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TOPIC: COMMUNITY PERCEPTIONS AND THEIR INFLUENCE ON WAYLEAVES ACQUISITION FOR RURAL ELECTRICITY DEVELOPMENT IN UGANDA: A CASE STUDY OF BUGAMBA SUBCOUNTY, RWAMPARA DISTRICT

BY

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Declaration

I, **NORMAN MUKAABYA** declare that this research thesis titled "***Community Perceptions and Their Influence on Wayleaves Acquisition for Rural Electricity Development in Uganda: A Case Study of Bugamba Subcounty, Rwampara District***" is my original piece of work that has never been submitted to any institution of higher learning for any academic qualification.

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Approval

This research thesis titled, "***Community Perceptions and Their Influence on Wayleaves Acquisition for Rural Electricity Development in Uganda: A Case Study of Bugamba Subcounty, Rwampara District***" has been prepared under my supervision. It is now ready for submission to the College of Engineering, Design, Art & Technology.

Signature Moabineno Date 25/06/2025

Dr Lilian Oryema

Dedication

This research thesis is dedicated to all those who relentlessly guided me to progress. Special gratitude to my supervisors, mentors, colleagues, and family whose unwavering support and encouragement kept me going. May the Lord Almighty bless your endeavours abundantly.

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Abbreviations	Full Meaning
CSV	Comma-Separated Values
EASP	Electricity Access Scale-up Project
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IEA	International Energy Agency
IFC	International Finance Corporation
ISO	International Organization for Standardization
KII	Key Informant Interview
KMO	Kaiser-Meyer-Olkin Measure of Sampling Adequacy
MEMD	Ministry of Energy and Mineral Development
NGO	Non-Governmental Organization
SD	Standard Deviation
SDGs	Sustainable Development Goals
SE	Stakeholder Engagement
SED	Strategy for Economic Development
SPSS	Statistical Package for the Social Sciences
URA	Uganda Revenue Authority

Abstract

A number of studies in relation to wayleaves acquisition have been conducted especially on the role of compensation and stakeholder engagement, although little is known on the impact of community perceptions on wayleaves acquisition. Community perceptions, expectations, and concerns regarding infrastructure projects influence the success of the project. Therefore understanding how community perceptions are shaped provides an opportunity to understand what is succeeding and what needs to be improved in an effort to ease rural electrification efforts. The study carried was carried out in the areas of Bugamba Subcounty in Rwampara District and targeted mainly community members that were directly affected by rural electrification activities. It involved 55 respondents to which to which mainly economic issues, influence of local leadership, transparency and inclusiveness played the highest role accounting for 66% of the respondents as main factors that influence their perceptions in wayleaves acquisition. Education and cultural issues played the least role in shaping community perceptions. Further analysis indicates that communities that experienced negative perceptions leads to delays in consent for wayleaves acquisition as well negative past experiences with previous infrastructure projects. Finally, the results suggest that more inclusive and continuous stakeholder engagement with the help of community local leaders is desirable and fosters trust hence increased positive cooperation with the communities.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Rural electrification is a critical component of global development strategies, aiming to enhance socio-economic growth and improve living standards in underserved areas (Yu et al., 2024; Alegre-Bravo & Anderson, 2022; Harish et al., 2022). Access to reliable electricity is fundamental for socio-economic development, yet as of 2023, approximately 750 million people worldwide (about 9.1% of world's population) remained without access, with rural areas disproportionately affected, and 90% of this number are in sub-Saharan Africa (International Energy Agency [IEA], 2024; Statista, 2024).

Between 2000 and 2024, global electrification efforts connected more than 1 billion people, increasing the global electrification rate from 83% to 90% covering approximately 7.2 billion people (IEA, 2024; Statista, 2024). Despite this progress, the urban-rural divide persists, with urban areas achieving a 97% electrification rate compared to 83% in rural regions as of 2022 (World Bank, 2023; IEA, 2023). The challenge of extending electricity infrastructure to these areas is multifaceted, involving technical, financial, and socio-cultural factors (Bhattacharyya, 2018). One significant obstacle is the acquisition of wayleaves—legal rights to use another's land for infrastructure projects—which often encounters resistance due to community perceptions and land ownership issues (Palmer, 2018). In an effort to successfully implement the Sustainable Development Goals (SDGs), particularly Goals 9 and 11, energy plays a crucial role as it directly impacts these goals. Access to electricity is a fundamental prerequisite for economic growth, poverty alleviation and sustainable development (World Bank, 2022).

In Africa, the electrification rate remains low, with only 43% of the population having access to electricity, and rural areas lagging significantly behind urban centers (International Energy Agency, 2019). The process of acquiring wayleaves in these regions is often complicated by customary land tenure systems and limited community engagement (Tenenbaum et al., 2018). For instance, in Nigeria, inadequate compensation and lack of consultation have led to community resistance against infrastructure projects (Adewumi et al., 2019). Most of Kenya's development partners including the World Bank, International Finance Corporation (IFC) among others, have revised their Performance Standards/ Operational Policies with respect to environment, and social safeguards to ensure that the infrastructure development projects which they finance are implemented sustainably while upholding the rights of the project affected communities (IFC World Bank, 2012). The wayleave acquisition process also faces numerous challenges, which result in unprecedented delays to project completion time due to

work stoppages, ultimately leading to budget overruns. Other challenges include unrealistically high expectations of compensation or resettlement to their satisfaction by affected communities, speculative and opportunistic behavior by PAPS after a transmission line route has been confirmed and undertaking land subdivisions after the cut-off date.

The Uganda Land Acquisition, Act Chapter 226 and the Uganda Land Act, Chapter 227 are among the substantive laws governing land acquisition for public purposes and compensation for the same (Government of Uganda, 1965; "LAND ACT, 1998", 1998). The laws in Uganda provide for compensation in cases where the land is fully taken over by the government and where restrictions are placed on private land (Dieterle, 2021). The Electricity Act of Uganda grants electricity companies the legal right to run power lines across private land, outlining the acquisition process, compensation, usage restrictions, and dispute resolution procedures (Government of Uganda, 1999). This necessitates fair compensation for the use of their land for the power lines (Uganda Parliament Library, 2022). The practice is that the MEMD acquires consent from the landowners through whose land these electricity power lines are to pass and consequently shares wayleaves' consent forms with Utility companies upon construction of the power line

The Revised Energy Policy for Uganda (2023) emphasizes the need for sustainable energy development and increased rural electrification (Electricity Regulatory Authority, 2023). The Electricity Connections Policy (2018) aims to provide free electricity connections to households that meet specific wiring standards, thereby reducing the financial burden on rural communities (Electricity Regulatory Authority, 2018). As of 2021, the national electricity access rate stood at 57%, with 19% on-grid and 38% off-grid connections (African Development Bank, 2021). To enhance rural connectivity, the government launched the Uganda Rural Electricity Access Project (UREAP), aiming to connect 87,500 rural households (African Development Bank, 2021). Despite these efforts, the electricity sector remains relatively undeveloped, with only 10% of rural households having access to grid electricity as of 2024 compared to urban households' 57.4% (Dominic, 2024). This low accessibility has led to increased reliance on wood fuels, contributing to forest depletion by 39% since the early 1990s (Research Consult Uganda, 2023). The high electricity tariffs, among the highest in East Africa, have also discouraged consumption, with many small industries struggling to operate due to elevated production costs (Electricity Regulatory Authority, 2018).

One of the major hindrances in the energy sector is inadequate public financing to develop electricity supply projects to match growing demand (Nabukeera, 2020; Twesigye et al., 2011). The government prefers to maximise private investment in infrastructure in order to allocate more resources to the social sector. Due to Government of Uganda resource limitations to fully

finance compensation within a given timeframe, MEMD requires that each property owner assents by signing a Consent Agreement to allow powerlines through their land and only being compensated for the damages that are done without land compensation. Land and property owners are motivated to freely allow such projects through their land because the value of their properties, health and wellbeing will improve (KCCA, 2017).

However, some recent energy generation and other development projects were stalled or halted by community opposition based on concerns over project impacts, land ownership, lack of consensus regarding benefit sharing, or a combination of these and other related issues. More to the point: sometimes project developers and communities have not engaged one another in a meaningful, timely, or productive way, leading otherwise good projects to get delayed or derailed altogether (MEMD, 2024). Land acquisition for infrastructure projects in Uganda often faces challenges of balancing public interest with landowner rights and ensuring just compensation. (Mwaura, 2012).

To achieve the Uganda Vision 2040 goal for electricity distribution, it is crucial to ensure widespread access to reliable and affordable electricity across the country. This involves significantly increasing the national connection rate to reach the targeted 80% by 2040 (IEA, 2023). Strengthening the grid infrastructure is essential to support economic growth and development. This includes expanding the grid's reach to rural areas and utilizing innovative solutions to address energy poverty. The expansion of such a network requires to have all stakeholders in the sector committed to achieve the targeted goals. Although it has been argued that many organizations are unclear on how to go about stakeholder engagement activities and end up having difficulties in developing a strategy given the lack of consensus, which in turn leads to inconsistent communications, and the general acceptability of projects in communities (Nielsen & Thomas, 2017).

