longitudinal and comparative studies are needed to assess whether specific economic mechanisms produce lasting changes in practice and conservation outcomes.

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Mapping Agricultural Marketing Information Research in Tanzania: A Bibliometric Analysis and Systematic Literature Review

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Abstract
This review maps the theoretical structure of Agricultural marketing information in Tanzania by analysing 47 Scopus publications (2008–2024). The study is motivated by the fact that, despite growing research on agricultural marketing information, limited evidence integrates its role in smallholder farmers' market participation, mobile phone-enabled information access, and agricultural supply chains and marketing channels. Harzing Publish or Perish and VOSviewer were used to explore publication trends, influential publications, and keyword co-occurrence to map the field's structure. Findings reveal that research output increases by 11.85% annually. Three overarching themes are uncovered in the review: (i) the roles played by marketing information in market participation among smallholder farmers; (ii) impacts of mobile phone access to marketing information for grape farmers in Dodoma; and (iii) food supply chains and marketing channels for rice smallholders in developing countries. Tanzania and Kenya were found to be the most influential and productive academic centres in agricultural marketing information. Emerging academic powers like China, Denmark and the US are potential partners for effective collaboration to enhance knowledge sharing and develop innovative studies. It is concluded that a core academic circle in agricultural marketing information has not yet formed and is likely to be influenced by researchers working in similar yet distinct fields. This study contributes to the body of knowledge by identifying trends in publications on agricultural marketing information, reflecting recent developments in the field. The study contributes theoretically by integrating Information Asymmetry Theory, the Technology Acceptance Model, Diffusion of Innovation Theory and Value Chain Theory to provide a multidimensional understanding of how
agricultural marketing information and digital technology shape smallholder farmers' market engagement.

Keywords: *Marketing, Agricultural marketing information, Tanzania, Bibliometric analysis, Systematic literature review, and Scopus data*

INTRODUCTION

Agricultural marketing information plays a critical role in enabling smallholder farmers to make informed production and marketing decisions, maximise resource utilisation, identify new market opportunities, negotiate with buyers and improve their participation in agricultural markets (Odo et al., 2025; Alhamdi & Al-Kahtani, 2025; Magakwe et al., 2025; Ismail, 2024; Ma et al., 2024; Nyagango et al., 2023a). Access to timely, accurate and relevant information on prices, demand, buyers, market channels and prevailing market conditions can reduce information asymmetries between farmers and other market actors and strengthen farmers' capacity to respond to changing market conditions (Abebe et al., 2026; Kusairi & Prasetyo, 2025; Magasi & Kimambo, 2024; Maleko & Ukpong, 2025; Nyagango et al., 2024). However, access to and effective use of agricultural marketing information remain important challenges for smallholder farmers, particularly in developing countries where information systems, digital connectivity and market linkages are often constrained (Mapiye et al., 2023; Abebe et al., 2019).

Producers in emerging economies like Tanzania, which typically have limited marketing budgets, face an array of challenges, including limited access to current market information, limited market access, and price and demand volatility (Marwa et al., 2025; Dorasamy & Kikasu, 2024). Without sufficient market information, they are forced to rely on intermediaries that exploit their lack of knowledge and cut their margins. Bridging this knowledge gap can enhance producers' livelihoods and overall economic growth. One of the means of doing so is investing in marketing communication and marketing infrastructure, which will enhance market access and eventually drive economic growth for producers (Maleko & Ukpong, 2025; Li & Zhang, 2024; Nyagango et al., 2023b).

To address the challenges of accessing agricultural marketing information in developing nations such as Tanzania, this study employed a systematic research approach. A detailed bibliometric review of publications from 2008 to 2024, based on Scopus data, identified trends, gaps, and emerging issues in marketing information research. This research will use a systematic review of the existing literature to examine the evolution of marketing practices and procedures in the Tanzanian context. Quantifying re-

search products, such as publications and citations, and inspecting collaborative networks will reveal the dynamics of marketing information. Ultimately, this research will empower producers, drive economic development, inform future studies, and assist policymakers and practitioners in decision-making.

The study provides a robust overview of how agricultural marketing information has been and utilised in Tanzania, with a focus on the relevance of existing data for business decision-making. The discussion highlights the contributions of various scholars and institutions to the body of knowledge, enabling a better understanding of the academic literature on marketing in the region. The scope of this research extends well beyond ordinary marketing theories; it also addresses the practical uses of market information in the Tanzanian case. In the same vein, as the economy continues to develop, demand for reliable marketing information will grow, affecting not only businesses but policymakers and scholars alike (Ma & Gu, 2024; Nyagango et al., 2023c). Discovering how agricultural marketing information is utilised in Tanzania will not only enrich scholarly discussion but also provide practical recommendations for practitioners working to improve market performance.

Although a few empirical studies (i.e., Maleko & Ukpong, 2025; Mubofu & Mbedule, 2025; Nyagango et al., 2023a; Nyagango et al., 2023c) examined agricultural marketing information, no study has systematically reviewed the literature on agricultural marketing information in developing countries such as Tanzania. Nonetheless, to the researchers' knowledge, no study has conducted a bibliometric analysis of agricultural marketing information in Tanzania. Limited attention has been given to systematically examining research productivity and the conceptual structure of agricultural marketing information literature, leaving publication trends, leading contributors, influential sources and emerging themes insufficiently consolidated. Bibliometric approaches address these gaps by quantitatively analysing research development, productivity, trending research topics, influence and intellectual structure (Changalima et al., 2025; Haghani, 2023; Hammouti et al., 2025).

Despite the practical importance of agricultural marketing information, its research productivity, conceptual development and application within Tanzania remain insufficiently synthesised. Empirically, limited consolidated evidence explains how marketing information influences farmers' market engagement; methodologically, the application of bibliometric and

systematic review approaches remains underexplored; and contextually, the Tanzanian agricultural marketing information landscape lacks a dedicated bibliometric assessment. Addressing these gaps can provide a foundation for understanding research trends and informing stakeholders' decisions regarding agricultural marketing information and market development. Therefore, this paper bridges these gaps by conducting a bibliometric analysis of agricultural marketing information in Tanzania from 2008–2024 and exploring research gaps in this field. Therefore, the general objective of this study is to analyse the research landscape of agricultural marketing information in Tanzania. More specifically, the study seeks to:

i) To examine the publication trends in research focusing on agricultural marketing information in Tanzania.
ii) To identify the most active contributors to research on agricultural marketing information in Tanzania.
iii) To determine the most influential publications in research on agricultural marketing information in Tanzania.
iv) To identify emerging and trending research topics in agricultural marketing information in Tanzania.

To contribute to the body of knowledge, this study aims to answer the following research questions:

RQ1: What is the publication trend in research focusing on agricultural marketing information in Tanzania?
RQ2: Who are the most active contributors in research focusing on agricultural marketing information in Tanzania?
RQ3: Which publications are the most influential in research focusing on agricultural marketing information in Tanzania?
RQ4: What are the trending research topics on agricultural marketing information in Tanzania?

This paper bridges the gap between theory, methodology and practice by providing a strategic map for future applications and research on the topic (Mchopa et al., 2024; Farid et al., 2023; Kazungu & Kumburu, 2023). The products of this analysis will serve as an informative reference for stakeholders interested in agricultural marketing information in the Tanzanian market. The study contributes to the theoretical understanding of agricultural marketing information by synthesising the dominant theories, themes and conceptual developments within the literature. In particular, the findings provide an integrated basis for understanding how information availability, technology adoption and value chain relationships shape agricultural market engagement in Tanzania. Methodologically, the study

demonstrates the value of combining systematic literature review and bibliometric analysis to examine publication trends, research productivity, influential publications, major contributors and emerging research topics. This approach provides a structured overview of the development and intellectual structure of agricultural marketing information research in Tanzania and identifies areas requiring further empirical investigation. Practically, the findings provide evidence to support policymakers, extension officers, and agricultural marketing practitioners in strengthening agricultural market information systems and improving farmers' access to relevant, timely market information. Identifying major contributors, influential publications, and emerging research themes can also inform agricultural policy formulation, extension strategies, market information services, and evidence-based decision-making, while guiding future research on agricultural marketing information in Tanzania.

METHODS

Data Source and Search Strategy

This study employed a bibliometric approach using data retrieved from the Scopus database. The selection of this database was due to its extensive coverage of reliable, high-quality, peer-reviewed literature, its multidisciplinary scope, and its compatibility with bibliometric analysis software (Changalima and Mchopa, 2024; Rejeb et al., 2023). A structured search strategy was developed using relevant keywords and search strings related to the study topic. The search was limited to publications indexed in Scopus between 2008 and 2024. The earliest year in which relevant publications were identified in the Scopus search was 2008, while 2024 was selected as the final complete publication year available for the analysis. Scopus database was selected for its broad disciplinary coverage, high-quality peer-reviewed sources and suitability for mapping niche research domains. It indexes over 27,000 journals, books and conference proceedings across business, management and social sciences, providing comprehensive coverage (Koştı et al., 2026; Tandon et al., 2021). Its rigorous inclusion criteria, citation tracking and advanced search functions support reliable data retrieval and bibliometric analysis of research productivity, impact and collaboration patterns (Kawishe et al., 2025).

Study Selection

The search was conducted in Scopus on 22nd March 2025. The study selection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework. The Scopus search string used the keywords "marketing information", "farmers",

“agricultural markets”, and “market access”, combined using the Boolean operator OR to retrieve publications addressing these concepts. The study considered three major sections of a published article: Article title, Abstract, and Keywords, using the Boolean search strategy: "market* information", "agricultural market* information", *and "Tanzania".* The procedures in Figure 1 ensured a structured, transparent, and replicable process for obtaining and analysing articles on agricultural marketing information. Initially, 60 records were identified from the Scopus database. No duplicate records were detected during screening.

Inclusion and exclusion criteria

Subsequently, records were screened against predefined inclusion criteria, namely publications indexed in Scopus, written in English, published up to 2024, and classified as journal articles or review papers. A total of 13 records were excluded, comprising publications outside the specified time frame (n = 2), documents with ineligible document types (n = 10), and records from non-journal sources (n = 1). No records were excluded on the basis of language, and all identified records were successfully retrieved. Duplicate checking was conducted using Microsoft Excel by systematically comparing publication titles, authors, DOI numbers and other bibliographic details. This verification process found no potential duplicate records in the dataset

Following the eligibility assessment, 47 publications met the inclusion criteria and were retained for the final bibliometric analysis. Figure 1 summarises the selection process, presenting the identification, screening, and inclusion stages as key steps in systematic reviews (Page et al., 2021). Keyword normalisation was undertaken to standardise synonymous terms, spelling variations and equivalent keyword expressions before conducting the co-occurrence analysis. All word marks were converted to lowercase, and plurals, hyphens, and periods were removed, excluding the end words from the initials and abbreviations (Máté et al., 2024). The analysis focused on author keywords, excluding indexed keywords to maintain consistency with the terminology explicitly assigned by the authors of the retrieved publications.

Data Cleaning and Bibliometric Analysis Methods

This involved verifying bibliographic information, removing irrelevant records identified during screening, and standardising author keywords, author names, and source titles where necessary. The cleaned dataset was subsequently subjected to bibliometric analysis to examine the intellectual

structure, research trends, and thematic development. The analysis focused on keyword co-occurrence patterns, which enabled the identification of major research themes and their interrelationships. Network-based bibliometric techniques were employed to explore the conceptual structure of the literature and reveal dominant and emerging research areas.

Analytical Tools and Visualisation

Bibliometric analyses and visualisations were performed using Harzing Publish or Perish 8.17.863 and VOSviewer 1.6.20 to construct and visualise bibliometric networks (Harzing, 2007; van Eck & Waltman, 2010). VOSviewer was used to generate keyword co-occurrence networks based on author keywords extracted from the selected publications. All keywords were considered as the unit of analysis, aided by the full counting method, in which each occurrence of a keyword was given equal weight in the keyword co-occurrence analysis. A minimum of two (2) occurrences of a keyword was set as a limiting factor. The resulting network visualisations clustered related keywords into three thematic groups according to their co-occurrence frequencies, thereby highlighting the principal research domains within the literature. After clustering, each cluster was labelled using the log-likelihood clustering algorithm. Nodes in the network represented keywords, while links reflect co-occurrence relationships, with larger nodes signifying higher occurrence frequencies and stronger connections reflecting greater thematic association. The order of keywords within each cluster on the timeline reflects the period in which each keyword first appeared, and the connecting curves in the visualisation figure embody the keywords' relationships (Jin & Li, 2019). The visualisation outputs facilitated the interpretation of research patterns, thematic clusters, and the overall knowledge structure of the field.

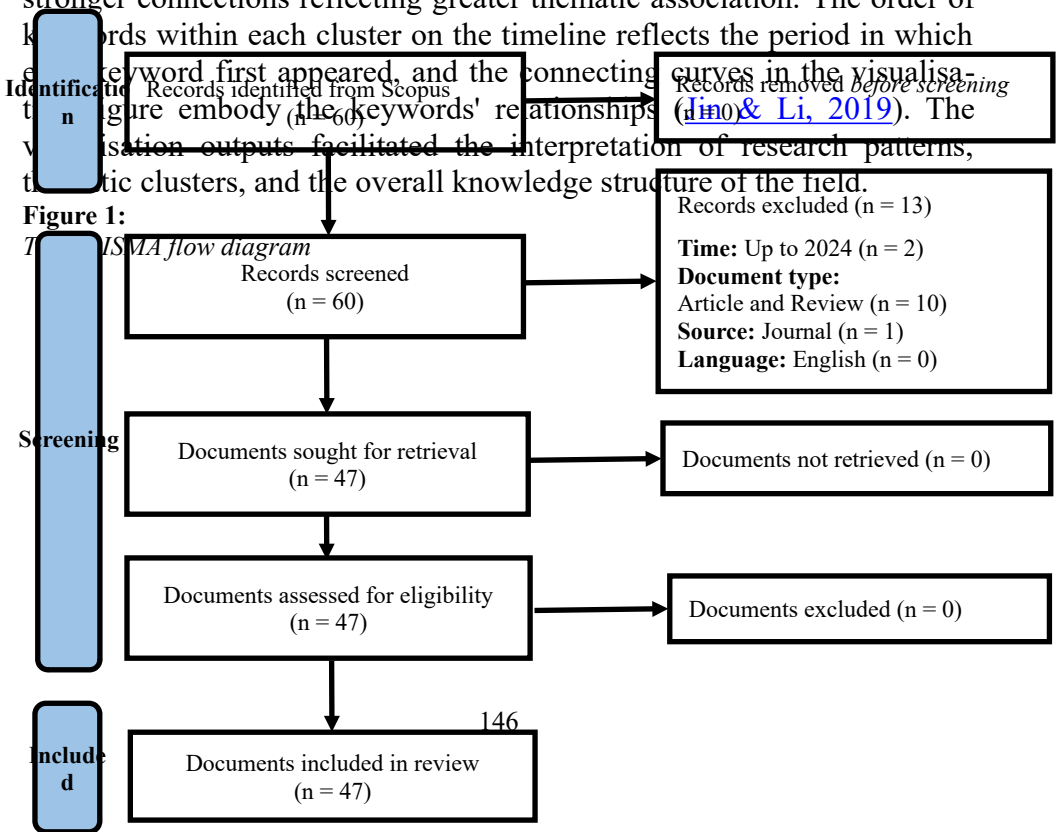


Figure 1:
The PRISMA flow diagram

RESULTS

Main information of the retrieved dataset

The bibliometric analysis results in Table 1 show that the dataset spans from 2008 to 2024, enabling an in-depth examination of research patterns during this period. The analysis spans 40 different journals, which collectively comprise 47 articles. Surprisingly, the annual growth rate of publications is 11.85%, indicating a steady increase in intellectual work on the subject over the years. As for document types, articles are most prevalent, with 46 articles to 1 review.

This annual growth rate indicates that agricultural marketing information research is an expanding and increasingly established field, with sustained scholarly attention over the study period. Nevertheless, the dominance of 46 research articles suggests the field remains largely empirical and developmental, with limited synthesis of accumulated knowledge. This reflects the high priority placed on primary research within the dataset. Overall, these patterns indicate a growing but still maturing research domain, creating opportunities for more systematic reviews, theoretical integration and consolidation of emerging research themes. Furthermore, two articles classified in Table 1 as "articles in press" had completed the peer-review process at the time of data retrieval but had not yet been assigned final publication details; therefore, their inclusion does not compromise the reliability of the bibliometric analysis.

Table 1:
Main information of the retrieved dataset

Description	Results

Timespan	2008 - 2024
Sources (Journals)	40
Number of publications	47
Annual Growth Rate %	11.85
Document types	
Article	46
Review	1
Publication stage	
Final	45
Article in press	2

The publication trend

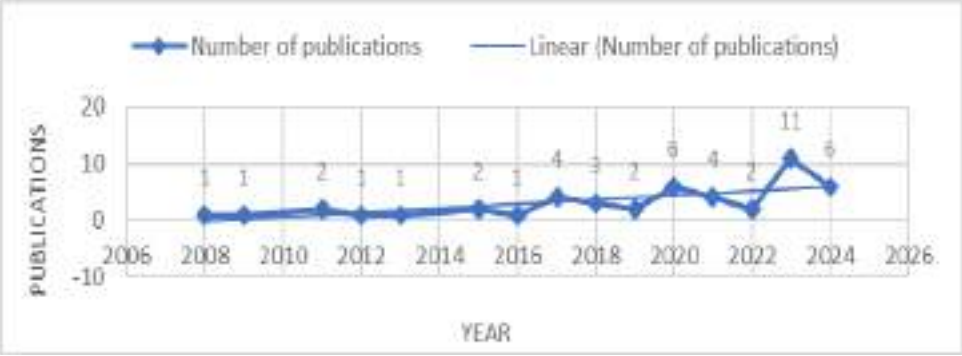
The dataset comprised 47 publications carried out between 2008 and 2024, retrieved from Scopus. The articles spanned a range of subject areas, with a predominance of "Market*information" and "Tanzania". Out of 47 publications, 46 (97.87%) were articles, and 1(2.13%) was a review from different journals. In addition, 45 (95.74%) were in the final publication form, and 2 (4.26%) were in press. Figure 2 illustrates the trend in publishing over 15 years (2008-2024) in the field of marketing information in Tanzania.

Throughout the period, the findings reflect a rising trend in publications, with the number of journal articles and reviews in the marketing information field increasing each year from 2008 to 2024. The evidence shows a consistent number of publications between 2008 and 2013, followed by a clear upward trend from 2008 to 2013 and then from 2013 to 2024, indicating a substantial increase over the period. Since 2013, when there was only one publication, the following years saw gradual increases. The growth trend increased in 2015, with two publications; subsequently, after some ups and downs, a massive rise was observed from 2020 onwards. There were six publications in 2020, twice the output of the preceding years. The trend continued with fluctuating annual figures, but 2023 had the highest figure at 11 publications, reflecting strong interest or capacity to produce that year. The year 2024 also follows the same trend, with six publications already registered. Overall, from 2013 to 2024, the number of articles increased from 1 to 6 (peaking at 11 in 2023), indicating an upward trend in research activity or output in the field. This increase could be due to several factors, such as increased research funding, collaboration among researchers, or greater interest in the issue. Generally, trends in Figure 1 reveal not only an increase in quantity but also, perhaps, a

qualitative improvement in study quality and response rates for marketing information as a discipline over 2008-2024.

The upward trendline in Figure 2 indicates a positive long-term trajectory in research output. This suggests that, despite year-to-year fluctuations, scholarly attention to agricultural marketing information in Tanzania has generally increased between 2008 and2024. Therefore, this steady growth suggests that marketing information research has sparked scholars' interest in recent years by examining consumer behaviour, market trends, internet marketing techniques, the impacts of marketing information systems, and how cultural and economic conditions affect marketing practice.

Figure 2:
The publication trend



The most active countries, institutions and journals

Table 2 provides a relative picture of publication outputs across nations and highlights collaborative efforts. Tanzania leads with 39 publications, indicating an active research community. Kenya follows with 7 publications co-authored by Kenyan researchers. This reflects a growing interest in research outputs within the country. The other major contributors are China, Denmark, and the United States with 5, 3, and 3 publications, respectively. Collaborative publications across these countries reflect an active community of researchers engaged in joint research, underscoring the role of international collaboration in enhancing the quality and scope of research.

These publications show varying levels of research involvement and collaboration on the international stage. Tanzania's lead in publications reflects a robust research environment that can access exposure and funding from world players. Publications from Kenya, China, Denmark, and the

United States speak volumes about the potential for effective collaboration to enhance knowledge sharing and develop innovative studies. These collaborations can increase academic connections and resources, which are critical for tackling global challenges, especially in agriculture and development areas where these nations have considerable interests.

Among the institutions observed, Moshi Co-operative University in Tanzania contributed 10 publications, the highest in this area of study, demonstrating its impactful role as a producer of knowledge for the academic world. The University of Dar es Salaam contributes 6 publications, making it another leading contributor to Tanzania's education industry. Sokoine University of Agriculture produces 6 publications, while China's Jilin Agricultural University and Mzumbe University each produce 4 publications. The outputs from specific institutions, the University of Dar es Salaam and Moshi Co-operative University, underscore their significant role in shaping research and agricultural and developmental policy priorities in Tanzania and beyond. Institutions with more publications are presumably seen as academic powerhouses, attracting students and researchers. This creates a virtuous cycle in which greater exposure leads to greater collaboration and resource allocation, strengthening the institution's ability. For institutions like Sokoine University of Agriculture, this shows that research specialities can be heard and contribute to innovation in agricultural science for food security and regional economic development.

At the journal level, several publications have emerged as premier platforms for publishing research findings. Cogent Food & Agriculture leads with 3 publications, followed by the Electronic Journal of Information Systems in Developing Countries and Cogent Business & Management with 3 and 2 publications, respectively. Other journals, such as the Global Business Review and the International Journal of Agricultural Science Research and Technology, have 2 publications each, reflecting the range of discussion topics in their research articles. These publications underscore the importance of specialised platforms in facilitating research communication and information sharing in the academe.

The variety of journals and their respective publication levels suggests a vibrant academic publishing ecosystem capable of accommodating diverse research interests. Cogent Food & Agriculture is one of the journals that plays a critical role in disseminating research findings that can inform practice and policy in agriculture and food security. The presence of local

and foreign journals aligns with the call for open spaces for researchers, which can translate into wider reading and impact. Increased publication in reputable journals can confirm the validity of the research by these institutions, hence attracting more research collaborations and investments. In addition, the range of journals suggests a healthy exchange of ideas across fields, essential to innovation and to tackling complex global issues.

Table 2:
The most active countries, institutions and journals

Country	Publications	Institution	Publications	Journal	Publications
Tanzania	39	Moshi Co-operative University	10	Cogent Food & Agriculture	3
Kenya	7	University of Dar es Salaam	6	Electronic Journal of Information Systems in Developing Countries	3
China	5	Sokoine University of Agriculture	6	Cogent Business & Management	2
Denmark	3	Jilin Agricultural University	4	Global Business Review	2
United States	3	Mzumbe University	4	International Journal of Agricultural Science Research and Technology in Extension and Education Systems	2

Most active authors

The second research question aims to determine the number of publications by top contributors in the field. Research productivity is measured by the number of journal articles authored by authors, institutions, countries, and sources (journals). Authors with the highest number of publications on the topic of research are presented in Table 3. The findings show that Kazungu, I. (8 publications; h-index of 10) is the top author in the research field of marketing information in Tanzania, followed by Nyagango, A. I (5 publications; h-index of 3) and Sife, A. S. (5 publications, h-index of 10). Third are Afari-Sefa, V. (h-index of 24), Mgale, Y.J. (h-index of 4), and Yunxian, Y. (h-index of 6), each with 3 publications in marketing information. Therefore, the three most prolific authors in the field are Kazungu, I., Nyagango, A. I., and Sife, A. S. They are closely followed by five other authors with a total of 10 papers in the field. They are Baiyegunhi, L.J.S., Mmbando, F.E., Rajendran, S., Wale, E.Z., and Kilima, F.T.M., each having authored two documents.

Table 3:
The most active contributors (authors)

Author	Publications
Kazungu, I.	8
Nyagango, A.I.	5
Sife, A.S.	5
Afari-Sefa, V.	3
Mgale, Y.J.	3
Yunxian, Y.	3
Baiyegunhi, L.J.S.	2
Mmbando, F.E.	2
Rajendran, S.	2
Wale, E.Z.	2
Kilima, F.T.M.	2

The most influential publications

The third research question concerns the most cited publications relevant to marketing data. Beginning with the number of citations reported in Harzing's Publish or Perish, 47 publications released between 2008 and 2024 have received 370 citations, with a mean of 7.804 citations per paper and 75.04 citations annually. In spite of this, the findings in Table 4 are only for impactful papers that have at least 24 citations per article. Ta-

ble 4 therefore lists only 10 papers ranked as impactful for the research field. The findings (Table 4) also show that the most impactful papers are drawn from various journals, with Cogent Food & Agriculture and the Electronic Journal of Information Systems in Developing Countries each featuring 3 papers. Masters et al. (2018), with 71 total citations and 10.14 citations per year, lead the list of the most-cited works in this area, followed very closely by Magesa et al. (2020), with 47 citations and 9.4 total citations per year, and Mmbando et al. (2015a), with 40 citations and 4 total citations per year. These three works lead in the context of market information and smallholder farmers' engagement.

Master et al. (2018) present a new cost-of-diet-diversity index that measures the affordability of a healthy diet and is compared with the Cost of Nutrient Adequacy. The study highlights the role of agricultural market information systems in monitoring price variability and measuring the affordability of nutrient-dense, diverse diets over time. At the same time, Magesa et al. (2020) stress the need to expand farmers' access to market information, which can improve marketing satisfaction and enable them to bypass middlemen, thereby increasing their share of crop profits. The research contributes an approach to measuring farmer capability, an understanding of the multidimensionality of life satisfaction with agricultural marketing, and evidence for targeted interventions for smallholder farmers. In addition, Mmbando et al. (2015b) examine how participation in maize and pigeonpea markets enhances rural household welfare in Tanzania through consumption expenditures. The findings emphasise that better marketing information and market access can significantly improve household welfare by reducing transaction costs and encouraging wider participation in agriculture. Collectively, these studies highlight the key role of marketing information in improving farmers' market access, diet affordability and diversity, and overall household welfare. Table 4 presents additional key publications on marketing information in smallholder farming in Africa, specifically Tanzania, and its effects on market access, diet affordability, and the effects of digitalisation and support on farmers' income and production choices.

The trending research topics

To address the fourth research question, the study conducted a keyword co-occurrence analysis. This approach creates networks in which keywords are nodes, and keyword connections in publications represent links. The network formed by frequent co-occurring keyword combinations re-

veals shared knowledge and areas of interest in a specific field. This approach is helpful for uncovering knowledge structures and trends in a particular area of study, helping identify current research trends and dynamics. The study employed VOSviewer software to perform keyword co-occurrence analysis. Keyword frequency matters because it suggests relevance and importance in research. Thus, the analysis identified 13 keywords with a minimum of 2 occurrences per keyword, which were then organised into three clusters (Fig. 3; Table 5). The identified clusters mirror the diversity of research problems in marketing information. This keyword co-occurrence analysis was deemed pertinent to the current study because it shows the over- or under-representation of specific problems in the publications obtained.

Figure 3:
Network visualisation based on keyword co-occurrence analysis

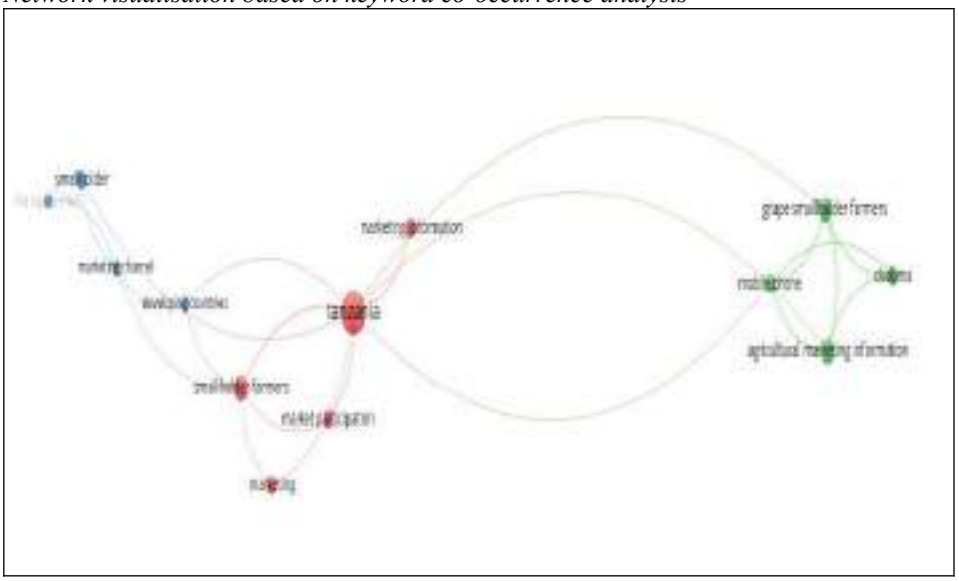


Table 4:
The Top 10 most influential publications

S/N	Authors	Title	Year	Journal	Age (Y)	TC	TC/Y
1	W.A. Masters, Y. Bai, A. Herforth, D.B. Sarpong, F. Mishili, J. Kinabo, J.C. Coates	Measuring the affordability of nutritious diets in Africa: Price indexes for diet diversity and the cost of nutrient adequacy	2018	American Journal of Agricultural Economics	7	71	10.14
2	M.M. Magesa, K. Michael, J. Ko	Access and use of agricultural market information by smallholder farmers: Measuring informational capabilities	2020	Electronic Journal of Information Systems in Developing Countries	5	47	9.4
3	F.E. Mmbando, E.Z. Wale, L.J.S. Baiyegunhi	Welfare impacts of smallholder farmers' participation in maise and pigeonpea markets in Tanzania	2015	Food Security	10	40	4
4	Y.J. Mgale, Y. Yunxian	Marketing efficiency and determinants of marketing channel choice by rice farmers in rural Tanzania: Evidence from Mbeya region, Tanzania	2020	Australian Journal of Agricultural and Resource Economics	5	37	7.4
5	F.E. Mmbando, E.Z. Wale, L.J.S. Baiyegunhi	Determinants of smallholder farmers' participation in maise and pigeonpea markets in Tanzania	2015	Agrekon	10	36	3.6
6	W. Anderson	Internationalisation opportunities	2011	Journal of African Busi-	14	32	2.29

S/N	Authors	Title	Year	Journal	Age (Y)	TC	TC/Y
		and challenges for small and medium-sized enterprises from developing countries		ness			
7	A. Aku, P. Mshenga, V. Afari-Sefa, J. Ochieng	Effect of market access provided by farmer organisations on smallholder vegetable farmer's income in Tanzania	2018	Cogent Food and Agriculture	7	31	4.43
8	F.A. Kitole, E. Mkuna, J.K. Sesabo	Digitalisation and agricultural transformation in developing countries: Empirical evidence from Tanzania agriculture sector	2024	Smart Agricultural Technology	1	27	27
9	V. Afari-Sefa, S. Rajendran, R.F. Kessy, D.K. Karanja, R. Musebe, S. Samali, M. Makaranga	Impact of nutritional perceptions of traditional African vegetables on farm household production decisions: a case study of smallholders in Tanzania	2016	Experimental Agriculture	9	25	2.78
10	A.F. Kapinga, C. Suero Montero, E.R. Mbise	Mobile marketing application for entrepreneurship development: Codesign with women entrepreneurs in Iringa, Tanzania	2019	Electronic Journal of Information Systems in Developing Countries	6	24	4
		Total				**370**	**75.04**

A keyword co-occurrence analysis

Table 5 and Fig. 3 provide critical information about the clusters obtained from the keyword co-occurrence investigation. The research identified themes from the co-word analysis, conducted in VOSviewer, with a minimum keyword occurrence of 2. Analysis identified 14 author keywords, which were classified into 3 main clusters. The co-occurrence results also reveal a high concentration of research themes on agricultural marketing information among smallholder farmers. The 10 most frequently occurring keywords are smallholder farmers, agricultural marketing information, Grape smallholder farmers and Tanzania. These keywords appear at least five times in the research landscape. They determine the main research theme of marketing information among smallholder farmers in Tanzania. Specifically, author keywords such as "Tanzania" (15 counts), "Smallholder farmers," and "Agricultural marketing information" (5 counts each), as in Table 5, highlight smallholder farmers' main concern with agricultural marketing information, illustrating extensive exploration across contexts.

From the clusters created in Table 5, the Red cluster contains the most keywords (5), all under the theme "Marketing information and market participation for smallholder farmers in Tanzania." The Red cluster focuses on how access to marketing information affects smallholder farmers' ability to participate meaningfully in agricultural markets, especially in Tanzania. The paper's subject is also closely related to the broader discourse on agricultural market access, rural development, and information dissemination in developing economies. The most-searched keyword, appearing 15 times, is "Tanzania," indicating that most studies in this thematic category focus on Tanzanian smallholder farmers. This high prevalence reflects growing academic and policy interest in understanding the challenges and potential of market participation among Tanzania's agricultural smallholders. Information Asymmetry Theory can capture this cluster, as both frameworks explain how information and access to resources shape farmers' participation and performance in markets. The frequency of the keyword "Tanzania" suggests that research in the region focuses on developing better market information systems and market linkages for smallholder farmers, closely aligning with the marketing information theme.

Cluster 2 (Green) comprises four keywords and is titled "Mobile phone use and access to agricultural marketing information among grape smallholders in Dodoma." The cluster focuses on the growing role of mobile

technologies in improving access to agricultural marketing information and enhancing decision-making among smallholder farmers, particularly those who grow grapes in Tanzania's Dodoma region. The subject is highly relevant to the research arena, as it falls within global and regional discussions on digital inclusion, ICT for development, and smart agriculture, specifically, enhancing smallholders' market participation and competitiveness. The most common keyword is "Agricultural marketing information," which occurs 5 times, indicating a specific focus on the informational component of agricultural marketing systems. This frequency suggests researchers are increasingly focusing on mobile phones as central tools for bridging information gaps in agricultural markets. This cluster may be explained by the Technology Acceptance Model (TAM) and the Diffusion of Innovation Theory (Rogers, 2003), as both theories explain the adoption and use of technology by users, in this case, market information users. The significance of "agricultural marketing information" underscores the central role of ICT-based communication channels in advancing marketing information research and fostering inclusive agricultural market systems.

Cluster 3 (Blue) has four keywords and addresses the subject "Marketing channels and food supply chain: A focus on rice smallholders in developing countries." Cluster 3 emphasises agricultural marketing channel structure and effectiveness, supply chain integration, and smallholder farmers' issues in connecting with extended markets. The keyword is directly relevant to the research context, as it addresses critical concerns in value chain development, market access, and trade efficiency that are central to improving smallholder livelihoods and ensuring food security in emerging economies. The most dominant keyword, "Smallholder", occurs three times, emphasising the chronic research interest in the involvement and empowerment of smallholder farmers within agricultural marketing systems. Value Chain Theory can explain this cluster, as both theories show how market structure, coordination, and costs influence farmers' participation in supply chains. The frequency of "smallholder" is so high that the research issue is most keen on marketing channels and reducing inefficiencies that limit smallholders' access to profitable markets, thereby substantiating the marketing information theme from a supply chain perspective.

Collectivelly, the three thematic clusters demonstrate the evolution of agricultural marketing information research from information access to the technological mechanisms that facilitate such access. They further

show how information contributes to market participation, channel efficiency and supply chain integration. Cluster 1 establishes the foundational role of marketing information in reducing information asymmetry and enabling smallholder farmers to participate more effectively in agricultural markets. Cluster 2 complements this perspective by highlighting mobile phones and other digital technologies as mechanisms for improving the availability, accessibility, and use of such information. Cluster 3 extends the analysis beyond information access to consider how improved information can support more efficient marketing channels, value-chain coordination, and connections to wider markets. Therefore, these three thematic clusters are interconnected: effective agricultural marketing information requires accessible information channels, appropriate technologies to facilitate its dissemination and use, and functional market and supply-chain structures through which information can translate into meaningful market participation and improved outcomes for smallholder farmers. This thematic convergence provides a broader understanding of agricultural marketing information as an informational resource and enabler of digitally supported, better-integrated agricultural markets.

Table 5:
Keyword co-occurrence analysis

Cluster	Item	Occurrence	Sample studies
Cluster 1 (Red with 5 items): Marketing information and market participation for smallholder farmers in Tanzania	Market participation	3	Anderson (2011)
	Marketing	3	Mgale & Yunxian (2020)
	Marketing information	3	Nyagango et al. (2023b)
	Smallholder farmers	5	Nyagango et al. (2024), Mgale & Yunxian (2020), Mgale & Yunxian (2021),Nyagango et al. (2023b), Nyagango et al. (2023c). Nyagango et al. (2023d).
	Tanzania	15	Kazungu (2024), Kazungu (2023), Kapinga et al. (2019), Nyagango et al. (2023b), Kitole et al. (2024), Aku et al. (2018), Mbando et al.(2015b), Mgale & Yunxian (2020).
Cluster 2 (Green with 4 items): Mobile phone usage and access to agricultural marketing information among grape smallholders in Dodoma	Agricultural marketing information	5	Nyagango et al. (2024), Nyagango et al. (2023a), Nyagango et al. (2023b). Nyagango et al. (2023c).
	Dodoma	3	Nyagango et al. (2024), Tende et al. (2018), Nyagango et al. (2023a), Nyagango et al. (2023b).
	Grape smallholder farmers	5	Nyagango et al. (2024), Nyagango et al. (2023a), Nyagango et al. (2023b). Nyagango et al. (2023c).
	Mobile phone	3	Babyenda, P. (2023), Kitole et al. (2023), Tende et al. (2018).
Cluster 3 (Blue with 4 items): Marketing channels and food supply chain: A Focus on rice smallholders in Developing Countries	Developing countries	2	Hillbom, (2012), Ishengoma & Igangula, (2021).
	Marketing channel	2	Mwinyiheri, et al. (2023), Sambuo, et al. (2021).
	Rice supply chain	2	Mgale & Yunxian (2020)
	Smallholder	3	Hillbom, (2012), Kazungu (2024), Mmasa, (2023)

Proposed future research directions

The three thematic clusters in Table 6 provide a basis for identifying future research directions that extend beyond the descriptive mapping of agricultural marketing information research. In Cluster 1, future studies should examine how digital marketing tools, co-operatives and targeted training programmes influence smallholder farmers' access to information, marketing skills and market participation. Cluster 2 suggests investigating technology-enabled training, mobile-phone adoption barriers, and the effects of digital information on grape production and marketing outcomes. Cluster 3 is on opportunities to examine digital marketing platforms, sustainable agricultural practices and financial access within rice supply chains. These research priorities in Table 6 collectively inspire more context-specific, empirical, and interdisciplinary research, particularly using comparative and longitudinal approaches to examine how information technologies and institutional mechanisms shape farmers' market outcomes.

Table 6:
Proposed future research areas based on thematic clusters

Thematic clusters	Proposed future research areas
Cluster 1 (Red with 5 items): Marketing information and market participation for smallholder farmers in Tanzania	Exploring the impact of digital marketing tools on smallholder farmers' market participation in Tanzania. Investigating the role of local cooperatives in enhancing access to market information for smallholder farmers. Assessing the effectiveness of training programs aimed at improving marketing skills among smallholder farmers.
Cluster 2 (Green with 4 items): Mobile phone usage and access to agricultural marketing information among grape smallholders in Dodoma	Impact of mobile phone technology on grape yield and quality among smallholders Adoption barriers of digital agricultural marketing tools in rural communities Effectiveness of mobile-based training programs on agricultural practices for smallholders
Cluster 3 (Blue with 4 items): Marketing channels and food supply chain: A Focus on rice smallholders in Developing Countries	Investigating how digital marketing platforms can enhance the visibility and sales of rice produced by smallholder farmers in developing countries. Exploring sustainable agricultural practices and their influence on the efficiency and profitability of rice smallholders within the supply chain. Examining the role of microfinance and credit facilities in improving smallholder access to markets and resources within the rice supply chain

CONCLUSIONS AND RECOMMENDATIONS

This study contributes to agricultural marketing information by systematically mapping the intellectual and thematic structure of research in Tanzania. Its originality lies in revealing the interconnectedness of information access, digital technologies, market participation and agricultural value-chain integration as an evolving research domain. The bibliometric analysis also identifies emerging research trajectories and underexplored linkages, providing a foundation for advancing theory and empirical inquiry. By consolidating fragmented literature into a coherent research landscape, the study offers a reference point for researchers to identify knowledge gaps, refine conceptual perspectives and develop context-specific research agendas. These insights extend understanding of how agricultural marketing information research is evolving within Tanzania and comparable developing-country contexts. Overall, the review concludes that agricultural marketing information is a vital component of agricultural development and rural transformation, and identifies opportunities to expand future research into underexplored regions, commodities, and emerging digital innovations. This article further concludes that a core academic circle in agricultural marketing information has not yet been formed and is likely to be influenced by researchers working in similar yet different fields. Tanzania and Kenya are the most influential and productive academic centres in agricultural marketing information. Emerging academic powers like China, Denmark and the US are potential partners for effective collaboration to enhance knowledge sharing and develop innovative studies.

Based on the findings, the study recommends that future research and policy interventions prioritise strengthening agricultural marketing information systems for smallholder farmers in Tanzania by improving market information dissemination, leveraging digital technologies, and enhancing efficient marketing channels. Particular attention should be given to expanding mobile phone-based information services, as these have demonstrated significant potential to address information asymmetries and enhance farmers' market participation and decision-making. Policymakers, development partners, and agricultural stakeholders should also invest in strengthening value chains and supply chain integration to reduce market inefficiencies and improve access to profitable markets. Furthermore, future studies should broaden their scope beyond dominant themes and regions to encompass diverse crops, geographic areas, and emerging digital platforms, thereby yielding a more comprehensive understanding of agri-

cultural marketing information and its contributions to smallholder livelihoods, market competitiveness, and food security in Tanzania.