1.2 Problem Statement

Access to electricity is a critical driver of rural development, yet the expansion of rural electricity infrastructure in Uganda faces significant challenges, particularly in acquiring wayleaves for power transmission and distribution (MoFPED, 2017). One of the major barriers to wayleaves acquisition is resistance from local communities, which is often influenced by their perceptions, expectations, and concerns regarding infrastructure projects (Kioko, 2021; Scholz, 2019). Many rural communities view wayleaves acquisition as a threat to their land rights, livelihoods, and environment (Horne, 2023). This resistance is exacerbated by socioeconomic factors such as inadequate compensation, lack of consultation, and fear of displacement (Mugyenyi et al., 2021). Uganda's rural electrification access remains low, with

only 19% of households connected to the grid, and even lower rates in remote areas (African Development Bank, 2021). Limited awareness and misconceptions about the benefits of rural electrification further hinder community acceptance and cooperation (Yu et al., 2024; Palit & Kumar, 2022; Ferrari et al., 2022; Budziewicz-Guźlecka & Drożdż, 2022; Turyahikayo, 2019). Despite the crucial role of community engagement in successful wayleaves acquisition, there is limited research on how community perceptions shape this process and what strategies can be employed to improve stakeholder relations (Trappett, 2024; Grace & Dosdall, n.d.). Uganda's legal and policy framework, such as the Electricity Act (1999) and the Land Act (1998), provides guidelines for infrastructure development, but gaps in implementation and enforcement continue to fuel disputes (Electricity Regulatory Authority, 2023). Through assessing the impact of these perceptions and proposing strategies for improving public participation, reducing conflicts, and ensuring smoother project implementation, the study aimed to contribute to more sustainable and inclusive rural electrification efforts.

1.3 Study Objectives

1.3.1 Main Objective

To examine the community perceptions and their influence on wayleaves acquisition in rural electricity infrastructure development in Uganda.

1.3.2 Specific Objectives

i. To examine factors that influence community perceptions of wayleaves acquisition.
ii. To evaluate the impact of community perceptions on wayleaves acquisition for rural electrification.
iii. To propose strategies for improving community participation and reducing conflicts in wayleaves acquisition for rural electricity infrastructure development.

1.4 Research Questions

i. What factors influence community perceptions of wayleaves acquisition?
ii. How do community perceptions impact wayleaves acquisition for rural electrification?
iii. What strategies can be implemented to improve community participation and reduce conflicts in wayleaves acquisition for rural electricity infrastructure development?

1.5 Significance of the study

This study is significant as it provides critical insights into the role of community perceptions in wayleaves acquisition for rural electricity infrastructure development in Uganda. Identifying key factors influencing community attitudes and their impact on project implementation

contributes to policy formulation and the improvement of stakeholder engagement strategies. The findings are beneficial to policymakers, electricity regulatory bodies, and project developers in designing inclusive and conflict-sensitive approaches that enhance public participation and facilitate smoother wayleaves acquisition. In addition, the study offers recommendations to address socioeconomic and legal challenges associated with wayleaves acquisition, ultimately supporting Uganda's rural electrification goals and sustainable development efforts.

1.6 Justification

The acquisition of wayleaves for rural electricity infrastructure development is crucial for enhancing energy access and promoting socio-economic growth in Uganda. However, persistent community resistance, driven by concerns over land rights, inadequate compensation, and environmental impacts, continues to hinder project implementation. Existing research on rural electrification in Uganda has largely focused on technical and financial aspects, with limited emphasis on the role of community perceptions in shaping project outcomes. This study is justified as it seeks to bridge this knowledge gap by examining the factors influencing community attitudes toward wayleaves acquisition and proposing strategies to foster cooperation and reduce conflicts. The findings informs policymakers, energy sector stakeholders, and development partners on effective engagement practices to ensure equitable and sustainable rural electrification.

1.7 Study Scope

This study focuses on examining community perceptions and their influence on wayleaves acquisition for rural electricity infrastructure development in Uganda. Specifically, it investigates the factors that shape community attitudes toward wayleaves acquisition, assesses the impact of these perceptions on the progress of rural electrification projects, and proposes strategies to enhance community participation and minimize conflicts. The study also explores the legal, policy, and socio-economic dimensions of wayleaves acquisition, including issues related to land rights, compensation, public awareness, and stakeholder engagement.

Geographically, the study is limited to Bugamba Subcounty, Rwampara District in Uganda, a region where rural electrification projects have faced challenges related to wayleaves acquisition. The selection of this district is based on its relevance to the study objectives, as it has ongoing and planned electricity distribution projects that require community engagement for successful implementation. The district shares borders with Sheema District in the north, Isingiro and Mbarara Districts in the east, Isingiro District in the south, and Ntungamo District in the west. The district has its headquarters in Kinoni Town Council, along the Mbarara-Kabale road, approximately 23 kilometers west of Mbarara City. With a total land area of about

1,846.4 square kilometers, the district provides a relevant case study for rural electrification challenges, particularly concerning wayleaves acquisition in infrastructure projects.

The study was conducted within 5 months from January 2025 to June 2025, within which proposal writing, attaining all the necessary permissions for data collection, actual data collection, data analysis and report writing was completed.

1.8 Conceptual Framework

Community perceptions act as a mediating factor between external influences (such as socioeconomic conditions, awareness, and trust in institutions) and the outcome of wayleaves acquisition. Negative perceptions contribute to resistance and conflicts, while positive perceptions foster cooperation and smoother infrastructure development. Implementing strategic interventions can help improve public participation, reduce opposition, and ensure efficient project execution.

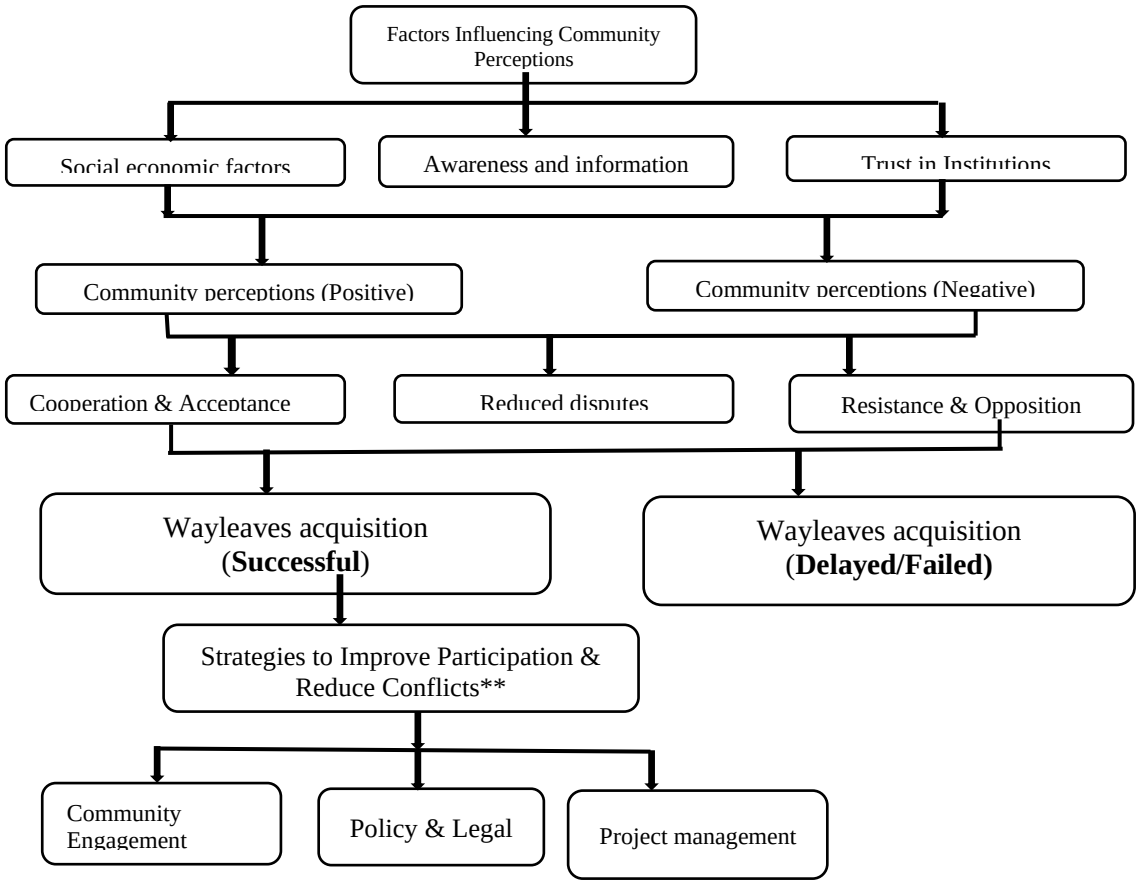

Figure 1: Conceptual Framework *Source: Researcher's own initiative*

1.9 Operational definition of key terms

- **Wayleaves Acquisition**: The legal process of securing rights to install and maintain electricity transmission and distribution infrastructure on private or public land.

- **Community Perceptions**: The attitudes, beliefs, and opinions held by local residents regarding the wayleaves acquisition process and its impact on their livelihoods, land rights, and environment.
- **Rural Electrification**: The expansion of electricity supply to rural areas to improve access to energy for households, businesses, and public services.
- **Stakeholder Engagement**: The process of involving community members, government agencies, utility companies, and other relevant parties in decision-making and implementation of rural electricity projects.
- **Land Rights**: The legal and customary entitlements of individuals or communities to own use, and control land, which may be affected by wayleaves acquisition for electricity infrastructure.
- **Compensation**: The financial or non-financial benefits provided to individuals or communities affected by wayleaves acquisition, intended to offset potential losses or inconveniences.
- **Conflict Resolution Strategies**: Methods and approaches used to address disputes and disagreements between communities and project developers regarding wayleaves acquisition for rural electrification.
- **Electricity Infrastructure Development**: The planning, construction, and expansion of power generation, transmission, and distribution systems to enhance electricity access.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter is structured to first review theoretical frameworks and models that inform the study, an exploration of the various methods employed in stakeholder engagement, stakeholder perceptions of these methods and examines how stakeholder participation influences project outcomes. The chapter concludes with a synthesis of the literature and identification of gaps

that this study intends to address, contributing new insights into the field of infrastructure project management.

2.2 Theoretical review

2.2.1 Stakeholder Engagement model

The Institute of Social and Ethical Accountability (2005) developed a five-step model that provides a structured approach to stakeholder engagement, ensuring thorough planning, participation, and evaluation.