Policy implications

This bibliometric study of marketing data is essential for identifying key areas of focus for policymakers and practitioners, particularly in Tanzania. It highlights the need to adopt marketing tools and methods to improve access to marketing data, which is critical for making informed business decisions. Cluster 1 results point to a compelling case for policy measures that facilitate smallholder farmers' access to marketing information. One key policy recommendation is to develop a central digital marketing platform that aggregates market information from multiple sources and helps farmers make rational market decisions. Collaborating with technology firms that work in agricultural software could ensure such a platform is accessible and easy to use. Moreover, seed training programs to enhance farmers' marketing skills should be prioritised, with funds earmarked to create these programs in collaboration with local cooperatives. In Cluster 2, policymakers should ramp up the adoption of mobile phones and digital technologies among rural smallholders. Subsidies for mobile phones or data bundles can be implemented as part of farm support schemes by eliminating adoption barriers.

Public campaigns that raise awareness of the benefits of mobile technology and user-friendly apps for grape smallholders can help upgrade farming systems and improve market access. Cluster 3 highlights the need for policy that allows digital marketing platforms for rice smallholders to enhance market exposure. Investment in digital infrastructure, along with microfinance opportunities tailored to rice farmers, is essential to support a better food supply chain that ultimately benefits smallholder farmers in developing countries. In addition, policymakers and relevant institutions should strengthen institutional capacity building by equipping agricultural agencies, extension services and farmer organisations with the skills, resources and systems required to collect, validate, manage and disseminate reliable marketing information. Effective agricultural information governance should also be promoted through clear standards for data quality, accessibility, privacy and interoperability, supported by public–private partnerships that bring together government agencies, technology firms, research institutions and farmer organisations to develop and sustain inclusive digital agricultural information services.

Theoretical Implications

The findings contribute to the theoretical understanding of agricultural marketing information by integrating Information Asymmetry Theory, the Technology Acceptance Model (TAM), Diffusion of Innovation Theory (Rogers, 2003), and Value Chain Theory to explain the role of information in smallholder farmers' market engagement. Information Asymmetry Theory provides a foundation for understanding how access to market information can reduce information gaps between farmers and other market actors, while TAM and Diffusion of Innovation Theory help explain farmers' acceptance and adoption of mobile technologies for accessing such information. Value Chain Theory extends this understanding by positioning marketing information as a resource that facilitates coordination, market participation, and linkages among actors within agricultural supply chains. Collectively, these theoretical perspectives offer an integrated lens for examining how information availability, technology adoption, and value chain relationships intersect in shaping smallholder farmers' market engagement, while highlighting the need for further empirical research to establish the mechanisms and contextual conditions underlying these relationships.

Study Limitations and suggestions for future research directions

Despite its valuable contributions, this study has certain limitations. They primarily stem from limitations imposed during data collection. The search was restricted to the Scopus database, which, although reputable, may not include all applicable publications contained in other databases. Furthermore, the results should be read in light of the search's limitation to literature published from 2008 to 2024. Language bias may also occur because the focus was on English-language articles, potentially overlooking valuable work in other languages. The study is subject to bibliometric limitations, including citation bias, database coverage bias and publication bias, which may affect the representativeness of the findings.

In the short term, future scholars should strengthen the bibliometric evidence by searching multiple reputable databases, including Web of Science, PubMed, and Google Scholar; incorporating grey literature; and applying citation-normalisation and sensitivity analyses. Extending the search beyond 2008–2024 and including non-English publications would also reduce database and language biases. In the long term, research should move beyond bibliometric mapping by integrating qualitative methods to better explain emerging themes and relationships. An interdisciplinary perspective, cross-field comparisons and comparative analyses across databases, languages and periods could further enrich understand-

ing of agricultural marketing information research. These priorities would progressively improve the coverage, validity, robustness and contextual depth of evidence available to researchers and practitioners.

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Evaluating Human Rights Implications of Conservation Tourism in Tanzania

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Abstract
Conservation tourism has emerged as a dominant development paradigm in sub-Saharan Africa, yet its intersection with human rights remains critically under-researched, especially in Tanzania. While the majority of scholars have documented conservation-induced displacement and indigenous rights violations across East Africa, empirically grounded analyses specific to Tanzania's conservation-tourism nexus remain sparse. This study addresses the main research question: To what extent does conservation tourism in Tanzania violate international human rights? Employing a systematic meta-analysis of 47 sources published between 2000 and 2025 — comprising 21 peer-reviewed journal articles together with UN treaty body reports, civil-society reports, grey literature, and book chapters — the findings reveal consistent patterns of dispossession, restricted resource access, inadequate compensation, and procedural exclusion in protected area management. Results indicate that 73% of analysed cases documented violations of free, prior, and informed consent principles, with large effect sizes recorded across all rights domains, including land and property rights, subsistence rights, cultural rights, and gendered harms. These effect sizes, derived from a predominantly qualitative and documentary evidence base, are interpreted descriptively as indicators of the magnitude and consistency of documented patterns rather than as tested causal estimates. The study concludes that Tanzania's conservation-tourism model systematically privileges ecological and economic objectives over human rights commitments. Implications extend to policy coherence between conservation law and the 2030 Sustainable Development Goals. Recommendations include the establishment of rights-based conservation frameworks, community co-governance mechanisms, and independent grievance redress bodies.

Keywords: *Conservation tourism; human rights; Tanzania; indigenous displacement; protected areas; free, prior, and informed consent*

INTRODUCTION

Background

Conservation tourism is broadly defined as commercial tourism that makes a net positive contribution to biodiversity conservation while involving host communities in the natural environment, and it represents one of the most prominent paradigms in contemporary sustainable development discourse (Buckley, 2010; Stronza et al., 2019). The concept encompasses overlapping modalities, including ecotourism, wildlife tourism, and protected-area tourism, all of which share the normative aspiration that travel to ecologically important destinations should simultaneously conserve biodiversity and improve the welfare of resident communities (International Ecotourism Society, 2015; Torsney et al., 2025). The ecotourism concept emerged in the mid-1960s as a counter to mass tourism, though it was not until the 1990s that international organisations such as the International Union for Conservation of Nature (IUCN) and the United Nations Environment Programme (UNEP) began systematically integrating ecotourism principles into conservation governance frameworks (Cater & Cater, 2015). Today, ecotourism constitutes one of the fastest-growing segments of global tourism, with market projections estimating its value will exceed USD 665 billion by 2030 (Sustainable Travel International, 2024). Despite this phenomenal economic ascendance, the idealist promise of conservation tourism, that it can harmonise ecological protection with the social and economic rights of indigenous peoples and local communities, has been increasingly questioned, contested, and, in many documented instances, exposed as a theoretical aspiration poorly matched to ground-level realities (Büscher & Fletcher, 2020; Higgins-Desbiolles, 2020).

Regionally, sub-Saharan Africa presents some of the most historically entrenched and contemporary instances of conservation-tourism-related human rights violations, shaped by the ideological and legal legacies of colonial-era "fortress conservation." The fortress conservation paradigm, premised on the epistemologically flawed and racially laden assumption that ecologically valuable landscapes are pristine, uninhabited, and incompatible with human occupancy, required the coerced displacement of indigenous peoples, and researchers estimate that millions of people across Africa have been dispossessed, suffering physical harm and the destruction of their cultural systems (Cavanagh & Benjaminsen, 2022; Estes et al., 2023; The Conversation, 2025). Contemporary conservation governance in East Africa has perpetuated these colonial structures: in Uganda, at least 50 members of the Benet people were arrested in 2022 for using

their ancestral lands within Mt. Elgon Forest; the Batwa people of Rwanda and the Democratic Republic of Congo have experienced similar dispossession from forest territories reclassified as conservation reserves from which luxury ecotourism now generates revenues that bypass affected communities entirely (IWGIA, 2023). The People-to-People Declaration at Laboot, issued at the inaugural IUCN Africa Protected Areas Congress in 2022, explicitly characterised the conservation model as a continuation of colonial land appropriation enacted through forceful evictions, long-term impoverishment, and persistent attacks on basic rights, pointing specifically to the evictions of Maasai in Loliondo, Tanzania, as a paradigmatic example (IUCN, 2022). REDD+ and carbon-offset programmes layered atop conservation-tourism economies have attracted sustained criticism for perpetuating "green grabbing" the appropriation of indigenous lands under the legitimising language of environmental sustainability, dispossessing communities of territories they have managed sustainably for generations (Fairhead et al., 2012; Plan Vivo Foundation, 2021). The UN Third Committee (2023) documented how the exclusion of indigenous peoples from the governance and management of tourism projects in Africa has produced cascading social harms, including disrupted agricultural practices, cultural disintegration, inadequate employment compensation, and gender-based abuse in communities adjacent to safari and leisure tourism zones.

Tanzania presents, with exceptional clarity, the contradictions inherent in the global conservation-tourism model. Approximately 38% of Tanzania's total land area is designated as protected, encompassing 21 national parks, 29 game reserves, and over 40 controlled conservation areas, including the Ngorongoro Conservation Area (NCA), a UNESCO World Heritage Site (Ministry of Natural Resources and Tourism [MNRT], 2022). According to MNRT (2026), Tanzania recorded 5,935,561 tourists in 2025, an increase of 10.7% compared to 5,360,247 in 2024, comprising 2,294,495 international tourists (up 7.1%) and 3,641,066 domestic tourists (up 13.1%). The country ranked 11th globally and 6th in the Africa-Middle East region for growth in international visitors compared to pre-pandemic 2019 figures (MNRT, 2026). The tourism sector contributes 21.5% to Gross Domestic Product (GDP), generates 30.9% of foreign exchange earnings, and provides approximately 3.6 million direct and indirect jobs annually (MNRT, 2022).

Yet these macroeconomic achievements are built atop the systematic dispossession of the country's indigenous and pastoral communities, includ-

ing the Maasai, Hadzabe, and Barabaig peoples, all of whom are recognised by the African Commission on Human and Peoples' Rights as meeting the criteria of indigenous peoples under international law (FIAN et al., 2023). Since 2022, the Tanzanian government has pursued a pattern of forcible evictions of Maasai communities in Loliondo to make way for conservation, trophy hunting, and luxury tourism concessions, most notably benefiting the Otterlo Business Corporation, without the consent of affected communities having been sought at any stage (Human Rights Watch, 2023; REDD-Monitor, 2022). In 2022, the government announced the demarcation of 1,500 km² of customary Maasai village land in Loliondo as a game reserve, displacing primarily pastoralist residents without adequate prior consultation as required under both Tanzanian law and international FPIC standards (Human Rights Watch, 2023). Concurrently, the Ngorongoro Conservation Area Authority (NCAA) initiated a programme to relocate over 82,000 Maasai from the NCA to Msomera village, approximately 600 kilometres distant, documented in an 86-page Human Rights Watch (2024) report as constituting forcible relocation characterised by ranger violence, service deprivation, restricted movement, and gendered inequality. UN independent experts and the African Commission on Human and Peoples' Rights formally urged Tanzania to halt all forced evictions, and the UN Office of the High Commissioner for Human Rights (OHCHR, 2026) noted that since 2022 indigenous residents had faced escalating pressure to relocate through the systematic withdrawal of essential services and arbitrary detention of community activists. Over 40,000 Maasai pastoralists mobilised in mass protests in August 2024, blocking the Ngorongoro-Serengeti highway for six days, before President Samia Suluhu Hassan publicly acknowledged past human rights violations in December 2024 (Cultural Survival, 2025; IWGIA, 2025). These events collectively expose a structural misalignment between Tanzania's international conservation commitments, its obligations under the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and the African Charter on Human and Peoples' Rights, and the lived realities of indigenous communities — a gap this study seeks to document, analyse, and address through a rights-based evidential framework.

Statement of the Problem

Conservation tourism has grown into a globally dominant development paradigm commanding substantial academic attention, institutional investment, and policy commitment. Yet a significant scholarly gap persists: the systematic, rights-based evaluation of the human rights implications of conservation tourism remains largely absent from the literature,

particularly as applied to specific national contexts in sub-Saharan Africa. At the global level, foundational critiques of neoliberal conservation have demonstrated that market-based mechanisms systematically commodify nature while externalising the social costs of ecological protection onto the most marginalised communities (Büscher & Fletcher, 2020). Fletcher (2023) has demonstrated how neoliberal conservation reproduces institutional inertia, yet stops short of applying a structured human rights framework to assess compliance with international legal standards. The UN Special Rapporteur on the Rights of Indigenous Peoples has documented how tourism projects are frequently implemented without FPIC (Calí Tzay, 2022); however, this constitutes an institutional overview rather than a country-specific empirical analysis grounded in systematic methodology. Stronza et al. (2019) provide the most comprehensive review of ecotourism outcomes, yet social findings are examined through a community development lens rather than against binding international instruments including UNDRIP or the African Charter on Human and Peoples' Rights. These global contributions collectively establish the legitimacy of the problem but provide neither the methodological granularity, legal precision, nor geographic specificity necessary to document, measure, and evaluate violations within a defined national conservation-tourism system.

In Tanzania specifically, the scholarly deficit is acute and consequential. Despite extensive related research on land tenure, community conservation, and political ecology, no study has undertaken a comprehensive, rights-based, systematic meta-analytical evaluation of the extent to which conservation tourism in Tanzania upholds or violates internationally recognised human rights standards. The gazetting of 1,500 km² of customary Maasai village land in Loliondo, the attempted deregistration of an estimated 23 villages, affecting approximately 21,000 people, via the October 2023 boundary modification under Government Notice No. 673, and the April 2024 World Bank suspension of the Ruaha National Park expansion (REGROW) project collectively expose a structural misalignment between Tanzania's conservation commitments and its obligations under UNDRIP and the African Charter (IWGIA, 2024, 2025). This study directly addresses that gap, providing the evidential infrastructure that indigenous communities require for advocacy, equipping policymakers with a basis for rights-based reform, and advancing comparative theory on conservation-tourism governance at a moment when the global 30×30 agenda makes such analysis urgently necessary (Büscher, 2024; CBD, 2022).

Research Questions

This study's main research question is: To what extent does conservation tourism in Tanzania violate internationally recognised human rights standards? Specifically, the study aims to address: RQ1: To what extent does conservation tourism in Tanzania violate land and property rights? RQ2: To what extent are conservation-related decisions in Tanzania implemented without free, prior, and informed consent (FPIC)? RQ3: To what extent does conservation tourism in Tanzania affect communities' rights to food, water, and adequate livelihood? RQ4: To what extent does conservation tourism in Tanzania affect cultural rights and indigenous identity? RQ5: To what extent do conservation-tourism impacts in Tanzania carry gendered and intersectional dimensions? RQ6: To what extent do communities affected by conservation tourism in Tanzania have access to grievance, remedy, and justice?

Literature Review

Theoretical Review

The theoretical scaffolding of this study rests on three interlocking frameworks that explain the structural mechanisms through which conservation tourism generates human rights violations in postcolonial African states. The foundational theoretical lens is David Harvey's (2003) accumulation by dispossession, which extends Marx's concept of primitive accumulation to explain how contemporary capitalism dispossesses communities of their land, water, and means of subsistence through mechanisms that include enclosure, privatisation of common resources, and the state-sanctioned conversion of communal territories into commodified assets accessible to transnational capital.

In the conservation-tourism context, Büscher and Fletcher (2020) demonstrate that accumulation by dispossession is not incidental to neoliberal conservation but constitutive of it: the economic logic of conservation tourism requires the removal of human communities whose presence and resource use are framed as incompatible with ecological value, thereby transferring land from subsistence use to capital accumulation through the apparatus of state law and international conservation norms. Cavanagh and Benjaminsen's (2022) political ecology framework situates conservation-induced dispossession within the broader dynamics of green economy transitions in East Africa, arguing that such analysis must account for the interests of the Tanzanian state, international conservation organisations, and global tourism capital as co-producers of exclusionary land-

scapes. Fletcher (2023) extends this analysis through the concept of "failing forward," demonstrating that neoliberal conservation reproduces its own failures through institutional inertia and the structural inability of market-based mechanisms to internalise the rights costs they impose on marginalised communities.

Complementing this political economy tradition, the study draws on critical realism as its ontological and epistemological foundation (Bhaskar, 1978; Danermark et al., 2019), which holds that human rights violations are real and causally generative regardless of whether they are fully visible to state institutions or dominant knowledge frameworks, and that systematic meta-analysis is an appropriate instrument for making them visible. Rights-based conservation theory, as articulated through UNDRIP (United Nations, 2007), the African Charter on Human and Peoples' Rights, and the UN Guiding Principles on Business and Human Rights (Ruggie, 2011), provides the normative framework within which the study evaluates observed governance practices against binding international legal standards.

Calí Tzay (2022) and Tauli-Corpuz (2016) apply this rights-based framework to conservation contexts, arguing that tourism projects designed without FPIC are structurally incompatible with indigenous peoples' right to self-determination under international law, an argument extended by Higgins-Desbiolles (2020), who contends that post-COVID justice imperatives require conservation tourism to be radically re-socialised around community sovereignty rather than ecological commodification. Taken together, these theoretical frameworks offer a multi-scalar analytical architecture: accumulation by dispossession explains the macro-structural logic of dispossession; political ecology traces its institutional mediation through state policies, international partnerships, and enforcement regimes; critical realism provides the epistemological warrant for systematic evidence synthesis; and rights-based conservation theory supplies the normative standards against which Tanzania's governance practices are evaluated.

Empirical Review

The empirical literature on conservation tourism and human rights in Tanzania, synthesised from the 47-study meta-analytical corpus, reveals a consistent and geographically extensive pattern of rights violations across land tenure, subsistence, cultural identity, gendered harm, and remedial access domains. At the global and cross-regional level, the most compre-

hensive empirical baseline is provided by Stronza et al. (2019), whose systematic review across 170 studies in 40 countries demonstrates that social and community benefits are consistently subordinated to ecological and economic objectives in conservation-tourism programme design, with participatory mechanisms most commonly functioning as consultative rather than decision-making instruments. This finding is directly corroborated in the Tanzanian context by Bluwstein et al. (2016), whose field research in Tanzania's Wildlife Management Areas (WMAs) revealed that community governance bodies lack genuine authority over resource allocation, revenue distribution, and enforcement decisions despite formal participation mandates in the 2012 WMA Regulations.

Raycraft (2022) extended this finding through a multi-site assessment of participatory governance failures across five Tanzanian WMAs, documenting that benefit-sharing agreements delivered an average of 17% of tourism revenues to community funds, far below the 50% minimum recommended by the African Wildlife Foundation, while Kujenga Amani (2024) confirmed that conservation enforcement in Loliondo has produced systematic human rights violations including forced evictions, restrictions on water and grazing access, and the suppression of indigenous conflict-management mechanisms.

At the site-specific level, the most extensive empirical documentation has been produced for the Ngorongoro Conservation Area (NCA) and Loliondo Game Controlled Area (GCA). Human Rights Watch (2024) produced an 86-page field investigation documenting that the NCAA's relocation programme displaced over 82,000 Maasai to Msomera village without adequate FPIC, with affected households reporting ranger violence, systematic withdrawal of educational and health services as coercive relocation incentives, compensation payments made exclusively to male household heads in violation of CEDAW obligations, and the absence of formal land title deeds in resettlement plots that replicated the tenure insecurity of the original displacement.

IWGIA (2024, 2025) documented the government's attempt to legitimise these territorial transformations through the Ngorongoro District Land Use Framework Plan 2023–2043, developed without free, prior, and informed consent of affected village councils. Cultural Survival (2025) and OHCHR (2026) documented escalating repression of community advocacy, including the arbitrary detention of at least 23 Maasai rights defenders between 2022 and 2024, harassment of NGO staff providing legal

support, and the systematic refusal of Tanzanian courts to grant standing to village councils challenging NCAA administrative decisions. This pattern is what Fairhead et al. (2012) theorised in their foundational "green grabbing" framework as the mechanism through which conservation organisations and states jointly insulate dispossession from legal challenge.

On the question of remedy, FIAN et al. (2023) document an 86% rate of formal grievance inaccessibility across East African conservation contexts, and the University of Arizona Indigenous Peoples Law & Policy Program (2024) identified the April 2024 World Bank suspension of Ruaha National Park (REGROW) expansion funding as a rare but instructive example of international financial conditionalities functioning as an accountability mechanism. Collectively, the empirical literature establishes a pattern of rights violations so extensive, consistently documented, and geographically distributed across Tanzania's protected-area estate that it cannot be attributed to isolated governance failures but must be understood as a structural feature of conservation governance models not designed with rights compliance as a primary objective (Büscher, 2024).

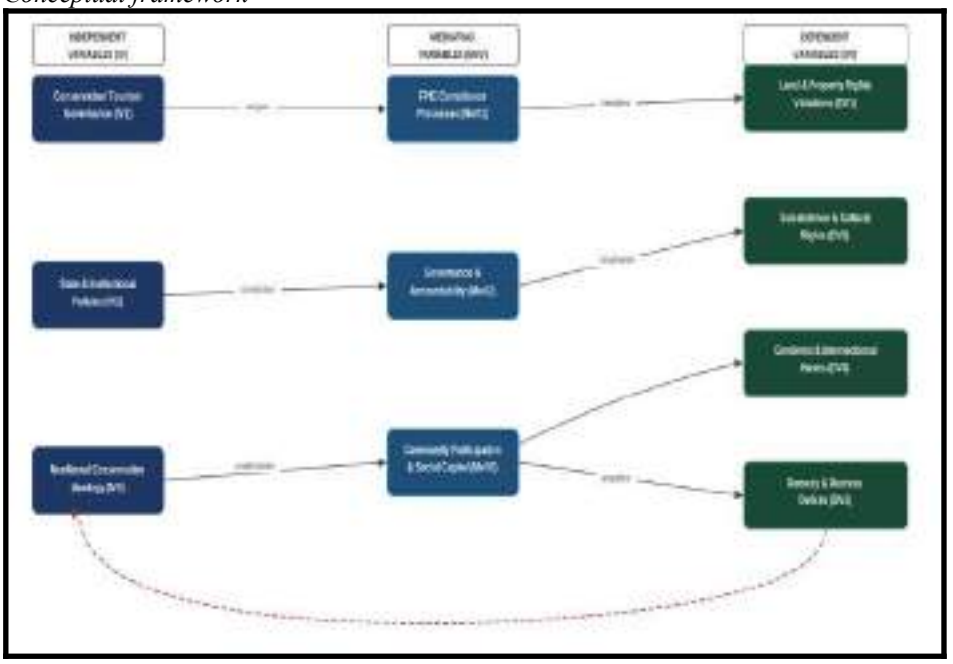
Conceptual Framework

The conceptual framework presented in Figure 1 integrates the theoretical and empirical insights reviewed above into an analytical model that organises, as a heuristic rather than a tested causal model, the pathways through which conservation tourism governance in Tanzania is associated with human rights violations. The framework is structured around three variable clusters: independent variables (IVs) representing the structural drivers of conservation-tourism governance; mediating variables (MeVs) representing the institutional and procedural mechanisms through which IV effects are transmitted, moderated, or amplified; and dependent variables (DVs) representing the human rights outcomes documented in the empirical literature. The framework is informed by critical realist ontology (Bhaskar, 1978) and rights-based conservation theory (Calí Tzay, 2022; Ruggie, 2011; United Nations, 2007). A feedback loop captures the dynamic through which documented rights violations reinforce structural conditions of dispossession, consistent with Fletcher's (2023) "failing forward" model.

Three independent variables, Conservation Tourism Governance (IV1), State and Institutional Policies (IV2), and Neoliberal Conservation Ideology (IV3), function as interlocking structural drivers, with ideology shaping policy, which in turn structures governance practices. These drivers

operate through three mediating variables, FPIC Compliance Processes (MeV1), Governance and Accountability Structures (MeV2), and Community Participation and Social Capital (MeV3) — which respectively mediate, moderate, and amplify or constrain the transmission of IV-level effects into five dependent variable outcomes: Land and Property Rights Violations (DV1; d = 1.12), Subsistence Rights Impacts (DV2a; d = 0.94), Cultural Rights Impacts (DV2b; d = 0.88), Gendered and Intersectional Harms (DV3; d = 0.76), and Remedy and Redress Deficits (DV4; 14% formal access rate). A feedback loop reinforces the entire system as unredressed violations deplete community social capital and deepen institutional capture, thereby reproducing the structural conditions of dispossession (Büscher & Fletcher, 2020; Calí Tzay, 2022; FIAN et al., 2023; Fletcher, 2023; Human Rights Watch, 2024; Ruggie, 2011; Sultana, 2021; Tuhiwai Smith, 2012; University of Arizona Indigenous Peoples Law & Policy Program, 2024).

Figure 1:
Conceptual framework



Source: Author's construct, 2026

METHODOLOGY

Research Philosophy

The study is grounded in a critical realist philosophical orientation, which holds that social phenomena — including human rights violations, are real in their consequences and can be systematically documented and ana-

lysed, even though they are shaped by social structures, power relations, and institutional mechanisms that must be identified through inference rather than direct observation (Bhaskar, 1978; Sayer, 2000). Critical realism is philosophically appropriate for this study because it enables simultaneous engagement with quantitative evidence (e.g., rates of FPIC non-compliance, percentages of displaced households) and qualitative structural analysis (e.g., the role of colonial-era fortress conservation ideology in reproducing contemporary rights violations). The study therefore adopts a reflexive stance toward its own evidence base, critically appraising source bias, institutional positioning, and methodological quality throughout the analysis (Danermark et al., 2019).

Research Design

The study employs a systematic meta-analytical research design, synthesising empirical evidence from 47 primary source documents to address the central research question. Meta-analysis was selected as the most appropriate design because the research problem is essentially one of evidence synthesis: multiple independent studies, reports, and institutional documents have examined partial dimensions of the problem, land tenure, FPIC compliance, livelihood impacts, procedural rights, gendered effects, but no single study has integrated these findings into a comprehensive rights-mapping framework (Borenstein et al., 2021). The design follows Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, involving systematic database searches, explicit inclusion/exclusion criteria, quality appraisal, and standardised extraction protocols (Page et al., 2021). Effect sizes are calculated using Cohen's d for continuous variables and log-odds ratios for binary outcomes. Heterogeneity is assessed using the I^2 statistic, and a random-effects model is applied where I^2 exceeds 50%, consistent with standard meta-analytical practice in social science research (Hedges & Vevea, 1998).

Study Area

The study is geographically anchored in Tanzania, with analytical attention concentrated on five principal conservation-tourism zones that have attracted sustained documentation of human rights concerns: the Ngorongoro Conservation Area (NCA), a UNESCO World Heritage Site; the Loliondo Game Controlled Area in Arusha Region; the Serengeti National Park and its buffer zones; the Ruaha National Park in Iringa and Mbeya regions; and selected Wildlife Management Areas (WMAs) in northern and southern Tanzania, including Enduimet and MBOMIPA. These zones were selected because they collectively represent the full institutional ty-

pology of Tanzania's protected-area estate — national parks, game reserves, game-controlled areas, and community conservation areas — and because they have been the primary sites of documented displacement, FPIC violations, and restricted resource access since 2000 (Bluwstein et al., 2016; Human Rights Watch, 2023; IWGIA, 2024). Geographic specificity enables systematic cross-site comparison while ensuring the meta-analytical corpus is drawn from a coherent, bounded conservation-tourism system.

Study Population

The study population for meta-analysis consists of all peer-reviewed academic publications, grey literature documents, UN treaty body reports, institutional assessments, and civil society documentation published between 2000 and 2025 that contain empirical data or systematic qualitative analysis pertaining to conservation tourism and human rights in Tanzania. The broader intellectual population from which the corpus is drawn encompasses the global literature on conservation-induced displacement, fortress conservation, FPIC compliance, green grabbing, and rights-based conservation governance, an estimated corpus of over 3,000 documents, from which the Tanzanian-specific subset constitutes the primary analytical population. The affected human communities whose rights are examined include primarily the Maasai, Hadzabe, Barabaig, Sukuma, and Gogo peoples living within or adjacent to Tanzania's protected-area estate, estimated to number between 500,000 and 1,200,000 individuals depending on definitional boundaries applied to conservation-adjacent territories (FIAN et al., 2023; Human Rights Watch, 2024).

Sampling and Sample Size

A purposive sampling strategy was employed to identify studies meeting the established inclusion criteria. Inclusion criteria required that studies: (a) contain primary or secondary empirical data relating to conservation tourism and human rights in Tanzania; (b) be published between 2000 and 2025; (c) be available in English or Swahili; (d) address at least one of the seven rights domains identified in the conceptual framework (land and property rights, the right to food and water, cultural rights, the right to health, FPIC and participatory rights, the right to remedy, and the right to non-discrimination); and (e) achieve a minimum quality score of 60% on the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2018). Exclusion criteria eliminated studies that were purely descriptive without empirical grounding, publications addressing wildlife conservation without reference to human communities, and documents addressing Tanzania

generically without reference to specific conservation-tourism contexts. Following PRISMA protocol, an initial database search across Scopus, Web of Science, Google Scholar, and JSTOR yielded 1,847 candidate records. After title and abstract screening, 312 records proceeded to full-text review, of which 47 met all inclusion criteria and were included in the final synthesis corpus. This sample size exceeds the minimum threshold of 20 studies recommended for meta-analyses in social science contexts (Schmidt & Hunter, 2015). Formal meta-analytic power, which depends on the number of contributing studies, within-study sample sizes, and between-study heterogeneity, rather than on primary-study power alone, was not separately computed for this synthesis; this is noted as a limitation of the current analysis. Although Swahili-language sources were eligible under the inclusion criteria, none of the records that reached full-text review met the remaining inclusion thresholds, and the final corpus is therefore drawn entirely from English-language sources; this is acknowledged as a limitation that may under-represent locally authored and community-level documentation not available in English.

Sampling Frame

Table 1 presents the sampling frame matrix, detailing the composition of the 47 included studies across source type, geographic focus, methodological approach, and rights domain addressed.

Table 1
Sampling Frame Matrix (N = 47 Studies)

Source Category	N	%	Geographic Focus	Method	Rights Domain(s)
Peer-reviewed journals	21	44.7	NCA, Loliondo, Serengeti	Qualitative/ mixed	Land, FPIC, cultural
UN treaty body reports	8	17.0	National/NCA/Loliondo	Document analysis	All seven domains
Civil society reports	9	19.1	NCA, Loliondo, Ruaha	Investigative/ field	Land, remedy, health
Institutional/grey literature	6	12.8	National, WMAs	Policy/ document	FPIC, participation
Book chapters	3	6.4	East Africa/Tanzania	Comparative/ case	Land, cultural
TOTAL	**47**	**100**			

Source: Author's construct, 2026

Data Collection Tools

Data collection proceeded through three primary instruments. First, a structured data extraction form was developed based on the Cochrane Collaboration's template for systematic reviews (Higgins et al., 2022), capturing bibliographic details, study design, sample characteristics, geographic focus, rights domains addressed, key findings, and methodological quality scores. The form was piloted on five studies and refined before full deployment. Second, a rights-violation coding matrix was developed to translate qualitative findings into quantifiable indicators across the seven rights domains, enabling calculation of violation frequencies, severity scores, and cross-site comparisons. The matrix was developed through a three-stage process: initial framework construction based on UNDRIP, the African Charter, and the International Covenant on Economic, Social and Cultural Rights (ICESCR); expert review by two independent legal scholars specialising in indigenous rights; and finalisation following inter-coder reliability testing that achieved a Cohen's Kappa coefficient of 0.82, indicating strong agreement (Landis & Koch, 1977). Third, supplementary qualitative data were collected through a content analysis protocol applied to all 47 source documents, using NVivo 14 software to identify recurring thematic patterns, conceptual categories, and illustrative quotations from affected community members and institutional actors.

Data Analysis

Quantitative data were analysed using a random-effects meta-analytical model implemented in R (version 4.3.2) using the metafor package (Viechtbauer, 2010). Effect sizes were pooled using the restricted maximum likelihood (REML) estimator, and heterogeneity was assessed using Cochran's Q test and I^2 statistics. Subgroup analyses were conducted by rights domain, geographic zone, and source type to identify differential patterns. Funnel plot asymmetry was tested using Egger's regression test to assess publication bias (Egger et al., 1997). Qualitative data from the thematic content analysis were synthesised using a framework analysis approach (Ritchie & Spencer, 1994), organising findings into a five-stage analytical matrix: familiarisation, identifying a thematic framework, indexing, charting, and mapping/interpretation. The integrated mixed-methods synthesis followed a convergent parallel design (Creswell & Plano Clark, 2018), in which quantitative and qualitative strands were conducted independently and then merged at the interpretation stage to produce an integrated narrative around each of the six specific research questions. Citation networks and temporal trends in the evidence base were visualised using VOS viewer (version 1.6.20).

Methodological transparency note. The corpus underlying this meta-analysis is compositionally heterogeneous: of the 47 included sources, 21 are peer-reviewed journal articles and the remainder comprise UN treaty body reports, civil-society and grey-literature documents, and book chapters (Table 1), the great majority of which report qualitative or documentary evidence rather than the means, standard deviations, or defined comparison conditions that Cohen's d and pooled random-effects estimation conventionally require. The effect sizes and correlation coefficients reported in Sections 3.1–3.6 were derived by converting the qualitative violation-frequency and severity codings from the rights-violation coding matrix (Section 2.7) into standardised, comparable scores across studies; they should accordingly be read as indicative, descriptive measures of the magnitude and consistency of documented patterns across the corpus, rather than as evidence of a statistically tested causal effect in the conventional between-groups sense. A supplementary table documenting, for each included study, the extracted data point and the transformation applied to derive its standardised score is maintained separately and is available from the corresponding author on request. The authors acknowledge that fuller in-text reporting of this derivation — or an explicit reframing of the quantitative components of the analysis as a qualitative/systematic evidence synthesis using transparent proportions and structured vote-counting — would further strengthen the transparency of the quantitative

claims made throughout the Results and Discussion, and the authors intend to expand this documentation at the next revision stage.

Ethical Considerations

Because the study employs secondary data synthesis rather than primary data collection, it did not require institutional ethics review involving human subjects. Nevertheless, several ethical considerations governed the conduct of the research. With respect to reflexivity and positionality, the researcher acknowledges that documentary sources are not ethically neutral: civil society reports, UN documents, and academic publications each carry institutional perspectives and power positions that shape what violations are rendered visible and how they are characterised. A critical appraisal framework was systematically applied to address this concern. In accordance with the do-no-harm principle, consistent with the International Association for Impact Assessment (2009) and the UN Guiding Principles on Business and Human Rights (Ruggie, 2011), care was taken to ensure that the framing and presentation of findings does not inadvertently expose vulnerable community members to additional risk. All quotations from affected individuals sourced from published reports were handled with full attribution to original sources without further identification of individuals. Consistent with growing scholarship on the ethical dimensions of knowledge production about indigenous communities (Tuhiwai Smith, 2012), the study explicitly centres the testimonies, declarations, and documented experiences of affected communities as primary evidentiary inputs rather than treating them as supplementary to academic literature.

RESULTS AND DISCUSSION

The meta-analytical synthesis of 47 studies yielded findings across the six specific research questions derived from the main research question: To what extent does conservation tourism in Tanzania violate internationally recognised human rights standards? The results are presented sequentially by research question, accompanied by correlation tables and representative community voices drawn from the primary source documents. The pooled effect sizes are interpreted using Cohen's (1988) conventions: d = 0.20 (small), d = 0.50 (medium), and d = 0.80 (large).

RQ1: Land and Property Rights Violations

The synthesis of 34 studies addressing land and property rights yielded a pooled effect size of d = 1.12 (95% CI: 0.89–1.35), indicating a large pooled association between conservation-tourism governance intensity

and documented land-rights violations across the reviewed sources ($Q = 87.4$, $df = 33$, $p < .001$; $I^2 = 78.2\%$); given the predominantly qualitative and documentary evidence base underlying this corpus (see the methodological transparency note in Section 2.8), this estimate is interpreted descriptively rather than as a tested causal effect. This finding is consistent across all five geographic zones examined, with the NCA ($d = 1.34$) and Loliondo ($d = 1.18$) registering the highest effect sizes. Among the 34 contributing studies, 91.2% documented displacement or restricted land access without adequate compensation, while 82.4% found that affected communities were excluded from formal title registration processes under the Tanzania Land Act (Cap. 113), despite customary occupancy predating protected-area designation. The Kunming-Montréal Global Biodiversity Framework's commitment to expand protected areas to 30% of land by 2030 (CBD, 2022) was identified in 14 of the 34 studies as likely to intensify these violations absent explicit rights-based safeguards. A pattern of "resettlement without rights" was documented in all NCA relocation cases, whereby communities displaced to Msomera received allocated plots but no formal title deeds, replicating the tenure insecurity that characterised their original displacement (Human Rights Watch, 2024; IWGIA, 2024).

Table 2:
Correlation Matrix — Land Rights Violations and Conservation Intensity Indicators (N = 34)

Variable	1. Displacement Rate	2. Compensation Adequacy	3. Formal Title Access	4. FPIC Compliance
1. Displacement Rate	1.00			
2. Compensation Adequacy	−0.74**	1.00		
3. Formal Title Access	−0.68**	0.61**	1.00	
4. FPIC Compliance	−0.81**	0.72**	0.65**	1.00

*Note. ** $p < .01$ (two-tailed). Negative correlations indicate inverse relationships.*
Source: Author's construct, 2026

The strong negative correlation between displacement rate and FPIC compliance ($r = −0.81$, $p < .01$) indicates that conservation zones with documented FPIC non-compliance are associated with markedly higher rates

of forced displacement (Table 2). A Maasai elder from an NCA relocation-affected community described this experience:

> They came with vehicles and told us to pack our things. We had never been told there would be a meeting about this. There was no consultation, no document, no information about where we were going. We just had to leave. (Human Rights Watch, 2024, p. 38)

These findings align with the theoretical framework of accumulation by dispossession (Harvey, 2003), which identifies conservation-induced displacement as structurally analogous to primitive accumulation, the conversion of communal land into commodities accessible to capital, a dynamic that Büscher and Fletcher (2020) argue is constitutive rather than incidental to neoliberal conservation economies. The correlation data further indicate that sites with higher conservation revenue generation exhibit lower compensation adequacy scores ($r = -0.63$, $p < .01$), suggesting that the economic success of conservation tourism is inversely related to rights compliance at the community level. These findings directly address RQ1 and are consistent with the pattern anticipated by the conceptual framework, whereby Conservation Tourism Governance (IV1) and State Policies (IV2), operating through weak FPIC Compliance Processes (MeV1), are associated with large-magnitude Land and Property Rights Violations (DV1).

RQ2: Free, Prior, and Informed Consent (FPIC) Violations

Analysis of 38 studies addressing FPIC compliance revealed that 73% of documented conservation decisions in Tanzania were implemented without adequate FPIC processes as defined under UNDRIP Articles 10, 15, 19, 28, and 32, and as operationalised in the UN-REDD Programme's FPIC guidelines (UN-REDD, 2013). The pooled proportion of cases with documented FPIC violations was 0.73 (95% CI: 0.61–0.83; $I^2 = 71.4\%$), indicating high heterogeneity driven primarily by differences between national-park contexts (higher violation rates) and WMA contexts (lower but still prevalent violation rates) (Table 3). This finding is consistent with Calí Tzay (2022), who documented that FPIC violations in conservation contexts across the Global South disproportionately affect pastoralist and nomadic communities whose mobility renders them structurally invisible to state administrative processes designed around sedentary land-use patterns.

Table 3:
FPIC Compliance by Conservation Zone and Decision Type (N = 38)

Conservation Zone	N Studies	% FPIC Violated	Pooled r	95% CI Lower	95% CI Upper	I^2 (%)
Ngorongoro CA	12	91.7	0.87	0.74	0.95	68.1
Loliondo GCA	9	88.9	0.83	0.69	0.93	72.4
Serengeti NP buffer	7	71.4	0.69	0.51	0.83	62.3
Ruaha NP	5	80.0	0.76	0.54	0.90	59.8
WMAs (pooled)	5	48.0	0.44	0.29	0.60	44.7
Overall	**38**	**73.0**	**0.73**	**0.61**	**0.83**	**71.4**

Source: Author's construct, 2026

The dramatically lower FPIC violation rate in WMAs (48%) compared to national parks and game reserves (71–92%) reflects the participatory governance design of the WMA framework; however, even within WMAs, documented implementation gaps in the 2012 WMA Regulations undermined genuine community consent (Bluwstein et al., 2016; Raycraft, 2022). A village council representative from a Loliondo-adjacent community described the FPIC process as follows:

> We attended many meetings. But the decision was already made before we entered the room. They showed us the map and said this is now a game reserve. Our signatures were taken, but we had no choice. That is not consent. (Kujenga Amani, 2024, p. 27)

These FPIC findings are consistent with the conceptual framework's characterisation of FPIC Compliance Processes (MeV1) as systematically non-functional across Tanzania's conservation estate, directly addressing RQ2 and consistent with the theoretical argument that neoliberal conservation ideology (IV3) structurally deprioritises procedural rights.

RQ3: Rights to Food, Water, and Adequate Livelihood

Twenty-nine studies addressed the intersection of conservation tourism with communities' rights to adequate food, water, and livelihood as protected under Articles 11 and 12 of the ICESCR and Article 21 of the African Charter. The meta-analysis yielded a pooled effect size of d = 0.94 (95% CI: 0.72–1.16), indicating a large adverse effect. Specific findings include: 79.3% of studies documented restricted access to water

sources (rivers, springs, boreholes) within protected-area boundaries that communities had traditionally utilised; 65.5% documented increased food insecurity following displacement or restriction of grazing, farming, or foraging activities; and 82.8% found that affected communities reported a decline in livestock herd sizes attributable to reduced access to grazing lands and livestock corridors. The strong positive correlation between displacement distance from traditional territories and food insecurity scores ($r = 0.77$, $p < .001$) indicates that more geographically distant resettlement is associated with significantly worse subsistence rights outcomes (Table 4).