Five step stakeholder engagement model

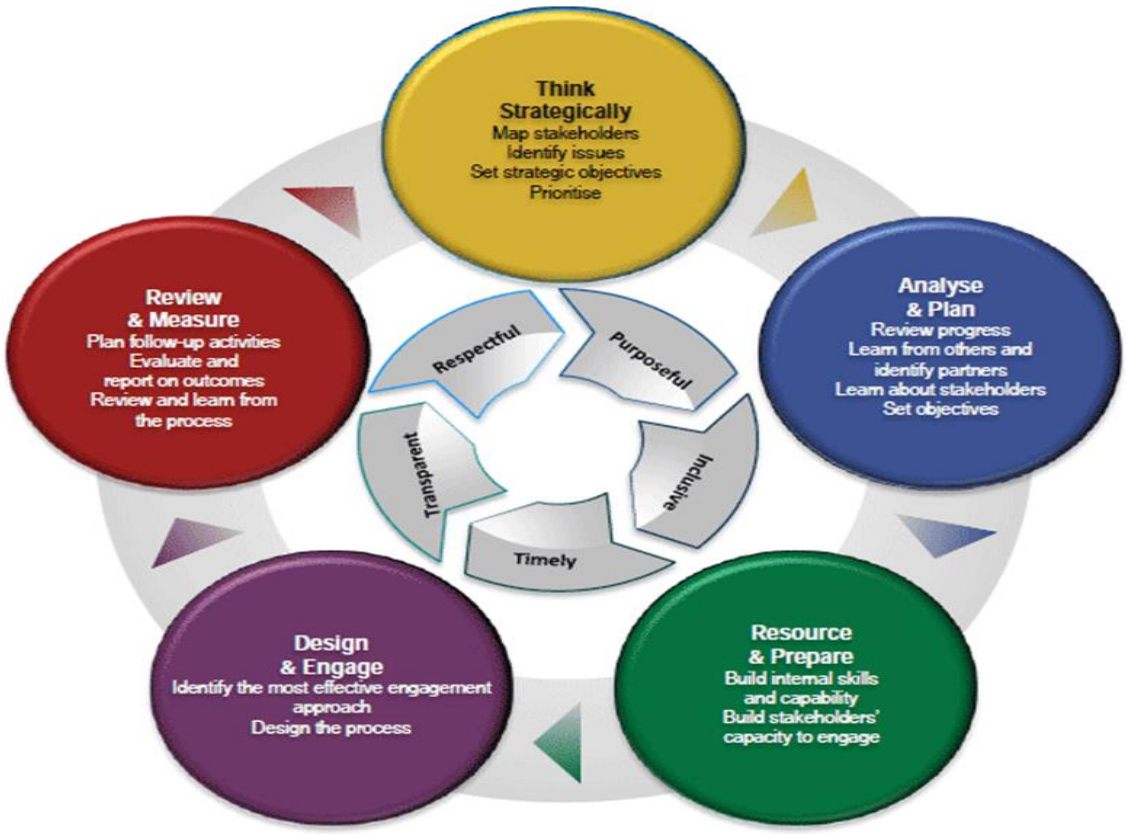

Figure 2: Stakeholder Engagement Model *Adopted from: The Australian Government (2005)*

Step 1: Think – Strategic Consideration of Stakeholders

At this stage, project implementers identify key stakeholders and their level of influence. In the context of this study, these stakeholders include landowners, local government officials, community leaders, environmental groups, and affected residents. Understanding the interests and concerns of these groups early, MEMD can anticipate potential challenges and resistance, ensuring that engagement strategies are designed to address specific stakeholder needs.

Step 2: Plan – Designing the Engagement Strategy

Once stakeholders are identified, engagement methods must be tailored to ensure inclusivity and effectiveness. This stage involves selecting appropriate communication channels, determining the level of participation required, and setting expectations. In rural Uganda, face-to-face meetings, radio announcements, and community gatherings are commonly used for stakeholder engagement (Ministry of Water and Environment, 2019). However, research suggests that using a mix of methods—such as surveys, workshops, and local media—can improve project acceptance by up to 44.1% (Wu et al., 2022)

Step 3: Prepare – Building Capacity for Effective Engagement

Preparation is crucial for meaningful engagement. This step ensures that stakeholders are well-informed and equipped to participate in the decision-making process. It involves providing relevant information, addressing concerns, and ensuring that all stakeholders, including marginalized groups, can participate effectively.

One challenge in Uganda's rural electrification projects is the limited awareness and understanding of wayleaves acquisition laws (MoFPED, 2023). Studies have shown that 75% of disputes in land acquisition result from misunderstandings regarding compensation and land rights (Coulibaly & Li, 2020; Mkodzongi & Lawrence, 2019; Sinha & Jha, 2019). To mitigate such conflicts, awareness campaigns explaining compensation policies, project benefits, and grievance-handling mechanisms should be organized (Ben Grama, 2022).

Step 4: Engage – Implementing Stakeholder Participation Activities

This step involves direct engagement with stakeholders through consultations, public meetings, and negotiation processes. The level of engagement should vary depending on the stakeholder's influence and interest in the project.

For instance, landowners directly affected by wayleaves acquisition should be engaged in one-on-one negotiations, while community-wide forums can be held to address general concerns. Ainomugisha et al. (2024) found that electrification projects that prioritized two-way communication—where stakeholders had opportunities to provide feedback—experience fewer project delays.

Step 5: Evaluate – Measuring the Impact of Stakeholder Engagement

The final step involves assessing whether the engagement process achieved its objectives. This includes gathering feedback from stakeholders, documenting lessons learned, and adjusting future engagement strategies accordingly. A study by Liu (2018) indicates that infrastructure projects with structured evaluation mechanisms reduce conflicts and recommended post-engagement surveys and community assessments to determine the effectiveness of stakeholder participation and identify areas for improvement in future projects.

2.2.2 Stakeholder Theory (Freeman, 1984)

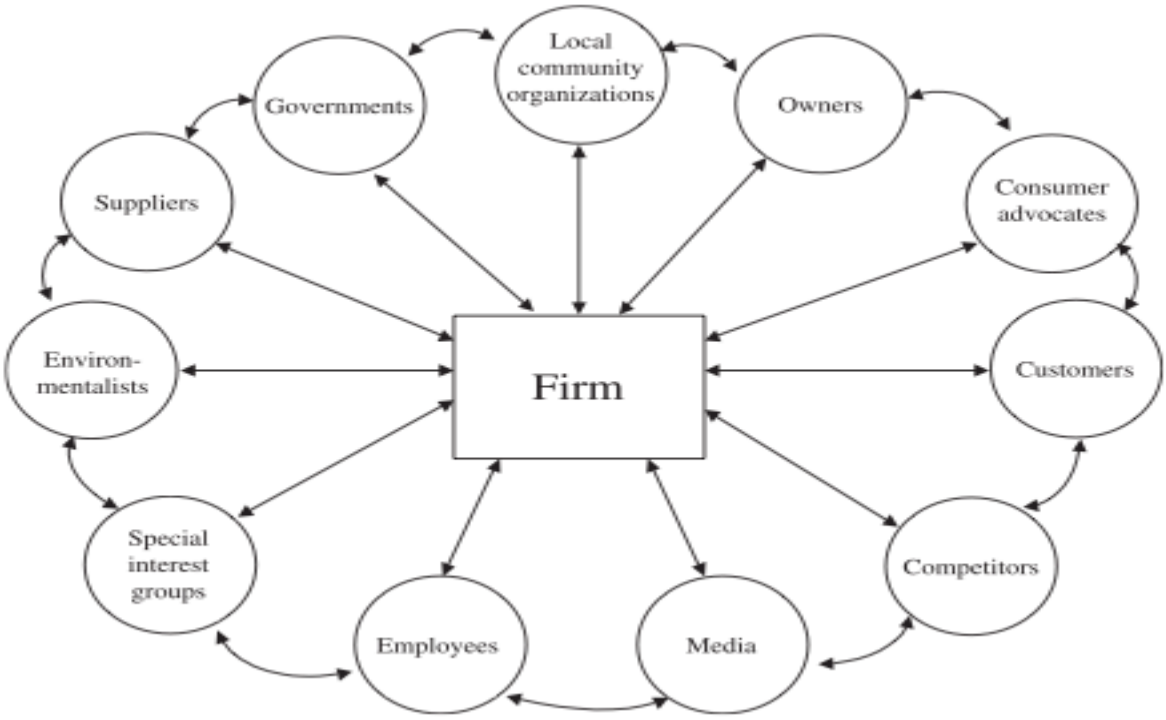

Figure 3: A Stakeholder Model (Freeman, 1984 in Preble, 2005, p. 417)

The Stakeholder Theory, developed by Freeman (1984), argues that organizations must consider the interests of all stakeholders—not just shareholders—for sustainable success. This theory is particularly relevant to rural electrification projects, where multiple actors, including government agencies, community members, and private sector players, must work together to ensure smooth project execution. Governments need the cooperation of landowners to acquire wayleaves for electricity distribution, while communities need access to electricity to improve their livelihoods. Thus, a balanced approach where all parties benefit is essential for project success (Stritzke & Trotter, 2019).

The Theory categorizes stakeholders as primary and secondary actors. Primary stakeholders, such as landowners and local government officials, have a direct impact on the wayleaves acquisition process. Secondary stakeholders, such as advocacy groups and environmental organizations, may also influence public perception and policy decisions regarding rural electrification projects. The theory also highlights the importance of stakeholder salience, which refers to the degree of power, legitimacy, and urgency a stakeholder possesses in influencing project outcomes. Recognizing and strategically managing such key stakeholders can significantly reduce resistance and enhance cooperation.

The Theory emphasizes long-term relationships rather than one-time interactions. Many infrastructure projects in Uganda have faced resistance because of transactional rather than relational engagement strategies (Ssenyange & Chodokufa, 2024). Adopting a long-term

engagement approach can build trust with local communities, ensuring that future projects face fewer hurdles in land acquisition and implementation.