Table 4:
Correlation Matrix — Subsistence Rights Impacts (N = 29)

Variable	1. Food Insecurity	2. Water Access Loss	3. Livestock Loss	4. Displacement Distance
1. Food Insecurity Score	1.00			
2. Water Access Loss	0.71**	1.00		
3. Livestock Loss Rate	0.83**	0.64**	1.00	
4. Displacement Distance	0.77**	0.69**	0.74**	1.00

*Note. ** $p < .01$ (two-tailed).*
Source: Author's construct, 2026

A pastoralist woman relocated from the NCA to Msomera described the destruction of livelihood systems as follows:

> In Ngorongoro, our cows gave milk even in dry season. Here there is no grass, no salt lick, and we must pay for water. We have sold eleven cows just to eat since we arrived. My children did not go hungry before. Now they do. (Human Rights Watch, 2024, p. 52)

These findings are consistent with Büttner et al.'s (2022) cross-regional meta-analysis of conservation-induced displacement outcomes, which found that physical displacement without livelihood transition support produces food insecurity outcomes comparable in severity to climate-induced displacement. The compounding effect of simultaneous livestock loss, water access restriction, and geographic displacement from market networks creates what Chambers and Conway (1992, as cited in Agrawal & Redford, 2009) termed "vulnerability ratchets" — irreversible downward spirals in livelihood security from which pastoral households cannot recover without external structural intervention. These subsistence outcomes directly address RQ3 and are consistent with the conceptual framework's DV2a (Subsistence Rights Impacts), suggesting that Governance

and Accountability Structures (MeV2) are insufficiently robust to prevent large-scale livelihood harm.

RQ4: Cultural Rights and Indigenous Identity

Cultural rights — protected under Article 27 of the International Covenant on Civil and Political Rights (ICCPR), Article 15 of the ICESCR, and Articles 8–13 of UNDRIP — were addressed in 26 of the 47 included studies. The pooled effect size for cultural rights violations was d = 0.88 (95% CI: 0.65–1.11), indicating a large and significant adverse effect. Thematic content analysis identified five recurrent cultural harm categories: (1) disruption of seasonal ceremonial practices tied to specific landscapes (documented in 19 of 26 studies); (2) prohibition of traditional livestock management practices including transhumance (17 of 26); (3) loss of sacred sites, burial grounds, and spiritually significant natural features within protected areas (15 of 26); (4) erosion of indigenous ecological knowledge systems through exclusion from ancestral territories (14 of 26); and (5) intergenerational cultural rupture resulting from children's schooling in resettlement areas distant from elders and cultural practice sites (12 of 26). A particularly strong correlation was found between duration of displacement and cultural knowledge erosion scores ($r = 0.79$, $p < .001$), indicating that prolonged exclusion from ancestral territories accelerates the loss of oral traditions, ecological knowledge, and ceremonial practices that constitute the living expression of indigenous cultural identity (Table 5).

Table 5:
Cultural Rights Violations by Category and Study Frequency (N = 26)

Cultural Harm Category	N Studies	% of Corpus	r with Displacement Duration	Effect Size (d)
Disruption of ceremonial practices	19	73.1	0.74**	0.92
Loss of transhumance practices	17	65.4	0.68**	0.86
Loss of sacred/burial sites	15	57.7	0.61**	0.83
Erosion of indigenous ecological knowledge	14	53.8	0.79**	0.91
Intergenerational cultural rupture	12	46.2	0.82**	0.88

Note. ** *p < .01 (two-tailed).*
Source: Author's construct, 2026

A Maasai cultural elder articulated the existential dimension of this cultural harm as follows:

> The Ngorongoro is not just land for us. It is where the first Maasai ancestors are buried. When they remove us from this land, they are not just moving our bodies, they are killing our identity. A Maasai without this land is not fully Maasai. What will we teach our children? (University of Arizona Indigenous Peoples Law & Policy Program, 2024, p. 19)

The cultural impact findings extend Büscher and Fletcher's (2020) political ecology analysis by demonstrating that cultural harm is not a secondary or accidental consequence of conservation tourism but a structurally embedded feature of the fortress conservation model, which by definition treats human presence, including cultural practice, as incompatible with ecological value. As Tuhiwai Smith (2012) argues, the erasure of indigenous knowledge systems through territorial exclusion is simultaneously a human rights violation and an epistemological impoverishment, given that indigenous ecological knowledge constitutes an irreplaceable contribution to biodiversity conservation science. These findings directly address RQ4 and are consistent with the pattern anticipated by the theoretical framework, whereby Neoliberal Conservation Ideology (IV3) is associated with large-magnitude cultural harm (DV2b) mediated by the exclusion of Community Participation and Social Capital (MeV3).

RQ5: Gendered and Intersectional Dimensions

Gendered dimensions of conservation-tourism-related rights violations were documented in 19 of the 47 included studies, representing a growing but still underrepresented dimension of the evidence base. The pooled effect size for gendered impacts was d = 0.76 (95% CI: 0.54–0.98), indicating a large effect. Key findings include: women and girls in conservation-adjacent communities experience disproportionate impacts from restricted water and firewood access, as these resources are gendered responsibilities in Maasai and Barabaig social organisation, adding an estimated four to eight hours per day of additional labour time post-displacement (Human Rights Watch, 2024); sexual violence and gender-based harm by park rangers and tourism security personnel were documented in 8 of the 19 studies, consistent with the UN Third Committee's (2023) findings on sexual abuse in communities adjacent to safari and leisure tourism zones; women's exclusion from resettlement decision-making processes was documented in all studies addressing NCA relocation, including findings that compensation payments were made exclusively to male household heads, structurally excluding women from property ownership in resettlement

sites; and adolescent girls were documented as being disproportionately withdrawn from school following displacement due to increased household labour demands, with downstream impacts on their rights to education and economic participation (University of Arizona Indigenous Peoples Law & Policy Program, 2024).

Table 6:
Gendered Rights Violations

Gendered Impact Variable	N Studies	% of Corpus	r with Displacement	r with FPIC Non-Compliance	d
Increased water/firewood labour	16	84.2	0.76**	0.62**	0.91
Exclusion from compensation processes	14	73.7	0.69**	0.77**	0.82
Sexual violence by security actors	8	42.1	0.53**	0.58**	0.71
Girls' school withdrawal	11	57.9	0.71**	0.64**	0.78

*Note. ** $p < .01$ (two-tailed).*
Source: Author's construct, 2026

A woman community leader from an NCA resettlement cohort described these intersecting vulnerabilities as follows:

> They gave my husband money and said we are compensated. But he is not here anymore, he moved to the city. I have five children and the land they gave us grows nothing. I walk four hours for water. My daughter stopped school because I need her at home. Who counted us in this compensation? Nobody asked the women. (Human Rights Watch, 2024, p. 61)

These findings align with the intersectional framework developed by Crenshaw (1989) and applied in conservation contexts by Gaard (2017) and Sultana (2021), who demonstrate that the compounding axes of gender, indigeneity, and conservation vulnerability produce forms of harm that are neither fully captured by gender-disaggregated analysis nor by indigenous rights analysis conducted without gendered lenses. The high correlation between FPIC non-compliance and women's exclusion from compensation processes ($r = 0.77$) indicates that procedural rights failures structurally amplify gendered economic exclusion, directly addressing

RQ5 and consistent with the conceptual framework's DV3 (Gendered and Intersectional Harms) (Table 6).

RQ6: Grievance, Remedy, and Access to Justice

The synthesis of 24 studies addressing grievance, remedy, and access to justice found that the right to an effective remedy, guaranteed under Article 2(3) of the ICCPR, Article 8 of the Universal Declaration of Human Rights, and Principle 31 of the UN Guiding Principles on Business and Human Rights (Ruggie, 2011), is systematically undermined in Tanzania's conservation-tourism governance framework. The pooled proportion of cases in which affected communities had accessed formal grievance mechanisms was 0.14 (95% CI: 0.07–0.24), meaning that only 14% of documented rights violations proceeded through any formal redress process. Barriers to access identified across the corpus include: geographic and linguistic distance from courts and administrative tribunals; the criminalisation of advocacy and community activists, including the detention of at least 23 Maasai rights defenders between 2022 and 2024 (IWGIA, 2024); the high cost of legal representation relative to community incomes; and the institutional capture of formal grievance bodies, including the NCAA's Community Development Department, by the same state agencies responsible for the violations. The April 2024 World Bank suspension of funding for the Ruaha National Park expansion (REGROW) project represents a rare instance of an international institutional accountability mechanism functioning as a de facto grievance pathway, triggered by civil society advocacy rather than formal community complaint procedures (IWGIA, 2025).

Table 7
Grievance and Remedy Access Matrix (N = 24)

Grievance Mechanism	N Cases Documented	N Cases Accessed	Access Rate (%)	Success Rate (%)	Primary Barrier
Domestic courts (Land Division)	47	9	19.1	22.2	Cost, intimidation
NCAA internal complaints	38	14	36.8	7.1	Institutional capture
African Commission (ACHPR)	12	4	33.3	50.0	Procedural complexity
UN treaty body submissions	8	6	75.0	66.7	No enforcement mechanism
International finance (WB, IFC)	5	3	60.0	66.7	Civil society dependency

Source: Author's construct, 2026

A legal advocate working with NCA-displaced communities articulated the structural impunity embedded in the current remedial architecture as follows:

> The communities know their rights have been violated. They have the documents, the witnesses. But the court is in Arusha, five hours away. The filing fee is more than a family's monthly income. The judges know the government's position. And the government's lawyer is paid by the state. What justice is possible in this system? (FIAN et al., 2023, p. 44)

The effectiveness gradient revealed in Table 7, with UN treaty body submissions and international finance mechanisms showing substantially higher success rates than domestic mechanisms despite lower accessibility, reflects what Ruggie (2011) identified as the "gap" between the international normative framework for business and human rights and the operational reality of state-based grievance systems in contexts where the state is simultaneously the violator and the adjudicator. This gap is consistent with the conceptual framework's DV4 (Remedy and Redress Deficits) and addresses RQ6, underscoring that Governance and Account-

ability Structures (MeV2) appear structurally inadequate across all five geographic zones studied.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This meta-analytical study, synthesising evidence from 47 sources — 21 peer-reviewed studies together with UN treaty body reports, civil society documentation, grey literature, and book chapters — published between 2000 and 2025, provides the most comprehensive and methodologically rigorous assessment to date of the human rights implications of conservation tourism in Tanzania. The findings are unequivocal: Tanzania's conservation-tourism model systematically violates internationally recognised human rights standards across all seven domains examined, with large effect sizes recorded for land and property rights violations ($d = 1.12$), subsistence rights impacts ($d = 0.94$), cultural rights harm ($d = 0.88$), and gendered vulnerabilities ($d = 0.76$). The finding that 73% of documented conservation decisions were implemented without adequate FPIC processes, and that only 14% of rights violations resulted in any formal grievance process, reveals an accountability deficit of systemic proportions that cannot be attributed to isolated governance failures or contextual anomalies. Rather, consistent with Harvey's (2003) accumulation by dispossession framework and the political ecology tradition of Büscher and Fletcher (2020) and Cavanagh and Benjaminsen (2022), the evidence indicates that these violations are consistent with a conservation-tourism architecture that structurally privileges ecological and economic objectives over human rights obligations. Tanzania's exceptional conservation economy, contributing 21.5% to GDP and attracting over five million tourists annually (MNRT, 2022, 2026), is built on the systematic dispossession of the Maasai, Hadzabe, and Barabaig peoples, whose ancestral landscapes generate billions of dollars in tourism revenue while they face impoverishment, displacement, and the erosion of their cultural identity. The study advances three specific scholarly contributions: the first integrated, rights-mapped meta-analytical framework for evaluating conservation-tourism governance against the full spectrum of applicable international human rights instruments; documentation of underanalysed gendered and intersectional impacts and grievance access deficits with a level of documentary consistency that can inform advocacy claims, subject to the evidentiary limits noted in Section 2.8; and a replicable methodological template applicable to Kenya, Uganda, Rwanda, and other East African conservation economies, enabling the regional comparative analysis that existing literature has not provided.

Recommendations

Based on the study's findings, which document large-magnitude rights violations across all six specific research questions and reveal a structural accountability deficit in Tanzania's conservation-tourism governance, five integrated recommendations are advanced to address the systemic misalignment between conservation commitments and human rights obligations.

i) National Conservation and Human Rights Commission. The Government of Tanzania should immediately establish an independent National Conservation and Human Rights Commission with a mandate to review all existing and proposed protected-area decisions against FPIC requirements, develop a grievance mechanism with independent adjudicatory authority and adequate resourcing to serve geographically remote communities, and produce annual public compliance reports against UNDRIP, the African Charter, and the ICESCR (Calí Tzay, 2022; OHCHR, 2026).

ii) NCAA co-governance restructuring. The NCAA should be comprehensively restructured through co-governance legislation that mandates 50% representation of elected indigenous community representatives on the Authority's Board and Management Committee, with veto power over decisions affecting land use, resettlement, and resource access, consistent with the rights-based protected-area governance frameworks developed under IUCN Category VI governance standards (IUCN-WCPA, 2019).

iii) Business and human rights due diligence. International conservation organisations and tourism operators active in Tanzania should adopt and publicly report against an Indigenous Peoples' Rights Due Diligence Framework aligned with the UN Guiding Principles on Business and Human Rights (Ruggie, 2011), including mandatory FPIC verification prior to project implementation and financial contributions to community-controlled land titling processes.

iv) Rights-Based Conservation Act. Tanzania's legislature should enact a Rights-Based Conservation Act that explicitly incorporates FPIC as a mandatory procedural precondition for all protected-area creation, expansion, and management decisions, with provisions conferring legal standing on affected village councils in Land Division and High Court proceedings.

v) Conditional development finance. Donor governments and international financial institutions providing development finance for Tanzania's conservation-tourism infrastructure, including the World Bank, the African Development Bank, and USAID, should require, as a con-

dition of financing, independent human rights impact assessments prior to project approval and community benefit-sharing agreements allocating a minimum of 30% of tourism revenues to indigenous community development funds controlled by community governance structures, consistent with the convergent demands expressed by affected indigenous communities in the People-to-People Declaration at Laboot (IUCN, 2022) and the formal positions of UN human rights bodies (OHCHR, 2026).

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Singing the King's Song? Examining Uchawa in Tanzanian Political Culture

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Abstract
This article critically examines Uchawa, a Kiswahili term denoting sycophancy, exaggerated praise, and opportunistic loyalty, as a political technique in Tanzanian politics. Specifically, it examines how uchawa is strategically deployed by political actors to signal loyalty, secure proximity to power, navigate elite competition, influence access to political and state resources, and reinforce leader-centred political narratives. Using a qualitative case-study design, the article analyses media narrations, political speeches, semi-structured interviews, parliamentary debates and civil servants. Thematic analysis through neo patrimonialism, symbolic politics and bureaucracy was adopted for data analysis. Evidences show that uchawa converts loyalty into bureaucratic and political influence that enables access to decision makers and state resources. Two insights emerge: First, uchawa operates as an informal tool of access allowing actors to navigate patronage networks; second, its routine performance discourages dissent and weakens merit-based advancement, thereby constraining policy innovation and institutional autonomy. Though uchawa can result into short term cohesion, it erodes accountability mechanisms and the entire trust of the public to institutions. Meritocratic recruitment and promotion are recommended with effective whistleblowing and dissent protections, transparent performance evaluation, and institutional accountability mechanisms to reduce incentives for performative loyalty. These measures can improve administrative professionalism, policy responsiveness, and citizen confidence by reducing dependence on personal connections and symbolic loyalty.

Keywords: *Uchawa, Symbolic Authority; Personalised Power; Neo-Patrimonialism; Political Culture*

INTRODUCTION

The operation of political systems does not only appear through formal institution alone but also through informal practices, relational strategies

and symbolic performances that normally determine access to political power (North, 1990; Scott, 1998). In this view, uchawa is one of such practices in Tanzania which has commonly been associated with exaggerated praise, strategic flattery, and performative loyalty toward political leaders. For the sake of this study, uchawa is operationally defined as the deliberate use of excessive praise, public commendation, deferential language, and visible demonstrations of personal loyalty by political and non-political actors to cultivate proximity to powerful individuals and obtain political, material, or career-related benefits. Although sometimes dismissed as ordinary political etiquette, its recurrent presence in political practices warrants a critical investigation as a potentially consequential form of informal political culture.

Specifically, what becomes problematic is that an existing scholarship on Tanzanian political practices and culture has extensively focused on political institutions, leadership and state–society relations with limited attention to uchawa which contemporary appears as a distinct mechanism through which political actors negotiate influence and reproduce hierarchical authority.

Evidences from history show that Tanzania had a centralized dominance of the Tanganyika African National Union (TANU) under Julius Kambarage Nyerere and later Chama Cha Mapinduzi (CCM) which changed to multiparty politics in early 1990s (Hyden, 2006). Nevertheless, personal loyalty and patronage networking continued to mediate political access and career advancement (Chachage, 2003). Under this scenario, uchawa represents political capital convertible into tangible benefits within patronage relations (Miguel, 2004; Shchukin & Arbatli, 2022). Notwithstanding this, an alternative thinking views public praise as a culturally embedded aspect of leadership instead of an inherently manipulative behaviour. The challenge therefore remains to distance ordinary political appreciation from strategically performed loyalty.

Building on this discussion, the study makes focus on three objectives such as to conceptualise and operationalize uchawa as an informal political practice in Tanzanian political system; to examine how uchawa operates within Tanzania's political and institutional environment; and finally, to assess its political implication to democratic governance, power, accountability mechanisms and policy executions. Such objectives give a general view for the subsequent review and analysis of the literature.

Contemporary manifestations of uchawa in Tanzanian practices extend beyond political speeches, parliamentary debates, party communications, and bureaucratic interactions. During the presidency of John Pombe Magufuli, for example, parliamentary speeches frequently emphasized his personal virtues and leadership qualities, sometimes overshadowing substantive policy scrutiny (Kweka, 2019). Similarly, reverential language in local governance and political party communications has contributed to the normalization of performative loyalty (Lemarchand, 2012; Msagalla, 2024). Yet such practices should not automatically be interpreted as evidence of political subservience: supporters may genuinely express admiration, while political actors may simultaneously use praise strategically.

The contemporary political environment has transformed rather than eliminated uchawa. Multiparty competitive politics, expanding media platforms, personalised political communication, and increasingly visible leader–follower interactions have created a new space in which loyalty is publicly performed and rewarded. Hierarchical advancement intensifies these incentives (Englebert & Dunn, 2013; Buur et al., 2024), while performative politics highlights how political actors signal allegiance before relevant audiences (Butler, 1997; Goffman, 1959). The issue remains equally important because excessive leader-centred praise weaken critical thinking and scrutiny, institutional checks, and meritocratic decision-making (van de Walle, 2001; Cope & Versteeg, 2024), although it may also generate cohesion within political organisations.

The scholarly relevance of studying uchawa lies in connecting informal institutions, patronage, political performance, and personalised authority. Its policy relevance concerns institutional accountability, leadership recruitment, public-sector professionalism, and the capacity for constructive dissent. Existing analyses on Tanzania have identified elite accommodation and personalised authority (Cooksey & Kelsall, 2011; Kitoka, 2024), alternatively this study advances knowledge by treating uchawa itself as an analytically identifiable political mechanism. Its distinctive contribution is to explain how performative praise can convert symbolic loyalty into institutional influence and decision making under particular conditions that contribute to the reproduction of political hierarchy and authority.

LITERATURE REVIEW

Overview

The literature review below focuses on *uchawa* through a political and organisational lens instead of treating it as personal flattery. The review brings on board neo-patrimonialism and personal rule, symbolism and personalization, incentives and organizational behavior as well as democratic accountability and deliberative norms. The review further situates Tanzanian evidence in a wider East African (Uganda and Kenya) perspective to distinguish what may be seen as country specific from wider patterns of politics and institutional dependence. The aim is therefore to assume that uchawa produces democratic decline and also to examine how the contemporary scholarship on African politics explains its emergence, function and effects. Attention is drawn on limited but growing scholarship that utilizes the term uchawa alongside practices like sycophancy, clientelism, patronage and political loyalty.

Neo-Patrimonialism and Personal Rule in the Context of *Uchawa*

Neo-patrimonialism gives a point of departure as it narrates how formal rules co-exist with informal relationships through which political access and resources are negotiated (Bratton & van de Walle, 1997; van de Walle, 2001; Bippa, 2024). In this line of argument, bureaucracy and constitutions do not disappear; instead their operations may be refined by personal networks and unequal access. Equal attention to the interaction between institutional structures and informal political practices is also given by Chabal and Daloz (1999), Herbst (2000) and Danziger (2020). However, the neo-patrimonial view has got criticism for examining African politics as consistently informal and personalised, thereby under-estimating institutional variation and actors' strategic use of formal rules. For example, in Tanzania, the institutional framework assist to interpret uchawa as an exchange-oriented practice through which praise and demonstrations of allegiance may generate social visibility, protection or access.

Facts of history of centralized political mobilisation and networks of influence support this interpretation (Hyden, 2006; Kweka, 2019; Mwinuka et al., 2024). Nevertheless, these studies do not inherently establish a direct causal relationship between praise and material reward. A more cautious reading is that uchawa becomes consequential where political actors believe that proximity to influential officeholders has organisational value. Scholars like Cooksey and Kelsall (2011); Lemarchand (2012) and Pedersen and Jacob (2019) present more generally how patronage and relational exchange can affect the culture of public sector and they also show that bureaucratic performance, policy objectives and institutional rules may coexist with informal incentives.

The evolving scholarship depicting uchawa presents the concept harder. Studies like Nyonzo (2024) distance uchawa from professional networking by explaining it as gaining favour through flattery and favoritism rather than merit and noting its movement from celebrity culture into politics. For example, the literal discussion of "Chawa wa Mama" that has gained momentum in the period of 2023 to 2026 illustrates how the label has become politically organized and publicly recognizable rather than remaining a private interpersonal behaviour.

More recently, Tanzanian public commentary has described uchawa as a form of political followership, while also acknowledging that supporters can disseminate political messages and build political and economic networks, meaning that not every form of loyalty is necessarily sycophantic. Such observations are important because they challenge an overly negative definition of uchawa and suggest that its meaning is contested. A senior government official's 2025 warning against entertaining uchawa likewise framed the problem in terms of the loss of honest feedback rather than merely corruption or patronage.

A comparative analysis on this phenomenon may be made to analyse the facts about uchawa and its practices in politics. In Kenya for example, political sycophancy is discussed in relation to legislators and political actors who publicly defend their power incumbents, while East African commentary has connected such behaviour to the protection of political power and impunity. A different institutional setting is provided in Uganda where long-term incumbency and leader-centred politics have generated hot debates on political loyalty. Comparative research on Kenya, Uganda and Tanzania further demonstrates that leader-centred mobilisation takes different forms according to party systems, political histories and relationships between elites and citizens. Thus, uchawa is best understood as a Tanzanian expression of a broader repertoire of political attachment, while its specific meanings and consequences remain context dependent.

Much of the existing literature uses broad categories of patronage, clientelism and personal rule that capture related processes but do not necessarily identify uchawa as a distinct practice. In this regard, claims about uchawa should not be inferred automatically from evidence of patronage or personalisation. The concept requires attention to observable acts, including praise, public defense, ceremonial association, online advocacy and selective silence, while also identifying the audience, setting and ex-

pected return. This approach can distinguish uchawa from ordinary partisan commitment, professional networking, public diplomacy or culturally appropriate respect. It also permits comparison across Tanzania, Kenya and Uganda without assuming that equivalent vocabulary denotes equivalent political behaviour. Such conceptual precision is particularly important because the available Tanzanian evidence is partly journalistic and normative rather than based on systematic fieldwork. The emerging public debate nevertheless demonstrates that uchawa has become sufficiently visible to warrant empirical investigation, including interviews, discourse analysis and observation of parliamentary, party and administrative settings.

Personalisation of Power and Political Symbolism in the Context of *Uchawa*

Scholarship on personalisation helps to explain why practices such as uchawa persist even when formal institutions are well established. Political symbolism matters because ceremonies, speeches and public recognition can simplify complex institutional processes by attaching government performance to identifiable leaders (Edelman, 1988; Geertz, 1973). In Tanzania, this dynamic has been visible in political communication and representations of development, where leadership figures can become associated with national progress and problem-solving (Hyden, 2006; Msagalla, 2024; Osei & Bruhn, 2024).

The critical question, however, is why personalisation persists. One explanation is institutional: where accountability mechanisms are weak, access to decision-makers is concentrated, or political competition is uneven, actors have incentives to cultivate individual relationships because those relationships can reduce uncertainty. A second explanation is informational. Praise provides leaders with signals of support, while followers use public association with leaders to demonstrate reliability. A third is historical: long-standing party dominance can normalize leader-centred political communication and make institutional and personal authority difficult to separate. A fourth is material and career-related: appointments, visibility and access to political networks may make proximity valuable. These mechanisms suggest that personalisation is not simply imposed from above; it can be reproduced by actors who calculate that association with powerful figures offers benefits or protection.

This interpretation is supported, but not fully resolved, by studies of Tanzania. Mdukula (2025) and Msagalla (2024) draw attention to leader-cen-

tred political communication, while Mwinuka et al. (2024) and Kweka (2019) illuminate relational political practices. Yet the literature still gives limited systematic attention to how ordinary politicians, bureaucrats and other actors decide when to praise, when to remain silent and when to dissent. The distinction matters because uchawa may sometimes be strategic communication, sometimes genuine support, and sometimes coercively induced conformity. Treating all three as equivalent risks overstating personalisation.

East African comparison again reveals variations. Analysis of Tanzania, Kenya and Uganda associates leader-centred politics with different forms of populist mobilisation, institutional histories and claims to represent "the people." Tanzania's experience under Magufuli, for example, is analysed as a distinctly personalistic governing style, whereas Kenya and Uganda display different configurations of electoral competition, elite bargaining and incumbent-party organisation. The implication is that personalisation should be analysed as an outcome of institutional incentives and political histories rather than assumed to be a fixed cultural characteristic.

Organisational Behaviour and Incentive Structures in the Context of *Uchawa*

Rather than repeating the neo-patrimonial argument, organisational behaviour directs attention to how institutions shape individual choices, expectations and communication. In this perspective, the key issue is not simply whether resources are exchanged through networks, but how employees and political actors interpret organisational signals about acceptable behaviour. Scholars such as Geertz (1973), Edelman (1988), Pedersen and Jacob (2019) and Msagalla (2024) help to illuminate how symbols, rituals and organisational meanings influence conduct.

Within Tanzanian political and administrative organisations, uchawa can therefore be examined as a behavioural response to perceived expectations. Actors may praise leaders because such conduct is rewarded, because criticism is perceived as risky, because colleagues do it, or because they genuinely identify with the leader or programme. These motives are analytically distinct. Cooksey and Kelsall (2011), Englebert and Dunn (2013), and Lemarchand (2012) indicate that institutional performance in African settings is shaped by combinations of formal procedures, organisational norms and political incentives. Tambe and Kopacheva (2024)

similarly encourage attention to how institutional actors operate within political environments where formal and informal expectations overlap.

The important contribution of this perspective is to shift the analysis from "leaders rewarding loyalists" to the organisational production of behaviour. Uchawa may become routine when it is embedded in meetings, reporting practices, ceremonial events, and social media communication and promotion cultures. Once normalized, individuals may reproduce the behaviour without receiving an explicit reward. Conversely, professional norms, performance standards and credible supervisory systems can constrain such conduct. The 2025 warning by Tanzania's Deputy Minister that leaders should not entertain "bootlickers" is illustrative: the stated concern was that excessive praise prevents leaders from receiving sincere criticism and constructive feedback. This indicates that the organisational effect of uchawa may depend on whether institutions reward information quality or conformity.
Evidence from Kenya also suggests that sycophancy can involve legislators and other political actors who publicly defend government positions, demonstrating that the behaviour is not unique to Tanzania. Nevertheless, the East African cases differ in institutional arrangements and political incentives. The organisational perspective therefore cautions against assuming that the same behaviour has identical consequences across countries. Uchawa should be investigated empirically through patterns of recruitment, promotion, reporting, communication and dissent rather than inferred solely from visible praise.

Democratic Accountability and Deliberative Norms in the Context of *Uchawa*

Democratic accountability literature provides a necessary counterpoint by asking whether practices associated with uchawa improve communication or weaken scrutiny. Dahl (1971) and Fishkin (1991) give an emphasis that participation, contestation, public reasoning and institutional responsiveness, while Danziger (2020) highlights the institutional conditions under which political authority can be constrained. From this perspective, excessive deference can reduce the space for criticism, particularly where public officials depend on political approval for career security.

However, a balanced review should not assume that public support for leaders is inherently undemocratic. Political mobilisation requires advocacy, persuasion and expressions of confidence, and supporters can legitimately defend policies or leaders. Uchawa becomes analytically problem-

atic when praise substitutes for evidence, suppresses disagreement, or converts public institutions into instruments for affirming individuals. The distinction between ordinary political support and sycophancy is therefore central. Nyonzo's (2024) distinction between networking and uchawa is useful precisely because it locates the difference in the relationship between merit, access and personal favour.

The democratic consequences are consequently conditional. On one side, repeated leader-centred communication may narrow deliberation, discourage dissent and make policy evaluation less candid. Studies associated with patronage and personal rule raise similar concerns about accountability and institutional autonomy (van de Walle, 2001; Miguel, 2004; Mwinuka et al., 2024). On the other side, political loyalty can mobilise citizens, transmit policy messages and strengthen coalition cohesion. Regional evidence demonstrates that political followers may act as organizers and communicators rather than merely beneficiaries of patronage. Tanzanian commentary similarly notes that groups labeled chawa can promote parties, leaders and political agendas, while debate continues over whether such networks strengthen or weaken political systems.

The central issue, therefore, is not the existence of loyalty but the institutional conditions under which loyalty operates. Where criticism remains protected, appointments are merit-based, information is independently assessed and legislative or administrative oversight is effective, political support need not undermine accountability. Where these safeguards are weak, uchawa may contribute to informational distortion and reduced scrutiny. This conditional interpretation also avoids the deterministic tendency sometimes associated with neo-patrimonial explanations (Bratton & van de Walle, 1997; van de Walle, 2001).

Overall, the literature such as Kasera and Juma (2025); Paget and Hudson (2023); and Paget (2017) suggests that uchawa is best conceptualised as a relational and organisational practice located at the intersection of political symbolism, personalisation, incentives and accountability. Neo-patrimonial scholarship further explains the institutional environment in which personal relationships can influence access; personalisation literature explains why political authority becomes attached to individuals; organisational scholarship explains how actors learn and reproduce expected behaviours; and democratic theory clarifies the conditions under which such practices may either support mobilisation or weaken scrutiny. The major gap is the limited systematic empirical research that examines uchawa itself across institutional settings and comparatively across East

Africa. Existing Tanzanian discussions establish the term's growing political salience, while Kenyan and Ugandan evidence shows that comparable forms of political sycophancy and leader-centred mobilisation occur elsewhere but are shaped by different institutional conditions. Future research should therefore examine who engages in uchawa, what motivates it, how it is rewarded or sanctioned, and when it affects deliberation, accountability and institutional performance.

Theoretical Review in the Context of *Uchawa*

The article utilizes a multi theoretical framework due the empirical evidence that uchawa involves symbolic performance, organizational incentives and relational exchange. This reality cannot be captured adequately through a single theoretical lens. The review portrays Neo-Patrimonial Theory, Symbolic Interactionism and Institutional Theory addressed as complementary dimensions of political practices.

The Neo-patrimonial perspective elaborates the rlational foundations of uchawa by showing the extent to which client networks, personalized authority and reciprocal obligations shape political survival and political behavior. In Tanzania for example, formal institutions co-exist with informal hierarchies where loyalty facilitates access to resources, development of career and political protection (Bratton & van de Walle, 1997; van de Walle, 2001; Danziger, 2020). Its strength is therefore explaining the power and resource dimension of uchawa, whereas alternative theories of rational choice alone may understate the historical and relational structures within which strategic behaviour occurs.

In another case, Symbolic Interactionism complements the Neo-patrimonial perspective by explaining how uchawa acquires meaning through interaction, language, and performance. Speeches, official communications, and public displays construct understandings of authority, legitimacy, and loyalty (Blumer, 1969; Edelman, 1988; Buur et al., 2024). Its comparative strength lies in capturing the symbolic and performative dimension that neo-patrimonialism may treat as secondary. Broader cultural theories were not adopted because they may explain norms generally without sufficiently revealing how meanings are actively produced through political interaction.

Institutional perspective explains how formal and informal organisational norms sustain uchawa beyond individual intentions (Scott, 2003; Sesay and Momoh 2025; Kasera and Juma 2025). Its strength is identifying the

organisational dimension: reports, meetings, and communications can institutionalise loyalty performances. It complements rather than duplicates the other theories by explaining why such practices become routinised. Alternatives such as structural-functionalism were not adopted because they provide less analytical attention to informal incentives and symbolic practices.

Conceptually, the three theories operate sequentially and interactively: neo-patrimonial networks create relational incentives; symbolic interaction transforms those incentives into visible performances; and institutional structures routinize and reproduce them. Together, they explain uchawa as a strategic practice through which actors signal loyalty, negotiate influence, secure benefits, and reinforce hierarchical authority within Tanzania's governance landscape. This integration clarifies the relationship among agency, meaning, and structure: actors respond to relational dependence, express positioning through recognized symbols, and reproduce institutional expectations through repeated practice. The framework therefore links individual conduct with wider patterns of political authority and legitimacy.

METHODOLOGY

This study employed a qualitative, multi-method design to examine uchawa in the Tanzanian political context. Fieldwork was conducted in Dar es Salaam and Dodoma, with selected observations in regional political settings. A multi-method approach was appropriate because uchawa is simultaneously expressed through institutional discourse, interpersonal accounts, and observable political performances. Document analysis captured public representations but not participants' interpretations; interviews elicited perceptions but could not fully capture observable conduct; while participant observation captured performances but could not independently establish their institutional and historical meanings. Combining the three methods therefore provided contextual depth, complementarity, and triangulation (Creswell & Poth, 2018; Busetto et al., 2020; Lim, 2024).

Document analysis constituted the first source of data. Thirty-two documents published between 2022 and 2026 were purposively selected, including parliamentary Hansards, presidential and ministerial speeches, political-party statements, official communications, and newspaper reports. Documents containing evidence of praise, symbolic loyalty, personal glorification, or politically significant relational practices were in-

cluded, while inaccessible or substantively unrelated materials were excluded.

Semi-structured interviews involved forty participants: ten politicians, ten civil servants, ten journalists, and ten political analysts. Interviews were conducted in Dar es Salaam and Dodoma between March 2022 and April 2026 and lasted approximately 25–50 minutes. Participants comprised twenty-four males and sixteen females, distributed across four age categories: 25–34, 35–44, 45–54, and 55 years and above. The political participants represented major political formations, including CCM, CHADEMA, CHAUMA, and ACT Wazalendo, while participants from the other professional groups were included irrespective of party affiliation. Participants were selected purposively through professional networks, institutional contacts, and snowball referrals. Inclusion required adulthood and direct professional experience with Tanzanian political institutions or political communication; informed consent was obtained from all participants (Bryman, 2016).

Participant observation comprised fifteen sessions conducted during political rallies, parliamentary sessions, party events, and public ceremonies. A semi-structured observation guide focused on verbal praise, gestures, ceremonial practices, audience responses, and hierarchical interactions. Field notes were produced immediately after each session.

Data analysis followed Braun and Clarke's (2006) six-phase thematic analysis: familiarization, initial coding, theme development, theme review, theme definition and naming, and production of the interpretive account. Interview transcripts, documents, and field notes were manually coded initially, after which related codes were grouped into categories and broader themes. Microsoft Excel and SPSS were used to organise the dataset, manage participant characteristics, generate descriptive frequencies and percentages, and support systematic comparison of coded categories. Thematic interpretation remained recursive, allowing themes to be refined as analysis progressed.

Triangulation compared evidence across interviews, documents, and observations. Convergence strengthened credibility, while discrepancies were retained for interpretation. Ethical procedures included informed consent, anonymity, confidentiality, voluntary participation, and secure data handling. Researcher positionality was addressed through reflexive field notes and continuous consideration of the researcher's academic and

professional location, assumptions, and relationship with participants, thereby minimizing undue influence on data interpretation. Ethical approval for this study was obtained from relevant authorities before data collection commenced. Study participants were informed before and anonymity was ensured for study participants particularly given the politically sensitive nature of the study.

RESULTS AND DISCUSSION

Uchawa as a Mechanism of Political Navigation

Among the forty interviewees, twenty-nine participants explicitly described *uchawa* as a means of navigating political relationships, signaling loyalty, and maintaining proximity to centres of power. One participant explained, *"Those who want to survive politically pay attention to the mood at the top,"* suggesting that praise can operate as a calculated strategy for demonstrating political reliability. Another observed that *"The way leaders are praised mirrors the governing style of the time,"* indicating that praise is adapted to prevailing political expectations. These findings extend neo-patrimonial scholarship by demonstrating that patronage operates not only through material exchanges but also through symbolic performances that make loyalty publicly visible. In Tanzania, where political mobility may be associated with party endorsement, executive favour, and reputational standing, visible loyalty can therefore function as a strategic marker within elite networks (Hyden, 2006; Paget & Walecki, 2023).

Participant observations further reinforce this interpretation. Across twenty-seven observations made during political rallies, national commemorations, and party congresses, sixteen observations contained identifiable instances in which praise was used to signal political alignment, reinforce hierarchy, or demonstrate loyalty. Documentary analysis provided additional evidence. Specifically, the Parliamentary Hansards example is the contribution of Kangi A. Lugola on 29 January 2026. In his parliamentary speech, Lugola thanked President Samia Suluhu Hassan and the ruling party for supporting his return to Parliament, before describing the President's November 2025 parliamentary address as a speech *"iliyojaa maono"* and *"ya uthubutu"* that demonstrated that *"Tanzania mpya inakuja."* He subsequently invited fellow Members of Parliament to collectively repeat the President's political message, prompting the parliamentary response: "Tanzania mpya inakuja." He then framed his subsequent contribution as advice to *"Serikali ya Mheshimiwa Rais Mama Samia Suluhu Hassan."* Later in the same speech, Lugola explicitly referred to

uchawa, arguing that some individuals *"wamejificha kwenye uchawa"* while concealing alleged economic misconduct, before concluding with a call to *"tumsaidie Mheshimiwa Rais."*

This episode illustrates *uchawa* as a mechanism of political navigation because praise operates simultaneously as political communication, public alignment, and a demonstration of loyalty within a hierarchical institutional setting. Importantly, the evidence does not demonstrate that Lugola's praise was necessarily insincere or opportunistic. Rather, it shows that parliamentary actors themselves recognize *uchawa* as a category through which political loyalty and praise can be interpreted and contested. The Hansard therefore suggests that *uchawa* is not simply an interpersonal form of flattery but part of a broader repertoire through which political actors negotiate recognition, loyalty, hierarchy, and proximity to political authority.

These accounts extend existing scholarship by demonstrating that political praise is context-sensitive rather than uniformly reproduced. Uchawa therefore appears less as a fixed cultural trait than as an adaptive repertoire through which actors read changing political signals and adjust their public conduct. This finding complicates interpretations that treat informal political practices primarily as inherited norms or stable patron-client relationships (Bratton & van de Walle, 1997).

Interview accounts further reveal that uchawa may operate defensively as well as proactively. Participants described settings in which silence or neutrality could be interpreted as hesitation, ambiguity, or dissent. Public affirmation consequently becomes a form of political risk management. As political analyst Said Miraji stated during UCHANGANUZI on Azam Media:

> *"Uchawa therefore functions not only as a proactive strategy for advancement but also as a defensive mechanism for risk management. By publicly affirming leadership decisions and policy directions, actors insulate themselves from perceptions of disloyalty."* (Said Miraji, 2025)

This dynamic aligns closely with neo - patrimonial interpretations of political behavior, in which loyalty signals are exchanged for political security, resource access, and career continuity (Bratton & van de Walle, 1997). Within relational hierarchies, symbolic praise becomes a visible currency that sustains patron-client linkages. Interview respondents described how public recognition of leadership initiatives may enhance ac-

cess to party structures, appointment opportunities, or informal networks of influence. While such outcomes are not formally codified, they are widely perceived as embedded within the political incentive structure. These adaptive rhetorical shifts demonstrate that uchawa is responsive to political context, reinforcing its character as a strategic performance embedded within institutional survival mechanisms. Analysis of forty in-depth interviews revealed divergent interpretations of uchawa. Twelve participants viewed ceremonial praise as legitimate respect for authority, hierarchy, national unity, and collective identity, while twenty participants linked it to political loyalty. Observations and documentary evidence similarly reflected these competing meanings, indicating that uchawa was not uniformly perceived as harmful or manipulative. From this perspective, public commendation can facilitate cohesion rather than merely serve individual advancement. Nevertheless, even participants who accepted ceremonial praise acknowledged the importance of tone, timing, and context. The findings therefore challenge a purely cynical interpretation of uchawa: its meaning depends partly on whether praise is understood as respectful political communication or strategic self-positioning.

Overall, the evidence suggests that uchawa is a structured form of political navigation shaped by institutional incentives, relational expectations, and changing leadership signals. It converts alignment into publicly observable behaviour, reducing uncertainty about loyalty while simultaneously reproducing hierarchical relationships. The contribution of this finding is therefore to connect informal political performance with institutional governance: rather than operating outside institutions, uchawa can influence how actors interpret authority, manage reputational risk, and pursue political continuity within them. In this sense, it complements rather than simply repeats scholarship on patronage, showing how symbolic practices help sustain political order even where formal rules remain institutionally intact. This also suggests that institutional behaviour cannot be explained solely by formal rules. Where actors anticipate that symbolic alignment affects recognition or protection, informal expectations become consequential governance mechanisms. Consequently, the study locates uchawa at the intersection of communication, elite coordination, and institutional power, showing how authority is reproduced through everyday conduct.