2.2.3 Arnstein's Ladder of Citizen Participation (Arnstein, 1969)

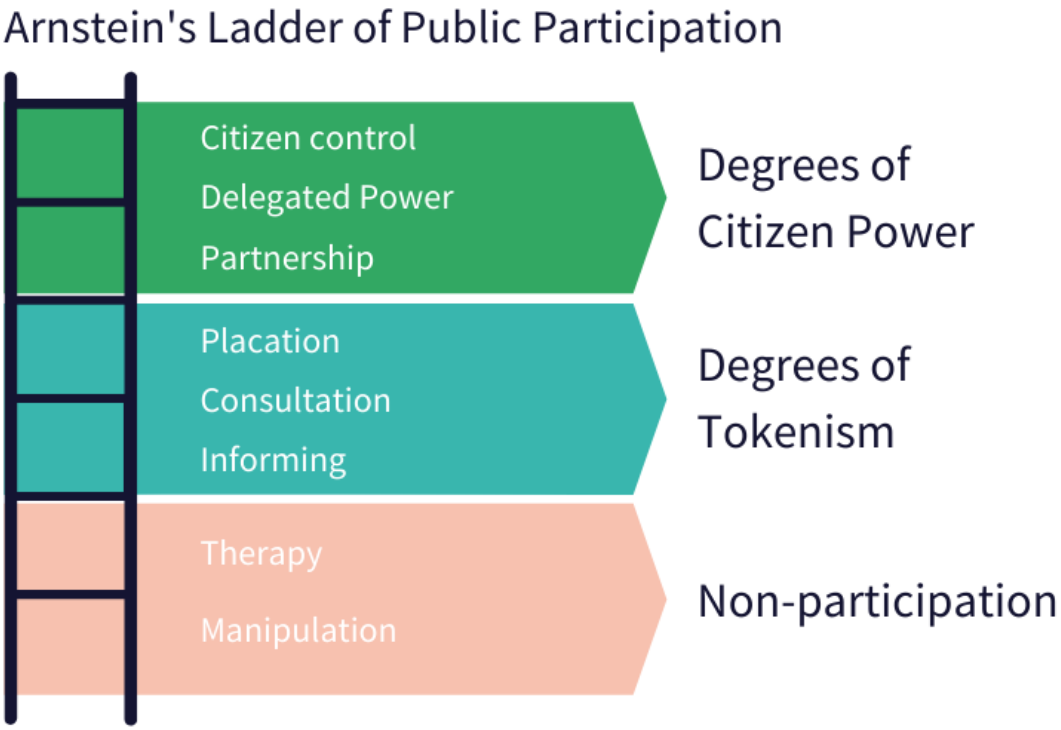

Figure 4: Arnstein's Ladder of Citizen Participation ***Adopted from Kusi (2023).***

Arnstein's Ladder of Citizen Participation provides a framework for evaluating the depth and quality of stakeholder involvement in decision-making processes. The model categorizes participation into eight levels, ranging from non-participation (manipulation and therapy) to tokenism (informing, consultation, placation) and full citizen power (partnership, delegated power, citizen control) (Arnstein, 1969). Many projects involve community meetings and information sessions, but true power-sharing mechanisms, such as partnerships or delegated decision-making, are often lacking. This limited participation can lead to community resistance, delays, and difficulties in securing wayleaves.

One of the key criticisms of many infrastructure projects in Uganda is that they engage communities only at the informing stage, where stakeholders are merely provided with project details without a real opportunity to influence outcomes Nduhura et al. (2024). According to the Ladder of Citizen Participation, this approach can lead to discontent and resistance, as stakeholders feel excluded from key decision-making processes. To improve stakeholder engagement, rural electrification projects should aim for higher levels of participation on the ladder, such as partnerships and delegated power.

Finally, the model emphasizes power dynamics in decision-making. Infrastructure projects are often led by government agencies and donor organizations, while local communities have

limited influence. However, research shows that projects that empower communities by involving them in meaningful decision-making—such as allowing them to determine compensation mechanisms for wayleaves—experience higher levels of acceptance (Kioko (2021; Scholz, 2019). Applying these principles can improve the success rate of the wayleaves acquisition process.

2.3 Factors that influence community perceptions of project acquisition and acceptance

2.3.1 Land Tenure and Compensation Concerns

One of the most significant factors shaping community perceptions of wayleaves acquisition is land tenure security and the compensation process (Turimubumwe et al., 2022; Kasimbazi, 2017). In many rural areas, land is not only a source of livelihood but also a critical aspect of cultural identity and inheritance (Ma et al., 2020). When wayleaves are acquired without proper consultation or fair compensation, communities tend to resist such projects, fearing loss of land rights (Kioko, 2021). In Uganda, studies have found that many rural landowners do not hold formal land titles, making compensation negotiations complex and often contentious (Kyomuhendo, 2025; Gochberg, 2021). Further, inequitable compensation packages, coupled with delayed payments, exacerbate grievances, leading to project delays and resistance (CESI, 2024). Research in Ghana and Nigeria has also demonstrated that inadequate compensation mechanisms often result in prolonged disputes, affecting overall project implementation (Osei-Kyei & Chan, 2020; Ametepey et al., 2017).

2.3.2 Community Awareness and Information Transparency

The level of community awareness regarding the benefits and impacts of electricity infrastructure projects significantly influences acceptance (Torro et al., 2024). Lack of clear, timely, and transparent communication from project developers often leads to misinformation, skepticism, and resistance (Shahbazi & Bunker, 2024). Many rural residents perceive wayleaves acquisition as land grabbing due to inadequate sensitization efforts (Kioko, 2021). In Uganda, a study by Magoola et al. (2021) found that projects with proactive community engagement strategies experienced less resistance compared to those with limited public participation. Research in Ethiopia also highlights that participatory decision-making and regular information-sharing meetings improve community trust and reduce opposition to infrastructure projects (HeinOnline, 2025; Sasie et al., 2024). Ensuring that communities fully understand the project objectives, benefits, and potential disruptions is crucial in fostering positive perceptions and cooperation (Di Maddaloni & Sabini, 2022).

2.3.3 Socio-Cultural and Traditional Beliefs

Cultural beliefs and traditional practices play a significant role in how communities perceive infrastructure development projects (Olanipekun et al., 2022). In many African societies, land is not only an economic asset but also holds spiritual and ancestral significance (Nehusi, 2024). Research in Tanzania found that infrastructure projects that encroach on sacred lands or burial sites often face heightened resistance due to cultural sensitivities (Bushozi, 2022; NEMA, 2018). Similarly, in Uganda, communities have opposed wayleaves acquisition when it disrupts cultural sites, traditional shrines, or communal grazing lands (Lubogo, 2024; Ministry of Water and Environment, 2023). Integrating cultural considerations into project planning and offering alternative sites for displaced cultural spaces can help mitigate resistance and improve project acceptance (Oyewo, 2024). Understanding and respecting cultural values is therefore essential in ensuring smooth land acquisition processes.

2.3.4 Economic and Livelihood Concerns

Many rural communities rely on land for farming, livestock rearing, and other economic activities, making them highly sensitive to land acquisition processes (Kebede et al., 2022; Mechiche-Alami et al., 2021). Loss of farmland or displacement without sustainable alternative livelihood options leads to strong opposition to wayleaves acquisition (Mutinda, 2022). In Kenya, a study found that communities were more accepting of infrastructure projects when they were assured of economic benefits, such as employment opportunities and access to electricity for small businesses (Foster et al., 2023). A report by Save the Children & Uganda Response Innovation Lab (U-RIL) (2023) reported that some communities initially resisted rural electrification projects but later accepted them after realizing the potential for improved economic activities, such as agro-processing and commercial ventures. Providing affected households with alternative income-generating opportunities and integrating development benefits into compensation packages can enhance public acceptance of electricity projects (Dijk, 2011).

2.3.5 Trust in Government and Project Developers

Trust in the government, project developers, and regulatory institutions plays a crucial role in shaping community perceptions (Lee-Geiller, 2024). Where past experiences with government-led projects have been characterized by corruption, broken promises, and unfair compensation, communities develop skepticism towards new initiatives (World Bank, 2020). Studies in Uganda have found that a history of land disputes and lack of government accountability in project implementation erode public confidence, making communities less cooperative in wayleaves acquisition (Ssenkumba, 2024; Birungi, 2019). A study in Ghana by Ametepey et al. (2017) showed that infrastructure projects with clear governance structures, accountability mechanisms, and stakeholder involvement had higher acceptance rates.

Transparency in compensation processes, community consultations, and grievance redress mechanisms are essential in rebuilding trust and ensuring successful project implementation (Mchome & Nzoya, 2023).

2.3.6 Perceived Benefits of Rural Electrification

The extent to which communities perceive direct benefits from rural electrification projects significantly influences their willingness to accept wayleaves acquisition (Mutinda, 2022). In many cases, resistance arises when communities do not see immediate advantages, such as household electrification, improved social services, or economic development opportunities (Nyoni & Makonese, 2021). A study in Ethiopia found that rural electrification projects that provided tangible benefits—such as reduced energy costs, improved access to education, and enhanced healthcare services—received greater public support (Gashaye et al., 2025). In Uganda, Ministry of Energy and Mineral Development (2022) report highlighted that many communities express initial reluctance due to skepticism about whether electricity will actually reach their homes. Ensuring that electrification projects integrate clear community benefits, such as affordable electricity connections and support for local enterprises, can enhance acceptance and minimize conflicts (World Bank, 2022).

2.3.7 Legal and Policy Frameworks Governing Wayleaves Acquisition

The legal and policy environment significantly influences community perceptions of wayleaves acquisition. Many rural communities are unaware of their legal rights and obligations regarding infrastructure projects, leading to confusion and resistance (World Bank, 2020). In Uganda, the Land Act (Cap 227) and the Electricity Act (1999) outline the procedures for acquiring wayleaves, but implementation gaps often lead to conflicts (Mugyenyi et al., 2021). A study by Tumushabe and Musoke (2023) found that inconsistencies in legal enforcement and bureaucratic delays in compensation payments undermine public confidence in the process. In contrast, countries like Rwanda and Ghana have streamlined their land acquisition policies to ensure transparency, thereby reducing disputes (Osei-Kyei & Chan, 2020). Strengthening Uganda's legal framework by enhancing public awareness and enforcing fair compensation policies can improve community perceptions and project success (Benefoh et al., 2022).