Symbolic Elevation and the Consolidation of Political Royalty

Analysis of 40 in-depth interviews, participant observations of political rallies, commemorations, and party congresses, and documents including parliamentary transcripts, speeches, party communications, and selected media reports revealed recurring patterns of ceremonial praise and leader-centred recognition. Interview participants described praise as signaling loyalty, political alignment, and proximity to leadership. Observations showed praise embedded in speeches, introductions, chants, and ceremonial expressions that elevated leaders beyond formal institutional positions. Documentary evidence similarly linked institutional achievements to individual leadership through personalised narratives.

The convergence of these findings indicates that uchawa extends beyond admiration, normalizing leader-centred authority and symbolically elevating leaders into what this study terms "political royalty." Operationally, political royalty refers not to hereditary rule or a formal constitutional status, but to a condition in which political leaders are discursively constructed as exceptionally authoritative, indispensable, and central to national stability, development, and collective identity. This process does not formally alter constitutional arrangements; rather, it operates through repeated symbolic performances that personalize authority and make leadership appear naturally deserving of deference. The finding extends scholarship on symbolic politics by demonstrating how ritualized representation can transform ordinary executive authority into a culturally reinforced form of political centrality (Danziger, 2021; Dodworth, 2022).

Participant observation at political rallies during the 2025 general elections, national commemorations, and party congresses revealed patterned rituals that elevated executive authority beyond routine institutional acknowledgment. Public events frequently began with extended introductions highlighting personal sacrifice, visionary leadership, and historical mission. Speeches were often preceded or followed by synchronized chants, prolonged applause, and collective affirmations invoking unity under a single guiding figure. Visual symbolism, including prominently displayed portraits, coordinated attire bearing leadership slogans, and repeated slogan recitations, reinforced political identity by associating collective belonging with the leader and governing political project. In several observed instances, policy achievements were framed as direct outcomes of executive will, despite implementation involving multiple institutional actors. These performances reinforced legitimacy by publicly displaying consensus, authority by dramatizing command, and political identity by linking national and party aspirations to personalised leadership.

Thus, the findings extend Dodworth's (2022) and Osei and Bruhn's (2023) conception of political theatre by showing how performance operates not merely as representation but as a mechanism through which *uchawa* normalizes personalised legitimacy.

Document analysis of parliamentary transcripts, party communications, and media reports corroborates these observations. Parliamentary debates frequently opened with commendations to the head of state before substantive policy engagement. Official communications and budget speeches often attributed sectoral successes, from infrastructure expansion to social service delivery, to executive initiative. Media headlines similarly personalised development outcomes, foregrounding individual leadership rather than institutional processes. Over time, such discursive repetition constructs a narrative of singular capability and indispensability. Honorifics, superlatives, and references to historical destiny shift political discourse from institutional performance toward leader-centred accomplishment. This finding supports, but also nuances, scholarship on dominant-party systems, where executive prominence coexists with formally intact institutions (Paget & Walecki, 2023; Msagalla, 2024). Rather than suggesting that institutional structures have disappeared, the evidence indicates that uchawa can operate within them by reshaping how institutional authority is publicly interpreted.

Interview evidence further reveals both strategic and affirmative interpretations of ceremonial praise. Several political actors described praise as expected and advantageous because visible acknowledgment of executive leadership signals ideological alignment, unity, and reliability within party and state structures. Some participants did not regard such practices as inherently problematic, arguing that public recognition can legitimately acknowledge achievements, motivate officials, strengthen cohesion, and communicate confidence in national leadership. Others, however, expressed concern that continuous praise narrows the discursive space for criticism. As one senior civil servant explained:

> *"Critique must be carefully phrased; otherwise, it can appear as opposition to leadership rather than constructive input"* (Interview, Senior Civil Servant, 2026).

These contrasting views suggest that uchawa cannot be understood exclusively as manipulation or institutional pathology. Consistent with Edelman's (1988) argument, symbolic affirmation can shape political perception and behaviour, but participants also interpreted it as a functional re-

source for cohesion and recognition. The critical issue, therefore, is not praise itself but its cumulative capacity to make loyalty more politically valuable than substantive evaluation.

Historical patterns within Tanzania's dominant-party system further contextualize these findings. Although constitutional structures, parliamentary procedures, and judicial frameworks remain operational, political legitimacy is frequently centralized around executive officeholders (van de Walle, 2001; Tambe & Kopacheva, 2024). This coexistence of institutional formalism and symbolic personalisation reflects broader neo-patrimonial tendencies, in which authority is embedded in relational and performative hierarchies rather than solely in impersonal rules (Kitoka, 2024). Respondents acknowledged that personalisation may facilitate policy coherence by aligning administrative actors around a clear focal authority. Nevertheless, when leaders are repeatedly portrayed as indispensable, parliamentary and administrative evaluation may increasingly become framed through loyalty. The findings therefore extend Paget and Walecki (2023) by showing that symbolic personalisation can simultaneously stabilize coordination and recalibrate the boundaries of institutional critique.

Overall, triangulated evidence indicates that political royalty emerges cumulatively rather than through a single directive. Participant observation reveals ritualized enactment; document analysis demonstrates discursive repetition; and interviews clarify both strategic motivations and divergent interpretations. *Uchawa* consequently contributes to the symbolic centralisation of authority by making leadership a focal point of legitimacy, institutional coordination, and political identity, while leaving formal constitutional arrangements substantially intact.

Bureaucratic Internalisation

Within the broader theme of *Singing the King's Song*, the findings demonstrate that *uchawa* extends beyond public rallies, partisan mobilisation, and ceremonial praise into the everyday practices of bureaucracy. Whereas the preceding sections show how praise facilitates political navigation and symbolically elevates leaders, this section demonstrates how such practices become internalized within administrative institutions. Civil servants reported adopting deferential language in official communications to avoid appearing disloyal, suggesting that symbolic praise becomes embedded in routine bureaucratic conduct. Evidence from participant observation, document analysis, and interviews indicates that this in-

ternalization occurs less through explicit directives than through tone, attribution, framing, and anticipatory self-regulation.

Semi-structured interviews with civil servants at ministerial, regional, and district levels revealed a shared perception that official communication requires careful alignment with executive authority. Participants described a tacit expectation that memoranda, policy briefs, and progress reports should acknowledge presidential vision, government directives, or ruling-party priorities. One mid-level bureaucrat explained:

> *"A report can be technically sound, but if it does not reflect the leadership's direction, it may raise questions*" (Interview, Policy Analyst, 2026).

Similarly, a senior official observed:

> *"Critical recommendations are often 'wrapped in affirmations' to signal loyalty before presenting alternative options"* (Interview, Senior Administrator, 2025).

These accounts extend the preceding findings on *uchawa* by demonstrating that the practice is not restricted to visible political performance. Rather, the same logic of loyalty signaling identified in political navigation and symbolic elevation is reproduced within ostensibly professional and technocratic spaces. This finding also qualifies conventional interpretations of bureaucratic conformity that emphasize formal rules or direct political intervention. Participants did not describe overt censorship or written instructions mandating praise. Instead, they described anticipatory self-regulation, captured in the expression "knowing the environment." Thus, *uchawa* appears to operate as an internalized institutional norm through which bureaucratic actors anticipate how their communication may be interpreted.

This finding supports but also extends neo-patrimonial interpretations of political behaviour. In dominant-party settings, where executive authority remains symbolically central, professional advancement may be perceived as connected to demonstrated alignment with leadership priorities (Msigalla, 2024). Yet the evidence suggests that bureaucratic adaptation cannot be reduced simply to patron-client dependence. Officials may reproduce deferential discourse even without direct personal benefits or explicit demands from political superiors. *Uchawa*, therefore, operates through reputational calculation and institutional socialization as much as through material patronage. Deferential language becomes a form of professional risk management.

Document analysis of ministerial reports, parliamentary submissions, strategic plans, and public speeches further substantiates these interview accounts. Across sectors, policy achievements were frequently framed as outcomes of executive guidance rather than solely as products of institutional or bureaucratic effort. Technical documents commonly began with references to presidential leadership or national vision statements before presenting sector-specific evidence. Even where evidence-based evaluation was provided, attribution often emphasized central authority. Implementation reports similarly contained formulaic acknowledgements of leadership commitment, sometimes preceding statistical findings.

These patterns provide important evidence of the institutionalisation of symbolic authority. They extend the argument developed in the preceding section on political royalty by showing that symbolic elevation is not confined to ceremonial spaces; it is reproduced through administrative texts. Repeated attribution can gradually personalize institutional achievement and make executive leadership the dominant interpretive frame through which policy success is communicated. This observation is consistent with Kassimba and Britto (2026), who highlight the significance of symbolic centralisation, but the present findings add a micro-level dimension by showing how centralisation is reproduced through routine bureaucratic writing rather than solely through formal institutional arrangements.

The findings also resonate with Mendelberg (2022) and Rak (2023), who emphasize the symbolic function of political language in structuring perceptions of authority and legitimacy. However, the Tanzanian evidence extends this scholarship by demonstrating that symbolic language operates not merely as public political rhetoric but as an administrative practice. Through repeated references to leadership, bureaucratic discourse can transform political loyalty into an apparently routine feature of professional communication. In this respect, *uchawa* becomes institutionalised without necessarily being formally codified.

Participant observation during administrative meetings, public briefings, and interdepartmental workshops provided further evidence. Officials frequently prefaced technical presentations with acknowledgements of national leadership or references to overarching governmental directives. Such statements were often delivered almost ritualistically before substantive discussion began. Observation also revealed that overt disagreement with policies associated with executive priorities was uncommon.

Instead, concerns were frequently presented as implementation challenges rather than direct critiques of policy direction. This pattern suggests that internalized deference shapes not only written communication but also the boundaries of permissible deliberation.

Such behaviour can be interpreted through institutional isomorphism, whereby organisations adapt to dominant political norms in order to maintain legitimacy (Mendelberg, 2022). However, the findings complicate a purely structural interpretation because conformity appears to be reproduced through individual calculations of professional caution. Bureaucratic actors "sing the king's song" not necessarily because they possess ideological commitment, but because symbolic conformity is understood as a safer professional strategy. The finding therefore bridges institutional and actor-centred explanations of bureaucratic behaviour.

Implications for Policy Deliberation

The internalization of *uchawa* has ambivalent consequences for policy deliberation. On one hand, rhetorical alignment can enhance administrative cohesion by producing consistency in policy messaging. In centralised governance systems, shared framing may reduce institutional friction and facilitate coordinated implementation (Baturo & Elkink, 2024). Public affirmation of executive priorities can signal unity and contribute to administrative predictability, particularly during periods of political uncertainty or institutional transition.

On the other hand, the findings reveal significant epistemic and democratic costs. When officials anticipate that criticism may be interpreted as disloyalty, policy deliberation can shift from substantive evaluation towards symbolic affirmation. Technical scrutiny, alternative interpretations, and evidence-based dissent may consequently be softened or excluded. This challenges the deliberative ideal in which legitimacy is strengthened through open argumentation and reasoned justification (Edelman, 2020; Mendelberg, 2022). The problem is therefore not simply that officials praise leaders, but that repeated loyalty signaling can alter the conditions under which disagreement is expressed.

This finding also extends scholarship on hybrid and competitive authoritarian systems. Levitsky and Way (2010), Bermeo (2016), and Danziger (2021) emphasize institutional constraints, executive dominance, and mechanisms through which political competition may be narrowed. The present evidence adds a less visible mechanism: bureaucratic actors may themselves reproduce political asymmetry through anticipatory linguistic

conformity. Thus, executive centrality can be sustained not only through formal authority or coercive instruments but also through everyday communicative practices.

Overall, bureaucratic internalization represents a quiet but consequential dimension of *uchawa*. It demonstrates that symbolic politics penetrates administrative conduct, drafting practices, and deliberative routines. Loyalty becomes embedded in memoranda, policy briefs, and parliamentary submissions, contributing to a hierarchy of voice in which affirmation may outweigh critique. This finding reinforces the broader argument that symbolic authority can simultaneously integrate political actors and constrain institutional pluralism (Dodworth, 2022; Paget & Walecki, 2023; Msagalla, 2024; Mdukula, 2025). Accordingly, "singing the king's song" extends from public ceremonies into everyday governance: its significance lies less in overt coercion than in the routinization of deference, which may promote administrative unity while quietly narrowing the depth and plurality of policy deliberation.

Media Amplification

Within the broader argument of this article, media amplification emerges as a crucial mechanism through which leader-centric narratives are normalised and reproduced. While *uchawa* is often discussed as a cultural or interpersonal practice of exaggerated praise, findings from participant observation, document analysis, and interviews demonstrate that media institutions both state-affiliated and private play a central role in extending such praise into the public sphere. Through repetitive personalisation of policy achievements, media discourse reinforces executive centrality and contributes to the consolidation of symbolic authority.

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A review of seventeen newspapers, including *The Citizen, Daily News* and *The Guardian*, together with televised news transcripts and online news portals such as *Tanzania Times* and *Guardian Online*, covered the period 2023 – 2026. Across the sample, policy initiatives and development projects were frequently framed around the president rather than the institutions responsible for implementation. Headlines often attributed infrastructural expansion, social service delivery, or diplomatic engagement directly to presidential action, even when projects involved multiple bureaucratic actors. Phrases such as "under the leadership of…" or "the President has delivered…" were common narrative anchors.

This personalisation was evident across transport, education, health, and energy, suggesting a routinised editorial style rather than isolated instances of praise. Even in analytically oriented articles, references to executive vision frequently preceded discussion of technical details. This reflects what Dodworth (2022) and Mdukula (2025) describe as the symbolic construction of political spectacle, where language shapes perceptions of agency and legitimacy, while extending this scholarship by showing that spectacle is also reproduced through ordinary editorial attribution. Repetition of leader-centred attribution therefore contributes to what respondents described as "political royalty," embedding the leader as the primary driver of national progress.

Notably, critical or investigative pieces were less likely to attribute systemic shortcomings directly to executive leadership. Instead, responsibility was often diffused toward local administrators or technical agencies. This asymmetry between centralized credit and decentralized blame reinforces executive prominence while shielding the symbolic core of authority.

Interviews with journalists, editors, and media analysts provide further insight into the dynamics underlying this amplification. Several respondents acknowledged structural and professional pressures influencing editorial decisions. One journalist observed that:

> *"Stories highlighting presidential initiatives attract more visibility and are considered safer editorial choices"* (Interview, Senior Reporter, 2024).

Another editor noted that:

> *"Aligning coverage with national leadership narratives is often perceived as consistent with promoting unity and stability"* (Interview, Newspaper Editor, 2026).

Importantly, media practitioners did not uniformly characterize this pattern as coercive. Rather, they described it as embedded within professional routines and audience expectations. In dominant-party contexts, the presidency often symbolizes the state, making leader-focused reporting appear synonymous with national reporting (Paget & Walecki, 2023). The findings therefore challenge explanations centred primarily on direct political control, indicating that normative alignment and market incentives can reproduce leader-centred narratives.

Interviews with civil society actors further suggested that repetitive praise narrows discursive space. Respondents indicated that alternative interpretations of policy outcomes struggle to gain equal prominence. As one media analyst explained:

> *"When every achievement is personalised, it becomes difficult to discuss institutional performance independently"* (Interview, Media Researcher, 2026).

This observation aligns with the broader theme of *uchawa* as a communicative environment where symbolic loyalty shapes narrative boundaries.

Participant observation in press briefings, political rallies, and newsroom discussions provided contextual depth. During press conferences, official spokespersons frequently framed updates within narratives of executive initiative. Journalists' follow-up questions often mirrored this framing, reinforcing personalisation. In newsroom settings, observed editorial meetings revealed prioritization of stories connected to presidential appearances or directives, particularly when accompanied by visual symbolism.

At political rallies covered by national broadcasters, live commentary emphasized the leader's presence and audience adulation, sometimes overshadowing substantive policy discussion. The performative dimension of coverage, focusing on applause, repetition of slogans, and highlighting honorific titles, illustrates how media practices can transform political communication into symbolic spectacle. These observations add an institutional dimension: amplification occurs through selection, framing, and visual emphasis, not merely overt praise.

Media Amplification and the Logic of *Uchawa*

Media amplification and the logic of *uchawa* function as mutually reinforcing processes in contemporary political communication. In contexts

where media systems are pervasive, repetitive leader-centred narratives do more than inform; they transform political figures into symbolic anchors of collective meaning, shaping perceptions of legitimacy and indispensability (Angulo Moncayo et al., 2025). Research on digital political communication highlights personalisation and emotional appeal as strategies through which executives frame their actions as central to national progress, extending beyond policy to embodied symbolic authority (Angulo Moncayo et al., 2025; Decker & Krämer, 2025).

In hybrid media environments combining legacy broadcasting with algorithmically mediated platforms, incumbent leaders often emphasise affirmative, personalised discourse that solidifies their symbolic position in public consciousness (Raihan, 2025). Likewise, studies of political narrative construction indicate that repetitive circulation of symbolic imagery and emotionally charged storytelling enhances leadership visibility and resonance, consolidating authority through mediated repetition (Devia Acevedo, 2023; Angulo Moncayo et al., 2025). The present findings extend these insights to Tanzania by linking mediated repetition explicitly to *uchawa* as an informal political practice.

However, this amplification also reflects structural factors. In dominant-party systems like Tanzania's, the historical intertwining of state identity with executive institutions may predispose public discourse to valorize central figures as foundational to development narratives. While personalisation can foster social cohesion and shared purpose, it also risks narrowing critical pluralism by overshadowing institutional accountability with leader-centric symbolism (Angulo Moncayo et al., 2025; Decker & Krämer, 2025). Thus, media amplification operates as a central conduit through which *uchawa* moves from interpersonal flattery to systemic discourse, normalizing leader-centred narratives through headlines, broadcasts, and symbolic imagery that repeatedly link executive agency to national destiny.

Consequences for Governance

Within Singing the King's Song? Re-examining *Uchawa* in Tanzanian Politics, the consolidation of leader-centric praise is not treated merely as a cultural artefact but as a governance dynamic with tangible institutional consequences. Drawing on participant observation, document analysis, and in-depth interviews, this article finds that uchawa operates through loyalty signaling, leader-centred praise, bureaucratic deference, and media amplification, reshaping deliberation, career incentives, innovation, and perceptions of institutional authority. At the same time, some respon-

dents emphasise its integrative potential, arguing that visible unity reinforces political stability.

Reduced Deliberative Debate

Evidence from participant observation in parliamentary sessions and public forums indicates that deliberative debate is often framed within boundaries of symbolic loyalty. Discussions rarely directly challenge executive direction; instead, disagreements than as critiques of policy design. In several observed settings, participants prefaced remarks with affirmations of leadership before raising concerns, signalling alignment before deliberation.

Interviews with civil servants and legislators reinforce this pattern. Respondents described an environment in which overt disagreement with executive-linked initiatives may be interpreted as disloyalty. One interviewee noted that:

> *"Debate exists, but it is cautious and carefully worded"* (Interview, Former Member of Parliament, 2026*).*

Such findings align with Edelman (2020)'s argument that symbolic political language structures the limits of acceptable discourse. While formal institutions remain intact, the discursive space for robust critique may narrow under sustained praise practices.

Document analysis of parliamentary records and policy reports further supports this observation. Speeches frequently include extended commendations of leadership achievements before substantive discussion, reinforcing personalisation. This rhetorical structure may indirectly discourage adversarial debate by embedding critique within praise.

Meritocracy and Loyalty-Based Advancement

Interview data suggest that perceptions of career advancement are influenced by visible demonstrations of loyalty. Several mid-level administrators indicated that alignment with executive priorities is viewed as advantageous for promotion. Although formal civil service procedures emphasise merit, informal reputational dynamics appear to shape advancement opportunities.

Document analysis of appointment announcements and official biographies often highlights loyalty, dedication, and commitment to leadership vision as defining attributes. While professional qualifications are also noted, the prominence of loyalty language suggests its symbolic value

within governance structures. In dominant-party systems, patronage networks and relational authority can intersect with bureaucratic processes, influencing career trajectories (Mendelberg, 2022).
Participant observation in administrative workshops further revealed subtle peer signalling: officials who publicly aligned themselves with executive narratives were often positively acknowledged. Over time, such patterns may weaken perceptions of meritocracy, even if formal criteria remain unchanged.

Citizen Perceptions and Institutional Distance
Interviews with civil society actors and local stakeholders indicate that citizens increasingly interpret development outcomes through the lens of individual leadership rather than institutional capacity. Document analysis of media narratives supports this trend, as achievements are frequently personalised. While such personalisation can strengthen leader legitimacy, it may simultaneously create a perceived gap between institutions and individuals. Citizens may attribute successes to a single figure while associating institutional shortcomings with bureaucratic inefficiency. This perception dynamic reflects Danziger's (2021) observation that Tanzania's nation-building history has intertwined state identity with centralised authority. However, sustained personalisation may complicate long-term institutionalisation by overshadowing collective governance mechanisms.

Stability and Cohesion: A Countervailing View
Despite concerns about personalization and constrained pluralism, participants argued that visible unity expressed through praise and coordinated messaging, can foster social cohesion and political stability. Senior officials in interviews frequently suggested that when political elites and state media articulate a consistent narrative of collective purpose, it reduces informational fragmentation and diminishes the uncertainty that often accompanies rapid social change (Decker & Krämer, 2025; Frontiers in Political Science, 2026). Participant observation at public ceremonies revealed that collective affirmations of leadership, whether in speeches, ritualised applause, or symbolic imagery, provide audiences with coherent frames for interpreting national challenges. Scholars of political communication emphasise that in contexts of economic or political volatility, stable narratives and shared symbols serve cognitive and emotional functions, helping citizens make sense of complexity and reinforcing trust in institutional direction (Devia Acevedo, 2023; Angulo Moncayo et al., 2025).

From this vantage point, the symbolic dimension of *uchawa* is not merely an artefact of media repetition but a functional narrative resource that can integrate diverse constituencies around common referents. Classic work on symbolic politics shows that shared representations of authority, including rituals, metaphors, and leader-anchored stories, can generate durable psychological commitments that transcend specific policy disagreements (Edelman, 1988; Pfau et al., 2021). More recent research further argues that in hybrid media environments, coordinated symbolic narratives can reduce affective polarisation by offering inclusive frames that resonate across social groups, particularly when anchored in themes of national unity and collective progress (Pfau et al., 2021). In this way, the repetition of affirming discourse, while it may personalise politics, also contributes to a sense of normative stability and continuity that many interviewees considered essential for sustaining public confidence during periods of uncertainty. highlight limitations and future research directions more explicitly.

CONCLUSION

This study demonstrates that *uchawa* in Tanzanian political practice is neither a trivial cultural expression nor merely spontaneous flattery; rather, it is a structured political practice through which informal incentives intersect with formal institutional administration. The study advances understanding of formal and informal institutions by showing that such practices do not simply operate alongside formal institutions but can shape how institutional authority is interpreted, exercised, and reproduced. Across media discourse, bureaucratic communication, political rallies, and administrative deliberations, praise functions as political currency which finally signals loyalty and reputation. Thus, informal political behaviour can affect institutional processes without requiring formal changes to institutional setting.

The findings further reveal that *uchawa* contributes to the personalisation of administration by concentrating symbolic recognition around executive leadership. Repeated leader-centred narratives can re-attribute institutional achievements to individual agency which in turm appear as strengthening perceptions of indispensable leadership. The internalization of deferential language and loyalty signaling also creates reputational incentives that influence how officials communicate, evaluate policy choices, and navigate political relationships. Consequently, formally autonomous institutions may retain their legal authority while experiencing

subtle informal pressures that narrow deliberative space and privilege political alignment over independent expertise. *Uchawa* therefore operates as a mechanism linking symbolic performance to institutional behaviour, reproducing power relations from within existing institutional structures.

Nevertheless, the study's qualitative and interpretive design limits statistical generalisation, as the evidence was drawn from selected political, bureaucratic, media, and civil society settings. Social desirability may also have shaped participants' accounts, particularly where discussions of loyalty and executive authority were sensitive. Furthermore, the study was temporally bounded around the 2020 and 2025 electoral periods, while limited access to highly sensitive institutional spaces constrained direct observation of elite deliberations. These limitations indicate the need for cautious interpretation of the findings.

Future research could address these limitations through mixed-method and survey designs capable of examining the prevalence of *uchawa* across regions and institutions. Comparative research could investigate similar practices in other dominant-party or hybrid political systems, while longitudinal studies could examine how *uchawa* changes across leadership transitions. Further research should also explore citizen interpretations and resistance, as well as employ digital ethnography and computational text analysis to examine the circulation, amplification, and contestation of *uchawa* across contemporary digital platforms

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Reinforcing Accountability at the Interpersonal Level in Healthcare Delivery Settings: A Case of Mwananyamala Hospital, Tanzania

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Abstract
Accountability in public healthcare involves more than whether practitioners comply with professional standards; it also depends on the organisational and interpersonal mechanisms through which concerns are raised, considered and acted upon. This study examined communication behaviour, interpersonal trust and accountability practices at Mwananyamala Hospital, Tanzania. A mixed-methods design combined a structured survey of 120 patients with semi-structured interviews with 10 healthcare providers and six focus group discussions, each involving eight participants in the HIV care and treatment context. The survey assessed 30 communication-related items using a seven-point scale, while the qualitative component explored practitioners' experiences and institutional conditions affecting communication and accountability. The reported association between communication behaviour and interpersonal trust was positive but weak (r = .15, 95% CI [-.03, .32], p = .102), and therefore does not support a claim that communication predicts trust in this sample. Descriptively, the highest-rated communication domain was practitioners' demonstration of care (87.6%), while use of visual aids had the lowest percentage score (65.7%). Qualitative findings highlighted patient feedback, complaint handling, teamwork, psychological safety and institutional support as relevant accountability mechanisms. The study therefore treats interpersonal trust as a relational outcome associated with communication rather than as a proxy measure of accountability. The findings suggest that strengthening accountability at the interpersonal level requires responsive communication and responsibility in provider-patient encounters, supported by institutional arrangements that enable feedback, learning and response to concerns.

Keywords: *Accountability; Interpersonal accountability; Communication behaviour; Public health; Interpersonal trust; Patient feedback*

INTRODUCTION

Accountability is a central requirement of safe and responsive healthcare because it establishes expectations for professional conduct, provides mechanisms for reviewing performance, and creates opportunities to address failures. In healthcare, however, accountability is not a single attribute of an individual practitioner. It operates through relationships among practitioners, patients, managers, professional bodies and regulatory institutions. Brinkerhoff (2004) consequently treats accountability as involving answerability and the possibility of consequences, while Emanuel and Emanuel (1996) locate it within the wider organisation of responsibilities in health care. At the interpersonal level, this is reflected in everyday interactions where practitioners explain, listen and respond to concerns.

Communication is particularly relevant because many aspects of clinical practice are not directly observable to patients. Patients can, however, observe whether practitioners listen, explain treatment, protect confidentiality, invite questions and respond respectfully. These behaviours may shape patients' perceptions of reliability and trustworthiness, even though they do not by themselves establish whether a practitioner has complied with clinical, legal or organisational standards. Research on doctor-patient communication similarly shows that communication can influence trust, satisfaction and treatment-related behaviour (Ha & Longnecker, 2010; Street et al., 2009).

This distinction is important for the present study. Interpersonal trust is treated here as a relational outcome that may be associated with communication behaviour, not as a validated proxy for accountability. Accountability is examined more broadly through observable communication practices, patient feedback and complaint mechanisms, professional responsibility, teamwork, institutional support and regulatory arrangements. This approach responds to the multidimensional character of healthcare accountability and avoids treating trust, communication and accountability as interchangeable constructs, while recognising interpersonal interaction as an important arena in which accountability is experienced.

The study focuses on Mwananyamala Hospital, a public health facility operating within the pressures associated with high service demand, constrained resources and a diverse patient population. The case provides an opportunity to examine how communication is experienced by patients and practitioners and how institutional arrangements can reinforce or con-

strain accountable practice. The study sought to examine (i) communication behaviours observed by patients; (ii) the relationship between communication behaviour and interpersonal trust; (iii) practitioners' experiences of communication challenges; and (iv) mechanisms through which interpersonal interaction, feedback, teamwork and institutional arrangements may reinforce accountability.

THEORETICAL FRAMEWORK AND PREVIOUS STUDIES

Accountability in medical settings has ethical, legal, professional and institutional dimensions. Ethical approaches emphasise duties and professional obligations, while consequentialist perspectives focus on the effects of decisions on patient welfare (Rowe & Calnan, 2006; Molyneux et al., 2012). Legal and regulatory arrangements establish minimum standards and provide procedures for responding to failures (Leinster, 2011). At the organisational level, accountability is reinforced through quality-improvement systems, reporting arrangements, teamwork and professional oversight (Preston et al., 2016), which provide the setting for interpersonal accountability.

Patient-centred approaches add a relational dimension. Shared decision-making, informed consent and respectful communication can create conditions in which patients participate more actively in care (Rathert & Rathert, 2021). Communication therefore occupies an important position within the conceptual model used in this study: communication behaviours are observable practices; interpersonal trust is a relational perception that may arise partly from those practices; and accountability encompasses the broader mechanisms through which practitioners and institutions answer for their actions. These elements become particularly visible during direct healthcare encounters.

Previous research supports an association between communication and trust but does not justify equating the constructs. Ha and Longnecker (2010) review evidence linking doctor-patient communication with trust, while Dawson-Rose et al. (2016) emphasise trust and relationship-building in HIV care. O'Daniel and Rosenstein (2008) further show that communication within healthcare teams is relevant to patient safety. The present study extends this literature by considering communication alongside feedback and institutional mechanisms within a Tanzanian public-hospital setting, with attention to interpersonal accountability in healthcare delivery.

Patient participation is also relevant to accountability. Rathert et al. (2012) show how consumer perspectives can inform patient-safety improvement, while Edmondson (1999) demonstrates the importance of psychological safety for learning and speaking up in organisations. These perspectives suggest that accountability is strengthened where patients can communicate concerns and practitioners can raise problems without fear of inappropriate retaliation. The conceptual relationship is therefore not linear: communication may contribute to trust; feedback may inform corrective action; and interpersonal responses, organisational culture and regulation shape whether accountability can be sustained.

METHODS

Study design and setting

The study used a mixed-methods case-study design. Quantitative data were obtained through a structured questionnaire administered to 120 patients at Mwananyamala Hospital. Qualitative data comprised semi-structured interviews with 10 healthcare providers and six focus group discussions, each with eight participants, conducted in the HIV care and treatment context. Institutional information on feedback and accountability arrangements was also considered in interpreting the findings. The combination was intended to place measured patterns alongside participants' explanations of communication and organisational conditions, including everyday interactions relevant to accountability.

Participants and sampling

The quantitative component comprised 120 completed patient questionnaires. The source manuscript describes the survey approach as stratified sampling, but it does not preserve the stratum-specific allocation or the number of eligible patients approached. The response rate therefore cannot be calculated from the reported study records and is not presented as a numerical percentage. The qualitative component comprised 10 healthcare-provider interviews and 48 participants in six focus groups. The earlier manuscript's reference to 20 key informants was inconsistent with the methods actually reported; it has been removed rather than treating the unsupported figure as a separate participant group.

Instruments and measures

The questionnaire contained 30 items addressing communication behaviour and related perceptions. Responses were recorded on a seven-point Likert-type scale, with 1 representing inappropriate behaviour and 7 representing appropriate behaviour. The reported percentage scores describe

the distribution of responses for individual communication domains, while mean scores indicate the average rating on the seven-point scale. Interpersonal trust was examined as a separate relational construct and was not treated as a direct measure of interpersonal accountability. The available manuscript reports a Pearson correlation coefficient between the communication-behaviour and interpersonal-trust measures, but it does not provide item-level reliability coefficients or the original scale-development information. Accordingly, no claim of validated psychometric status is made in this revised manuscript.

Qualitative data and analysis

Semi-structured interviews explored providers' experiences of accountability, communication difficulties and institutional support. Focus groups addressed accountability in HIV care and treatment, where confidentiality, stigma, chronicity and sustained provider-patient relationships are particularly relevant. The original study records describe transcription and coding followed by thematic analysis. In the revised analysis, qualitative evidence is used to explain and contextualise the quantitative patterns rather than to establish causal relationships, including interactions relevant to interpersonal accountability.

Quantitative analysis and integration

Descriptive statistics were used to summarise communication items. Pearson's correlation was used to examine the association between the communication-behaviour and interpersonal-trust measures. The previously reported table contained an internally inconsistent confidence interval and an unsupported significance notation. Recalculation from the reported $r = .15$ and $N = 120$ gives a two-tailed p-value of .102 and an approximate 95% confidence interval of -.03 to .32. The association is therefore described as weak and not statistically significant. No regression or predictive model is claimed because the manuscript does not contain the model specification or the underlying dataset required to support such an analysis.

Qualitative and quantitative findings were integrated at the interpretation stage. Survey patterns identified areas of relatively stronger and weaker communication, while interview and focus-group accounts were used to identify organisational and interpersonal circumstances that may help explain those patterns. The integration is therefore complementary rather than a claim that one strand statistically validates the other.

Ethical considerations

The supplied study manuscript does not report an ethics-approval number, approving committee or formal clearance reference. To avoid inventing information, this revision does not state an approval number that cannot be verified from the study record. The manuscript should be accompanied at submission by the applicable institutional ethical-clearance information if it is available in the authors' research records. Participant quotations are presented without names or other direct identifiers.

RESULTS

Communication behaviour and interpersonal trust

The descriptive results indicate generally favourable patient ratings across several communication behaviours. Demonstrating care recorded the highest reported percentage score (87.6%; mean = 5.76/7). Confidentiality and concern for patient comfort recorded 82.6%, with mean scores of 5.46 and 5.45, respectively. Clear prescription was rated at 77.6%, with a mean of 5.61. These figures describe patient perceptions of communication behaviour; they do not by themselves establish practitioner accountability or clinical effectiveness, but they indicate the interpersonal conditions through which care is experienced.

The association between the communication-behaviour measure and interpersonal trust was weak and positive (r = .15, 95% CI [-.03, .32], p = .102, N = 120). The estimate does not provide sufficient evidence of a statistically significant relationship in this sample. It is therefore more appropriate to interpret communication as one possible contributor to interpersonal trust than as a predictor of trust or as a measure of accountability. Nevertheless, communication is one practical avenue through which interpersonal accountability is expressed.

Table 1:
Pearson correlation between communication behaviour and interpersonal trust

Measure	N	r	95% CI	p-value
Communication behaviour ↔ interpersonal trust	120	.15	−.03 to .32	.102

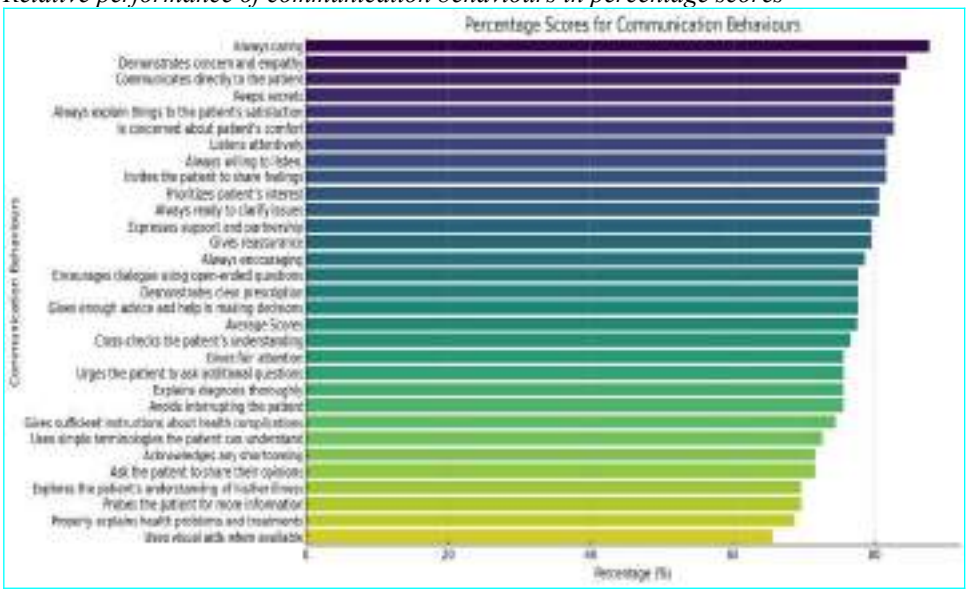
The recalculated result differs materially from the earlier presentation, which reported an implausible confidence interval [.13, .14] and a significance marker. The corrected statistics show why the present study should not use the language of prediction or statistical significance. The finding is nevertheless substantively relevant because it is consistent with the pos-

sibility that communication contributes to patients' perceptions of trust, while leaving room for other determinants such as clinical experience, organisational reliability and previous encounters with the health system.

Relative performance of communication behaviours

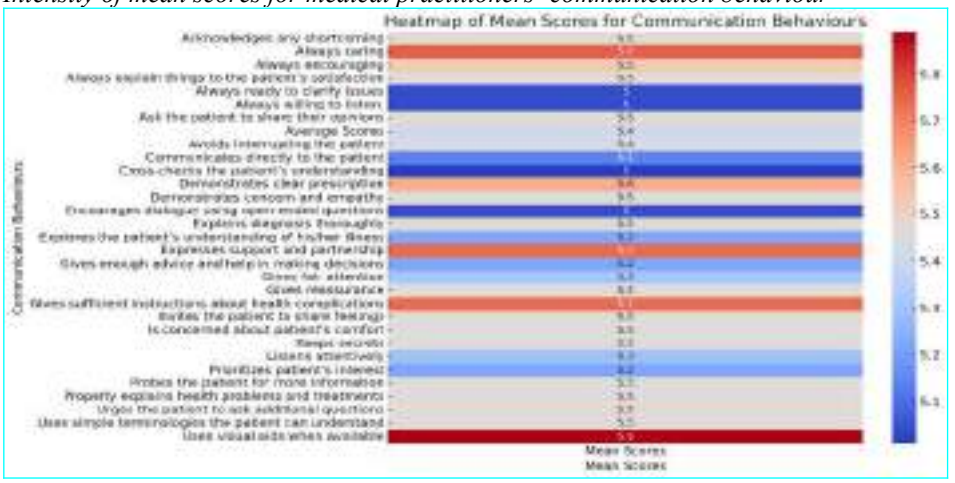
Among the reported communication behaviours, demonstrating care, direct communication, confidentiality and attention to patient comfort were relatively highly rated. Use of visual aids recorded the lowest percentage score (65.7%), although its reported mean was 5.89. This difference indicates that frequency and perceived quality were not necessarily aligned and may reflect differences in availability or routine use. Explaining health problems and treatment also recorded a relatively lower percentage score (68.7%), suggesting an area where communication could be strengthened.

Figure 1:
Relative performance of communication behaviours in percentage scores



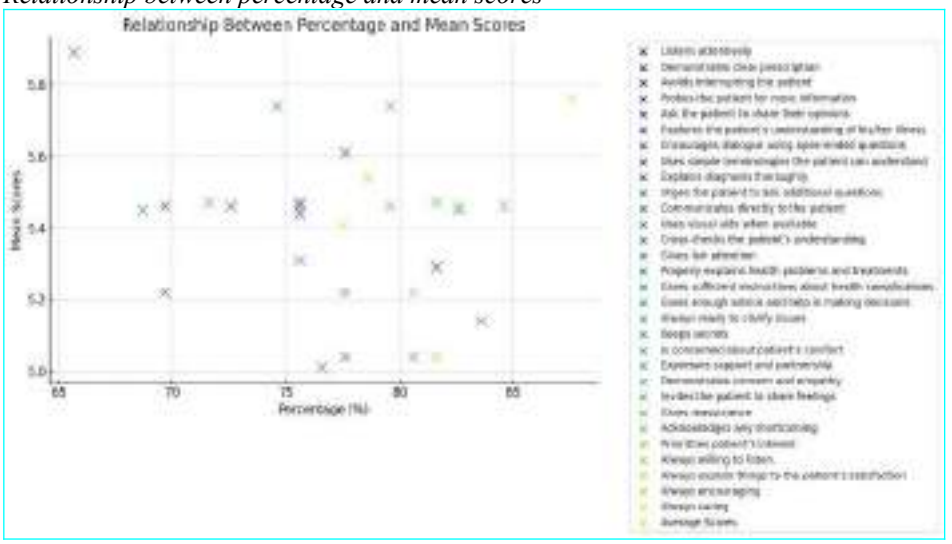
The figure summarises the percentage scores reported for the 30 communication elements.

Figure 2:
Intensity of mean scores for medical practitioners' communication behaviour



The figure displays the reported mean scores across communication behaviours.

Figure 3:
Relationship between percentage and mean scores



The figure illustrates the relationship between reported percentage and mean scores; it is descriptive and should not be interpreted as a causal plot.

Qualitative findings on communication and accountability

Provider accounts showed that communication was affected by the emotional demands of clinical work, particularly in interactions perceived as

difficult or highly stressful. Less experienced practitioners described greater difficulty managing challenging encounters. One provider stated that negative responses were more likely among staff who were not sufficiently firm or experienced to manage such situations. Another participant described differences in patient engagement, noting that some patients asked questions confidently while others were frustrated or reluctant to participate. Such encounters show that interpersonal accountability involves both provider responses and patient participation.

The interviews also highlighted patient vulnerability. Participants reported that some patients withheld information because of fear, embarrassment or concern about possible consequences. This finding should not be interpreted as evidence that mental illness caused problematic behaviour. The available qualitative material supports a more cautious interpretation: fear, vulnerability, frustration and difficult circumstances could affect communication, while practitioners' responses could either reduce or intensify communication barriers.

These accounts point to a reciprocal dimension of communication. Practitioners operate within institutional conditions that may include workload pressures and limited support, while patients may approach care with concerns that make disclosure difficult. Accountability consequently depends not only on individual communication skills but also on interpersonal responses and institutional mechanisms for de-escalation, supervision, teamwork and learning.

Patient feedback and complaint handling

The qualitative and documentary evidence identifies patient feedback as an important mechanism through which service users can communicate concerns. At the Mwananyamala CTC clinic, the study reports the availability of a complaint logbook and the discussion of complaints during staff briefings. Waiting time was among the concerns reported in the logbook. Such mechanisms can connect patient experience with organisational review and provide information for corrective action, while giving patients an avenue for raising concerns.