2.3.8 Historical Land Conflicts and Displacement Experiences

Uganda has a history of land conflicts, particularly in rural areas, where disputes over customary land ownership are common (Tumushabe & Musoke, 2023). Many communities view infrastructure projects as a continuation of past injustices, particularly in cases where they feel their land was taken without proper consultation or compensation (Mugyenyi et al., 2021). A study in Northern Uganda found that communities previously displaced by large-scale

projects, such as refugee settlements or commercial plantations, were more resistant to wayleaves acquisition due to lingering distrust in government interventions (Nyambura et al., 2023). Similar trends have been observed in Kenya and Nigeria, where historical grievances influence current attitudes toward land acquisition (Osei-Kyei & Chan, 2020). Addressing past grievances through transparent compensation and community engagement can help reduce resistance and improve project acceptance (Kimani et al., 2021).

2.3.9 Gender Dynamics and Land Ownership

Gender plays a crucial role in shaping community perceptions of infrastructure projects. In many African societies, women have limited control over land despite being primary users for farming and household needs (Mwangi & Kariuki, 2020). Studies show that when women are excluded from decision-making in land acquisition processes, resistance to projects increases (Kimani et al., 2021). In Uganda, rural electrification projects often engage male landowners, overlooking the concerns of women who may be disproportionately affected by displacement or changes in land use (Nyoni & Makonese, 2021). Research in Ethiopia and Ghana indicates that inclusive consultation processes, where both men and women participate in decision-making, improve community acceptance and reduce conflicts (Teshome & Alemu, 2020). Addressing gender disparities in land governance and involving women in wayleaves acquisition discussions can enhance cooperation and project success (Rahman et al., 2022).

2.3.10 Political Interference and Elite Capture

Political dynamics significantly influence community perceptions of wayleaves acquisition. In many cases, infrastructure projects become politically charged, with local leaders using them to gain political mileage or incite opposition for personal gain (Mugyenyi et al., 2021). A study in Uganda found that some politicians mobilize resistance against electricity projects to negotiate higher compensation for their constituents or secure alternative benefits (Tumushabe & Musoke, 2023). Similarly, in Nigeria and Ghana, elite capture—where influential individuals manipulate compensation processes for personal advantage—has led to community distrust and project delays (Osei-Kyei & Chan, 2020). Strengthening governance structures, ensuring political neutrality, and implementing anti-corruption measures can enhance transparency and community trust in rural electrification projects (Mwangi & Karanja, 2023).

2.3.11 Environmental Concerns and Land Use Changes

Community perceptions of wayleaves acquisition are also influenced by environmental considerations. Many rural communities rely on forests, wetlands, and communal grazing lands, which may be affected by electricity infrastructure projects (Benefoh et al., 2022). In Uganda, research shows that communities living near protected areas are particularly resistant to infrastructure projects due to fears of deforestation, soil degradation, and water pollution

(Nyambura et al., 2023). Similar concerns have been reported in Tanzania and Kenya, where rural electrification has sometimes led to the loss of agricultural land, triggering community opposition (Kimani et al., 2021). Addressing these concerns through environmental impact assessments, conservation strategies, and alternative land use plans can help mitigate conflicts and improve public acceptance (Zhang & Xu, 2022).

2.3.12 Social Capital and Community Leadership

The role of social capital and leadership structures in influencing community attitudes towards project acquisition cannot be underestimated. Community leaders, including traditional elders, religious figures, and local opinion leaders, play a vital role in shaping public perceptions and mobilizing either support or resistance (Rahman et al., 2022). A study in Ethiopia found that projects with strong leadership engagement and support had higher levels of acceptance and fewer disputes (Teshome & Alemu, 2020). In Uganda, Tumushabe and Musoke (2023) highlight that involving respected local figures in project negotiations fosters trust and increases the likelihood of community cooperation. Similar findings from Ghana and Kenya emphasize that engaging trusted community representatives in early planning stages enhances transparency and minimizes resistance (Mwangi & Kariuki, 2020).

2.3.13 Stakeholder Engagement and Community Participation

Stakeholder engagement is a critical factor influencing community perceptions of wayleaves acquisition and project acceptance. The extent to which communities are involved in decision-making processes determines their level of cooperation and support for rural electrification projects (Mugyenyi et al., 2021). A study by Tumushabe and Musoke (2023) in Uganda found that projects that prioritized early and continuous community engagement experienced fewer conflicts and smoother implementation. Similarly, research from Ghana and Tanzania revealed that stakeholder consultation, where local leaders, landowners, and affected residents are involved, significantly reduces resistance to infrastructure development (Osei-Kyei & Chan, 2020). In contrast, projects that are implemented without meaningful community participation often face protests, legal challenges, and delays (Mwangi & Karanja, 2023).

Effective stakeholder engagement goes beyond information dissemination; it involves meaningful dialogue, transparency in compensation processes, and addressing community concerns (Rahman et al., 2022). According to Kimani et al. (2021), inclusive participation in Kenya’s rural electrification projects resulted in higher levels of trust and cooperation. The World Bank (2020) emphasizes that best practices in stakeholder engagement include structured community meetings, grievance redress mechanisms, and partnerships with local leaders. Uganda's electricity sector, however, has been criticized for inadequate stakeholder engagement, with reports showing that many affected communities feel excluded from key

decisions (Nyambura et al., 2023). Strengthening stakeholder engagement strategies through participatory decision-making and transparent communication can significantly enhance community acceptance and ensure the successful acquisition of wayleaves for rural electrification.

2.3.14 Social-economic factors

Household income significantly influences community perceptions of wayleaves acquisition, as lower-income populations often view land as their primary asset and source of livelihood (Mugyenyi et al., 2021). A study by Nyambura et al. (2023) in Uganda revealed that low-income households are more likely to resist wayleaves acquisition due to fears of inadequate compensation or loss of agricultural productivity. Similarly, research from Ethiopia found that compensation disputes are more frequent in communities with lower economic stability, where land acquisition for infrastructure projects is perceived as a direct threat to survival (Teshome et al., 2022). On the other hand, households with higher incomes may be more accepting of wayleaves acquisition due to alternative income sources, reducing their dependence on land (Rahman et al., 2022). Addressing income disparities through fair compensation and livelihood restoration programs is crucial for minimizing resistance to wayleaves acquisition (World Bank, 2021).

Employment status plays a crucial role in shaping community attitudes toward infrastructure projects. Unemployed or informally employed individuals tend to view wayleaves acquisition as a potential economic loss rather than an opportunity (Kimani et al., 2021). A study in Tanzania found that resistance to wayleaves acquisition was higher among individuals engaged in subsistence farming and informal businesses, as they lacked alternative means of income (Mwangi & Karanja, 2023). In contrast, salaried workers and those in stable employment sectors were more receptive to such projects, viewing rural electrification as an opportunity for economic growth and improved quality of life (Turyahikayo, 2019). Ensuring that infrastructure projects generate local employment opportunities and compensate for economic disruptions can help foster positive community perceptions (Osei-Kyei & Chan, 2020).

Education level significantly affects how communities perceive infrastructure projects, including wayleaves acquisition. Studies show that individuals with higher education levels tend to have better awareness of the benefits of electrification and are more likely to support development initiatives (Tumushabe & Musoke, 2023). Conversely, lower education levels are associated with higher resistance, often due to misinformation, fear of land dispossession, and distrust in authorities (Nyambura et al., 2023). In Kenya, projects with strong community education campaigns experienced higher acceptance rates than those lacking proper sensitization efforts (Kimani et al., 2021). In Uganda, limited knowledge about compensation

policies and legal frameworks further fuels conflicts over wayleaves acquisition (World Bank, 2020). Strengthening education and awareness programs can bridge this gap and enhance community participation in rural electrification projects.

2.4 The impact of community perceptions on wayleaves acquisition.

Community perceptions play a crucial role in determining the success or failure of wayleaves acquisition for rural electrification projects. Positive perceptions can facilitate smooth project implementation, while negative perceptions can lead to resistance, conflicts, and delays (Mugyenyi et al., 2021). Several studies have highlighted the ways in which community perceptions impact land acquisition processes, compensation acceptance, and overall project timelines in rural electrification efforts (Nyambura et al., 2023; Tumushabe & Musoke, 2023). Understanding these impacts is essential for developing strategies to improve stakeholder engagement and ensure sustainable rural electricity development.

2.4.1 Delays and Increased Project Costs

Negative community perceptions often lead to resistance, legal battles, and prolonged negotiations, resulting in significant project delays and increased costs (Di Maddaloni & Sabini, 2022; Kikwasi, 2013). Nanjero and Wairiuko (2020) found that community opposition to wayleaves acquisition delayed the implementation of electrification projects by up to three years, leading to cost overruns exceeding 30% of the initial budget. Similarly, a study in Tanzania showed that delays in acquiring land for transmission lines due to disputes over compensation and land ownership rights led to a 25% increase in project costs (Osei-Kyei & Chan, 2020). In Uganda, the Rural Electrification Agency (REA) has reported that community resistance to wayleaves acquisition has caused delays in several rural electricity projects, affecting overall electrification targets (World Bank, 2021).

2.4.2 Land Acquisition Conflicts and Legal Challenges

Community perceptions about land ownership and rights influence the level of conflict in wayleaves acquisition. In many rural areas, land is considered a vital economic and cultural asset, making communities highly sensitive to its acquisition (Mwangi & Karanja, 2023). A study in Ghana found that unclear land tenure systems and community fears of forced displacement led to multiple lawsuits that hindered the implementation of electricity transmission projects (Rahman et al., 2022). In Uganda, similar legal battles have emerged in districts like Rwampara, where affected landowners have contested compensation terms and the legality of land acquisitions for rural electrification (Nyambura et al., 2023). Addressing these conflicts through clear land tenure policies and transparent compensation mechanisms can enhance community trust and cooperation.

2.4.3 Compensation Disputes and Resistance to Relocation

Compensation remains a major source of community grievances in wayleaves acquisition. Many rural residents perceive compensation processes as unfair, inadequate, or delayed, leading to strong opposition to electrification projects (Tumushabe & Musoke, 2023). Research by Mugyenyi et al. (2021) in Uganda found that 60% of affected landowners expressed dissatisfaction with compensation amounts, citing undervaluation of their land and lack of transparency in the process. Similar findings were reported in Ethiopia, where communities resisted rural electricity transmission projects due to delays in compensation payments (Teshome et al., 2022). Ensuring timely, fair, and transparent compensation can help mitigate resistance and facilitate smooth wayleaves acquisition.

2.4.4 Misinformation and Lack of Awareness

Limited public awareness and misinformation about the benefits of rural electrification contribute to negative perceptions and resistance (Kimani et al., 2021). Studies have shown that some communities fear displacement, health hazards from power lines, or land devaluation, leading to rejection of wayleaves acquisition proposals (World Bank, 2020). In Kenya, public education campaigns helped to address such misconceptions, increasing community acceptance by 40% (Osei-Kyei & Chan, 2020). In Uganda, inadequate public engagement has been a major challenge, with many rural communities lacking accurate information about compensation policies, project timelines, and electrification benefits (Nyambura et al., 2023). Strengthening awareness programs through local engagement can improve community cooperation in rural electrification projects.

2.4.5 Trust in Government and Project Developers

The level of trust in government agencies and project developers influences community perceptions of wayleaves acquisition. A study in Tanzania found that communities with a history of unfulfilled promises from previous infrastructure projects were more resistant to new electrification projects (Mwangi & Karanja, 2023). Similarly, research in Uganda indicates that past experiences with poorly executed compensation processes have eroded trust in rural electrification initiatives (Turyahikayo, 2019). Transparent communication, stakeholder involvement, and fulfillment of project commitments are essential to rebuilding community trust and improving public acceptance of wayleaves acquisition (Rahman et al., 2022).

2.4.6 Impact on Electrification Goals and Rural Development

Negative community perceptions and the resulting resistance to wayleaves acquisition hinder the achievement of rural electrification targets. Uganda aims to achieve universal electricity access by 2030, yet community resistance to land acquisition remains a major obstacle (World Bank, 2021). In Rwanda, effective community engagement strategies have accelerated rural electrification projects, with electrification rates increasing from 17% in 2015 to over 50% in

2022 (Teshome et al., 2022). In contrast, Uganda's rural electrification rate remains below 30%, partly due to challenges in land acquisition and community acceptance (Nyambura et al., 2023). Addressing these barriers through participatory approaches and conflict resolution mechanisms can enhance rural electricity access and support economic development.

4.5 Strategies for improving community participation and reducing conflicts in wayleaves acquisition

Wayleaves acquisition for rural electrification projects often faces resistance from communities due to concerns about land rights, compensation, and environmental impacts. Effective strategies to improve community participation and reduce conflicts are essential for ensuring smooth project implementation. These strategies include early stakeholder engagement, transparent compensation processes, legal and policy reforms, community education programs, alternative livelihood support, and the integration of dispute resolution mechanisms.

4.5.1 Early and Inclusive Stakeholder Engagement

One of the most effective ways to enhance community participation and reduce conflicts is to engage stakeholders from the onset of the project. Studies show that when communities are involved in decision-making, they are more likely to support infrastructure development (Mugyenyi et al., 2021; Osei-Kyei & Chan, 2020). In Ghana, early stakeholder engagement helped reduce land disputes by 40% in rural electrification projects (Rahman et al., 2022). Similarly, in Tanzania, participatory planning approaches have significantly improved community acceptance of electricity transmission projects (Mwangi & Karanja, 2023). Uganda can adopt similar strategies by ensuring that local leaders, landowners, and affected households are actively consulted before, during, and after wayleaves acquisition processes (World Bank, 2021).

4.5.2 Transparent and Fair Compensation Processes

Compensation-related conflicts remain a major barrier to wayleaves acquisition. A fair and transparent compensation process is crucial for gaining community trust and cooperation (Tumushabe & Musoke, 2023). Research in Kenya found that compensation delays and underpayment led to protests that halted electrification projects for up to two years (Kimani et al., 2021). In Ethiopia, a standardized compensation framework significantly reduced disputes by ensuring landowners received payments promptly and at market value (Teshome et al., 2022). Uganda can address compensation concerns by conducting independent land valuations, setting clear compensation timelines, and ensuring public disclosure of valuation criteria (Nyambura et al., 2023).

4.5.3 Strengthening Legal and Policy Frameworks

Weak legal and policy frameworks often contribute to conflicts in wayleaves acquisition. Strengthening land tenure laws and ensuring alignment with community land rights can enhance acceptance of rural electrification projects (Osei-Kyei & Chan, 2020). Studies indicate that well-defined legal protections for affected communities help to reduce resistance and ensure smoother project execution (Rahman et al., 2022). In Rwanda, policy reforms that provided legal clarity on land acquisition and compensation increased public trust in electrification projects (Turyahikayo, 2019). Uganda can benefit from revising its existing land acquisition policies to improve transparency and protect the rights of affected households (World Bank, 2021).

4.5.4 Public Education and Awareness Campaigns

Misinformation and lack of awareness about the benefits of rural electrification often fuel community resistance. Public education campaigns can help address misconceptions and increase acceptance of wayleaves acquisition (Mwangi & Karanja, 2023). In Kenya, educational programs explaining the socio-economic benefits of electricity access led to a 30% increase in community support for rural electrification projects (Kimani et al., 2021). Similarly, in Uganda, targeted awareness initiatives can ensure that communities understand compensation policies, safety measures, and long-term benefits of electrification (Mugyenyi et al., 2021). Engaging local media, religious institutions, and community meetings can be effective in disseminating accurate information (Nyambura et al., 2023).

4.5.5 Alternative Livelihood and Resettlement Support

Providing alternative livelihood support and fair resettlement options for affected landowners can help reduce resistance to wayleaves acquisition (Tumushabe & Musoke, 2023). Research in Ethiopia and Ghana indicates that offering livelihood restoration programs and alternative land to displaced families improved project acceptance by 45% (Rahman et al., 2022). In Uganda, previous infrastructure projects have faced resistance due to inadequate resettlement plans, leading to prolonged legal disputes (Nyambura et al., 2023). Implementing sustainable livelihood programs, such as vocational training and agricultural support, can enhance community cooperation in wayleaves acquisition (Turyahikayo, 2019).

4.5.6 Establishing Effective Conflict Resolution Mechanisms

Even with proactive engagement, conflicts may still arise during wayleaves acquisition. Establishing formal dispute resolution mechanisms can help address grievances before they escalate (Osei-Kyei & Chan, 2020). Studies have shown that mediation committees consisting of local leaders, government officials, and community representatives help resolve conflicts

faster and more effectively (Mugyenyi et al., 2021). In Rwanda, alternative dispute resolution mechanisms have helped reduce electrification-related land conflicts by 50% (Teshome et al., 2022). Uganda can adopt similar approaches by establishing independent grievance redress committees that ensure fair and timely conflict resolution (Nyambura et al., 2023).

2.6 Summary of Literature and Research Gaps

The reviewed literature highlights that community perceptions significantly influence wayleaves acquisition for rural electrification. Several studies emphasize factors such as land tenure concerns, compensation disputes, misinformation, and socio-economic factors in shaping community attitudes toward infrastructure projects. In addition, research underscores the importance of early stakeholder engagement, legal and policy frameworks, public awareness campaigns, and conflict resolution mechanisms in facilitating smoother wayleaves acquisition. Case studies from African countries, including Kenya, Ghana, and Ethiopia, provide insights into successful strategies that enhance community participation and minimize resistance. However, while these studies provide a broad understanding of rural electrification challenges, they often lack a context-specific analysis of Uganda's unique socio-economic, legal, and cultural landscape.

Despite existing research on rural electrification and community engagement, several critical gaps remain. First, limited empirical studies focus specifically on how community perceptions impact wayleaves acquisition in Uganda's rural electrification projects. Second, there is a lack of research exploring the intersection of legal, policy, and socio-economic factors in shaping these perceptions. Third, while previous studies highlight general stakeholder engagement strategies, there is insufficient analysis of how these strategies can be tailored to Uganda's diverse rural communities. Lastly, there is a research gap in understanding how demographic variables—such as income level, education, and employment status—affect perceptions and acceptance of wayleaves acquisition. This study aims to address these gaps by providing an in-depth analysis of community perceptions, their impact on wayleaves acquisition, and practical strategies for improving public participation and reducing conflicts in Uganda's rural electricity infrastructure development.

CHAPTER THREE

METHODOLOGY

3.1 Study design

This study employed a mixed-methods research design, combining both quantitative and qualitative approaches. The mixed-methods approach enhances the depth of the study by combining statistical rigor with rich descriptive explanations of community experiences

(Dawadi et al., 2021). The quantitative approach involved the use of structured surveys to collect numerical data on community attitudes, socio-economic characteristics, and their impact on wayleaves acquisition. The qualitative approach involved key informant interviews (KIIs) and document analysis to gain deeper insights into the reasons behind community perceptions, conflicts, and stakeholder engagement practices. A descriptive cross-sectional survey design was adopted to capture data at a single point in time, providing a snapshot of community perceptions and their impact on wayleaves acquisition. Descriptive research is ideal for this study as it allows for the collection of data that describes Community Perceptions and their Influence on Wayleaves Acquisition, providing insights into how these factors influence project implementation (Creswell & Creswell, 2018).