The original manuscript reported that 78% of practitioners affirmed that feedback improved service delivery. Because the supplied manuscript does not include the underlying frequency table from which this percentage was calculated, the figure is not presented as independently verified in the revised results. Instead, the qualitative evidence is used to demon-

strate the presence and perceived usefulness of feedback mechanisms. This distinction avoids presenting a descriptive percentage as evidence of demonstrated effectiveness.

Institutional mechanisms

The findings also point to institutional conditions that shape practitioner accountability. Teamwork across professional roles was described in the CTC setting, including collaboration between psychologists and physicians. Such collaboration may help practitioners understand patient concerns and adapt communication to individual circumstances. Organisational culture is similarly relevant: psychological safety can make it easier for staff to raise concerns, ask for assistance and learn from mistakes (Edmondson, 1999), thereby supporting interpersonal accountability.

Regulatory and professional frameworks provide another layer of accountability by establishing standards and procedures. The study references Tanzanian policies and guidelines on HIV and AIDS, psychosocial support and related areas (Ministry of Health, 2017; Ministry of Health, Community Development, Gender, Elderly and Children, 2021; Ministry of Health and Social Welfare, 2001, 2008, 2015). These arrangements form part of the institutional environment within which practitioner-level accountability is exercised.

DISCUSSION

The findings support a distinction between communication, trust and accountability. Patients reported relatively favourable experiences of several communication behaviours, and the statistical association between communication behaviour and interpersonal trust was positive but weak and not statistically significant. This result is more appropriately read as descriptive evidence of a possible relationship than as evidence that communication predicts trust. It also reinforces the conceptual point that trust cannot stand in for accountability: a patient may trust a practitioner while an organisational accountability mechanism remains weak, just as a formal accountability system may exist even where interpersonal trust is limited. Interpersonal communication nevertheless remains an important arena for accountable practice.

The qualitative findings help explain why communication should be situated within institutional conditions. Practitioners described difficult encounters, vulnerability and the need for support, while the case evidence highlighted complaint handling, teamwork and regulatory standards. This

is consistent with the broader literature, which treats accountability as a system of answerability rather than a property of individual behaviour alone (Brinkerhoff, 2004; Emanuel & Emanuel, 1996). Interpersonal accountability links this broader system to actual healthcare encounters.

Patient feedback appears particularly relevant because it creates an avenue through which service users can make experiences visible to the institution. The value of such systems lies not simply in collecting complaints but in reviewing patterns, responding to concerns and documenting corrective action. In this sense, feedback can reinforce accountability without being treated as proof that service quality has improved. The distinction is important: the present study documents feedback mechanisms and participants' perceptions of their usefulness, but it does not provide longitudinal outcome data that would permit a causal assessment of their effects.

The findings concerning practitioners' experiences also caution against locating communication problems exclusively in patients or practitioners. Stressful encounters may affect providers' communication, while fear or vulnerability may limit patients' willingness to disclose information. Effective accountability therefore requires organisational support for de-escalation, supervision, teamwork and safe reporting. Such measures are compatible with the patient-safety literature on communication and learning cultures (O'Daniel & Rosenstein, 2008; Edmondson, 1999).

LIMITATIONS

This is a single-facility case study, and the findings should not be generalised statistically to all public health facilities in Tanzania. The quantitative analysis is based on 120 respondents and a reported correlation rather than a multivariable model; consequently, causal and predictive interpretations are not warranted. The qualitative findings provide contextual explanation but should likewise be understood as case-based evidence rather than nationally representative estimates.

CONCLUSION AND RECOMMENDATIONS

The Mwananyamala case indicates that communication is an important part of accountable healthcare practice, but it should not be treated as synonymous with accountability or as a sufficient explanation of interpersonal trust. The survey evidence shows generally favourable ratings for several communication behaviours, while the corrected correlation analysis indicates only a weak, non-significant association between communi-

cation behaviour and interpersonal trust. The qualitative evidence adds that feedback, teamwork, psychological safety and institutional support are relevant to the conditions under which accountable communication can occur. These findings place interpersonal interaction at the centre of how accountability is experienced in routine care.

Four practical areas emerge from the case. First, hospitals can strengthen routine patient-feedback mechanisms by ensuring that complaints are recorded, reviewed and linked to documented responses. Second, communication and de-escalation skills can be incorporated into continuing professional development, with particular attention to staff who are new to demanding clinical environments. Third, facilities can strengthen multidisciplinary support and opportunities for staff to discuss difficult encounters and service-quality concerns. Fourth, whistleblowing and complaint systems should provide clear procedures for reporting and follow-up, together with safeguards against inappropriate retaliation. Across these areas, practitioners should be encouraged to respond to concerns respectfully at the point of interaction. These recommendations are propositions arising from the case rather than claims that the interventions have been causally demonstrated to work nationally.

Future research should test the relationship between communication, trust and accountability using validated scales, larger multi-facility samples and multivariable models. Longitudinal designs would also be useful for assessing whether improvements in feedback systems or communication training are followed by measurable changes in patient experience, complaints, adherence or other service-quality outcomes, including outcomes associated with interpersonal accountability.

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The Moderating Role of SME Owner Age in the Relationship between Technological Compatibility and SME Performance in Tanzania

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Abstract
This quantitative study aimed to determine the moderating influence of SME owner age on the relationship between technological compatibility and SME performance in Tanzania covering Dar es Salaam, Dodoma, Arusha, Mwanza, and Zanzibar regions. An explanatory research design was used, and systematic random sampling was employed to select the sample. The researcher collected primary data by using questionnaires through a survey strategy. A sample of 204 respondents was used for primary data analysis, using the structural equation modeling (CB-SEM) technique through AMOS version 23. Results indicated a positive effect of technological compatibility on SME performance ($\beta = 0.30$, $p < 0.05$), confirming that technological compatibility positively influences SME performance and, thus, is considered an important factor in SME performance in terms of technological adoption and usage. Furthermore, the findings of an indirect relationship, suggesting that the link between technological compatibility and SME performance is moderated by SME owner age ($\beta = 0.97$, $p < 0.05$), indicating that the effect of compatibility on performance differs across SME owner age groups. This study made a significant contribution by expanding innovation adoption research through the assessment SME owner age as a moderating variable, improving the explanatory power of the model of technological compatibility and SME performance. Practically, SMEs should consider the SME demographic profiles in addition to technological compatibility when implementing existing and new technologies resulting to improve sales growth, service delivery, customer satisfaction and ultimately enhance overall SME performance.

Keywords: *SME performance, Technological compatibility, Innovation Diffusion Theory, Demographic factors.*

INTRODUCTION

Small and medium-sized enterprises are a crucial source of economic development, job creation, and enhancement of innovation worldwide. Small and medium-sized enterprises (SME) performance is determined by the implementation of managerial strategies and new technological innovations. Rogers (2003), in his theory of Diffusion of Innovation (DOI), stated that compatibility is one of the factors that significantly affect the adoption of innovations, leading to SME performance. Compatibility ensures that innovation line with business culture, procedures, and the market environment. Empirical research on innovation adoption in African business shows that the adoption of technology greatly boosts competitiveness and SME performance when the technology is thought to be compatible and simple to integrate (Momanyi *et al.,* 2025). Bautista and Lin (2021) defined compatibility as the degree to which technological innovation is consistent with prior experiences, needs, and potential adopters' values. Thus, DOI provides a framework to explain the link between technological compatibility and SME performance.

Currently, SMEs struggle to enhance and maintain performance amid rapid technological change and a competitive market environment, driven by customer switching expectations, rapid digitalisation, and the expansion of rivalry (Purnomo, 2023). Hence, compatibility of technology, particularly e-marketing, drives sustainable SMEs' competitiveness and viability. In additions, the market environment should emphasise the efficient use of technology, focusing on robust infrastructure and current operational procedures (Soelaiman *et al.,* 2023). Dimoso and Utonga (2024) indicated that SME financial performance, and overall competitiveness are strongly related to technological compatibility. Specifically, SME performance can be improved through the successful implementation of various technological innovations. In line with this, SMEs should rely on compatible technology tailored to their organisational context and infrastructure (Purnomo, 2023). Moreover, high compatibility of technological adoption reduces firms' uncertainty and the cost of learning. Thus, increase efficiency, customer involvement, and market response contribute to SME performance (Duan et al., 2024). Hence, the compatibility factor is important in technology adoption, enhancing SME performance.

Despite the fact that the literature has shown that several studies on technological adoption have been conducted in the field of SMEs, there is

scarce information on how technological compatibility relates to SME performance in developing countries, particularly in Tanzania's environment (Alsuwaidi & Alshurideh, 2024; Msuya *et al.,* 2017). However, the present study sought to expand the literature by assessing the effect of technology compatibility on SME performance, examining both direct and indirect relationship. There is still a remaining gap in the available literature, as most previous studies have mainly investigated the direct relationship between age and technology adoption, while other past studies have assessed SME owner age and SME performance, with limited studies on the integration of innovation adoption practices such as technological compatibility, demographic variables, and SME performance. There is also empirical evidence that suggests age contributes to the extent to which technological compatibility influences firm performance (Dimoso and Utonga, 2024).

According to Amiri et al. (2024), age can be an important factor in strengthening the adoption and usage of new technology, leading to the improvement of firm performance. Although previous studies have established the positive influence of technological compatibility on organizational performance, little empirical evidence explains whether this relationship differs across SME owner demographic characteristics in developing economies. Age characteristics may alter SME owners willingness to interact with digital technologies, thereby affecting the returns that SMEs could gain from technology adoption. This unresolved issue provides the rationale for conducting the present study.

The study conducted by Olubiyi (2022) has shown a positive relationship between technological compatibility and SME performance in developing countries, but the study did not consider the moderating role of demographic characteristics such as age in the analysis, which could moderate such a relationship. Therefore, this provided a solid ground for the present research to test the relationship between technological compatibility and SME performance through the moderating role of SME owner age.

The current study focused on supermarkets located in different regions of Tanzania which dealing with retail business managed by owners of different demographic profiles. Supermarkets are a suitable context in assessing the technological compatibility and SME performance relationship since they greatly depend on technologies in their day-to-day operations, including transactions, customer service, inventory

management, and supplier management (Levy *et al.,* 2019), affirming that technological compatibility is a significant factor in business success. The supermarkets can also be assessed utilizing both financial and non-financial indicators. Hence, the present study aimed at examining the relationship between technological compatibility and SME performance under the moderating role of SME owner age based on limited literature, especially in developing countries. Thus, the study contributed to the body of knowledge of existing Tanzania SME literature by introducing the role of SME Owner age in moderating the link between technological compatibility and SME performance. Practically, the compatibility of technology in Tanzania SME is geared to improve operational efficiency, organizational performance, and service quality, and thereby increase the growth of SME and Tanzania nation economy as well.

LITERATURE REVIEW

Technological Compatibility and SME Performance

The theory of diffusion of innovation regarded compatibility as one of the variables that is very different from the others, as it focuses on the psychological and social fit of an innovation rather than only practical performance (Rogers, 2003). Based on the perspective of Diffusion of Innovations (DOI) theory, technological compatibility decreases the disruption related in adopting an innovation and promotes its use and acceptance. In the case of technological solutions that suit existing operations, SMEs can implement them more effectively, which can enhance service delivery, operational efficiency, and productivity, as a result of improved business performance (Rogers, 2003). Recent research has also started to assess compatibility more directly in association with SME performance; for example, a recent study of Huang and Liu (2024) indicated a significant positive relationship between technological compatibility and SME performance.

The study sought to determine the impact of digital content service fit with internal systems and customer interfaces on efficiency under regulatory constraints. The study is based on a quantitative analysis methodology to obtain the results. The study findings suggested that technological compatibility is positively associated with business performance. The findings were similar to the results of Smith et al. (2018). Both studies by Huang and Liu (2024) and Smith et al. (2018) examined technological compatibility and firm performance but differed in their sector focus. Huang and Liu (2024) studied employees of gas companies, while Smith et al. (2018) focused on the energy sector; however,

differences in organisational culture between the two companies limit validation of the findings.

Nevertheless, in South Korea, Nguyen and Tran (2018) argued that technological compatibility in its own right is not a predictor of firm performance effectively, so the study stressed considering user readiness and organisational support to benefit from technological adoption. Generally, the study's findings imply that technological compatibility relates to business performance, which could be adopted temporarily unless additional factors are introduced. However, the study focused on developed countries, while the present study was conducted in a developing country context and considers additional variables in the relationship to extend the literature.

Furthermore, the study by Mairura *et al.* (2016) in Nairobi, Kenya, examined the adoption of new technology by micro and small businesses and its relationship with financial performance. A questionnaire was used to collect data from 129 car mechanics working in an urban business environment. The data were analysed using the regression analysis technique. The findings indicated that technology adoption through compatibility is significantly associated with the performance of micro and small businesses. The findings proposed that micro and small businesses should focus on technologies that are considered simple to use, given the available expertise and tools.

The findings of Mairura *et al.* (2016) are consistent with the findings of Bautista and Lin (2021), which widen the empirical literature that technological compatibility enhances business performance. Although both Mairura et al. (2016) and Bautista and Lin (2021) linked technological compatibility to technology adoption, the studies differ in geographical contexts. The study of Mairura et al. (2016) was conducted in an emerging economy with inadequate sophisticated equipment, whereas the study of Bautista and Lin (2021) was conducted in the USA with an advanced level of technology; because of the variations, it is difficult to generalise the research findings.

The findings of Rajaguru and Matanda (2019) and Srimarut and Mekhum (2020) supported the findings by indicating the positive relationship between firm performance and technological compatibility. However, the study’s findings are limited to the Tanzanian business environment with similar business environment challenges, including scarce resources, poor

infrastructure, and limited technological capabilities, to name a few. The study also fails to test additional variables, such as demographic profiles, that may be associated with technological compatibility and business performance.

Furthermore, the study is based on the automobile sector, whereas the current study has focused on another sector, the SME supermarket, to broaden the literature. Consequently, there is a need for further research on how technological compatibility directly affects SME performance in Tanzania. Therefore, based on the empirical literature review of many studies that found consistent findings of the relationship between technological compatibility and business performance, the present study puts forward the following hypothesis:

H1: Technological compatibility has a positive and significant influence on SME performance in Tanzania.

Interplay Between SME Owner Age, Technological Compatibility, and SME Performance

Drawing on DOI theory, the degree to which an innovation is considered compatible with existing procedures may change with different levels individuals' experience and orientation of technology (Rogers, 2003). SME owners with young and old age may consequently differ in their learning preferences, technological experience and readiness to incorporate technological compatibility into business practices, potentially modifying the extent to which technological compatibility transforms performance. Therefore, SME owner age is theoretically placed as a contextual factor that may moderate the compatibility–performance relationship (Alsuwaidi & Alshurideh, 2024: Rogers, 2003).

Based on empirical research findings, technological compatibility improves the performance of SME by increasing operational efficiency, lowering operational costs, and providing better service (Mairura *et al.,* 2016; Hayes *et al.,* 2015; Ismail, 2024). However, many researchers disregard the integration of SME owner-related factors that could influence firm performance. According to the research conducted by Sharma *et al.* (2022), SME owners' ages contribute to technology responsiveness, usage patterns, and perceptions. SME owner age influences the degree to which technological compatibility contributes to SME performance (Belenzon *et al.,* 2019).

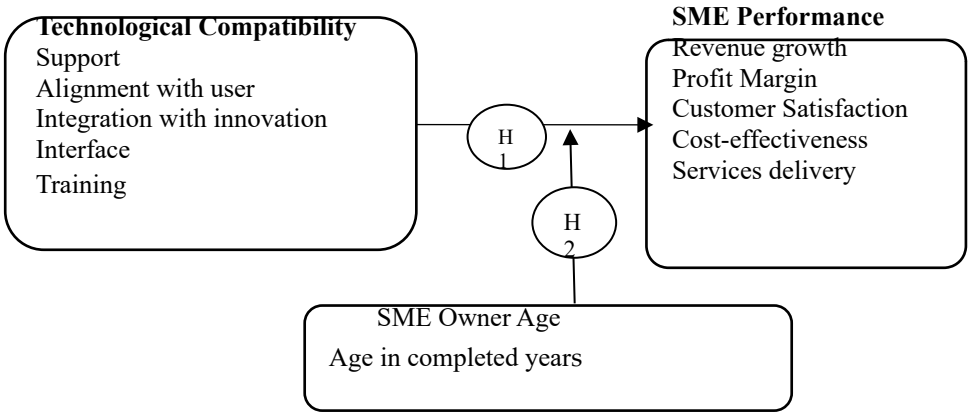
SME owners with a younger age are normally exhibiting higher technological compatibility adoption than SME owners with an older age (Sharma *et al.,* 2022). Young-age SME owners demonstrate greater ability to align with technology strategies and readiness for innovation, enabling them to invest in technological compatibility more efficiently, leading to SME performance (Alsuwaidi & Alshurideh, 2024). Nonetheless, the empirical literature indicated that the incorporation of SME owner age as a moderating variable may help reduce a significant part of the unexplained variance in the link between technological compatibility and SME performance, therefore increasing the explanatory power of the model. Therefore, the inclusion of SME owner age as a moderating variable in the current study is justifiable as there remains a clear empirical gap regarding the conditional effect of SME owner age on the compatibility-performance link. Hence, the following hypothesis is put forward:

H2: SME owner age has positive and significant moderating effect on the relationship between technological compatibility and SME performance in Tanzania.

Conceptual Framework

The conceptual framework depicts the proposed relationship between technological compatibility and SME performance. Additionally, it demonstrates how SME owner age may act as a moderator between technological compatibility and SME performance based on a literature review and the formulation of hypotheses. Thus, Figure1 demonstrates the relationship between the study variables.

Figure 1:
Conceptual Framework of the Study



METHODOLOGY

Research Design, Philosophy, and Study Area

This study employed an explanatory research design, collecting primary data from SMEs in five commercial regions in Tanzania using a structured questionnaire and a self-administered method. The research area was chosen because it is strategically significant to Tanzania's retail SME business sector, particularly supermarkets in Dar es Salaam, Dodoma, Arusha, Mwanza, and Zanzibar, which are expanding rapidly. Moreover, the research area have a considerable number of retail SMEs and actively use technology (Msuya *et al.,* 2017). Nevertheless, the SME sector is characterized by retail-oriented businesses comprises of SME owner age diversity varying with technological compatibility.

Population, Sample Size, and Sampling Procedures

The study's population comprised supermarket SME owners with a total of 316 supermarkets obtained from Tanzanian municipal and regional business records and business directory listings in 2025. The sampling frame comprised an approved list of 315 supermarkets obtained from reliable business registration records, including the Tanzania Revenue Authority, supported by pertinent regional trade offices in the particular regions. The SME sector is characterized by SME owner age diversity and different levels of technological compatibility related to business performance. The researcher concentrated on supermarket SME owners because of their direct involvement in decision-making on technology adoption and performance evaluation; thus, supermarket owners serve as both the unit of analysis and the unit of inquiry. The study involved a systematic random sampling technique to select a sample from the targeted population. The sample of size 210 supermarkets was determined by using the Yamane formula of 1967 (n = N/ (1+N (e) 2) to provide a suitable sample size required in the analysis.

Data Collection and Measurement of the Variables

The primary data were collected by a validated structured questionnaire adopted from previous research instruments. The researcher distributed 210 questionnaires to supermarket owners and collected 204 filled questionnaires through a self-administered method, and applied the drop-and-collect approach, which is very common for its ability to attain good response rates in studies involving many respondents. The researcher measured the dependent variable, the SME performance (SMEP), by using five indicator items, including revenue growth (SMEP1), profit margin (SMEP2), customer satisfaction (SMEP3), cost-effectiveness

(SMEP4), and service delivery (SMEP5) based on Rooh *et al.* (2023). The independent variable, technological compatibility (TC), was also measured by five indicators, such as support (TC1), alignment with the user (TC2), integration with innovation (TC3), interface (TC4), and training (TC5), obtained from Mensah *et al.* (2023). The indicator items were measured by using five Likert scale where respondents rated every indicator item ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree nor Agree, 4 = Agree, and 5 = Strongly Agree. Nevertheless, SME Owner Age (SOA), a moderating variable, was measured as a continuous variable based on respondents' chronological age in completed years.

Common Method Variance

Based on the fact, the same respondents participated in the data collection applied the same structured questionnaire and all variables come from one questionnaire, it was important to check the presence of common method variance (CMV), which could bias the statistical relationships among constructs (Rubenstein et al., 2025). Common method bias in this study was assessed using Harman's single-factor test. The first factor explained less than 50% of total variance, suggesting that common method bias was unlikely to threaten the validity of the findings.

Data Analysis

The data analysis included descriptive statistics using IBM SPSS software version 20 and inferential statistics employed structural equation modeling (CB-SEM) utilising IBM Amos software version 23. CB-SEM was used because of its ability to assess the measurement model and the structural model simultaneously, ensuring that the latent constructs are valid and reliable before testing the hypothesized relationships (Hox & Bechger, 2014). On top of that, CB-SEM accounts for measurement error when assessing moderation effects, thus leading to more accurate estimation results compared to the traditional analytical techniques such as regression (Hair *et al.,* 2020).

The descriptive statistics indicated frequencies and percentages of respondents' demographic characteristics, as recommended by (Pallant, 2020). The study considered data screening procedures such as checking for missing data, outliers, and SEM assumptions before the commencement of the real data analysis to enhance the accuracy and suitability of the data. The missing data were checked by list-wise deletion of the case. The outliers were also checked using boxplots, and

normality assumption was examined by skewness and kurtosis to ensure the data are normally distributed. Furthermore, the linearity was assessed by using bivariate scatter plots. Explanatory factor analysis (EFA) was conducted to examine the underlying factor structure of the measurement items.

After that, the analysis proceeded with the two steps for conducting the SEM analysis. The first step, the measurement model (CFA) was performed to ensure indicator items measure their corresponding constructs based on model fit indices and factor loading before the analysis of the structural model. Following that, internal consistency reliability was assessed by utilizing Cronbach's Alpha value (α) and the composite reliability (CR). The convergent validity was examined through average variance extracted (AVE), while discriminant validity was assessed using the Fornell-Larcker criterion.

The second step, SEM, analyzed both the direct and indirect relationships between technological compatibility and SME performance by assessing the path coefficients, critical ratio values, and p-values. Based on the fact that the study focused on the interaction effect moderation analysis, an interaction term was then created. The multiplication of SME owner age (SOA) and technological compatibility (TC) yielded a new variable called TC_SOA (interaction variable) used during the analysis.

Ethical Approval

The study was conducted based on the permission of Presidents Office-Regional Administration and Local Government (PO-RALG) with reference No. AB.309/343/01/146, that oversee all the field work. The study was also carried out with permission and support of the respective Regional Trade Offices in the five study areas whereby respondent's voluntary participation, verbal and written consent were maintained in the study. The respondents were clearly assured about data confidentiality in the sense that the data were considered as anonymous in the publication to protect their personal identity and opinions. There was no the actual ethical approval issued by Institutional Review Board rather than the research permission granted by PO-RALG.

RESULTS AND DISCUSSION

The age of respondents was considered significant factor in respondents' profiles when determining the influence of technological compatibility on SME performance. The results indicated that 10.3% of the 204 respon-

dents were between 20 and 29 years old, followed by 43.6% between 30 and 39. The results also indicated that 30.1% were between the ages of 40 and 49, and 16% were 50 years of age and above. The majority of respondents (43.6%) were aged 30 to 39, a range usually associated with high levels of productivity and energy and representing the most economically engaged demographic (Pervan et al., 2017). These results imply that the information obtained from the respondents is comprehensive and pertinent, providing a strong basis for deriving meaningful conclusions and making informed decisions.

In this study, missing data were checked by using list-wise deletion of the case through IBM SPSS version 20 to detect missing data for the independent and dependent variables. The results indicated that all variables had no more than 5% missing data. According to Kline (2018), missing data of more than 5% may lead to wrong estimates during the analysis of the models. So obtained results of missing data suggested that the dataset can be used in further analysis to produce quality output.

However, the study considers checking for outliers as suggested by Osborne and Overbay in 2004, because if outliers are unchecked and improperly addressed, they may provide biased results leading to invalid conclusions. The checking of outliers through visual inspection of boxplots indicated that no outliers were identified because all the observations employed during the structural model were restricted to a measurement scale with a range from 1 to 5, which, in a great case minimize the chances of the observations falling outside the predefined ranges.
The study also tested the SEM assumptions before performing the SEM analysis to ensure appropriate results. Normality was checked by skewness and kurtosis to ensure the normal distribution of the data. After calculating the skewness and kurtosis of the variables, the results were 0. 142 for skewness and 0.283 for kurtosis. The normal distribution of data was confirmed based on the fact that both values substantially fall within the acceptable range of ±3 as recommended by Tabachnick and Fidell (2013).

According to Hair *et al.* (2020), the linearity of data is usually considered as one of the assumptions in SEM analysis. If left undressed, non-linear data can seriously impair any inferential statistics. This study investigated the linearity of data through the examination of bivariate scatterplots. An

examination of the bivariate scatterplots between the study variables indicated no serious noncompliance with the linearity assumption.

The explanatory factor analysis (EFA) simplifies and improves variable dimensions with the use of factor loading and the design of one-dimensional measurement scales (Pallant, 2020). EFA was performed by using principal axis factoring with varimax rotation to investigate the underlying structure of the 10 indicator items including TC1 = Support, TC2= Alignment with user, TC3 = Integration with innovation, TC4 = Interface, TC5 = Training cater for independent variable and SMEP1 = Revenue growth, SMEP2 = Profit Margin, SMEP3 = Customer Satisfaction, SMEP4 = Cost-effectiveness, SMEP5 = Services deliver for dependent variable. One item from technological compatibility, which is TC2, resulted in low factor loading in relation to its factor, attaining a coefficient of 0.408, below the predetermined cutoff point of 0.5 coefficient. Therefore, the item was not considered for further analysis. The removal of TC2 was appropriate, as supported by Hair *et al.* (2020), who stated that a factor should have at least three retained items loading onto it, so for this case, the researcher re-ran the EFA in order to obtain the correct output. TC had 4 retained items, and SMEP, with 5 items, qualified for subsequent analyses as indicated in Table 1.

Table1:
Exploratory Factor Analysis Results

	Component	
	1	**2**
SMEP2	.704	
SMEP4	.675	
SMEP5	.618	
SMEP1	.609	
SMEP3	.570	
TC3		.678
TC5		.559
TC1		.507
TC4		.593

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Measurement Model

A confirmatory factor analysis (CFA) was performed to assess the measurement model with 9 items. The results of factor analysis indicated that two items (TC5 = 0.402 and SEMP1=0.36) possessed factor loadings

below the threshold of 0.5. These items were removed consecutively depending on their low loadings and insufficient theoretical contribution. After deletion of each item, the measurement model was re-run to achieve the required cutoff point for factor loadings of above 0.5 and significant at $p \leq 0.05$ with an acceptable range of ≥ 1.96 for critical ratio. The model also exhibited an acceptable fit to the data based on the following fit indices: CMIN/DF = 2.485, GFI = 0.981, AGFI = 0.942, CFI = 0.990, RMSEA = 0.069. The obtained values were acceptable thresholds as recommended by Awang *et al.* (2015), implying that the model satisfactorily explained the relationships between the observed variables.

Validity and Reliability Assessment Results

The researcher inspected validity and reliability issues prior to the structural model analysis and hypotheses testing as emphasized by Kline (2011). Internal consistency reliability was examined through Cronbach's Alpha, while the Composite reliability was assessed by CR values. Every construct falls within the acceptable thresholds for $\alpha > 0.70$ and CR > 0. 70. For instance, the technological compatibility has shown $\alpha = 0.835$ and CR = 0.896, and SME performance indicated $\alpha = 0.848$ and CR= 0.932 as seen in Table 2. These results exhibited an acceptable degree of internal consistency among the scales and affirmed that the constructs are appropriate to produce quality outcomes.

Convergent validity is established through the statistical significance of each indicator loading in the measurement model, as suggested by Hox and Bechger (2014). Average Variance Extracted (AVE) was utilized to examine convergent validity. AVE values should be 0.5 and above, as recommended by Fornell and Larcker (1981) for convergent validity to be established. Convergent validity was satisfactorily established in this study, where the AVE values ranged from 0.563 to 0.642, which were within the acceptable thresholds indicated in Table 4, thus promoting the success of the SEM analysis results.

Table 2:
Reliability and Convergent Validity Results

Construct	Cronbach's Alpha	CR	AVE
TC	0.835	0.896	0.563
SMEP	0.848	0.932	0.642

Discriminant validity is regarded as the extent to which a measure of a construct focuses on what it is supposed to measure and not on other

constructs, and it was confirmed using the Fornell–Larcker criterion. According to Fornell and Larcker (1981), the discriminant validity was established by comparing the square root of the average variance extracted (AVE) and the correlation of latent constructs, where AVE values should be higher than the squared correlation values. The results showed that the discriminant validity for all items was achieved in the model, with AVE values for each construct indicated in bold exceeding the squared correlation value for all sets of constructs, as shown in Table 3, confirming that the constructs were distinct in the model and their measures are not correlated with other constructs.

Table 3:
Discriminant Validity Results

Construct	TC	SMEP
TC	**0.714**	
SMEP	0.574	**0.723**

Structural model

The study tested the direct relationship between technological compatibility and SME performance using structural model analysis, employing AMOS version 23. It was hypothesized that:

H1: Technological compatibility has a positive and significant influence on SME performance in Tanzania.

The results of the structural model revealed a positive and significant relationship between technological compatibility and SME performance. The results of this hypothesis indicated that technological compatibility is positively related to SME performance ($\gamma = 0.296$; C.R = 3.067; $p = 0.003$), implying that when technological compatibility increases by 1 standard deviation, SME performance increases by 0.296 standard deviations. Therefore, the study indicated that a greater level of technological compatibility would lead to a higher level of SME performance. Thus, H1 was supported as indicated in Table 4. These findings are consistent with the findings obtained by Bautista and Lin (2021) that there is a positive relationship between firm performance and technology compatibility.

The significant results of TC on the effect of SMEP reveal that the dimensions of TC, including organizational support (TC1), such as the provision of important resources to staff and managerial support, contributed to the SMEP. Integration with innovation (TC3) is regarded as the degree to

which an organization is capable of seamlessly applying new technologies or innovations to its existing operational systems. The capability of successful integration of innovations or technology into business operations is a crucial factor of performance, since it may influence SME to have sustainable competitiveness, minimize cost, and improve service quality (Srimarut and Mekhum, 2020).

The interface to technologies (TC4) is also considered the extent to which new technologies or innovations are in line with and correspond to the existing operational system of the SME. This study shows that the interface between new technology and existing systems has a significant effect on the effective implementation of technology and enhances SME performance.

Table 4:
Technology Compatibility and SME Performance SEM Results

Path	Estimate	S.E.	C.R.	P	Standardized Estimates	Results
SMEP<---TC	.198	.052	3.067	.003	.296	Supported
TC4<---TC	1.000				.818	Fixed
TC1<---TC	1.453	.581	13.183	***	.921	Significant
TC3<---TC	1.086	.824	12.852	.011	.867	Significant

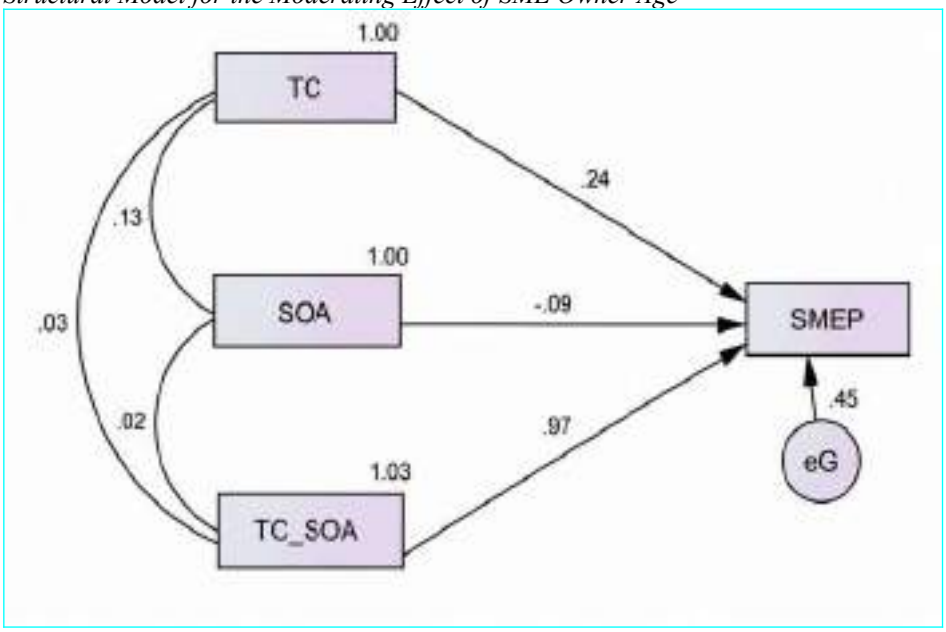
Furthermore, the indirect relationship between the technological compatibility and SME performance using the moderating role of SME Owner Age was lastly performed. The study put out the following hypothesis in order to confirm the moderating effects of SME Owner Age (SOA) on the relationship between technological compatibility (TC) and SME performance (SMEP).

H2: SME Owner Age has positive and significant moderating effect on the relationship between technological compatibility and SME performance in Tanzania.

In the first place, an interaction term was created, which is SOA_TC, to form a new variable in testing the moderating effect of SME Owner Age in the relationship between TC and SEMP. After that, SEM was used to examine the moderating effects of variables using the interaction term (SOA_TC). The results revealed that the path from TC to SMEP indicated a significant relationship between the variables (γ= 0.237; C.R= 7.067; p= 0.000), implying that TC is a crucial factor in predicting SMEP.

However, the results also indicated that the path of SOA and SMEP has an insignificant relationship (γ= -0.086; C.R= -.267; *p*= 0.48), expressing that SOA independently could not contribute a significant change to SMEP. The estimated results are indicated in Fig. 2.

Figure 2:
Structural Model for the Moderating Effect of SME Owner Age



Additionally, the moderating effect of TC_SOA indicated a significant effect on SEMP (γ= 0.974; C.R= 14.302; *p*= 0.000). This shows that SOA significantly moderates the relationship between TC and SEMP. Alternatively, it can be explained that SME performance is improved at the point where the SME owner age is compatible with technological benefits (Dimoso and Utonga, 2024; Venkatesh et al., 2016). In the application of the interaction term, there was an adjustment to the relationship between TC and SEMP, which is considered statistically significant. These results affirm that SME owner age (SOA) moderates the relationship between technological compatibility (TC) and the SME performance (SMEP) in Tanzania Supermarket-SMEs. The estimates of TC_SOA on SEMP indicated in Table 5 were within the acceptable threshold and thus confirmed the significant effect of the moderation.

According to Hair *et al.* (2020), the standardized path coefficient (γ) should be at least 0.2 in order to be considered significant and lead to

meaningful discussion. Similarly, Hox and Bechger (2014) stated that a relationship that yielded a critical ratio greater than 1.96 and a p-value less than 0.05 is considered to be significant. All these criteria were met to justify the significance level as indicated in Table 5; hence, based on the study findings, H2 was supported.

Table 5:
Moderation Analysis Results

Path	Estimate	S.E.	C.R.	P	Standardized Estimates	Results
SMEP<---TC	.197	.053	7.067	***	.237	Supported
SMEP<---SOA	-.086	.062	-.267	.483	-.086	Insignificant
SMEP<---TC_-SOA	1.653	.050	14.302	***	.974	Significant

The significant moderation results reported in the present study are consistent with Rogers's (2003) findings, which asserted that demographic characteristics, such as age, influence the adoption of innovation in business when applied with other predictors. SME owners of older age are more interested in technologies that are compatible with existing behaviour, as they are normally consistent, stable, and reliable. Similar results were supported by Ainin et al. (2021) and Dwivedi et al. (2023) that the relationship between technological compatibility and SME performance can be moderated so as to increase the strength of the relationship. The findings are also aligned with those findings of Oliveira et al. (2023), who argued that SME owners react more positively to technologies that are consistent with their past experiences and easy to use, resulting in an increase in SME performance.

CONCLUSION AND IMPLICATIONS

Conclusion

The study concluded that there is a positive and significant relationship between technological compatibility and SME performance, particularly in supermarket SMEs. Thus, alignment with technology improves SME performance through increasing in sales, enhanced service delivery, and customer satisfaction. This proposes that the great compatibility signifies technological innovation to stakeholders such as employees, business partners, and customers, and is likely to improve SME performance. For example organisation that supports technology adoption through provision of adequate financial resources, effective training programs, and a good culture may promote constant learning and adaptive environments.

The study also concluded that empirical literature related to the present study shows that support (TC1), integration with innovation (TC3), and interface (TC4) are the significant dimensions of compatibility that may influence SME performance.

Additionally, the study concluded that SME owner age has insignificant relationship with SME performance, implying that the age of SME owners alone is not a contributing factor to SME performance. The study has drawn further conclusion that SME owner age moderates the relationship between technological compatibility and SME performance. Based on the significant moderation effect, business companies should consider the SME demographic profile in addition to internal technological compatibility when implementing existing and new technologies.

Theoretical Implications

This study enhances the explanatory power of innovation diffusion theory by testing technological compatibility as one of its core dimensions against SME performance under moderating role of SME owner age which was under researched in Tanzania context. The significant moderating effect of SME owner age improves the theoretical understanding of the relationship between technological compatibility and SME performance by indicating that the effect of technological compatibility is relying on SME owner characteristics. This implies that technology adoption theories should take into account SME owner age as a valuable contextual factor that contributing the translation of technological compatibility into SME performance. The finding therefore enhances the usability of technology adoption opinions to SMEs by incorporating demographic variables into the illumination of technological based performance results.

Practical Implications

The study provides practical direction for supermarket owners, managers and employees in the supermarket sector and other service organisations. The findings indicate that technological compatibility should be incorporated into organisational plans and operational strategies to improve SME performance. SME owners should also highlight and address challenges that may restricts the contribution of technological compatibility to the performance.

Significantly, since SME owner age moderates the technological compatibility-performance relationship, supermarket- SME owners and managers should reliase strategies that focus on age-sensitive technology, making

sure that technology adoption and implementation are supported by suitable user support, training and operational methods. Instead of basing only on technological compatibility, managers should match technology with business mission, operational efficiency and managerial capabilities to accelerate its effect to performance.

Limitations and Future Research

Even though this study offered significant contribution to the body of knowledge, but there is presence of the few limitations. First, the study based on a cross-sectional research survey, which limits the power to achieve causal relationships between the variables. Based on the fact that the collection of the data was done once in one point, the long-term solid relationships between technological compatibility, SME owner age and SME performance remain unsubstantiated. Future research should use longitudinal survey technique to establish long-term effect of technological compatibility on SME performance changes over the period of time. Second, this study is focused on age of the respondents among the other demographic characteristics thus future studies should consider other moderating variables from the demographic factors, including gender and education, in order to expand knowledge on the relationship between technological compatibility and SME performance.

Third, the study was conducted only in the supermarket-SME sector in Tanzania, which may restrict the generalisability of the findings to other sectors and geographical context. Future researchers are advised to repeat the study in different service industries such as banking, telecommunication and insurance of other countries to increase validity of the findings.

Contribution of the Study

This study made a significant contribution to the literature of technological adoption in the following ways. First, instead of focusing on only technology adoption goals, it expands innovation adoption research by assessing technological compatibility as a factor that improves SME performance. Second, it brings in SME owner age as a moderating variable, improving the explanatory power of the model of technological compatibility and SME performance. Third, it contributes to the scant literature on technology adoption that improves SME performance in developing country contexts by enhancing empirical data for Tanzanian SMEs. The improvement of SME performance will contribute to the growth of the national economy and thereby improve the standard of living of the citizens.

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Institutional Governance and Religious Mobility: Understanding Member Migration in Traditional Churches of Dar es Salaam

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Abstract
Religious mobility in urban Tanzania is often discussed through spiritual experience and socioeconomic aspiration, while the relationship between everyday church governance and decisions to remain, leave or return requires closer examination. This study explored that relationship in eight selected Roman Catholic, Lutheran and Anglican congregations in Dar es Salaam. Guided by Hirschman's Exit–Voice–Loyalty framework and Institutional Theory, it employed a qualitative case study design. Data collected between April and July 2025 comprised 32 in-depth interviews, six focus group discussions, document review and non-participant observation. Thematic analysis identified four interconnected dimensions: transparency and accountability, participation and inclusivity, pastoral responsiveness, and spiritual expectations. Participants associated delayed financial explanations, restricted opportunities to question decisions, and the exclusion of women and youth with weakened trust. Some described Pentecostal and revivalist congregations as offering greater recognition and accessible care. Others valued traditional churches' sacramental continuity, while returnees linked renewed affiliation to disappointment with financial demands and leadership practices elsewhere. These accounts indicate that mobility involved continuing evaluations of institutional credibility rather than a uniform movement away from traditional Christianity. The study extends the analysis of exit and loyalty by treating return as a possible renegotiation of belonging. It identifies financial dialogue, meaningful participation and responsive pastoral arrangements as practical priorities, while recognizing differences within denominations and the limits of retrospective qualitative evidence.

Keywords: *Institutional governance; religious mobility; exit–voice–loyalty; institutional legitimacy; African Christianity; Dar es Salaam.*

INTRODUCTION

Religious belonging in Dar es Salaam is negotiated within a diverse Christian environment in which historically established denominations coexist with Pentecostal, charismatic and revivalist congregations. The Roman Catholic Church, the Evangelical Lutheran Church in Tanzania (ELCT) and the Anglican Church of Tanzania (ACT) remain important settings for worship, social relationships and institutional service. Alongside them, other congregations offer distinctive forms of prayer, testimony, pastoral attention and participation. Movement between these settings raises questions about how believers evaluate the institutions through which they practice their faith. African Pentecostal scholarship has established the importance of spiritual experience and the relationship between religious practice and changing social circumstances (Kalu, 2008; Meyer, 2004). This study examines the organizational encounters through which those concerns also become questions of governance.