3.2 Study Area

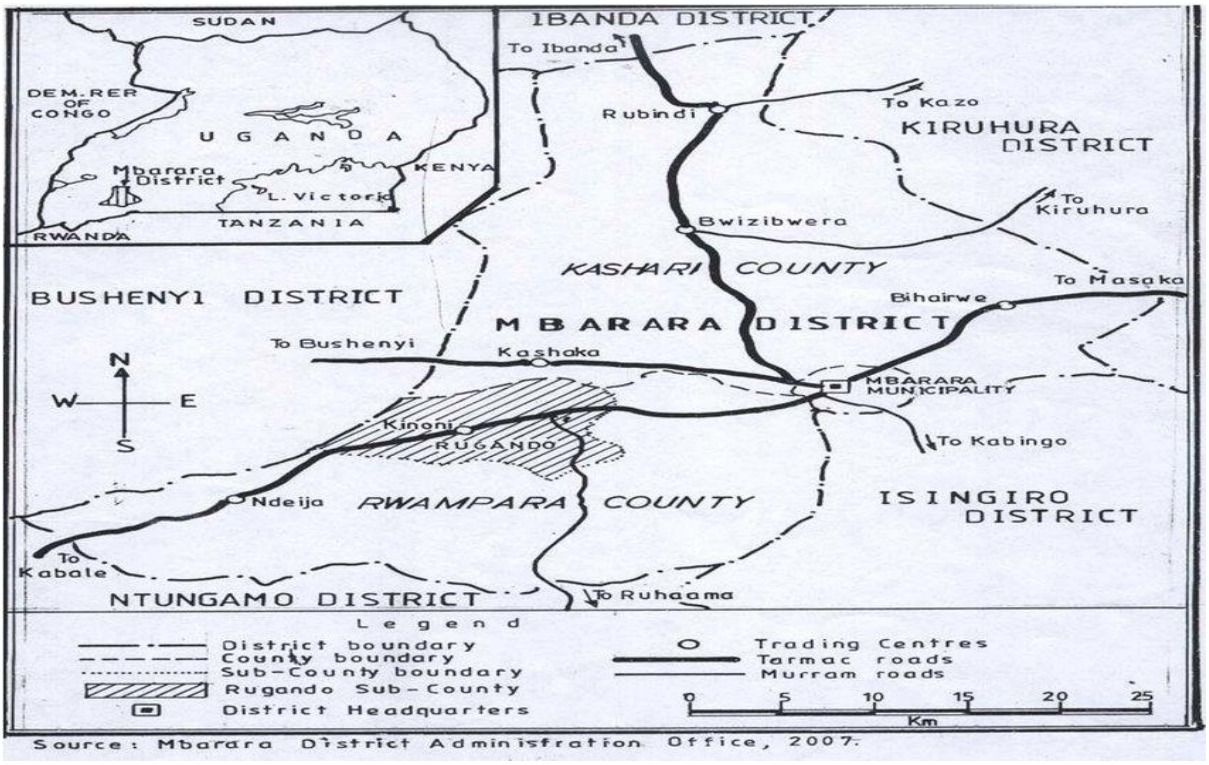

Figure 5: Study area map

This study was conducted in Bugamba Subcounty, Rwampara District, located in southwestern Uganda. The district was carved out of Mbarara District and granted district status in July 2019. It borders Sheema District to the north, Isingiro and Mbarara Districts to the east, Isingiro District to the south, and Ntungamo District to the west. The district headquarters are in Kinoni Town Council, approximately 23 kilometers west of Mbarara City, along the Mbarara-Kabale road (Rwampara District, n.d.). Rwampara District was selected for this study because it is one of the rural districts in Uganda where rural electrification projects are being implemented, requiring substantial stakeholder engagement and wayleaves acquisition. The district has a mix of urbanizing and rural areas, where community participation is crucial for project success.

Previous reports have highlighted challenges related to community resistance, land disputes, and delayed wayleaves acquisition, making it a suitable case for this study.

3.3 Study Population

The study population consisted of key stakeholders involved in rural electrification projects, including landowners, local government officials, project implementers from the Ministry of Energy and Mineral Development (MEMD), and representatives from electricity distribution companies. These stakeholders are directly affected by or play a role in the community and stakeholder engagement process and wayleaves acquisition. The inclusion of different stakeholder groups ensures a comprehensive understanding of how Community Perceptions influence Wayleaves Acquisition and project success.

3.4 Sample Size

The sample size for this study was determined using Krejcie and Morgan's (1970) sampling table (Appendix IV), which provides a standardized method for selecting a representative sample from a given population. This method is widely used in empirical research to ensure statistical accuracy and generalizability of findings. Given the study population, the sample size was selected based on the total population of stakeholders involved in rural electrification projects. Using Krejcie and Morgan's (1970) table, an appropriate sample size was determined to ensure reliability and validity while maintaining feasibility in data collection. The final sample size was adjusted to account for non-responses and missing data, ensuring robust and representative findings.

3.5 Sampling Procedure

This study employed purposive and snowball sampling technique. In purposive sampling, participants that were affected by the medium voltage powerline were deliberately selected. Purposive sampling was used to select key informants, such as district leaders, project managers, and senior officials from MEMD and electricity distribution companies, who have in-depth knowledge of stakeholder engagement processes. These key informants provided expert insights on policy implementation, challenges in wayleaves acquisition.

Snowball sampling was used in which initial participants referred others who met the study criteria. The population included stakeholder categories, including landowners, local government officials, project implementers from the Ministry of Energy and Mineral Development (MEMD), and electricity distribution company representatives.

3.6 Inclusion and Exclusion Criteria

The study included members who are directly involved in rural electrification projects. Eligible participants consisted local community members, landowners, local government officials,

MEMD project implementers, and representatives from electricity distribution companies. To ensure relevance, only individuals who have participated in electrification projects within the last five years (2019–2024) were included, as they can provide insights into current perceptions and engagement practices and recent experiences with wayleaves acquisition. Participants were 18 years and older, as they are more likely to have decision-making authority regarding land use and project participation.

Conversely, individuals who have no direct involvement in the projects were excluded from the study. Those below 18 years of age were excluded, as they might not have the legal authority to engage in land-related discussions. Individuals who have not participated in electrification projects within the last five years were excluded to ensure the study captures current trends. The study excluded participants who refused to provide informed consent or were unwilling to take part in the study.

3.7 Study Variables

3.7.1 Dependent variables

In this study, the dependent variable is the **community perceptions** of wayleaves acquisition. This refers to the local community's attitude, response, and general outlook toward the acquisition of land (wayleaves) for the purpose of constructing electricity transmission and distribution infrastructure. These perceptions could range from acceptance and cooperation to resistance and conflict, depending on various social, economic, legal, and environmental factors. This study focuses on how these perceptions influence the process of wayleaves acquisition and the associated challenges faced during rural electrification projects

3.7.2 Independent variables

The independent variables that influence community perceptions of wayleaves acquisition are derived from factors identified in the literature review. These include:

Demographic Factors:

- Income Level: Communities with higher income levels may have different attitudes toward land acquisition compared to lower-income households, especially in terms of compensation expectations and perceived benefits from electrification projects.
- Employment Status: Employment status (whether individuals are employed, self-employed, or unemployed) can influence their perception of project benefits, as those

with stable employment might view electrification as an opportunity for economic growth, while others may see it as a disruption.

- Education Level: Higher education levels generally correlate with better understanding of the benefits and technicalities of rural electrification, influencing positive perceptions of wayleaves acquisition.
- Age: The age of community members affects how they perceive the impact of electricity infrastructure, with younger individuals possibly being more open to development projects than older generations who may have concerns over traditional land use.

Socio-Economic Factors:

- Wealth Status: Wealthier communities may be more resistant to wayleaves acquisition if they feel compensation is insufficient, while poorer communities may have more positive views, seeing electrification as a tool for improving their livelihoods.
- Land Tenure Security: Insecure land tenure is a significant issue in rural Uganda. Communities with unclear or contested land rights may view the acquisition of wayleaves as a threat to their livelihoods and land ownership, leading to resistance.
- Household Size: Larger households may have different expectations of rural electrification, especially regarding the benefits such as improved lighting, health services, and economic opportunities.

Cultural and Regional Factors:

- Community Values: Local cultural values, including traditional land ownership practices and community norms, play a major role in determining how wayleaves acquisition is perceived. In some communities, land is seen as sacred or communal, and acquiring it for development purposes may conflict with cultural beliefs.
- Religious Beliefs: In some rural areas, religious beliefs may influence perceptions of development, where some religious groups may be more accepting of rural electrification, while others may resist due to fears of environmental degradation or exploitation.

Awareness and Information:

- Awareness of Benefits: Knowledge of the long-term benefits of rural electrification, such as improved education, healthcare, and economic opportunities, significantly influences community perceptions. Lack of awareness or misinformation can result in resistance to the project.

- Misinformation and Misunderstanding: Misconceptions about compensation processes, environmental impact, and project outcomes can lead to suspicion and opposition.

Past Experiences with Infrastructure Projects:

- Historical Disputes: If the community has previously encountered conflicts or dissatisfaction with infrastructure projects (such as poor compensation or environmental damage), it may influence their perceptions of new development initiatives.
- Conflict Resolution: Previous experiences in resolving conflicts during land acquisition, such as the role of local leaders or mediation processes, can either foster trust or create skepticism.

Stakeholder Engagement:

- Community Involvement: The level and nature of community engagement during the planning phase of rural electrification projects (e.g., consultations, meetings, public forums) can shape perceptions. Communities that feel their views and concerns are heard are more likely to have positive perceptions and cooperate.
- Role of Local Leaders: Local leaders (e.g., village chiefs, elders) play a crucial role in shaping community perceptions. Their support or opposition can significantly influence the community's acceptance of wayleaves acquisition.

Legal and Policy Factors:

- Legal Framework and Policies: The clarity, transparency, and fairness of legal frameworks governing land acquisition for public infrastructure projects influence how communities perceive wayleaves acquisition. A weak or ambiguous legal framework can lead to distrust and resistance.
- Compensation Laws: The perceived fairness of compensation laws and practices is critical in shaping community attitudes toward land acquisition for rural electrification. Inadequate or delayed compensation is a common source of resistance.