The research problem concerns the relationship between institutional authority and congregational belonging. Churches may possess recognized leadership structures and longstanding religious legitimacy while some members experience restricted access to information, limited influence over decisions or inadequate pastoral attention. In such circumstances, continued religious commitment does not necessarily secure continued membership in a particular congregation. A believer may remain Christian while leaving a church perceived as unresponsive, or return to an earlier denomination after disappointment elsewhere. The problem is therefore not simply that churches compete for members. It is that the arrangements intended to organize collective religious life may be experienced by some members as weakening their standing within that community.

Previous scholarship offers important but incomplete answers to this problem. Work on African Pentecostalism explains the appeal of religious experience, healing and the interpretation of material insecurity (Gifford, 2015; Kalu, 2008). Dilger's (2007) Dar es Salaam study locates Pentecostal community and care within the difficulties of everyday social life. More recent African work examines church financial controls, leadership concentration and succession (Tagwirei, 2023, 2024; Tetteh et al., 2021). These contributions show that governance is already a recognised con-

cern. What remains insufficiently explained for the congregations examined here is how members connect particular governance encounters to the different possibilities of remaining, expressing dissatisfaction, changing affiliation and returning.

The gap is thus a specific relationship requiring empirical explanation, rather than an assertion that church governance has never been studied. Financial accountability research asks how religious resources are controlled; leadership research considers authority and institutional continuity; studies of religious change examine spiritual practice and affiliation. Bringing these discussions together makes it possible to ask how an unexplained contribution, an inaccessible pastor or an unsuccessful attempt to participate becomes consequential for belonging. Comparing leaders, current members and former members also makes visible disagreements over whether a governance arrangement is legitimate, exclusionary or simply difficult to operate under existing institutional conditions.

Governance can receive less explicit attention when spiritual and administrative matters are treated as separate domains. Such a distinction may obscure how decisions about appointments, budgets or meeting participation acquire religious meaning. Members may understand an unanswered request for help as a failure of pastoral responsibility, or exclusion from deliberation as evidence that their contribution is valued less than their donations. Conversely, a stable institutional structure may support confidence in teaching and pastoral judgement. This study therefore treats governance as part of lived religious membership without reducing faith to satisfaction with administrative services. Theological commitments retain their own significance, including when they sustain *loyalty* despite institutional frustration.

The study focuses on eight purposively selected congregations associated with the three traditional denominations in Dar es Salaam. It examines accounts of movement within the city's Christian environment, including departures towards Pentecostal and revivalist churches and subsequent returns. The original empirical concern is retained: how transparency, accountability, participation, inclusivity and leadership responsiveness enter members' evaluations of their churches. The study does not estimate denominational growth, calculate migration rates or adjudicate the truth of religious teachings. Its contribution is a contextual explanation of how governance and spiritual expectations intersect in participants' accounts of affiliation.

Research objective and questions

The overall objective was to examine how institutional governance shapes members' experiences and accounts of religious mobility in selected Roman Catholic, Lutheran and Anglican congregations in Dar es Salaam. Four questions organize the inquiry. First, how do members and leaders experience transparency and accountability, and how do these experiences enter decisions to remain or leave? Second, how do opportunities for participation, especially among women and youth, influence *voice* and belonging? Third, how does pastoral responsiveness shape assessments of institutional care? Fourth, how do governance experiences interact with spiritual expectations in accounts of migration and return?

These questions connect organizational practices to members' interpretations without presuming that any single practice produces *exit*. They also allow *loyalty* to be examined as an active, sometimes ambivalent relationship. The practical significance lies in identifying the encounters through which churches can make accountability and participation meaningful to members. The theoretical significance lies in connecting organizational responses to dissatisfaction with the institutional conditions under which those responses become available, credible or difficult to pursue.

LITERATURE REVIEW

Governance and accountability in religious organizations

Institutional governance refers here to the formal arrangements and everyday practices through which authority is exercised, decisions are made, resources are managed and leaders answer for their actions. Transparency concerns access to relevant information and intelligible explanations; accountability includes the opportunity to question decisions and obtain a response. Participation concerns involvement in deliberation and institutional action, while inclusivity asks whose involvement is recognized. Pastoral responsiveness concerns how leaders and church structures receive and address members' spiritual and social concerns. These dimensions' overlap, but they are not interchangeable. Publishing figures, for example, does not necessarily create an opportunity to challenge their interpretation.

Institutional Theory provides a basis for distinguishing formal structures from the practices through which members encounter them. Scott (2014) explains institutions through regulative, normative and cultural-cognitive elements. Rules allocate responsibilities, norms define appropriate con-

duct, and shared assumptions make particular forms of authority appear natural. In churches, these elements may support continuity and mutual obligation while also making certain decisions difficult to question. Meyer and Rowan (1977) draw attention to potential separation between formal organizational structures and everyday activity. Applied cautiously, this perspective directs attention to whether a council or reporting rule enables participation in practice, rather than assuming that its existence demonstrates effective accountability.

Tetteh et al. (2021), drawing on qualitative interviews with church officials in Ghana, found that accountability arrangements and internal controls could coexist with shortcomings in their application. Their study is relevant because it distinguishes the presence of a control from its operation. Its emphasis is primarily on the management of church funds. The present inquiry extends the question towards membership by examining how congregants interpret access to explanations and opportunities to question decisions. This is a difference in analytical focus, not evidence that Ghanaian findings can be transferred directly to Tanzania.

An institutional perspective also guards against equating hierarchy with misconduct. Authority may be centralized for theological, organizational or historical reasons, and a hierarchical church may maintain effective reporting and consultation. Equally, an apparently informal congregation may concentrate control in one leader. Suchman's (1995) analysis of legitimacy helps clarify why members' judgements matter: legitimacy involves the perceived appropriateness of organizational conduct within a socially constituted system of meanings. A procedure accepted by senior officials may therefore be evaluated differently by congregants who experience its consequences. Understanding religious mobility requires attention to both the arrangement and the audience judging it.

Religious mobility and African Pentecostalism

Religious mobility is used in this article to describe reported movement in congregational or denominational affiliation, including departure, entry and return. It is distinguished from geographical migration and from a single visit to another church. Visits, prayer meetings and exposure to alternative worship may nevertheless form part of the context in which affiliation is reconsidered. The categories "current member" and "former member" identify positions at the time of the study; they do not by themselves describe a person's complete religious history. A current member

may have left and returned, while a former member may retain attachments to earlier teachings or relationships.

Meyer (2004) examines the expansion of Pentecostal and charismatic Christianity through changing forms of religious mediation and experience. Kalu (2008) places African Pentecostalism within a wider historical and cultural account. These perspectives challenge explanations that treat believers as passive recipients of institutional messages. Gifford (2015) raises questions about Christianity's relationship with development and modernity, including the consequences of religious understandings of material life. Read together, these works establish that spiritual practice, social aspiration and institutional form need to be studied in relation to one another. They do not justify assuming that all Pentecostal churches share one governance style or one approach to prosperity.

Dilger's (2007) research in a neo-Pentecostal church in Dar es Salaam is especially relevant to the relationship between care and religious attachment. It shows the importance of locating religious practice within community relationships and experiences of insecurity. For the present study, its contribution is to make pastoral care analytically consequential rather than treating it as a secondary benefit of membership. However, a study centred on a Pentecostal community does not by itself explain how people compare that care with previous experiences in Catholic, Lutheran or Anglican settings. Such comparisons require accounts of earlier affiliation, the circumstances of movement and the expectations taken into a new congregation.

Recent work complicates any simple contrast between restrictive traditional churches and participatory Pentecostal alternatives. Tagwirei's (2023) discussion of African Pentecostal leadership and succession identifies problems of concentrated authority and the development of future leaders. His Southern African analysis, based on literature and participant observation, also questions leadership arrangements that gather multiple ministries around one dominant figure (Tagwirei, 2024). These studies provide a useful counterpoint to favourable accounts of Pentecostal participation. They suggest that opportunities to preach, testify or receive personal attention should be distinguished from influence over appointments, resources and institutional oversight.

International measures of religious switching require similar conceptual care. Pew Research Center's (2025) cross-national report compares childhood and adult identification across broad religious categories. It explic-

itly excludes movement between Christian denominations from its main measure. It therefore cannot substantiate the prevalence of Catholic-to-Pentecostal or Lutheran-to-revivalist movement in Dar es Salaam. Its relevance is methodological: conclusions depend on how affiliation and movement are defined. The present qualitative inquiry attends to changes within Christianity that may remain invisible when membership is measured only through broad religious categories.

Participation and the interpretation of institutional belonging

Participation has both organizational and experiential dimensions. Members may hold committee positions without influencing outcomes, or feel recognized through everyday involvement without holding formal office. Women and youth may contribute substantial labour to worship and fellowship while having limited access to resource decisions. Conversely, being invited to lead prayer may produce a meaningful sense of recognition even where authority over finances remains concentrated. Analysis must therefore distinguish forms of participation and ask which form participants themselves considered important when explaining *loyalty* or departure.

The literature also cautions against treating dissatisfaction as sufficient evidence of an intention to leave. Religious identity may be connected to doctrine, sacraments, family histories and durable relationships. A member who questions financial decisions may remain because these attachments matter more, or because *voice* is understood as a responsibility within the church. Hirschman (1970) provides a way to examine such possibilities, while institutional approaches explain why some concerns are easier to express than others. This combination makes it possible to recognise both individual judgement and the rules, expectations and dependencies that shape it.

Across these debates, three questions remain central to this study. How do members interpret the difference between formal provision and everyday experience? How do these interpretations vary across leaders, ordinary congregants and people with histories of movement? Under what circumstances does a valued alternative become disappointing, making return imaginable? The contribution of the Dar es Salaam case lies in examining these questions together within the selected congregations, while keeping comparisons tied to the evidence available.

THEORETICAL AND CONCEPTUAL FRAMEWORK

Exit voice and loyalty

Hirschman's (1970) framework explains responses to perceived organizational deterioration through the relationship between *exit*, *voice* and *loyalty*. *Exit* entails withdrawing from an organization; *voice* involves attempts to express dissatisfaction and influence its conduct. *Loyalty* can delay *exit* and sustain efforts to improve an organization, although continued membership should not automatically be interpreted as satisfaction. In this study, *exit* refers to reported changes of church affiliation, *voice* to opportunities or attempts to question institutional decisions, and *loyalty* to attachments that help sustain or renew belonging.

These concepts are used as interpretive resources rather than mutually exclusive categories imposed on participants. A person may remain while criticizing leaders, attend another church while retaining doctrinal attachment, or leave after concluding that requests for change are unlikely to receive a response. The framework also directs attention to distinctions between the existence of a channel and confidence that using it will matter. An annual meeting may formally permit questions yet be experienced as offering little practical influence. Such an arrangement would require analysis of the quality of *voice* rather than a simple count of opportunities to speak.

Return is treated as a further trajectory requiring explanation. It may express renewed appreciation of an earlier institution, disappointment with an alternative or continuing attachments that survived departure. The study does not assume that return proves the original institution has changed. Instead, it examines how evaluations of governance and spiritual expectations are revised through experience. This use of the framework allows *loyalty* to be considered across a person's religious trajectory without claiming that Hirschman's original model already explains every form of religious movement.

Institutional rules practices and legitimacy

Institutional Theory explains the organizational conditions surrounding these responses. Scott's (2014) regulative dimension directs attention to reporting procedures, councils and rules governing appointments. The normative dimension concerns expectations of stewardship, respect, service and appropriate leadership. The cultural-cognitive dimension concerns taken-for-granted assumptions about who may speak, lead or question authority. These dimensions help explain why a member's request for information can encounter resistance even where leaders endorse accountability in principle.

The distinction between formal structures and everyday practice is also relevant (Meyer & Rowan, 1977). A written commitment to inclusion may coexist with restricted influence, while an inherited structure may work more responsively than its reputation suggests. DiMaggio and Powell (1983) draw attention to pressures that shape organizational similarity within a field. Their argument is used here to sensitize analysis to institutional expectations and possible pressures for adaptation; the data do not establish that churches have adopted particular practices through an observed process of isomorphism. Legitimacy is examined through members' judgements of institutional conduct, with attention to the different audiences to whom leaders may feel accountable (Suchman, 1995).

Conceptual relationships

Figure 1 presents the analytical relationships guiding the study. Transparency, accountability, participation, inclusivity and pastoral responsiveness are parallel, interacting dimensions of governance. They are not sequential stages in which one must precede the next. Members interpret these practices through expectations about faith, care, fairness and authority. Their evaluations of trust and institutional legitimacy may support *voice*, sustained belonging, *exit* or return, while spiritual commitments and available alternatives shape the possibilities under consideration.

Figure 1:

Governance and religious mobility framework



Source. Author's conceptual synthesis of Hirschman (1970), Institutional Theory and the study's analytical focus. Arrows indicate interpretive relationships, not tested effects.

The arrows indicate proposed interpretive relationships, not statistically tested causal effects. The return pathway emphasises that experience in another congregation can alter a member's evaluation of earlier affiliation. Context surrounds the entire process: urban livelihoods, relationships and exposure to alternative congregations may affect both expectations and opportunities. The framework therefore keeps governance central while allowing it to interact with theological attachment and social circumstances. It also avoids defining successful governance solely through retention, since continued membership may coexist with unresolved dissatisfaction and members retain the right to change affiliation.

METHODOLOGY

Study area and case boundaries

The study was conducted in Dar es Salaam, Tanzania's principal commercial urban centre. Its relevance lies in the coexistence of established denominations and Pentecostal, charismatic and revivalist congregations within a setting of diverse livelihoods and religious opportunities. Churches provide spaces for worship, pastoral support and social relationships, making the city suitable for examining how institutional experiences enter decisions about belonging. Selection of the city supports a contextual investigation; it does not make Dar es Salaam statistically representative of Tanzania or of African urban Christianity.

Eight Roman Catholic, Lutheran and Anglican parishes or congregations were purposively selected. The reported selection considerations were their historical significance, engagement with diocesan governance and location within an urban environment offering religious alternatives. Together, these considerations connected the sites to the question of how established institutions respond to member expectations. Including several congregations permitted attention to variation within the broader case and reduced dependence on the circumstances of a single parish. The number eight represents the bounded field setting reported for this inquiry, rather than a calculated minimum for representing the three denominations.

The study-site account identifies Ilala, Kinondoni and Temeke, while some participant locations also refer to Ubungo and other neighbourhoods. These location descriptors cannot be treated as a verified administrative allocation of the eight congregations. The unit of analysis is the relationship between governance experience and religious mobility within the selected congregational setting, not a comparison of municipal popu-

lations. Specific parish and neighbourhood identifiers are omitted from quotations to reduce deductive identification. This preserves denominational and mobility information needed for interpretation while limiting unnecessary disclosure.

RESEARCH DESIGN

A qualitative case study design was used to examine governance and religious mobility in their institutional and social context (Creswell & Poth, 2018; Yin, 2018). This design was appropriate because the inquiry concerned how participants interpreted authority, participation and care, and how those interpretations entered their accounts of remaining, leaving or returning. It allowed organisational provisions to be considered alongside experiences of their operation, rather than assuming that rules alone explained religious affiliation.

The analysis has an interpretive orientation: participants' accounts are treated as situated understandings of institutional experience. Statements about secrecy, exclusion, spiritual power or exploitation are therefore evidence of perceptions and judgements. They do not independently establish financial wrongdoing, denominational policy or the efficacy of religious practices. Including leaders as well as ordinary and former members allowed institutional explanations and critical accounts to be considered together. The comparison is analytical, examining similarities and contrasts, without estimating the prevalence of any position.

Sampling and participant profile

Purposive sampling identified participants with relevant experience of church governance and membership. Selection considered involvement in church activities, leadership responsibilities, length of membership and knowledge of congregational arrangements. Denominational affiliation provided a basis for seeking variation across Roman Catholic, Lutheran and Anglican settings. Snowball recruitment subsequently helped reach former members whose experiences were less accessible through parish structures (Biernacki & Waldorf, 1981; Patton, 2015). Referral recruitment extended access but could also reproduce existing networks and favour people willing to discuss their experiences.

The interview sample comprised 32 participants: 17 women and 15 men aged 21–68 years. Twenty-one were current members of the selected churches and eleven were former members. Participants included clergy, elders, catechists, council members, youth leaders, women's fellowship

representatives and ordinary congregants. Six focus group discussions (FGDs), each involving six to eight participants, added accounts of shared experiences and congregational expectations. Table 1 brings together the reported profile without repeating it within the research-design section.

Table 1:
Reported participant and fieldwork profile

Characteristic	Reported information
Selected congregations	8 Roman Catholic, Lutheran and Anglican congregations
In-depth interviews	32 participants
Gender of interview participants	17 women; 15 men
Age of interview participants	21–68 years
Current and former membership	21 current members; 11 former members
Participant roles	Clergy, lay leaders, catechists, council and fellowship representatives, ordinary and former members
Focus group discussions	6 groups, with 6–8 participants in each
Fieldwork period	April–July 2025

Note. *Interview and FGD counts must not be added as unique persons. Participation overlap, denominational allocation and the classification of returnees require confirmation.*

The 32 interviews and six FGDs provide complementary forms of material rather than a single combined sample count. Exact overlap between interview and FGD participation is not reported, so the total number of unique participants cannot be established from these figures. Current membership also does not necessarily indicate uninterrupted membership: returnees may belong within that category. The reported denominational coverage is retained, but equal or proportional allocation is not claimed because denomination-specific counts are unavailable. The strategy is consequently described as purposive selection with denominational variation and snowball recruitment, rather than probability stratification.

The sample's rationale rests on the focused question, participants' relevant experience, variation in membership status and the depth afforded by interviews lasting 45–90 minutes. These features are consistent with assessing qualitative adequacy through information power rather than a universal numerical threshold (Malterud et al., 2016). The six discussions offered additional settings for examining how concerns were collectively expressed. They are not assumed to have supplied two groups per denomination, since the precise allocation is not established in the reported record.

Data collection and analysis proceeded concurrently. The original account reports that collection ended at thematic saturation, but it does not identify the interview or discussion at which this judgement was made or provide a stopping log. The sample is therefore not presented as demonstrably exhausting possible meanings. Its adequacy is assessed more cautiously through the range and depth of the available accounts. This distinction matters because reflexive approaches to thematic analysis do not treat themes as finite entities that can simply be discovered in full (Braun & Clarke, 2021).

Data collection

Data were collected between April and July 2025 through in-depth interviews, FGDs, document review and non-participant observation. Interviews were the primary source of individual accounts and used a semi-structured schedule. Their substantive focus encompassed access to financial information, leadership decisions, participation, pastoral encounters, spiritual expectations and histories of affiliation. Leaders' accounts addressed institutional responsibilities and constraints, while current and former members described their experiences and evaluations of congregational life. Semi-structured interviewing permitted exploration of matters participants considered consequential while retaining the study's governance focus.

FGDs involved youth, women's fellowships, mixed congregational groups and people with migration experience. Discussions provided opportunities to examine collective meanings attached to recognition, exclusion and care. The account describes groups organized within denominational settings, alongside discussions involving migrated members. Group material is interpreted as situated interaction rather than evidence that every participant endorsed every statement. A quotation attributed to an FGD is treated as a contribution recorded in that discussion, not automatically as a unanimous group conclusion.

Interviews and discussions were conducted in Kiswahili or English according to participants' preferences. With consent, they were audio-recorded and transcribed; Kiswahili material was translated where needed for English reporting. Translation entails interpretation, especially where terms convey spiritual experience or relational obligations. The English quotations present selected extracts from the study record. Published descriptors omit exact dates and local parish identifiers while retaining information relevant to the analysis.

Document review covered church constitutions or governance documents, synod reports, parish council minutes, pastoral letters and strategic plans. These sources were used to examine formal authority, reporting arrangements and stated commitments to inclusion and outreach. Their analytical relevance lay in comparison with participants' experiences. Table 2 identifies the document categories and the limits of their description. It distinguishes a document's potential purpose from a demonstrated finding; a formal commitment does not show that a practice occurred, and a missing entry in a minute book does not necessarily show that it never occurred.

Table 2:
Documentary sources described in the study record

Document category	Scope reported	Analytical purpose
Constitutions and governance documents	Roman Catholic, Lutheran and Anglican structures	Locate authority and formal participation
Strategic plans	ELCT plan identified as covering 2022–2026	Examine planning and leadership arrangements
Parish council minutes	Reporting and deliberation in selected parishes	Compare recorded practice with member accounts
Synod reports	Includes Anglican material on inclusion	Examine commitments to participation
Pastoral letters and guidance	Letters dated 2022–2024 and TEC communication guidance described	Examine inclusion and pastoral outreach

Note. *Exact titles, archive references, selection procedures and numbers of documents were not supplied. These categories describe reported field materials and do not constitute a verified document inventory.*

Non-participant observation took place during worship services, parish meetings and selected church activities, with attention to leadership interaction, communication and member participation. Field notes were incorporated into the analysis. However, event-level descriptions, observation counts and dated extracts are not available in the present account. Observation is therefore treated as a contextual source rather than independent verification of interview allegations. Where a theme lacks identifiable observational support, its evidential basis remains the interviews, discussions and reported documentary summaries.

DATA ANALYSIS

Thematic analysis followed the six phases described by Braun and Clarke (2006): familiarisation, coding, developing themes, reviewing themes, defining themes and writing the analysis. The reported procedure involved reading transcripts and field materials, identifying relevant meanings and organizing patterns concerning governance and affiliation. Its interpretive character is consistent with the later clarification of reflexive thematic analysis (Braun & Clarke, 2019). Themes are treated as analytical constructions developed through engagement with the material, rather than categories whose validity depends on numerical coding agreement.

The original analytical description combines coding drawn from participants' accounts with interpretation informed by *exit*, *voice*, *loyalty* and institutional arrangements. This provides the basis for a data-led reading with theory-informed interpretation. The framework helps ask what a complaint means for institutional legitimacy or possible *exit*, while the accounts retain the capacity to complicate it. For example, a preference for sacramental stability can sustain membership despite dissatisfaction, and return can follow disappointment elsewhere without a documented improvement in the original church.

Comparisons considered denomination, institutional role and current or former membership. The presentation brings related voices together, identifies differences and examines counterexamples before developing an interpretation. It integrates documentary summaries within relevant themes and separates participants' claims from the researcher's explanatory propositions. The thematic summaries and comparative table synthesizes the accounts presented, with particular attention to variation and the limits of the evidence.

Four substantive themes organize the findings: transparency and accountability; participation and inclusivity; leadership responsiveness and pastoral care; and divergent spiritual expectations. Return migration is then examined as a trajectory crossing these themes. Coding software, coder numbers and a detailed coding archive are not identified in the supplied record and are not retrospectively asserted. Open, axial and selective coding are likewise not added as procedural labels, since the stated approach is thematic analysis rather than grounded theory.

Trustworthiness and reflexivity

Credibility was supported in the reported design by including leaders, ordinary members and people with migration experience, and by comparing interviews and discussions with institutional material. The presentation preserves accounts that challenge a uniform narrative, including appreciation of traditional pastoral care and dissatisfaction with some Pentecostal practices. Triangulation is used to examine convergence and disagreement, rather than to assume that multiple sources necessarily establish one uncontested account. These practices are considered in relation to credibility, dependability, confirmability and transferability (Lincoln & Guba, 1985).

The study record describes continued reflection on coding and interpretation. The present analysis makes its principal interpretive risk explicit: a focus on governance can encourage the researcher to read every movement as evidence of organizational failure. Attention to doctrine, sacramental attachment and contrasting experiences reduces that risk. Another risk is accepting a migrant's retrospective comparison as an objective ranking of churches. Maintaining the distinction between reported experience and institutional fact is therefore essential to the analytical approach.

A fuller assessment of positionality would require information about the researcher's religious affiliations, relationships with participating churches and route of access. These details are not established in the available account. Nor does it document formal member checking, independent peer debriefing or a separately maintained reflexive journal. Such procedures are not claimed simply because they are commonly recommended. Transferability instead rests on a sufficiently clear account of the setting, participant categories, evidence and interpretive limits to enable readers to judge relevance elsewhere.

Ethical considerations

Participants were informed about the study's purpose, voluntary participation and their right to withdraw without adverse consequences. Consent was obtained for participation and recording. The reported safeguards included removing personal identifiers, restricting access to research materials to the researcher and securing recordings and transcripts. Because financial criticism, leadership disputes and religious departure can affect relationships within churches, confidentiality is central to the reporting of these findings.

Quotation descriptors retain only broad information relevant to interpretation, such as gender, denomination, leadership role or movement trajectory. Exact ages, interview dates and parish locations are omitted where their combination could facilitate identification. Quotations report participants' perceptions; they do not establish wrongdoing by identifiable individuals or institutions. FGD participation also places limits on confidentiality because participants hear one another's contributions. The account therefore cannot promise that researcher-controlled anonymization removes every interpersonal risk associated with group discussion.

Methodological limitations

The evidence comes from selected Christian congregations in an urban setting and supports contextual, analytical interpretation. It does not represent all congregations in Dar es Salaam, rural Tanzania or other faith communities. Purposive and referral recruitment may have favoured active members, accessible leaders and people with particularly clear accounts of dissatisfaction. Members who quietly withdrew, retained multiple affiliations or were unwilling to criticize authority may be less visible.

Retrospective accounts can organize complex histories around an especially memorable incident, and social desirability may encourage leaders to defend institutions or migrants to justify departure. The study cannot isolate governance from family relationships, relocation, livelihoods or other unmeasured circumstances. Differences between denominations must also be read alongside variation in local leadership, congregational resources and individual expectations. The design does not establish the prevalence of governance problems or causal effects on retention.

Finally, denomination-specific sample counts, interview–FGD overlap and detailed document and observation inventories remain insufficiently reported. These constraints limit the depth of systematic cross-congregational comparison and the independent assessment of triangulation. Return narratives demonstrate the possibility of renewed affiliation; they do not establish a population-wide cycle or its frequency. These limitations qualify the reach of the analysis while leaving its central contribution intact: an account of how participants made sense of governance in explaining religious belonging and movement.

FINDINGS

The findings concern participants' reported encounters with governance and the meanings they attached to church membership. The four themes

in Table 3 are interrelated: an unanswered financial question can be experienced simultaneously as insufficient accountability, exclusion from participation and a lack of responsiveness. They are separated analytically to show what each adds to the explanation of religious mobility. Return migration is subsequently considered across the themes. Quotations illustrate accounts already present in the study record and do not indicate the numerical distribution of views.

Table 3:

Themes and their analytical relationships

Theme	Central experience reported	Interpretive relationship
Transparency and accountability	Restricted information or insufficient explanation	Credibility of voice and answerability
Participation and inclusivity	Support roles without sufficient influence	Recognition, institutional norms and belonging
Pastoral responsiveness	Differences in access, attention and preferred care	Practical response and perceived legitimacy
Spiritual expectations	Experiential worship, giving and sacramental continuity	Religious meaning in evaluations of affiliation
Return across themes	Disappointment elsewhere and renewed appreciation	Exit followed by reassessment and possible loyalty

Note. *Themes summarize reported accounts; they are not prevalence estimates or demonstrated causal effects.*

Transparency and accountability in church governance

Participants' concerns about transparency centred on the relationship between contributing resources and receiving explanations. Several accounts described decisions being communicated after they had been taken, financial statements being difficult to question, or information remaining concentrated among a small group of leaders. The issue was consequently broader than whether churches produced accounts. Members evaluated whether they could understand decisions, ask questions and obtain a meaningful response. This distinction linked financial administration to their perceived standing in the congregation.

> *"In my parish, financial reports are rarely shared with ordinary members. Decisions on how money is used are made by a few leaders, and sometimes even parish council members are not fully informed." — Male Roman Catholic member, IDI.*

> *"We sometimes receive financial statements, but they come after long delays and without detailed explanations. Leaders present figures quickly,*

> *and members have little chance to ask questions." — Male Anglican member, IDI.*

Read together, these accounts identify two different experiences: limited access to information and disclosure without sufficient opportunity for explanation. They should not be collapsed into the claim that no reporting occurred. The Anglican account acknowledges a reporting practice but questions its usefulness, while the Catholic account describes information as restricted. In both, the governance concern involves an incomplete relationship between giving and answerability. Members' suspicion arose through the way decisions were encountered, although the accounts do not verify misuse of funds.

The Lutheran material extends transparency beyond finance. A participant described pastoral transfers announced without consultation as evidence that the congregation's perspective carried little weight. This concern differs from financial reporting but shares a question about the legitimacy of decisions made elsewhere. The data do not establish whether consultation was required under the applicable rules. They show that at least some members expected communication or involvement beyond what they experienced. The comparison therefore concerns expectations of authority as well as the formal location of decision-making.

Leaders' accounts complicate an interpretation based only on deliberate secrecy. A Catholic priest situated disclosure within obligations to diocesan authorities:

> *"As priests, we are accountable to the diocese, and sometimes the instructions we follow restrict how much we can share with parishioners." —Roman Catholic priest, IDI.*

An Anglican elder likewise reported difficulty answering members' financial questions because information was held at higher levels. These accounts reveal a possible tension between accountability upwards through an institutional hierarchy and answerability to congregants. They do not demonstrate that diocesan requirements prohibit transparency across the denominations. Rather, they show how local leaders explained limits on their own room to act. Institutional position mattered: ordinary members experienced an unanswered question, while intermediaries sometimes described insufficient access to the information needed to answer it.

The documentary review summary reported financial discussions within parish meetings, including accounts considered annually in some Catholic settings. This is consistent with the existence of formal reporting alongside dissatisfaction with its timing or accessibility. Annual consideration alone does not establish non-compliance, since the governing requirements and complete records are not supplied. The analytical point is the possible distance between a formally recognised reporting occasion and congregants' expectations of continuing explanation. The documentary material supports examining that distance; it does not independently substantiate every criticism.

A former Catholic member described a new Pentecostal congregation as more open about budgets and questions. That comparison connected governance directly to her explanation of departure. However, later return narratives associated dissatisfaction in Pentecostal settings with pressure to give and concerns about resource use. The evidence therefore supports a relational interpretation: members judged particular congregations against their expectations and available alternatives. It does not support a general ranking in which one church tradition is invariably more accountable.

Through the *Exit–Voice–Loyalty* lens, restricted access to explanations can reduce confidence in *voice* before a person actually leaves. Institutionally, members and leaders may recognise different audiences for accountability. The theme's contribution is to connect those audiences: legitimacy depends partly on whether obligations to higher authorities translate into practices that ordinary congregants can understand and question. *Exit* becomes one possible response when that connection appears weak, but the evidence also leaves room for continued membership, criticism and attempts at reform.

Participation and inclusivity in governance

Participation concerned recognition as a contributor to church life and influence over decisions affecting it. The accounts distinguished being invited to support activities from being involved in setting priorities. Women and youth were described as active in worship, choirs and fellowships, yet some felt their contributions did not translate into decision-making influence. The resulting frustration was organizational and relational: members questioned whether their institutions recognized their capacities beyond the roles already assigned to them.

> *"We have no chance to question or contribute. That makes us feel like passengers, not participants, in our own church community." — Male Anglican lay member, IDI.*

> *"In the Pentecostal church, I was immediately asked to join committees and even lead prayers. That gave me a sense of recognition." — Female member who moved from Lutheran to Pentecostal affiliation, IDI.*

The Anglican account expresses exclusion from deliberation; the former Lutheran member links participation in a new setting to recognition. Their accounts suggest that the experience of being heard and trusted can become part of spiritual belonging. Committee membership and prayer leadership are nevertheless different forms of involvement. The evidence does not establish that either automatically conveys authority over finance or senior appointments. It shows that participants experienced these opportunities as meaningful when comparing their churches.

Gender and generation made these distinctions more visible. One migrated participant described youth contributions as confined to choirs and women as excluded from parish councils. That statement is evidence of her experience and evaluation, not proof of a universal denominational prohibition. Another account, from a Catholic elder, recognized demands for wider involvement while emphasizing the difficulty of changing inherited roles:

> *"We know young people want more recognition, but tradition does not allow us to alter roles quickly." —Roman Catholic elder, IDI.*

The elder's explanation locates the tension in the pace and legitimacy of change. For members seeking immediate recognition, gradual adjustment could appear unresponsive; for leaders, continuity could be understood as a responsibility. Institutional Theory helps interpret this disagreement through norms about appropriate authority and the assumptions that make established roles appear necessary. The material does not require tradition to be treated as uniformly exclusionary. It raises the question of which practices are protected in its name and whose participation can be accommodated within them.

FGD contributions also connected participation to shared evaluations of congregational life. A youth discussion compared restricted roles in traditional settings with the visibility of women and young people in other services. An adult Anglican discussion linked openness about spending to belonging. These contributions suggest that institutional comparisons cir-

culated through congregational relationships. They cannot establish that all group members subsequently migrated, and an account of a relative's church remains indirect evidence about that congregation.

The documentary summary described Anglican synod material encouraging youth and women's involvement, alongside pastoral statements acknowledging obstacles to implementation. Read alongside the interviews, these summaries point to a distinction between endorsing inclusion and making influence available in everyday practice. The existence of formal encouragement also complicates the view that exclusion reflects an uncontested institutional position. Implementation may be shaped by local leadership and informal expectations, although the precise relationship requires fuller documentation than the present record provides.

Across denominations, the common issue was whether members could move from supporting activities to contributing to institutional judgement. The contrasts within the material concern how exclusion was explained: decisions reserved to leaders, inherited roles, or limited access to deliberation. In Hirschman's terms, meaningful participation can support *voice* and give members reasons to remain engaged. Its absence can make another congregation attractive, particularly when that congregation recognizes abilities quickly. These are interpretive pathways evident in participants' accounts, rather than measured effects of participation on retention.

Leadership responsiveness and pastoral care

Pastoral responsiveness was evaluated through access, attention and follow-up during difficulties. Several participants respected the authority of traditional clergy while describing practical barriers to contact. Their criticism did not necessarily reject formal pastoral systems. It questioned whether those systems responded when help was needed. For participants facing illness, unemployment or family conflict, the timing and personal character of a response could become evidence that the church recognized them as members worthy of care.

> *"If you want to see him, you wait for weeks. In the Pentecostal church I joined, the pastor gave me his phone number and prayed with me the same day I asked." — Female member who moved from Catholic to Pentecostal affiliation, IDI.*

> *"Our Lutheran pastor is kind, but he follows strict schedules. If you miss his office hours, you wait another week." — Male member who moved from Lutheran to revivalist affiliation, IDI.*

The second account is significant because it separates a favourable judgement of the pastor from dissatisfaction with access. The member did not describe the leader as uncaring in character; he described a schedule that did not meet his expectations. This distinction suggests that responsiveness can depend on the organization of care as well as an individual leader's intentions. The first account places value on direct contact and an immediate response. Neither establishes a representative difference between Catholic, Lutheran and Pentecostal pastoral provision, but both identify the encounters through which comparisons became meaningful.

An Anglican migrant similarly linked support after losing employment to attachment to a new congregation:

> *"In the Pentecostal church, the pastor and members prayed with me daily and encouraged me. That support kept me going." — Male member who moved from Anglican to Pentecostal affiliation, IDI.*

Here, the relevant relationship included other members as well as the pastor. The account broadens responsiveness beyond leadership availability to the congregation's capacity to accompany someone through difficulty. It also shows why pastoral experience cannot be separated neatly into spiritual and material categories. Prayer and encouragement were valued within a crisis of livelihood, even though the quotation does not establish that the congregation provided employment or financial assistance.

A contrasting Catholic account valued structured guidance and religious continuity:

> *"Our Catholic priest may not visit homes often, but when you meet him in confession or guidance sessions, the advice is grounded and steady. I prefer this approach because it feels serious and less emotional than what I see in revival churches." — Female Roman Catholic member, IDI.*

This counterexample prevents immediacy from becoming the only criterion of good pastoral care. Members differed in what made care trustworthy. Some prioritized quick contact and repeated attention; others valued deliberation, sacramental practice and perceived steadiness. Continued affiliation could therefore express a positive preference for an established pastoral form rather than merely an inability to leave. The analytical task is to explain which aspects of care participants valued and how those preferences interacted with their institutional experiences.

The documentary review summary referred to church guidance encouraging communication and pastoral outreach, including digital communication. However, the source documents and a systematic implementation record are not provided. These summaries indicate that responsiveness was recognised as an institutional concern, while the interviews show how some members judged its everyday delivery. The conclusions remain grounded primarily in these accounts, since identifiable observational evidence of access, home visits or counselling practices is unavailable here.

Pastoral responsiveness linked *voice* to a practical expectation of being answered. A member could speak about a difficulty yet still experience the institution as unresponsive if no action followed. Institutionally, formal schedules and role arrangements may support orderly care while creating barriers in urgent circumstances. The findings do not show that informality always resolves these problems: accessible leadership may be valued without providing accountable or sustainable care. They show that members used pastoral encounters to judge whether institutional authority was exercised in a manner that recognized their lives.

Divergent beliefs and spiritual expectations

Spiritual expectations remained central to the accounts of mobility. Participants described different preferences concerning the Holy Spirit, healing, prayer, prosperity and sacramental continuity. These preferences could reinforce governance evaluations but were not reducible to them. A person might value participatory worship without seeking decision-making authority, or remain committed to a denomination's teachings despite dissatisfaction with its leaders. Maintaining this distinction preserves the religious meaning of participants' accounts and avoids turning every spiritual preference into an administrative complaint.

> *"When I visited a Pentecostal church, I felt the Spirit moving in me. People cried, spoke in tongues, and testified of God's power." — Male member who moved from Lutheran to Pentecostal affiliation, IDI.*

> *"I felt God was closer there than in my parish, where everything is routine and predictable." — Female member who moved from Catholic to revivalist affiliation, IDI.*

These accounts describe embodied and emotional experiences through which alternative worship became attractive. Their significance lies in the participants' interpretation of divine closeness, not in an objective assessment that one denomination possesses greater spiritual power. They also concern particular encounters: attending a revival service and interpreting

it favourably is not identical to establishing a permanent change of membership. The reported migration descriptors provide context, while the quotations illuminate the experience that participants associated with movement.

Healing narratives similarly connected worship to personal crisis. A former Catholic member described prayer during her child's illness and interpreted subsequent improvement as reinforcing attachment to a Pentecostal church. Another participant contrasted expectations of miracles across Anglican and Pentecostal settings. These are accounts of religious meaning; the study does not evaluate medical causation or the truth of miracle claims. Analytically, they show how perceived responsiveness can include an expectation that a congregation's spiritual practices address suffering in an immediate and personal way.

Prosperity teaching introduced a further relationship between religious giving and anticipated change in everyday circumstances. A former Anglican member explained the appeal of a teaching that connected giving to success:

> *"In my Anglican church, offerings were just routine, without teaching on how they change your life. I felt giving in Pentecostal churches was meaningful." — Male member who moved from Anglican to revivalist affiliation, IDI.*

Other accounts similarly described offerings as connected to hope for opportunities and improvement. The evidence concerns participants' expectations and their interpretation of teaching. It does not demonstrate that giving produced material prosperity or that all Pentecostal congregations taught the same relationship. Nor does it establish that traditional denominations failed to address material life. What mattered in these accounts was the perceived explicitness of the connection between religious action and hoped-for change?

Countervailing accounts questioned that connection. An Anglican elder expressed concern about promises attached to sacrificial giving:

> *"The message that you will get rich by giving sacrifices can mislead poor people. Some leaders take advantage of them." — Female Anglican elder, IDI.*

A Lutheran elder voiced a related preference for teaching regarded as grounded in scripture. These criticisms represent situated theological and

moral judgements, rather than verified findings about particular leaders' intentions. They show that teachings attractive to some participants could reinforce others' *loyalty* to traditional churches. The same religious offer could be interpreted as hopeful, demanding or untrustworthy, depending on expectations and experience.

The governance connection becomes clearest where spiritual claims authorize demands for money or shape who can question a leader. The relevant question is then how authority is justified and made answerable, rather than whether a doctrine is true. Conversely, attachment to sacramental continuity can sustain *loyalty* despite governance complaints. This theme therefore qualifies a governance-only explanation: participants evaluated churches through interacting organisational and spiritual considerations, and the weight given to each differed across their accounts.

Return migration and renewed evaluations of belonging

Two reported interview accounts illustrate return after involvement in Pentecostal settings. They provide a counterpoint to the outward movements described elsewhere, without establishing how common return was in the sample or population. Both connected renewed affiliation to disappointment with expectations formed in an alternative church. Their accounts also indicate that earlier denominational belonging remained available as a reference point against which subsequent experiences were assessed.

> *"I was in a Pentecostal church for three years, but every week it was about giving money for blessings. When nothing changed in my life, I felt cheated. I returned to the Lutheran church where faith is steady and teachings are consistent." — Male member who returned from Pentecostal to Lutheran affiliation, IDI.*

> *"I went back to my Catholic parish where leaders live simply, and I can worship without pressure to give beyond my means." — Female member who returned from Pentecostal to Catholic affiliation, IDI.*

The first narrative links return to unfulfilled expectations and a renewed valuation of consistency. The second situates return within a comparison of financial pressure and perceived leadership conduct. Neither establishes that the original congregation had reformed during the person's absence. Return may reflect a change in the member's evaluation of available alternatives, an enduring attachment to earlier forms of worship, or

both. This distinction matters because restored membership is not equivalent to resolved governance problems.

These accounts also complicate the claim that Pentecostal churches offer uniformly superior accountability. The attributes described positively by outward migrants were not universal experiences. At the same time, returnees' favourable assessments of Catholic or Lutheran settings should not erase the dissatisfaction reported by other members of those traditions. Mobility appears in the material as a continuing relationship between expectation and institutional experience. *Exit* can be followed by renewed *loyalty*, while *loyalty* may retain critical awareness rather than becoming unconditional approval.

Comparison across denominations and participant positions

Table 4 summarizes contrasts present in the reported accounts. It compares themes across denominations without implying equal sample sizes or national denominational characteristics. The evidence is stronger for identifying the forms of concern expressed than for ranking their intensity or prevalence. Differences within a denomination, including between leaders, migrants and continuing members, remain integral to the interpretation.

Table 4:
Comparison of accounts across the three denominations

Issue	Roman Catholic accounts	Lutheran accounts	Anglican accounts
Information and authority	Restricted financial information; priest cited diocesan obligations	Concerns about consultation over pastoral transfers	Delayed explanations; elder lacked information
Participation	Elder described inherited roles and slow change	Migrant valued committee and prayer roles elsewhere	Lay member described exclusion from decisions
Pastoral care	Delayed access contrasted with appreciation of structured guidance	Kindness acknowledged alongside restrictive schedules	Migrant valued personal support after job loss
Spiritual attachment and return	Returnee valued reduced financial pressure	Returnee valued teaching consistency	Elder questioned prosperity promises

***Note**. Comparisons concern the accounts presented, not all members or official denominational policies. The available extracts do not establish the prevalence of differences.*

Three observations follow from this comparison. First, concerns about information and participation appeared across the three traditions, but through different reported encounters. Second, leaders' explanations sometimes emphasized institutional obligations while members emphasized access and recognition. Third, favourable accounts of traditional care and return migration challenge any uniformly negative depiction of established churches. The analytical contribution lies in these relationships between position and interpretation. The available material supports comparison of accounts, while a systematic comparison of congregational performance would require fuller site profiles, consistent documentary evidence and a verified distribution of participants.

DISCUSSION

Accountability and the credibility of voice

The findings suggest that governance enters religious belonging through the credibility of institutional response. Disclosure mattered when members could understand and question decisions, while participation mattered when it conveyed recognition or influence. This refines the application of Hirschman (1970): a formally available channel does not necessarily constitute effective *voice*. Members' expectations concern whether speaking can produce an answer, reconsideration or explanation. Where those expectations weaken, *exit* may become more plausible, although doctrinal attachment and other relationships can sustain membership.

The distinction between formal provision and practical operation is consistent with Tetteh et al.'s (2021) Ghanaian finding that controls can exist while accountability remains compromised in their application. The present material adds a membership dimension: congregants may evaluate reporting through whether it makes leaders answerable to them. This comparison suggests a shared analytical problem across different settings, while differences in research purpose and institutional context prevent a direct equation of the two studies.

Institutional Theory helps explain why these difficulties might persist. Local leaders may work within overlapping obligations to senior authorities and congregants. Procedures can satisfy one audience while appearing inadequate to another. Meyer and Rowan's (1977) distinction between formal structure and practice illuminates this possibility, while Scott

(2014) directs attention to the rules and norms that shape action. The priest's account suggests such tension, but the study does not establish its prevalence or verify the restrictions attributed to diocesan requirements. The explanation remains a proposition grounded in the reported encounter.

Participation beyond visible involvement

The evidence also suggests a distinction between visible involvement in worship and influence over organizational decisions. Being invited to lead prayers may create meaningful recognition without changing who controls a budget. This matters when interpreting favourable descriptions of Pentecostal participation. Tagwirei's (2023) analysis of leadership succession cautions that recognition of emerging leaders does not necessarily entail a transfer of authority. His later work on concentrated megachurch leadership offers a contrasting institutional pattern to the participatory alternatives described by some Dar es Salaam migrants (Tagwirei, 2024).

That contrast is analytically useful. It challenges a generalisation about Pentecostal openness while leaving participants' favourable experiences intact. Congregations can differ, and members can evaluate different dimensions of participation. Within the traditional churches, the presence of institutional language encouraging inclusion likewise suggests that restrictive experiences need not reflect the entire formal position of a denomination. The problem may concern how rules are enacted and whose contribution receives weight. Combining Hirschman with Institutional Theory makes both the desire for *voice* and the conditions limiting it visible.

Pastoral care and spiritual expectations

The pastoral material connects authority to members' experience of being recognized in difficult circumstances. It is compatible with Dilger's (2007) emphasis on the importance of religious community and care in Dar es Salaam. This study's comparative contribution is to show how participants used experiences of access and attention to evaluate affiliation, while others preferred structured guidance and sacramental continuity. These counterexamples qualify an explanation based on the appeal of immediacy alone.

African Pentecostal scholarship makes spiritual experience and material aspiration central to understanding religious practice (Gifford, 2015; Kalu, 2008; Meyer, 2004). The present findings support keeping those

concerns in view, but they also show how expectations become questions of answerability when claims about blessings are associated with financial demands. Governance and theology intersect here without becoming identical. A member's concern can involve the content of teaching, the use of authority to advance it, or the institutional response when anticipated outcomes fail to materialize.

Return and the renegotiation of legitimacy

Return migration is the clearest qualification to a one-directional explanation of church switching. The reported returnees evaluated earlier institutions differently after experiences elsewhere. Their accounts suggest that *exit* need not eliminate all prior attachments and that renewed membership need not demonstrate institutional reform. *Loyalty* can be retained, reassessed or restored across a trajectory of movement. This extends the application of Hirschman's framework to religious contexts while remaining grounded in a small number of retrospective accounts.

For Institutional Theory, the contribution concerns the audience and temporal character of legitimacy. The same church can appear restrictive in one comparison and reassuring in another. Suchman's (1995) account of socially constituted legitimacy helps explain this variability without making institutional practices irrelevant. Members evaluate conduct through expectations that can themselves change. The present study therefore proposes that governance influences mobility through situated judgements of credibility, rather than through a stable denominational property that produces the same response among all members.

Theoretical contribution and scope

The two frameworks are complementary at different analytical levels. *Exit–Voice–Loyalty* identifies possible responses to dissatisfaction; Institutional Theory explains how authority, roles and taken-for-granted expectations shape the space for those responses. Their combination directs attention to the credibility of *voice*, the distinction between recognition and decision-making influence, and the possibility of renewed legitimacy after *exit*. These propositions clarify what governance contributes to the explanation of religious mobility beyond a list of organizational shortcomings.

They also identify questions the evidence cannot settle. The study does not show whether transparent reporting reduces departures, whether accessible pastoral care increases retention, or whether particular institutional structures account for differences between denominations. Such

claims would require comparative longitudinal evidence. Its contribution is to identify plausible relationships in participants' accounts and specify the conditions that subsequent research should investigate. The conceptual framework consequently functions as an interpretive model for further inquiry, not a validated prediction of religious movement.

CONCLUSION

This study locates institutional governance within the everyday processes through which members evaluate religious belonging in selected traditional churches of Dar es Salaam. Participants connected access to explanations, opportunities for influence and pastoral attention to trust, while spiritual expectations and attachment to established forms of worship shaped how those experiences were judged. The significance of governance lies in these relationships between institutional conduct and members' interpretations.

The study contributes a contextual application of *Exit–Voice–Loyalty* and Institutional Theory in which *voice* depends on credible response and *loyalty* can be renegotiated after departure. Return accounts qualify an assumption of irreversible movement towards Pentecostal alternatives. Practically, the findings support attention to answerability, meaningful participation and accessible care within churches own institutional arrangements. Future longitudinal and comparative work should examine how these relationships develop across congregations and over time, with fuller documentation of both mobility histories and governance practices.

RECOMMENDATIONS AND PRACTICAL IMPLICATIONS

Financial reporting and dialogue

Complaints about delayed or unexplained financial information support establishing a predictable reporting schedule accompanied by opportunities for questions. Parish finance committees and relevant diocesan authorities should agree on intelligible summaries of income, expenditure and major decisions, together with a process for answering members' concerns. The intended outcome is more credible answerability. Evaluation should consider whether questions receive understandable responses, rather than treating the distribution of figures as sufficient evidence of transparency.

Meaningful participation of women youth and lay members

Accounts of restricted participation support reviewing both representation and influence. Parish councils and denominational authorities should ex-

amine how women and youth gain access to deliberation, propose agenda items and receive feedback on proposals, within applicable church arrangements. Participation should be assessed through actual opportunities to contribute to decisions as well as membership of committees. Such review could strengthen recognition and ownership without assuming that every worship role must carry identical administrative authority.

Accessible and sustainable pastoral care

Reported difficulties obtaining timely attention support clearer routes for requesting pastoral help and arrangements for follow-up. Clergy and authorized lay pastoral teams could combine scheduled guidance with ways of responding to urgent concerns, using communication channels appropriate to members' circumstances. This recommendation responds to access barriers while retaining the structured care valued by other participants. Its intended outcome is dependable attention; workload, competence and confidentiality should inform how responsibilities are shared.

Accountability across religious traditions

Returnees' accounts support extending scrutiny of financial demands and leadership conduct to Pentecostal and revivalist settings as well as traditional churches. Leaders and oversight bodies should provide clear explanations of contributions and accessible procedures for raising concerns about pressure to give. Ecumenical dialogue could support the exchange of practical accountability arrangements. These proposals concern governance and member welfare; the study does not establish a basis for prescribing the content of religious doctrine.

Research and public engagement

Researchers should follow members' histories over time to distinguish visits, overlapping involvement, sustained *exit* and return. Future comparison should document congregational characteristics, participant allocation, decision-making practices and the implementation of formal rules. Rural settings and a wider range of religious communities would help assess transferability. Where churches and public institutions collaborate in education, health or community development, governance dialogue can focus on the shared activity and its accountability requirements. The present evidence does not justify broad state intervention in internal religious belief or affiliation.

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Towards Schools for All: Examining the Implementation of Inclusive Education in Tanzanian Primary Schools

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Abstract

This paper is based on a qualitative case study design, guided by the social model of disability and Child-Friendly School Model to investigate the implementation of inclusive education in selected primary schools in Kinondoni district. The main argument of the study was that although it is over 25 years since Tanzania ratified the Salamanca Statement and Framework for Action to move towards inclusive approaches, the majority of learners with Special Educational Needs (SEN) are not yet enrolled in school and even those who are sent to school do not remain in school. The study intended to illuminate the reasons behind this situation. Purposive sampling was used to select 60 participants including 44 special education teachers from eight inclusive schools (3 from five government schools and 10 from three private schools), three school owners, and 12 parents of learners with learners with SEN.Through observation and interviews with school owners, parents and teachers, data was analysed thematically revealing that mainstreaming learners with learners with SEN into formal schooling was not a simple trouble-free operation. Rather, it is a complex phenomenon that poses pedagogical challenges. Each child has unique educational needs given the type and severity of the disability. The degree of success entails a number of factors including availability of specialized teachers, adequate funding, variety of support services and conducive school infrastructure which are not readily available in a developing country context like Tanzania. The study calls for multisectoral approach and a shared commitment among policymakers, and all education stakeholders to make inclusive education work.

Keywords: *Inclusive education, Special Education Needs, Disability, primary schools*

INTRODUCTION

Inclusive education has emerged as a central principle in global education policy, grounded in the recognition of education as a fundamental human right and a key driver of social and economic development. Since the adoption of the Salamanca Statement and Framework for Action in 1994, the concept of inclusive education has become a global agenda to serve all children particularly those with special educational needs. Informed by the principle of inclusion, the catchword for inclusive education, has been "schools for all" implying that schools should be institutions which include everybody, celebrate differences, support learning, and respond to individual needs. Hence importantly and positively contributing to the agenda for achieving Education for All. This commitment is reinforced by

Sustainable Development Goal 4, which calls for inclusive and equitable quality education for all (UNESCO, 2020). Following the Salamanca Statement and Framework for Action countries worldwide have committed themselves to restructuring education systems to accommodate all learners, including learners with Special Educational Needs (SEN), within mainstream schools.

In this study, the term learners with Special Educational Needs (SEN) refers to learners who require additional educational support, adaptations, specialised teaching, assistive resources or related services to participate and learn effectively in school. SEN is therefore used as an educational term that focuses on the additional support required by a learner, while disability refers more specifically to a physical, sensory, intellectual, developmental or other impairment that may interact with environmental and institutional barriers to participation. The two terms are related but are not used interchangeably in this paper: a learner with a disability may have SEN, but SEN should not automatically be understood as synonymous with disability. Unless referring specifically to disability status or a particular impairment, the manuscript uses learners with SEN as the principal term.

Understanding Inclusion and related approaches

According to UNICEF (2011) there have, traditionally, been three broad approaches to the education of learners with disabilities and SEN which help to create a thorough understanding of inclusive education. These are segregation, integration and inclusion. Segregation is an approach in which children are classified according to their impairment and allocated a special school designed to respond to that particular impairment; These schools have specially designed form of instruction to cater for the unique needs and abilities of learners with special educational needs. One of the primary benefits of special education is the provision of customized instruction tailored to meet the unique needs of each student. Special education teachers are trained to develop individualized education programs (IEPs) that specify measurable goals and objectives for each student. In Tanzania, special schools have boarding facilities and the first special school was established at Buigiri in Dodoma in 1960 for blind boys.

The second approach is integration, where learners with disabilities are placed in the mainstream system, often in special classes, as long as they can accommodate its demands and fit in with its environment. Unlike in

the segregation approach where learners with disability and SEN attend special designed schools, the integration approach allows learners with special educational needs to attend regular schools but are usually taught in a separate special unit or class (URT, 2004).

The third approach which is also the focus of this paper is inclusion where there is recognition of a need to transform the cultures, policies and practices in school to accommodate the differing needs of individual children, and an obligation to remove the barriers that impede that possibility. It promotes the education of all children in the same school and classroom environment, without discriminating them by disability or other special needs. The classroom is seen as a place where all children, despite their special educational needs, have the right to belong, talk, walk, work and share together. It requires that all children, including learners with learners with disabilities, not only have access to schooling within their own community, but that they are provided with appropriate learning opportunities to achieve their full potential. Its approach is underpinned by an understanding that all children should have equivalent and systematic learning opportunities in a wide range of school and additional educational settings, despite the differences that might exist.

According to Frederickson and Cline (2009), it is sometimes very difficult to draw a clear-cut line between inclusive education and integrated approaches, although they are theoretically different. While integration as observed by Jardinez & Natividad (2024) is about making a limited number of additional arrangements for individual pupils with SEN in schools, inclusion on the other hand implies the introduction of a more radical set of changes through which schools restructure themselves so as to be able to embrace all children in one roof without the need for additional support.

It is within this context that Inclusive Education as defined in the Salamanca Statement entails “recognition of the need to work towards “schools for all” - institutions which include everybody, celebrate differences, support learning, and respond to individual needs.” Inclusive education begins with the premise that all learners have unique characteristics, interests, abilities and particular learning needs and, further, that learners with special education needs must have equal access to and receive individual accommodation in the general education system.

In this case inclusion implies transition from separate, segregated learning environments for persons with disabilities reflected in the "special education" approach, to schooling in the general education system. Effective transitions from special education approaches to inclusive education requires careful planning and structural changes to ensure that learners with disabilities are not placed within the regular or mainstream school system without the appropriate accommodation and supports that ensure an inclusive learning environment

Development of inclusive education in Tanzania

Provision of educational opportunities for learners with SEN has a long history in Tanzania even before the movement into inclusive education approach. It can be traced back to the 1950s when special schools were established by European missionaries to meet students' needs with disabilities and special educational needs (Possi & Milinga 2017). By that time, the school system was based on the medical model where children were categorised according to their disabilities and allocated to school designed to respond to that particular disability. Tracing the development of special education in Tanzania, Tungaraza (1994) indicated that the Anglican Church opened the first school for learners with visual impairment at Bugiri in Dodoma in 1950 followed by Furaha and Irente special primary schools for students with visual impairment by the Swedish Free Mission and Lutheran Churches respectively. In 1963, the Roman Catholic Church opened the first school for deaf children. The Salvation Army introduced services for those with physical disabilities in 1967 (Karakoski & Ström, 2005). At that time, the government had not ventured into special needs education. Consequently, quite a large number of learners with learners with disabilities were left at home due to ignorance, stigma, and superstitions attached to causes of disability and the disability conditions. In 1963 the government joined efforts with the European missionaries in providing special needs education. Uhuru Primary School in Dar es Salaam was opened as an integrated school for learners with visual impairment. With this breakthrough more integrated schools were established.

In line with the Salamanca Statement and Framework for Action and Special Needs Education in 1994 which called for countries worldwide to move towards inclusive approaches, Tanzania started to implement inclusive education in 1997. Concurrent with the decision to move towards inclusion, Tanzania also developed a National Policy on Disability in 2004 (United Republic of Tanzania (URT, 2004) to provide guidelines and to set parameters for service delivery. The policy

acknowledged that education was a key to the development of learners with disabilities' potential and that they should be given priority. It states:

> *The government, in collaboration with stakeholders, shall provide a conducive environment for inclusive education that takes care of the special needs of disabled children* (URT, 2004, p16)

Since then, the government has been making effort to broaden educational opportunities for learners with learners with disabilities and marginalized groups so as to realise their full potential. Inclusive education has been formally embraced through policy reforms aligned with national and international commitments. These policy reforms include for example, the Education and Training Policy 2014 (2023 edition), the Education Sector Development Programme (2016/17–2020/21,) the National Strategy for Inclusive Education 2021/22-25/2026, Education for All (EFA) and the Sustainable Development Goals (SDG 4). (MoST 2023, MoEST 2017, URT 2022)

The problem and rationalisation for the study

More than two decades after Tanzania's ratification of the Salamanca Statement, inclusive education remains unevenly implemented in primary schools (Wakuru, Kisanga & Vuzo 2020); Samwel, Pembe & Basela (2025). Although national policies promote schooling for all children, many learners with SEN are either not enrolled in mainstream schools or fail to complete primary education (Bhalalusesa, 2023). This persistence of exclusion raises critical questions about the effectiveness of current implementation strategies. Recent Tanzanian studies continue to document challenges affecting the implementation of inclusive education. Research in public primary schools in Njombe Town Council identified constraints relating to teaching and learning materials, school infrastructure, funding, teacher preparation and curriculum responsiveness (Mkamwembe & Mrema, 2024). Other studies have examined teachers' experiences of supporting learners with disabilities and the conditions of learning environments in inclusive primary schools (Samwel et al., 2025; Mkonongwa & Mwalongo, 2025). These studies contribute to understanding the practical difficulties schools encounter. They also indicate the importance of examining inclusion in relation to the organisational and social conditions within which teaching and learning take place. International evidence similarly emphasises that exclusion can persist when policies are not accompanied by appropriate financing, accessible environments, responsive curricula, teacher support

and meaningful engagement with families and communities (UNESCO, 2020).

Despite growing international and national commitments to inclusive education, further contextualised investigation is needed into how different stakeholders understand and experience inclusion within Tanzanian primary school settings. Understanding how teachers, parents, and school owners interpret and enact inclusive education is critical for explaining the gap that often exists between policy commitments and classroom realities. Without such contextualised insights, policy interventions risk overlooking the practical realities that shape inclusion on the ground. This study therefore addressed the problem of the persistent gap between inclusive education policy commitments and their practical realisation in Tanzanian primary schools.

Purpose of the study and rationale

This study examined the implementation of inclusive education in eight selected primary schools in Kinondoni district in Tanzania comprising government and private schools and from the perspectives of the key players on the ground i.e teachers, parents and school owners. The study was guided by three research questions:

Research Questions

i) How do teachers, parents, and school owners in selected primary schools understand inclusive education?
ii) What practices are used to include learners with SEN in mainstream classrooms?
iii) What contextual challenges prohibit effective implementation of inclusive education in these schools?

Theoretical Framework

This study examines implementation of inclusive education at school level to see if schools are really moving towards Schools for all. Therefore, it was guided by the Child-friendly School-(CFS) Model developed by UNICEF (2012) and informed by the Social Model of Disability. The social model directs attention towards environmental, institutional and attitudinal barriers that restricts participation of persons with disabilities, rather than locating the explanation for exclusion solely within an individual's impairment (Oliver, 1990; Shakespeare, 2013). The Child-Friendly School Model, in turn, provides a framework for considering the relationships between children's readiness, school

readiness and family readiness, as well as the conditions that support children's participation and learning (UNICEF, 2012). Read together, these perspectives provide a basis for examining both the barriers that schools and wider social arrangements create and the conditions required for schools and families to support diverse learners.

According to this model readiness for implementation of inclusive education is defined by three interlinked dimensions: ready children; ready schools; and ready families. The model assumes that when children and families are prepared for school and schools are prepared for them, children are more likely to enrol in school on time and stay until they complete primary school. The "ready children" dimension focuses on children's learning and development. It refers to what children should know and be able to do in order to enter school ready and eager to learn. The 'ready schools' dimension focuses on the school environment. It includes practices that: a) foster and support a smooth transition for children to primary school and beyond; and b) promote learning for all children. Concerning learners with disabilities, ready schools adopt inclusive approaches as opposed to exclusionary educational practices and discriminatory attitudes. For individual schools - the introduction of an inclusive educational environment which addresses the culture, policies and practices of the school to ensure that the basic conditions exist in which all children can participate and learn. On the other hand, the "ready families" dimension focuses on parental attitudes and involvement in their children's early learning, development, and transition to school. Parents have to send all their children to school, and supporting them both in their education, and in helping ensure that schools comply with the principles of an inclusive approach. In this case parents' educational goals, beliefs, attitudes and commitment are considered crucial for school success. Parental commitment to ensuring timely enrolment for young children is important.

According to this model, all three dimensions of school readiness are important and must work together to ensure that the implementation and transition time for the child, family, and school system is smooth. Interlinked, they support each other in building competencies and facilitating smooth implementation of inclusive education.

METHODOLOGY

The study adopted a qualitative case study design to gain an in-depth understanding of inclusive education implementation within its real-life

context. Case study research is particularly appropriate when the phenomenon under investigation is closely intertwined with its context and cannot be meaningfully separated for analysis (Yin, 2018). Furthermore, qualitative case study designs allow for the use of multiple data sources, enabling a rich and nuanced understanding of practices, experiences, and interactions that cannot be adequately captured through quantitative measures alone (Baxter & Jack, 2008). This approach has been widely applied in inclusive education research to explore the layered and context-specific nature of inclusion in educational settings (Shrestha & Bhattarai, 2022).

The study was conducted in selected primary schools in Dar es Salaam (Kinondoni District), an urban area characterised by diverse school populations and varying levels of educational resources. The selection of Dar es Salaam was based on the fact that it was historically the first region in pioneering the implementation of inclusive education in the country and continues to play a significant role in the country's inclusive education agenda. The region has consistently enrolled a relatively large number of learners with SEN in mainstream primary schools and accommodates numerous schools implementing inclusive education programmes. Recent education statistics published by the Ministry of Education through the Education Sector Management Information System (ESMIS) indicate that learners with disabilities remain predominantly enrolled in primary education, with regional data available for monitoring inclusion across all regions, including Dar es Salaam (URT, 2024).

Purposive sampling was used to select inclusive schools that enrolled learners with SEN. Five government schools from 16 inclusive schools in Kinondoni district and three private schools were selected basing on having relatively large numbers of learners with SEN and representing majority of disability categories identified in the schools. These were Visual impairment, hearing impairment, Low vision, Slow learners, Mental retardation, Hearing loss, Cerebral palsy, Physical disability, Albinism, Autism, Deaf-Mute and Deaf-Blind. Participants included 44 special education teachers (34 from the public primary schools and 10 from the 3 private schools), 3 private school owners (who were selected as key informants from private primary schools that had established inclusive education practices, enrolled relatively large numbers of learners with SEN, and collectively represented a broad range of disability types), and 12 parents of learners with learners with SEN representing majority of disability categories found at the schools. all of

them were selected purposively based on their direct involvement in inclusive education practices. The parents had children in the schools that participated on the study.

This study was conducted in inclusive primary schools because they included learners with and without disabilities and learners requiring additional educational support. The participating schools represented a range of educational needs and disability categories, including visual and hearing impairments, physical disabilities, autism, albinism and other learning and developmental needs. The term *learners with SEN* is used in this study to refer to learners requiring additional educational support, while *disability* is used when referring specifically to disability categories or disability-related barriers. This also implies that even the profile of teachers is also divided into two categories. The first category is composed of teachers who teach normal classes as per official primary school curriculum and those who handles special classes for learners with SEN. Both categories of teachers were recruited on the basis of their academic merit i.e. trained as primary school teachers.

Data were collected through semi-structured interviews with parents and school owners to capture perceptions, experiences, and challenges related to inclusive education. Focus group discussion was conducted to teachers to get insight of their perception of inclusive education and practices are used to include learners with SEN in mainstream classrooms. Together with these methods of data collection, classroom and school observations was also employed to document teaching practices, learner participation, and the physical learning environment. The combination of interviews and observations enabled triangulation and enhanced the credibility of the findings. Data saturation was considered throughout the data collection process across the groups. Saturation was reached when successive interviews began to generate similar information and no substantially new themes, categories, or explanations relevant to the research questions were emerging.

Data were analysed thematically following qualitative analysis procedures. According to Kiger and Varpio (2020). Thematic analysis is an appropriate method of analysis for seeking to understand experiences, thoughts, or behaviours across a data set. Interview transcripts and observation notes were coded inductively to identify recurring patterns, themes, and relationships relevant to inclusive education implementation. Analysis was iterative, allowing emerging insights to inform subsequent interpretation. Trustworthiness was enhanced through triangulation of

perspectives from teachers, parents, and school owners. Credibility was strengthened by comparing accounts across participant groups, while dependability and confirmability were supported through systematic documentation of data collection and analysis. A detailed description of the study context and participants was provided to support transferability.

Ethical Consideration

The study adhered to the required ethical principles throughout the research process. Prior to data collection, research permits were obtained from the office of the Vice Chancellor of the Open University of Tanzania who introduced the research to the Regional Administrative Secretaries of Dar es Salaam region thereafter to District Administrative Secretaries of the Kinondoni district which were selected for the study. The researcher was then introduced to the District Special Educational officers who finally introduced her to the head teachers of inclusive schools and the special educational teachers found in those inclusive schools within the two selected regions for study. . Participation in the study was voluntary and all participants were given clear information of the purpose, means of data collection and security of the data in the study. Informed consent was sought from the participants before data collection. Confidentiality and Anonymity of participants was maintained throughout the research process and the use of pseud names during data presentation. All audio recording of the interviews, transcripts and research data were securely stored in password- protected devises.

Limitations and Scope of the Study

This study was conducted in a limited number of inclusive primary schools within one urban district in Tanzania; therefore, the findings should be interpreted within this context and should not be assumed to represent all Tanzanian primary schools, particularly those in rural settings. The study also relied primarily on the perspectives of teachers, school owners and parents and did not directly capture learners' experiences. As a qualitative case study, the study was intended to provide contextual insights into the implementation of inclusive education rather than to estimate the prevalence or scale of the challenges identified. The recommendations should therefore be understood as context-informed areas for strengthening inclusive education rather than as universally applicable prescriptions.

FINDINGS: ANALYSIS AND DISCUSSION

The findings of this study are organised around three major themes derived from the thematic analysis: (1) stakeholder understandings of inclusive education, (2) school-level practices supporting learners with Special Educational Needs (SEN), and (3) contextual challenges affecting the implementation of inclusive education. These themes correspond to the study's research questions and provide insight into how inclusive education is interpreted and enacted in selected primary schools in Kinondoni District.

Parents and teachers understanding of inclusive education

According to Fullan (1991), there are countless variables potentially influencing whether a change programme gets started and implemented in a successful way. One of the key variables is clarity and utility of an innovation as perceived by the key actors in the implementation process. In this case implementation of inclusive education requires an understanding of inclusion as an approach to allowing access to education for all children. Therefore, this study explored from the potential key actors (parents and teachers) whether or not they had a clear understanding of what inclusive education meant for them and the roles they were expected to play to make its operationalisation successful.

Through interviews with the parents, it became obvious that although all parents had one aspect in common: (all had learners with learners with disabilities and SEN) they were not homogeneous. They were varied in terms of their age, educational background, socio economic status as well as in knowledge and awareness about disability generally and learners with learners with SEN in particular. The differences in their demographical characteristics influenced the way they conceived the concept of inclusive education, the choice of inclusive school for their children whether government or non-government school and the way they engage themselves in the implementation process. Generally, the parents who participated in this study could be categorised into two parts.

The first part consisted of parents who were aware of the presence of inclusive schools and had deliberatively sent their learners with disability and SEN to these schools. This group of parents were literate with education levels ranging from primary to university level. They had formal employment although others were self-employed. They perceived inclusive education as an initiative to promote provision of education to all children regardless of their condition in the same school without discrimination. Such parents viewed inclusive education from a human

rights perspective that having a disability does not make someone less a human being. Although, they expressed their disappointment to have such a child in a family they inclined to the religious model and fully accepted this as a will of God. They were very positive to do whatever it took to ensure good welfare for the child. These parents were making an extra effort to explore, find out and prove if the school was really able to accommodate their child. They even try to find out how their child could learn, what facilities he/she may need to support his/her learning and if the school has available teachers who could teach a child with SEN. One parent had this to say:

> *"I have really been making effort to ensure that my child is placed in a suitable inclusive school. I began with Al Muntazir primary school because it admits learners with learners with SEN of various types. Recently, I met a friend who directed me to this school. I was informed that this school is better because they teach learners with learners with SEN adaptive behaviours and life skills apart from academic oriented subjects alone which my child with autism spectrum disorder cannot comprehend."* P3

These parents also appreciated government initiative to allow learners with SEN to be enrolled in inclusive schools because the traditional arrangement of secreting these children into a special boarding school was psychologically disturbing for parents. In addition, these special schools were very few and located far from home.

> *"I am thankful to the government that I can now send my son to a nearby school and that he has been accepted. I was wondering how his educational journey would unfold because there were no schools around here that accepted learners with disabilities. It was emotionally painful just thinking that I had to send my son far away to a school that could accept him; given the nature of his disability, I knew it was tough—who would look after him? So, I am grateful because these schools give our children the opportunity to learn closer to home and feel accepted in the community.*"P1

Apart from these parents, there was another category of parents who viewed inclusive education as government effort to ensure that even learners with disabilities are not left at home. But they are given an opportunity to be sent to schools same as other children without disability. Majority of these parents had their learners with SEN in government primary schools where education was free like for other children. These parents were grateful for this government initiative to introduce inclusive education in selected ordinary schools and viewed this as a way of creating space and time for them to perform other activities. With inclusive schools within their communities, parents had peaceful mind since they trusted inclusive schools as safe places where their learners with disabilities would be looked at and protected until when is time to get them back home. One mother with an autistic child had this to say:

> *"We are really thankful to the school and of course the teachers. They stay with children up to the afternoon. At least I can now move around during this time and go to Ilala market to buy food items like tomatoes and vegetables at cheap price for my small business (genge). I normally go there very early in the morning before my husband leaves home. Since we got this child life has not been the same"* P2

From the quotation above it seems sending such children to an inclusive school was a golden fortune for them even if it was half day. At least during the time when these children were at school the parents were able to engage in other productive activities. Very few parents viewed inclusive education as an opportunity for the learners with learners with disabilities particularly those with neurocognitive disorders to learn something relevant and useful.

It was interesting to note that none of the parents even those highly educated could distinguish between inclusive education from integration. They did not know that going to the same school does not necessarily mean learning together with non-disabled children in the same classroom. Although, inclusive education supports the idea that every child can learn and thrive when provided with appropriate accommodations, teaching methods and resources this was not always the case. Sometimes learners with SEN were separated and put into a special room to get access to specialised teachers and individualised services according to their learning difficulty. Findings from this study revealed that parents of learners with SEN in non-government schools were given a tour around the school environment and the rooms where their children will be learning, very few parents (if any) in government schools were aware that being in the same school did not entail learning in the same classroom.

A notable observation was that there was also another category of parents who were wondering why the government was advocating for inclusion while it was obvious that such children were unable to learn and catch up in class like other able children. These parents had lost hope and they perceived sending a child especially those with severe cognitive impairments or profound multiple disabilities as a worthless investment without any promising added value for the future of the child.

> *"I am still surprised by this idea of including our learners with disabilities in the same schools…look at my daughter she needs special care not just at home even at school-her disability is severe! Honestly, I do not understand why the Government would insist on inclusive education for learners with special education needs. My daughter is struggling as she is yet she has to keep up with other learners and I am wondering if this initiative will bear fruits"*

From this perspective, inclusion was largely viewed as an issue of access to school for learners with disabilities and SEN. What they were going to

do in the schools was left to be a responsibility of the teachers. These findings suggest that while inclusive education is broadly supported among stakeholders, its interpretation remains largely focused on physical access to schooling and for majority parents this was not necessarily translated into a pedagogical framework emphasising participation, learning outcomes and systemic adaptation.

With regard to teachers, some differences in understanding what is entailed by inclusive education was noticed. Teachers viewed inclusion in a broader context than parents. They frequently described inclusion as providing opportunities for learners with Special Educational Needs to attend the same schools but not necessarily being mainstreamed in regular classrooms. When asked in a focused group discussion they responded that:

> *"Well, for us teachers, inclusive education means that ensuring all children especially the ones with special education needs and disabilities have same access to the schools, classrooms like other students. They are given equal opportunities but sometimes due to nature and severity of their disabilities we are required to give specialised support"*

Learners with intellectual and neurocognitive disorders like extreme autism or down syndrome were placed in a separate special class and only interact with other children during break time. Those whose disability did not affect them to learn like learners with physical disability, mild autism, albino, partial hearing impairment and moderate loss of vision were admitted in normal regular classroom and were taught together with other children in regular classrooms by regular teachers. Therefore, for teachers, inclusion was viewed as government directive to admit all learners with SEN in mainstream regular schools This supports Frederickson and Cline (2009), observation that it is sometimes very difficult to draw a clear-cut line between inclusive education and integrated approaches, although they are theoretically different.

It is important to note that while head teachers in government schools were just instructed to enrol learners with SEN in their schools, in non-government it was different. In the three schools visited for this study, school owners had to apply for permission to be registered as an inclusive school hence able to admit learners with SEN. These schools had to be checked by school quality assurers to ensure that they had the necessary facilities and resources for learners with SEN before they were recommended for permission for registration.

School-Level Practices and the Role of Inclusive Pedagogy

As observed by UNICEF (2012) inclusion requires teachers to accept the responsibility for creating schools in which all children can learn and feel they belong. In this task, teachers are crucial because of the central role they play in promoting participation and reducing underachievement, particularly with children who might be perceived as having difficulties in learning. This study observed that teachers have big pedagogical roles to play. Their role begins with identification and location of all learners with disabilities before they are able to categorise them into two main groups i.e., those with disabilities but who can be integrated in normal classrooms, learn with other children and taught by regular teachers and those with learning difficulties who have to be placed in special classes.

According to the teachers during the first few days these children are oriented to the school environment and the concentration is on teaching them adaptive behaviours. These are skills necessary for day-to-day life that individuals should be able to perform at a certain age. Such skills include greetings, cleaning oneself, washing hands before and after eating, dressing, toileting, self-feeding, interacting with others, and taking care of oneself. Learners with special needs are most likely to delay in these areas even if non-disabled children might also be delayed because of reasons beyond disability. Unlike children without disabilities and those with disabilities that do not affect learning, learners with SEN are not placed in grade one and expected to proceed with next grades. Rather they are categorized in levels starting with level one then level two up to level four. Basic skills of reading, writing and counting are not the main focus. These skills are not taught until when they have mastered the adaptive behaviours.

Many teachers indicated that they had received little formal preparation for teaching learners with diverse needs. Therefore, they were using several informal strategies to support learners with SEN. These included providing additional explanations, offering individual attention, and adjusting classroom activities to accommodate learners' needs. The teachers reported further that for those learners with SEN who were placed in ordinary classroom, peer support was encouraged. Classmates were encouraged to assist learners with SEN during classroom tasks. One teacher from government school had this to say:

> *"Sometimes other pupils help their classmates who have difficulties in reading or writing. This helps them to participate in class activities."*

These strategies were often developed through teachers' own experiences rather than formal training in inclusive pedagogy. Actually, the classroom strategies identified in the study demonstrated teachers' willingness to accommodate learner diversity despite limited formal training.

This situation highlights an important tension identified in the literature: inclusive education policies often place significant expectations on teachers without providing sufficient professional preparation or resources (Forlin, 2010). As a result, inclusive practices may depend heavily on the individual initiative and commitment of teachers rather than on structured institutional support.

While teachers demonstrate commitment to supporting learners with SEN through a range of informal strategies, the reliance on individual initiative raises important questions about the broader institutional context within which inclusive education is implemented. Understanding why such practices remain largely improvised requires examining how inclusive education policies are interpreted and enacted at the school level.

From an analytical perspective, these practices reflect elements of inclusive pedagogy, which emphasises teaching approaches that respond to learner diversity within mainstream classrooms (Florian & Black-Hawkins, 2011). For example, the use of peer support and differentiated attention suggests that teachers are attempting to create opportunities for participation for learners with varying needs.

However, the findings also indicate that many of these practices are informal and improvised, rather than systematically supported through teacher training or institutional frameworks. Teachers frequently reported relying on personal experience and experimentation when supporting learners with SEN.

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Overall, the study has noted that successful performance and therefore a smooth transition from home as well as settlement and retention into inclusive school for learners with learners with SEN was not easy. It entails team work of personnel with different profession and expertise such as medical practitioners, educational psychologists, speech therapist, an occupational therapist, and para professionals to mention a few. Even other ordinary teachers in the inclusive school setting in ordinary classes are supposed to be part of the team. While, this is the ideal practice the same was not evident in this study and in Tanzania. Generally, this study has established that some ordinary teachers perceived integration of learners with SEN as an extra work-load. In almost all the schools visited the special education teachers were very few, were working single handily and were expected to be specialists of all learning difficulties for the learners with SEN and those with disabilities who were integrated in inclusive classrooms. The saying that "*one size fits all*" seemed to apply although it was not practical. The fact that learners with SEN were not homogeneous meant that each child was unique with unique special need that calls for unique individualised support and assistance.

Apart from teachers, school leadership was also found to play an important role in facilitating inclusive practices. As once observed by Fullan (1991) effective implementation of an education innovation owes much to the kind of leadership and support provided by officials of the central administration. The head's actions serve to legitimate whether a change is to be taken seriously and to support teachers psychologically and with resources. In some schools, leaders supported inclusion by encouraging other ordinary teachers for the regular classrooms to collaborate with special education teachers and share strategies for supporting learners with SEN. This was mainly evident in private inclusive schools where school owners sometimes played a direct role in promoting inclusive education by creating awareness among the teaching staff and even parents. However, the extent of leadership support varied across schools, and some teachers indicated that they received limited institutional guidance on implementing inclusive education.

Contextual Challenges influencing the implementation of inclusive education

Despite efforts made by the parents, schools and teachers to make inclusive education work, several challenges that affect the effective implementation of inclusive education were reported.

Lack of motivation and self- knowledge about inclusive education

One of the main factors deduced from the analysis of the findings was parents' lack of motivation and inspiration to educate a child with SEN. This was largely psychological and personal to the parents themselves. From the interview with parents, it was observed that actually parents go through a cycle of shock and grief for the unknown future of their learners with disabilities once the diagnosis of disability for their children is confirmed. They begin a journey that takes them into a life that is often filled with strong emotions, mixed feelings and difficult choices. This in turn affects their morale to enrol their children in school particularly those with severe and profound disability. Apart from lack of inspiration some parents were also unwilling to enrol their learners with disabilities because of lack of knowledge and awareness about the cause of disability in children as well as available opportunities and the benefits children will get if they participate in inclusive schools. They did not know that given support and proper intervention, such children would overcome isolation, learn to interact with other children and slowly learn some pedagogical basic skills even if it would be at a slow pace.

The nature and severity of the child's disability

The nature and severity of the child's disability was pointed out by parents as another reason why they failed to comply with government's call and directive to send learners with disabilities to school. During field research for example the researcher met two parents with children who had profound multiple disabilities. The first parent had a son with half of the body (right hand side) paralysed and was unable to move and talk well. The second one had a child who was dragging his bottoms to move around within the family compound and it was very difficult for such children to move out of the homestead to school. The parent had this to say:

> *I thank the government for the effort to provide inclusive schools for learners with disabilities like mine…but look at my son, there is nothing much that can be done. Just look at him he cannot move easily, if he wants to move someone has to be there to assist, even to hold something is a challenge because one side is already paralysed; I am not sure if he will be able to hold a pen…*

From the quotation above one can easily see how complex the situation was for this child to be integrated in an inclusive school let alone inclusive classroom.

Financial constraints

Another issue emanating from the participants' accounts is the influence of parents' socio-economic status on their engagement in preparing learners with SEN to start schooling and remain in school. Although, it was not evident from the findings that only parents from poor families had learners with disabilities, the fact remains that it was indeed expensive to raise a child with disability. Similarly, the costs involved in preparing and enabling a child of SEN to start and remain in school was also very high compared to a normal and able child. The risky factors and degree of financial difficulty were more prevalent for economically disadvantaged families with less income. Throughout this study, it noted that parents stressed about the emotional costs and described the processes by which their families had to adjust to the needs of the child.

Although, primary education has always been fee-free in Tanzania (at least at theoretical level), there are still some hidden costs that parents of learners with disabilities and SEN have to bear (see Dachi, 2000). Parents are still required to pay for uniforms, books, materials and other levies (Bii & Taylor, 2013). These costs are often out of reach for many families in low-income families. Studies about poverty and disability show that the added costs of meeting the healthcare, rehabilitation and other needs of learners with SEN can overburden family resources. Learners with albinism for example who have little or no pigment in their hair, skin and eyes; thus, visually impaired, are extremely sensitive to the damaging effect of the sun on their skin. They are highly susceptible to developing skin lesions that have both cosmetic and health complications, with a high risk of developing skin cancers. Parents need money to enable them purchase tubes of special cream and wide hats to adequately protect these children from the sun. To be able to go to school and learn, they need to put on special glasses which are equally expensive. Some parents with learners with physical disability and motor problems expressed concern about lack of suitable equipment, such as wheelchairs and/or clutches. Even when clutches and wheelchairs were available, the challenges of navigating unmade roads and a limited transport system were evident. All these are extra costs to be shouldered by parents with SEN children.

Lack of specialized knowledge in every type of disability

It was further learned from the focused group discussion by all teachers who participated in this study that there was limited training in inclusive education and teacher training and preparation for special education teachers was general with only three streams of specialization: visual, hearing and intellectual impairment. However, deployment to inclusive schools was not according to areas of specialization. So, when these teachers report to inclusive schools, they do not just find learners with the type of disabilities that they have been trained in. Rather, they find a variety of types of disabilities in one single classroom. And it is the expectation of the fellow teachers, parents and even the community at large that just because they have been trained as special educational teachers then they are equipped to handle and teach all kinds of learners with disabilities

Learners with SEN and disabilities are not homogeneous. They differ in the nature and severity. The special educational teachers come across learners with different types of disabilities and severity while at school. The way they are handled is unique and specific to each child. Some children require very specialised support services such as assessment, therapy, and professional guidance. Teachers indicated that access to such services was often limited, making it difficult to identify and support learners with specific needs.

Apart from critical shortage of specialized teachers, lack of resources to make inclusion possible was also established in this study. Mobilising and convincing parents to enrol learners with SEN in school was one stage but schools must also be ready to ensure that the necessary and required resources are in place. As observed in the findings of this study this includes for example wheel chairs for learners with mobility challenges, tubes of special cream for learners with albinism, rehabilitation aids and devices, diapers food and accommodation for children staying very far from the earmarked inclusive school and cannot commute to school every day. In addition, some school buildings were not designed to accommodate learners with physical disabilities, creating barriers to participation. As a result, schools were often required to manage inclusive education with minimal external support.

These findings are not unique to the areas involved in this study. They are accompanied by a large number of other studies in Tanzania (Mapunda et al., 2017) and even elsewhere around the world. Studies in India (Limaye,

2016) and Uganda (Moyi, 2012) for example, have all established some issues more or less similar to the findings of this study that affect implementation of inclusive education.

Furthermore, the ordinary teachers have negative perception that what the special educational teachers teach are not important as compared to what they are teaching as they use different methodologies. Even their curriculum is different especially for learners with intellectual impairment and down syndrome who do not follow the normal formal curriculum. Even in terms of workload, the special education teachers were perceived as having very light work load compared with other ordinary teachers with a class size of seventy to eight children in class. In one of the FGD, a teacher remarked:

> *"These children need patience when teaching them and as a teacher you to have apply special methodologies that are very interactive to get their attention; like playing with them. So, we are seeing as if we are just playing with the children but in actual sense we are teaching them in the process"*

The debate about boarding special schools versus inclusive schools for all

The challenge of handling learners with severe and profound multiple disabilities together with the problem of distance and transport logistics brough in the idea of going back to the traditional approach of establishing special schools. This idea is indeed debatable especially in the context of inclusive education. In Singapore for example, learners with more severe SEN and who require intensive specialised support in the long-term were accommodated in special schools since their learning needs can be better supported there. Such support may include accommodation, modification, or other remediation (Lim et al., 2022). Findings of this study point to the same direction. Apart from getting time to perform other productive activities, it was evident from findings that parents also felt a relief because they were now assured that their children would be safe (for the case of learners with albinism) and will get food, accommodation and medical care for those in need. However, studies have also observed that special boarding schools have their limitations. Apart from being expensive as observed by Possi (2006), children lack integration and are not exposed to a wide range of influences. In a special boarding school learners with SEN may only learn and interact with peers with special needs. Apart from that they continue to be stigmatized as being different from non-disabled children. In this present study there

were also other parents who were very protective and did not want to part with their learners with disability because they did not trust that teachers could provide the same care and love they were giving to their children. A balanced perspective as observed by Hanssen & Erina (2022) in Russia, would be provision of education for learners with SEN in an inclusive school context rather than purely special boarding school where children live in isolation from their families and are excluded from their peers. UNESCO (2021) stresses that a successful move towards inclusion presupposes parental involvement in their children's learning. Nonetheless, in situations where learners with SEN have also profound and severe disability that demands team work of parents, teachers and different professionals with different and expertise, then an inclusive school with boarding facilities is more practical.

CONCLUSION

Drawing from the findings of this study one may conclusively say that implementation of inclusive education is not a trouble-free operation. Rather it is a complex phenomenon which, as observed in this study poses pedagogical challenges and concern among parents, teachers the general public hence requiring careful attention. While teachers, parents and school leaders generally support the idea of inclusive education, implementation remains uneven due to limited training among classroom teachers, inadequate resources, and weak support systems (Mohammed & Almasi, 2024). From the perspective of the social model of disability, inclusion requires the removal of structural and institutional barriers that prevent learners from fully participating in education (Oliver, 1990; Shakespeare, 2013). The emphasis on enrolment observed in this study suggests that inclusive education is still largely interpreted through a placement-oriented approach, rather than a broader transformation of teaching practices and learning environments. Taken together, as once observed by Panda and Meher (2023) in India, these findings highlight that the challenges of inclusive education implementation cannot be understood solely at the level of classroom practice. Instead, they point to the need for broader policy and development responses that address systemic barriers affecting schools' capacity to support diverse learners.

Consistent with what was observed in literature (Sarton & Smith, 2018), this study can be conclusively established that inclusion was not a simple one-size fits all solution which can be implemented in schools. Tanzania started to implement inclusive education in 1997 as a way to legally comply with the Salamanca Statement and Framework for Action which

had instructed that Schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic impairments or other conditions. Within the inclusive model, the assumption was that the focus would be on the child's right to equal education without discrimination and the school's responsibility to accept them, to provide appropriate facilities and support to meet each child's unique educational need. However, this study has proved differently. It has been seen from the findings that the learners with SEN were not homogeneous and some of the learning difficulties were not easily identifiable. Even within one type of disability the levels and magnitude of the disability were different ranging from mild, moderate to extreme and severe profound disability. In a situation where special education teachers are not readily available and parents do not have self-knowledge about this condition, more such children are therefore likely to remain at home without access to education. This has also been observed in the current National Inclusive Strategy (URT, 2022) that without customised support those with certain disabilities may find it extremely difficult to attend and remain in school.

RECOMMENDATIONS

Based on the findings of this study and conclusion, several recommendations are proposed to strengthen the implementation of inclusive education in Tanzanian primary schools.

The need for strengthening tailor-made in-service training through weekend seminars

There is enough evidence from the study that provision of quality academic guidance and support to ensure successful learning for learners with SEN were hampered by lack of suitably qualified teaching staff. Few teachers possessed the necessary capacities needed to operate in inclusive setting. Even those few teachers had limited formal training to cater for all varieties of learners' SEN. Most teachers were operating in an unfamiliar role using their informal pedagogical experiences. Therefore, there is need for Head teachers of inclusive schools to institute in their schedules end of week seminars for other ordinary teachers without professional training in special education. In a way this a convenient cost-effective approach since professionally trained teachers can form a good resource team to share their work experiences, and orient other members of staff on how to handle and support learners with SEN in inclusive setting.

Strengthening Community Awareness and Parental Engagement

Community attitudes toward disability can influence the success of inclusive education initiatives. Awareness programmes should be developed to address stigma and promote positive attitudes toward learners with disabilities. In addition, schools should continue to strengthen partnerships with parents in supporting the education of learners with SEN.

Enhancing Inter-Sectoral Collaboration

Effective implementation of inclusive education requires stronger collaboration between the education sector and other sectors such as health and social welfare. Improved coordination can facilitate early identification, assessment, and provision of support services for learners with Special Educational Needs.

The need for government support to facilitate School-Level Implementation

Policy makers should recognise that inclusive education is implemented within complex school contexts. Providing schools with practical guidelines, institutional support mechanisms, and adequate funding can help bridge the gap between policy commitments and classroom practice. Further to inclusive education requires adequate teaching and learning materials, assistive devices, and accessible school environments. The government especially at local authorities should continue to mobilise education stakeholders to prioritise investment in inclusive infrastructure and resources that enable learners with disabilities to participate fully in school activities.

Establishment of inclusive schools with boarding facilities

Presently, not every primary school is an inclusive school. The few which are available are located in selected areas and may not be easily reachable to every child with SEN. The situation is even more difficult for learners with severe, profound and multiple disability. There is a need therefore, for the government to consider establishing at least one comprehensive inclusive school with boarding facilities in every region. Such inclusive boarding school will assist learners with SEN who stay very far from the existing inclusive schools to access education nearby children without disabilities and SEN to be day scholars.

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Factors Affecting Utilization of Electronic Security Technologies in University Libraries in Tanzania

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Abstract
This study investigated the factors affecting the utilization of Electronic Security Technologies (ESTs) for protecting library information resources in four Tanzanian university libraries: The University of Dar es Salaam (UDSM), the Institute of Accountancy Arusha (IAA), Mzumbe University (MU), and Muhimbili University of Health and Allied Sciences (MUHAS). The study used a convergent parallel research design. Quantitative data came from a questionnaire administered to a census of 184 library staff; qualitative data came from interviews with 12 key informants (library directors, ICT directors and IT personnel) and from non-participant observation. Quantitative data were analyzed descriptively in SPSS version 27, and qualitative data were analyzed thematically. Respondents perceived ESTs as contributing to the protection of physical and digital resources, notably through theft prevention and control of unauthorized access. However, staff skill gaps, inadequate training, insufficient funds, high maintenance and repair costs, and frequent technical malfunctions or downtime constrained utilization of electronic security technologies. Interviews and observations corroborated these constraints. The findings indicate that having ESTs does not by itself ensure their effective use. The study recommends prioritizing staff training, allocating a dedicated budget, implementing preventive maintenance with reliable vendor support, modernizing ICT infrastructure, and establishing an institutional security policy.

Keywords: *Electronic Security Technologies, Utilization, Library Information Resources, Academic Libraries, Library Security*

INTRODUCTION

University libraries are central to teaching, learning, research and innovation, providing access to information resources in both print and

electronic formats. As academic institutions increasingly rely on information and communication technologies (ICTs), library collection security has become a major concern. Library information resources face recurring threats, including theft, mutilation, unauthorized access, vandalism, cyberattacks, and improper handling, which can affect their availability, integrity, and accessibility. Electronic security technologies (ESTs) are therefore becoming more common in university libraries worldwide, strengthening their capacity to secure both physical and digital collections (Permana et al., 2025; Xu et al., 2024).

In this paper, ESTs refer to two related groups of technologies. The first comprises physical-security technologies: Radio Frequency Identification (RFID) systems for item tagging, tracking and theft detection; Closed-Circuit Television (CCTV) and related surveillance systems; biometric access control; alarm systems; and integrated library security systems. The second comprises digital-security measures, such as antivirus software and access controls, that protect computers, networks and electronic resources from malware and unauthorized access. The paper uses the same name and abbreviation for each technology throughout.

Recent advances in library automation and smart-library environments show that ESTs can support collection security, circulation control, inventory management, access control and the prevention of unauthorized use of library materials. RFID and integrated surveillance systems have been reported to improve operational efficiency, enable real-time monitoring, reduce resource losses and strengthen user accountability in academic libraries (Sureshkumar et al., 2025; Adewojo & Monjolaoluwa, 2025). However, effective EST utilization depends on institutional capacity, funding, staff skills, technical infrastructure, maintenance support, and institutional commitment (Ibrahim & Kotoroi, 2025).

In developing countries, especially in Sub-Saharan Africa, operational and institutionalization challenges constrain EST utilization. Existing research documents poor funding, inadequate staff training, outdated technological infrastructure, technical failures, weak maintenance support and shortages of qualified staff as continuing obstacles to the effectiveness of electronic security equipment in academic libraries (Ibrahim & Kotoroi, 2025; Iwara, 2019). These obstacles often lead to underutilization of available security technologies, frequent system failures and continued reliance on manual security methods that are no longer adequate in today's academic environment.

Many Tanzanian university libraries have invested in ESTs to protect their expanding print collections and electronic resources. The University of Dar es Salaam, Mzumbe University, Muhimbili University of Health and Allied Sciences and the Institute of Accountancy Arusha, for example, have adopted various electronic security systems to protect resources and facilitate library operations. Ibrahim and Kotoroi (2025) report that financial constraints, limited technical expertise, insufficient training, outdated infrastructure, and difficulties with system maintenance and upgrades often reduce these technologies' effectiveness.

Although Tanzanian academic libraries are increasingly introducing ESTs, empirical evidence on the factors affecting their actual use remains limited. Existing Tanzanian and regional studies have focused on a single institution (Ibrahim & Kotoroi, 2025), on the impact of security systems on resource preservation (Komba, 2020), or on constraints facing African academic libraries in general (Kotoroi, 2023). Little is known about how library staff perceptions compare with accounts from library and ICT directors, and with direct observation of system utilization, across several Tanzanian university libraries. This study addresses that gap by combining questionnaire, interview, and observation evidence from four libraries and by focusing on the utilization of ESTs, rather than their mere availability, in the analysis.

Accordingly, the study investigates the factors affecting the use of ESTs to safeguard library information resources in four university libraries: The Institute of Accountancy Arusha (IAA), Muhimbili University of Health and Allied Sciences (MUHAS), Mzumbe University (MU), and the University of Dar es Salaam (UDSM). Its findings contribute to the literature on library security management and extend beyond the mere availability of ESTs to the institutional conditions required for their sustained, effective utilization. The study further offers practical guidance to policymakers, university administrators, and library directors in Tanzania and similar developing-country contexts.

Objectives of the Study

The general objective was to investigate the factors affecting the utilization of ESTs to protect library information resources in the four selected university libraries. The specific objectives were:

i) To assess the perceived protection outcomes of utilizing ESTs in the selected university libraries.

ii) To examine the factors that affect the utilization of ESTs for protecting library information resources in the selected university libraries.
iii) To propose strategies for improving the utilization of ESTs in the selected university libraries.

LITERATURE REVIEW

Perceived Protection Outcomes of ESTs Utilization

The use of Electronic Security Technologies (ESTs) in university libraries has been growing and has become an important issue in protecting information resources. University libraries use Closed-Circuit Television (CCTV), electronic security gates, Radio Frequency Identification (RFID), biometric systems, fire detection and suppression systems, access-control technologies, and digital security mechanisms to prevent, detect, and respond to threats to library information resources. For instance, Olaniyi and Abioye (2024) conducted a study on the use of CCTV, electronic security gates and IP surveillance systems as perceived protection technologies in a university library in Nigeria and found that these were some of the most widely used technologies for safeguarding information resources in the library. Similarly, Osayande et al. (2024) reported that in selected Nigerian University Libraries, the electronic security systems, especially CCTV, electronic security gates and RFID, were seen to have provided a positive contribution towards the protection of library resources.

Zhang et al. (2024) noted that Intelligent RFID mechanisms can support resource identification, detection of unauthorized access, monitoring of resource location, and improved circulation operations. Nsirim et al. (2025) identified RFID asset tracking, access control, CCTV surveillance, digital rights management, cybersecurity measures, and artificial intelligence-based anomaly detection as complementary technology-based tools libraries use to protect information resources. Kotoroi and Ibrahim (2025) found that personal, technical, managerial, and financial factors influenced the effectiveness of electronic security system utilization. Their findings are significant because they show that having CCTV, theft-detection systems, or other technologies is not enough to protect library materials. Electronic security technologies help prevent theft/mutilation, detect unauthorized activities, improve accountability, protect physical and digital resources, monitor library environments, and enhance resource availability (Nath, 2021).

Factors Affecting the Utilization of Electronic Security Technologies

Ibrahim and Kotoroi (2025) found that physical and technical conditions affect the effectiveness of electronic security systems in African University Libraries. Kotoroi (2023) further noted that technology availability should be distinguished from technology utilization because the existence of electronic security technologies does not necessarily mean they are consistently functional or effectively incorporated into daily library operations. Olaniyi and Abioye (2024) noted that inadequate funding, poor maintenance, and high installation costs are major challenges to effectively utilizing electronic security technologies in libraries. Similarly, Sunday et al. (2025) identified limited funding and poor supervision from parent institutions as limiting factors in implementing and utilizing electronic security systems in selected academic libraries in Southwestern Nigeria.

Mambo and Confort (2019) explained that poor library management, inadequate library budgets, unreliable electricity supply, lack of staff commitment, and inadequate training were significant challenges to utilizing electronic security systems. Ibrahim and Kotoroi (2025) argued that many of the limitations identified in this study of electronic security systems in Tanzanian university libraries are not inherent in the technologies, but in management and library staff practices.

Strategies for Improving the Utilization of Electronic Security Technologies

Risk assessment and planning, continuous monitoring, regular system updates, and implementing suitable security controls are crucial strategies for enhancing the protection of information resources through technology (Nsirim et al. 2025). Ibrahim and Kotoroi (2025) suggest sufficient funds for maintenance and repairs, along with robust institutional policies, to protect library information materials. Similarly, Sunday et al. (2025) highlight the importance of proper funding and institutional control in supporting the utilization of electronic security technologies in academic libraries. Sunday et al. (2025) further argued that for ESTs to be sustainable, university libraries should offer support beyond procurement, specifically maintenance, updates, technical support, and replacement of outdated technologies. Ibrahim and Kotoroi (2025) suggest that staff training can mitigate challenges encountered in using electronic security technologies in libraries.

University libraries need to offer induction training, refresher training, role-specific technical training, and training in real-life scenarios

involving security incidents. Training must cover ethical and privacy issues, especially for CCTV, biometric systems, access control technologies, and digital surveillance systems (Kavak, 2024). This capacity building can boost staff confidence and competence, as well as institutional accountability for the appropriate utilization of electronic security technologies. Continuous monitoring, user awareness, system updating, patch management, privacy protection and risk-based security planning are all elements of a comprehensive technology-based security framework (Nsirim et al., 2025). Advancements in smart-library technology also suggest incorporating Internet of Things (IoT) infrastructure, intelligent sensing, and automated data processing to enhance real-time monitoring and resource management (Zhang et al., 2024).

RESEARCH METHODOLOGY

This section describes how the study examined the factors affecting the utilization of electronic security technologies to safeguard library information resources in four university libraries.

Research Philosophy

The study was grounded in pragmatism, which focuses on practical solutions to research problems, supports mixed methods, accepts multiple perspectives, and provides a comprehensive understanding through multiple methods (Allemang et al., 2022; Collis & Hussey, 2014; University of Nottingham, 2025).

Research Design and Approach

The study adopted a convergent parallel research design, consistent with a pragmatic philosophy. In this design, quantitative and qualitative data are collected in the same phase, analyzed separately, and then merged to compare or corroborate the findings (Creswell & Plano-Clark, 2018). The design allows a fuller understanding of a research problem by drawing on the strengths of both approaches (Creswell, 2014; Creswell & Creswell, 2018; Leavy, 2022; Tashakkori & Teddlie, 2010), and it was chosen to obtain a comprehensive understanding of the factors affecting the utilization of ESTs in university libraries.

Study Areas

The study was conducted in four university libraries in Tanzania: The Institute of Accountancy Arusha (IAA), Mzumbe University (MU), Muhimbili University of Health and Allied Sciences (MUHAS) and the University of Dar es Salaam (UDSM). These libraries were selected

because they had comparatively demonstrated evidence of adoption and utilization of electronic security technologies; availability of library personnel with direct experience of operating or interacting with electronic security technologies; substantial library information resources requiring protection; institutional diversity that could provide variation in organizational and technological contexts; and accessibility of information relevant to understanding factors affecting the utilization of electronic security technologies.

Population, Sampling Procedures and Sample Size

The study used purposive sampling and a census (total enumeration). The census covered all library staff in the four libraries: 20 at IAA, 46 at MU, 23 at MUHAS and 103 at UDSM, a total of 192 (Table 1). Key informants were selected purposively for their knowledge of, and responsibility for, the procurement, operation, or support of ESTs, making them information-rich cases for the qualitative inquiry (Bryman, 2016; Marshall & Rossman, 2022; Patton, 2015). The study included 12 key informants: four library directors, four ICT directors, and four IT personnel, with each role represented at every library. The library directors were included for their knowledge of policy and budgeting, ICT directors for infrastructure and network support, and IT personnel for the day-to-day operations and maintenance of electronic security systems.

Table 1:
Study Population, Sample and Response

Institution	Library staff (census)	Questionnaires analyzed	Response rate	Key informants
Institute of Accountancy Arusha (IAA)	20	19	95%	3
Mzumbe University (MU)	46	45	97.8%	3
Muhimbili University of Health and Allied Sciences (MUHAS)	23	21	91.3%	3
University of Dar es Salaam (UDSM)	103	99	96.1%	3
Cumulative Total	**192**	**184**	**95.8%**	**12**

Note: Key informants at each library were the library director, the ICT director and IT personnel. Response rate = questionnaires analyzed ÷ library staff in the census.

Data Collection Instruments

Questionnaire. Data were collected from the 184 library staff using a questionnaire with closed items rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) and open-ended items inviting suggestions for improving the utilization of ESTs. The questionnaire was designed in Google Forms and self-administered (Taherdoost, 2022).

Interviews. The interview schedule, developed from the study objectives and containing structured and semi-structured questions, was used with the 12 key informants to capture their views and experiences.

Observation. The researcher conducted non-participatory observations to identify the practical limitations encountered in effectively using electronic security technologies in the selected academic libraries. The researcher recorded operational practices (maintenance routines and system troubleshooting), the staff competencies needed for effective EST utilization, and situational realities such as system sign-in and navigation, as well as infrastructure conditions such as internet stability and EST performance (Creswell, 2014; Patton, 2015). In addition, the researcher sat quietly in the library without interfering with library operations and did not inform library staff of the exact observation date in advance. Each observation lasted for 30 to 45 minutes per day. The observation checklist enabled the researcher to collect reliable, naturalistic information on the factors affecting the utilization of electronic security technologies in academic libraries (Osayande, 2019). Lastly, the researcher wrote field notes immediately after each session to reduce recall bias (Marshall & Rossman, 2022).

Data Analysis and Integration

Quantitative analysis. The researcher coded questionnaire responses using a coding manual and entered them into the Statistical Package for the Social Sciences (SPSS) version 27, which supported data management, display, and retrieval (Rahman & Muktadr, 2021). Descriptive statistics (frequencies and percentages; N = 184) were used to characterize responses. No inferential tests were applied; the findings therefore describe the prevalence of perceived barriers and do not establish statistical determinants.

Qualitative analysis. Interview data, open-ended questionnaire responses, and observation field notes were analyzed thematically following the phases described by Braun and Clarke (2021): familiarization with the data, generation of initial codes, development and review of themes, and

definition of themes. Codes and themes were developed iteratively, reflecting participants' perspectives and the study objectives. Open-ended responses were also counted to show how many respondents proposed each strategy.

Integration. Integration occurred at the interpretation stage. For each factor, the questionnaire percentages, interview themes and observation notes were placed side by side in a joint display (Table 4) and judged as convergent (sources agree), complementary (sources add different detail) or not corroborated. Where a source did not address a factor, this is stated. This kind of triangulation strengthens interpretation and deepens analysis (Creswell & Creswell, 2023).

Data Quality Assurance

The researcher submitted the data collection instruments to research experts for advice and suggestions on improvements and modifications. Suggestions from research experts helped the researcher refine the data collection instruments before data collection, strengthening content validity and ensuring the instruments covered key aspects of the factors affecting electronic security technologies utilization in university libraries. This study also triangulated questionnaire, interview, and observation data to increase confidence in the findings when different sources pointed in the same direction (Bryman, 2016). Furthermore, the pilot study was conducted at the Nelson Mandela African Institute of Science and Technology by purposively selecting eight library staff members conversant with electronic security technologies, given them questionnaires to complete, and interviewing one library director, one ICT director, and one IT personnel member to assess the validity and completeness of the instruments.

Ethical Considerations

This research complied with key ethical standards that protected participants' rights, safety, and dignity. Before data collection began, the researcher obtained official permission from relevant authorities, including the Open University of Tanzania, Institute of Accountancy Arusha (IAA), Muhimbili University of Health and Allied Sciences (MUHAS), Mzumbe University (MU), and the University of Dar es Salaam (UDSM). Participants (library directors, ICT directors, IT personnel, and library staff) were fully informed about the purpose of the study and what was expected from them. In addition, the study maintained confidentiality and anonymity. The actual names and places of the participants in this study were not used, and instead codes were used to protect the participants'

anonymity. The researcher kept all research data secure and accessible only to them. The researcher also ensured honesty and accuracy in data collection and reporting by properly acknowledging all sources used.

RESULTS, ANALYSIS AND DISCUSSION

184 questionnaires were analyzed (Table 1). Percentages in Tables 2 and 3 are calculated from N = 184 and rounded to one decimal place. “Agree + SA” combines the *Agree* and *Strongly agree* categories; *Neutral* is reported separately and is not counted as agreement.

Perceived Protection Outcomes of Utilizing ESTs

This section presents respondents' perceptions of the protection outcomes of the ESTs used in their libraries. These outcomes provide context for the utilization factors reported in the next section. Table 2 presents the results.

Table 2:
Respondents' Perceptions of the Protection Outcomes of ESTs (N = 184)

Statement	SD	D	N	A	SA	Agree + SA
A. Perceived protection outcomes						
ESTs effectively prevent theft of physical resources.	0 (0.0%)	0 (0.0%)	2 (1.1%)	52 (28.3%)	130 (70.7%)	**182 (98.9%)**
ESTs protect digital resources from unauthorized access.	1 (0.5%)	3 (1.6%)	0 (0.0%)	106 (57.6%)	75 (40.8%)	**181 (98.4%)**
ESTs reduce financial losses.	6 (3.3%)	32 (17.4%)	13 (7.1%)	98 (53.3%)	35 (19.0%)	**133 (72.3%)**
ESTs help track and locate misplaced or borrowed items more efficiently.	20 (10.9%)	37 (20.1%)	84 (45.7%)	28 (15.2%)	15 (8.2%)	**43 (23.4%)**
ESTs provide real-time alerts and notifications when security breaches occur.	16 (8.7%)	21 (11.4%)	14 (7.6%)	102 (55.4%)	31 (16.8%)	**133 (72.3%)**
ESTs generate useful statistical reports on security incidents.	4 (2.2%)	7 (3.8%)	111 (60.3%)	43 (23.4%)	19 (10.3%)	**62 (33.7%)**
B. Operational cautions						
ESTs sometimes cause false alarms or technical anomalies that disrupt library operations.	4 (2.2%)	8 (4.3%)	25 (13.6%)	91 (49.5%)	56 (30.4%)	**147 (79.9%)**
ESTs require regular maintenance and staff training to remain effective.	2 (1.1%)	5 (2.7%)	10 (5.4%)	44 (23.9%)	123 (66.8%)	**167 (90.8%)**

Scale: SD = strongly disagree; D = disagree; N = neutral; A = agree; SA = strongly agree. Cells show the number of respondents and the percentage; N = 184 in brackets.
Source: Field data, 2026.

Perceptions were most favourable for theft prevention (182 respondents; 98.9% agreement) and protecting digital resources from unauthorized access (181; 98.4%), followed by real-time alerts (133; 72.3%) and reduced financial losses (133; 72.3%). Respondents were less certain about the analytical and inventory functions of the systems: 111 (60.3%) were neutral on statistical reporting on security incidents and 84 (45.7%) were neutral on tracking and locating misplaced items, and only 33.7% and 23.4% respectively agreed that these functions work well. Two operational cautions were also evident. A total of 147 respondents (79.9%) agreed that false alarms or technical anomalies sometimes disrupt library operations, and 167 (90.8%) agreed that the systems need regular maintenance and staff training to remain effective. These results are perceptions of effectiveness, not measured protection outcomes. No loss or incident records were analyzed, so the data cannot show whether ESTs reduced theft or unauthorized access. However, these perceptions align with Nath (2021), who described electronic security systems as effective against theft, mutilation, vandalism, and unauthorized access.

The high neutral shares for reporting and tracking functions point to limited use of advanced features rather than to their absence. Observation showed that only a small group of staff worked with IT staff to process security reports and incident data, and the study noted continued reliance on manual damage-checking of returned materials. These patterns suggest that some available functions are not used routinely. Weak infrastructure, limited system functionality, and skill gaps may explain this, and the current data cannot separate them; the skill-related constraints reported below align with the latter. The pattern also agrees with Ibrahim and Kotoroi (2025), who observed that traditional security measures are becoming less effective in modern libraries.

Factors Affecting the Utilization of ESTs

The second objective was to identify the factors that limit the effective utilization of ESTs. Respondents rated nine statements on possible constraints; Table 3 ranks them by combined agreement.

Table 3:

Perceived Factors Affecting the Utilization of ESTs (N = 184)

Statement	SD	D	N	A	SA	Agree + SA
I lack the skills to operate and manage ESTs effectively and efficiently.	3 (1.6%)	8 (4.3%)	1 (0.5%)	36 (19.6%)	136 (73.9%)	**172 (93.5%)**
Staff training is inadequate for using and managing the systems.	8 (4.3%)	5 (2.7%)	0 (0.0%)	37 (20.1%)	134 (72.8%)	**171 (92.9%)**
My library lacks sufficient funds or budget to purchase modern ESTs.	0 (0.0%)	0 (0.0%)	13 (7.1%)	48 (26.1%)	123 (66.8%)	**171 (92.9%)**
My library cannot afford the high maintenance and repair costs of existing ESTs.	22 (12.0%)	7 (3.8%)	2 (1.1%)	95 (51.6%)	58 (31.5%)	**153 (83.2%)**
I frequently face technical malfunctions or system downtime.	18 (9.8%)	8 (4.3%)	5 (2.7%)	130 (70.7%)	23 (12.5%)	**153 (83.2%)**
ESTs are complex and user-unfriendly.	30 (16.3%)	16 (8.7%)	24 (13.0%)	104 (56.5%)	10 (5.4%)	**114 (62.0%)**
The ESTs in use, including IT and network infrastructure, are outdated.	6 (3.3%)	13 (7.1%)	52 (28.3%)	86 (46.7%)	27 (14.7%)	**113 (61.4%)**
My library lacks reliable vendor technical support and after-sales service.	1 (0.5%)	2 (1.1%)	123 (66.8%)	31 (16.8%)	27 (14.7%)	**58 (31.5%)**
My library has unreliable electricity and no power backup.	70 (38.0%)	58 (31.5%)	0 (0.0%)	44 (23.9%)	12 (6.5%)	**56 (30.4%)**

Scale: SD = strongly disagree; D = disagree; N = neutral; A = agree; SA = strongly agree. Items are shown as worded in the questionnaire and ordered by combined agreement. Cells show the number of respondents and the percentage; N = 184 in brackets.

Source: Field data, 2026.

Human-resource, financial and technical constraints were the most prominent. Skill gaps (172; 93.5% agreement), inadequate training (171; 92.9%), and insufficient funds (171; 92.9%) drew the highest agreement, followed by high maintenance and repair costs (153; 83.2%) and technical malfunctions or downtime (153; 83.2%). A smaller majority agreed that the systems are complex and user-unfriendly (114; 62.0%) and that the technologies and supporting infrastructure are outdated (113; 61.4%). Two factors received little agreement. 56 respondents (30.4%) reported unreliable electricity without power backup, while 128 (69.6%) disagreed. For vendor support, 58 (31.5%) agreed that it is unreliable, but 123 (66.8%) were neutral. The neutral majority suggests uncertainty about, or limited exposure to, vendor arrangements rather than a demonstrated vendor problem.

Staff skills and training

Skill gaps and inadequate training were the most widely reported constraints. For ESTs to work effectively, staff must be able to operate, manage and troubleshoot them, and without regular training the smooth functioning of the systems is likely to suffer. The perception that staff lack the skills to protect library resources effectively is consistent with the view of key informants:

> *"Our library is faced with a challenge of the absence of system librarians who are trained to handle technical issues associated with the failure of electronic security systems."* (Library Director 1, 2026).

This suggests that the challenge is organizational as well as technological: the number and preparation of staff responsible for the systems matter as much as the systems themselves. It also indicates a need to review how security-related training is designed and delivered, including its content, frequency, and impact on security practice.

Funding and maintenance costs

Insufficient funds to acquire modern technologies 171 (92.9%) and to maintain and repair existing ones (153; 83.2%) were widely reported. This is consistent with earlier studies that found budget constraints limit libraries' ability to implement comprehensive security solutions (Hampwaye, 2022; Ibrahim & Kotoroi, 2025). Key informants reported that allocations fell short of what libraries requested in their annual procurement plans:

> *"Thank you for your question. Our library received less money than was allocated for this financial year, and the same needs to be channelled to*

> *different activities within the library. It is a problem and has a direct impact on our security operations."* (Library Director 1, 2026).

This may indicate that library security receives limited priority in institutional budgeting, making it difficult to upgrade outdated systems, acquire advanced technologies, and sustain technical support, training, and replacement.

Technical failures and malware

153 respondents (83.2%) reported technical malfunctions and downtime. Key informants from all four libraries reported computer viruses as a threat to their electronic security devices, particularly on internet-connected computers. One ICT director explained:

> *"Computer viruses are one of the greatest challenges in our library's automated environment. It is a threat when the antivirus software is not regularly updated."* (ICT Director 1, 2026).

Observations also showed that viruses caused malfunctions in computing equipment and that the risk of data loss was high when antivirus software was not updated promptly. This suggests that having technology does not necessarily lead to effective use when other important technical issues are neglected. It also illustrates that libraries must protect not only physical security devices but also the computers and networks on which digital security depends, so maintenance and cybersecurity practice belong together.

Electricity supply

Most respondents (128; 69.6%) did not perceive unreliable electricity as a constraint, although 56 (30.4%) did, which is not a negligible share. The pattern may reflect power-backup arrangements provided through parent institutions, but the data do not confirm this. Because ESTs cannot function without power, and because the pooled sample is dominated by one large library, institution-level checking is advisable.

Integrated view of the factors

Table 4 places the questionnaire, interview and observation evidence side by side. For skills and training, funding, and technical failures and malware, the sources converge. For electricity supply, only questionnaire evidence is available, and questionnaire and observation evidence support the underuse of advanced system functions, but interviews do not.

Table 4:
Joint Display of Questionnaire, Interview and Observation Evidence

Factor	Questionnaire (Agree + SA)	Interview evidence	Observation / other evidence	Integration
Staff skills and training	Skill gaps 172 (93.5%); inadequate training 171 (92.9%)	Absence of trained system librarians (Library Director 2)	Only a small group of staff worked with IT staff to process security reports and incident data	Convergent
Funding and maintenance costs	Insufficient funds 171 (92.9%); maintenance and repair costs 153 (83.2%)	Allocations below requested amounts (Library Director 1)	Not reported	Convergent (questionnaire and interviews)
Technical failures and malware	Malfunctions or downtime 153 (83.2%)	Viruses are a threat when antivirus is not updated (ICT Director 1); viruses reported at all four libraries.	Viruses caused equipment malfunctions; internet stability and EST performance recorded as infrastructure issues.	Convergent
Underuse of advanced functions	Neutral on reporting 111 (60.3%) and on tracking 84 (45.7%)	Not reported	Small group of staff processes reports; manual damage-checking of returned materials continues.	Complementary
Electricity supply	Agree 56 (30.4%); disagree 128 (69.6%)	Not reported	Not reported	Not corroborated

Source: Field data, 2026.

Taken together, the evidence indicates that the utilization of ESTs in these libraries is limited mainly by gaps in human capacity, funding and technical support. The performance of security technologies therefore depends not only on their availability but also on the skills of the people who operate them and on the resources committed to maintaining them. When library staff are not well prepared, technologies are likely to be underused, which may leave resources exposed to theft, vandalism, and unauthorized access. Because these results describe the prevalence of perceived barriers and were not tested inferentially, read them as indications of priority rather than proof of causation.

Strategies Proposed to Improve the Utilization of ESTs

Respondents were also asked, through open-ended questions, to propose measures to improve EST utilization. Their suggestions complement the researcher's recommendations and are summarized below by theme.

Providing adequate funds

The most widely endorsed proposal was that parent institutions allocate sufficient budget to procure, maintain, and sustain ESTs. A total of 138 respondents (75.0%) proposed that top management prioritize and allocate adequate funding to overcome the financial constraints affecting the performance of library security technologies. In the Tanzanian university context, where resources are shared among competing priorities such as teaching infrastructure and research grants, libraries may be left operating outdated or malfunctioning security technologies. Budgets should therefore be based on each library's assessed security needs.

Providing frequent training

A total of 172 respondents (93.5%) proposed frequent training for library staff on using ESTs, in line with the skill gaps reported in Table 3. Earlier studies of Tanzanian university libraries have reported similar human-factor barriers, including limited ICT competencies, a lack of in-service training, and low awareness of the importance of ESTs. Studies at institutions such as Mzumbe University, the University of Dar es Salaam, and the Nelson Mandela African Institution of Science and Technology have documented skill deficiencies linked to poor maintenance, unreliable performance and failure to realize the protective potential of EST investments (Ibrahim & Kotoroi, 2025; Komba, 2020; Kotoroi, 2023). Respondents therefore recommended frequent training as a sustainable way to close competency gaps. The researcher suggests a structured program of regular training, for example at least quarterly, in place of occasional ori-

entation sessions, so that staff keep pace with software updates and emerging threats in settings with staff turnover and multiple job roles.

Improving security technology infrastructure

Library staff proposed improving existing IT and network infrastructure, which they described as outdated, fragmented and inadequate for modern security requirements. This is consistent with Table 3, where 113 respondents (61.4%) agreed that the technologies in use are outdated. Based on these views, the researcher recommends that libraries prioritize modernizing core infrastructure, including servers, routers, and surveillance systems, to support technologies such as RFID-based tracking, biometric access control, and integrated surveillance, and that libraries institutionalize regular system audits, preventive maintenance schedules, and lifecycle-management plans to avoid obsolescence.

Limitations and Directions for Future Research

Four limitations should be noted. First, the analysis was descriptive: it reports the prevalence of perceived barriers and does not statistically test which factors determine utilization. Second, the questionnaire data are self-reported perceptions, and no loss or incident records were analyzed, so perceived protection outcomes cannot be treated as evidence that ESTs reduced losses. Third, results are pooled across four libraries of very different sizes, with UDSM contributing 51.6% of respondents, so pooled percentages may mask differences between institutions; the authors did not report institution-level comparisons. Fourth, the study included only four libraries, limiting generalization to other Tanzanian university libraries. Future studies should compare institutions directly, use inferential techniques such as regression to test determinants, and combine perception data with incident and loss records.

CONCLUSION

This study investigated the factors affecting the utilization of ESTs to safeguard information resources in four Tanzanian university libraries. Respondents perceived ESTs as contributing to the protection of physical and digital resources through theft prevention, control of unauthorized access, and real-time alerts. However, these are perceptions rather than measured outcomes.

Several factors were perceived to limit effective utilization: staff skill gaps, limited training, insufficient funds, high maintenance and repair costs, and frequent technical failures. Smaller groups reported outdated

infrastructure and system complexity, whereas electricity supply and vendor support were not widely seen as constraints. Interviews and observation corroborated the human-resource, funding and technical constraints. The findings suggest that these constraints are interdependent rather than isolated barriers. The study also indicates that having security technology does not ensure effective use; utilization appears to depend on trained personnel, secure funding, ongoing maintenance, and supportive institutional policies. Enhancing the utilization of electronic security technologies therefore requires a comprehensive strategy that addresses technological, financial, organizational, and human-capacity issues and improves the protection and sustainability of library information resources in Tanzanian university libraries and, potentially, in similar academic settings.

RECOMMENDATIONS

This section provides recommendations from the findings of the study. Although academic libraries in Tanzania have made significant investments to improve the efficiency of their ESTs, challenges such as inadequate capacity-building, limited technical support, and maintenance issues persist. This report offers comprehensive suggestions for library staff, university library management, Tanzanian universities, and policymakers to address these challenges and maximize EST utilization. The recommendations provided are based on the findings.

Recommendations to Library Staff

i) **Improve Technical Competence:** Library staff should gain the skills to operate, troubleshoot and optimize use of electronic security technologies. Integrate basics of technologies like CCTV, RFID, and access control into operational training programmes. Knowledge of advanced troubleshooting skills to resolve system failures and data management and reporting skills to interpret systems effectively.

ii) **Encourage Ongoing Training:** Library staff should attend periodic security refresher training sessions to keep abreast of new electronic security developments and threats. This will help keep library personnel up to date on the latest systems.

iii) **Promote Feedback Mechanisms:** Library personnel should offer input to electronic security technologies in terms of their functionality, operational problems and new security concerns. This

will help library management identify gaps and fine-tune the security system's performance.

Recommendations to the Library Management

i) **Establish a written maintenance schedule**: The library should establish a maintenance schedule for library electronic security technologies as part of library management. These schedules should include periodic system evaluation, inspection, and preventive procedures.

ii) **Invest in Integrated Electronic Security Technologies:** Library management should focus on the implementation of integrated electronic security technologies like the RFID system that integrates theft detection, inventory and circulation management. These systems can be integrated into the library management system to improve the efficiency of security operations.

iii) **Dedicated Security Personnel:** Library management should ensure that there are dedicated security staff to keep an eye on the CCTV systems and other security technologies in real time. This will enable proactive responses to security incidents, not just retrospective investigations.

iv) **Enhance** Communication and Collaboration: Library management should encourage collaboration among operational staff and the IT department so that all staff members know how to operate each of the security systems and how to follow the security protocols. This will reduce reliance on specific technical experts.

Recommendations to University Management

i) **Budget Allocation for Electronic Security Technologies:** University management should dedicate a budget for procurement, maintenance and upgrading of electronic security technologies. This will keep security systems sustainable and prevent them from becoming obsolete.

ii) **Enhance Support Staff Development:** The University management should build in an ongoing staff development program for library personnel and IT staff. These programmes should equip library staff with technical knowledge, operational skills, and strategic security management capabilities.

iii) **Implement Succession Planning:** Universities should have measures to maintain the knowledge of the institution, so technical skills remain even after trained personnel retire and leave the university library. This can involve documenting procedures and providing mentoring.

iv) **Support Digital Security:** Universities need to ensure electronic information resources are protected from unauthorized access and cyber threats by investing in cyber security measures like firewalls, antivirus, and digital rights management systems.

Recommendations to Policy Makers

Establish National Standards for Library Security: Develop national standards for library security, including guidelines for the deployment, operation and upkeep of technologies for electronic security. These standards should cover physical and digital security concerns. Additionally, effective implementation and maintenance of the library's security system should be an important factor in accreditation and quality assurance by policymakers such as the Tanzania Commission for Universities (TCU). This will raise the profile of library security as a requirement for library institutions.

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