3.8 Data Collection Procedure

The data collection process begun with obtaining an introductory letter from the university, which serves as official authorization to conduct the research. This letter was presented to the relevant authorities to seek permission to engage stakeholders. After securing necessary approvals, the researcher conducted a preliminary visit to the study area to introduce the study to community leaders, landowners, and other key stakeholders. A pilot study, where a small sample of respondents (10% of the final sample size) completed the questionnaires to determine whether the questions are clearly understood and relevant to the research objectives Structured

questionnaires were distributed to selected respondents, who were from a different location not where the actual data collection was conducted. After assessing for content validity and reliability of the questionnaire from data gathered by piloting, actual data collection begun. Observational methods were used to capture non-verbal reactions and community responses to rural electrification projects. The completed questionnaires and interview transcripts were reviewed for completeness before proceeding to data analysis.

3.9 Data Collection Instruments

The study employs structured questionnaires, key informant interview guides and observation checklists to collect data. The structured questionnaire was designed and deployed using KoboToolbox, a digital data collection platform that enhances accuracy, efficiency, and real-time monitoring of responses. Key informant interview guides were used to collect qualitative insights from project implementers, and electricity distribution representatives. An observation checklist was used to document non-verbal stakeholder interactions and community responses to the wayleaves acquisition process. Use of KoboToolbox ensured secure data storage, minimize errors, and streamline the data collection process.

3.10 Statistical Data Analysis

The data analysis process started with data entry and cleaning using STATA Version 15 to ensure accuracy and consistency. Data collected via KoboToolbox was exported in a CSV format to STATA for further processing. The dataset was checked for missing values, outliers, and inconsistencies, with non-responses handled through multiple imputation or mean substitution, depending on the nature and extent of missing data. Descriptive statistics, including frequencies, means, and standard deviations, were computed to summarize community perceptions, and participation levels. Reliability analysis (Cronbach's Alpha) was conducted to assess the internal consistency of the Likert-scale items. Inferential statistics, including Pearson correlation and regression analysis were used.

The study used descriptive statistics to analyze the demographic and socio-economic characteristics of the sample population. Key variables such as income level, education level, employment status, and others were summarized using frequencies, percentages, mean scores, and standard deviations. This provided a general understanding of the sample's composition.

In addition, factor analysis was conducted to identify the underlying factors that influence community perceptions regarding wayleaves acquisition. Factor analysis is particularly useful when dealing with Likert scale questions that measure attitudes or opinions, as it helps to reduce a large number of variables into a smaller set of uncorrelated factors.

Factor Analysis Model

$X_i = \lambda_i F_1 + \lambda_2 F_2 + \ldots + \lambda_k F_k + \epsilon_i$ .....Equation 3.1

Where:

- X_i represents the observed variables (Likert scale items),
- F_k represents the factors influencing community perceptions,
- λ_k are the factor loadings (weights),
- ϵi is the error term.

The Principal Component Analysis (PCA) method was used to extract the factors, and a promax rotation was applied to make the factors more interpretable. The suitability of the data for factor analysis was checked using the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and the Bartlett's Test of Sphericity to assess whether the correlations between variables are adequate for factor analysis.

3.11 Data Quality Control

3.11.1 Validity of the data collection tools

Validity refers to the extent to which the data collection tools measure what they are intended to measure (Andersson et al., 2024; Creswell, 2018). To ensure content validity, experts to confirm that all key variables are adequately captured reviewed the questionnaire and interview guides. Construct validity was assessed through a pilot study, where a small sample of respondents (10% of the final sample size) completed the questionnaire to determine whether the questions are clearly understood and relevant to the research objectives (Saunders et al., 2019). Factor analysis was conducted using STATA 15, to confirm the validity of the constructs by assessing how well the items group together. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity was used, ensuring the validity of the constructs. The KMO statistic was ≥ 0.6, and Bartlett's test should be statistically significant ($p < 0.05$) for factor analysis to proceed (Sigudla & Maritz, 2023; Shrestha, 2021). The formula for the KMO test is:

$$KMO = \frac{\sum\sum r_{ij}^2}{\sum\sum r_{ij}^2 + \sum\sum a_{ij}^2}$$ *Equation 3.2*

r_{ij}^2 = Sum of squared correlations between variables

a_{ij}^2 = Sum of squared partial correlations

3.11.2 Reliability of the data collection tools

Reliability refers to the consistency and stability of the data collection instruments over repeated measurements (Haradhan, 2017; Taherdoost, 2016). The study assessed reliability using Cronbach's Alpha, a statistical measure that evaluates the internal consistency of Likert-scale-based questions in the questionnaire. A Cronbach's Alpha coefficient of 0.7897 indicated that the instrument is reliable (Taber, 2017). The formula for Cronbach's Alpha is:

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2}\right) \quad \text{.....Equation 3.3}$$

Where:

α = Cronbach's Alpha, k = Number of items in the scale, σ_i^2 = Variance of each item, σ_t^2 = Total variance of all items

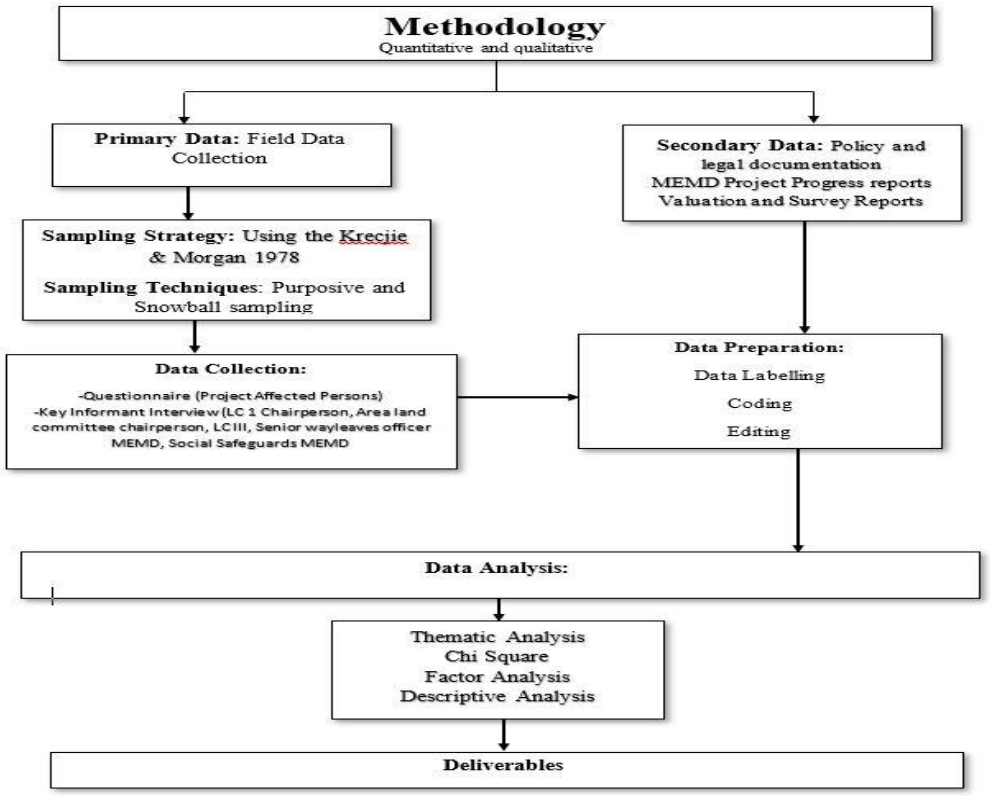

Figure 6: Methodology Flow Chart *Source: Researcher's own initiative*

3.13 Ethical Considerations

This study adhered to established ethical research principles to ensure the rights, safety, and dignity of all participants are upheld. Before data collection, ethical approval was obtained from the relevant university research ethics committee and necessary permissions were obtained from local authorities in Rwampara District. Participants were required to provide informed consent, ensuring they understand the purpose, procedures, potential risks, and

benefits of the study before participating. Confidentiality and anonymity was strictly maintained by coding responses instead of using personal identifiers and securely storing data in password-protected systems. Participation was voluntary, and respondents had the right to withdraw at any stage without facing any penalties. The study also ensured that no deceptive practices were used, and findings are reported truthfully and transparently, avoiding fabrication, falsification, or manipulation of data. Then, data collected is only used for academic purposes, and participants are given the option to access the final research findings upon request.

3.14 Limitations of the Study

One of the primary limitations of this study is the possibility of non-response or incomplete responses, particularly from community members and landowners, some who were hesitant to participate in the survey. Some respondents perceived the topic as sensitive, fearing potential repercussions or misunderstandings regarding land rights and compensation. To mitigate this, the study emphasized informed consent, anonymity, and confidentiality, reassuring participants that their responses are used solely for academic purposes. The researcher used trained research assistants to build rapport with respondents, translate questions into local languages, and use KoboToolbox for digital data collection, allowing participants to complete the survey at their convenience.

Another limitation is the potential for biased responses, particularly from key informants such as project implementers, who may provide socially desirable answers rather than objective feedback on stakeholder engagement effectiveness. This could lead to overestimation of the success of engagement strategies while underreporting challenges. To address this, the study employs triangulation by using multiple data collection methods, including surveys, and key informant interviews, to compare findings across different stakeholder groups. The open-ended questions were included to encourage honest, detailed responses, and interviews were conducted in neutral settings to reduce response bias.

CHAPTER FOUR

PRESENTATION, ANALYSIS, AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter presents and discusses the research findings from the analysis. The results are structured according to the specific objectives laid out in Chapter Three. Data from questionnaires, interviews, and observations are analysed using both descriptive and inferential statistical techniques. Data was analyzed using STATA Version 15 and MS Excel.

4.2 Response Rate and Background Characteristics of Respondents

4.2.1 Response Rate

Questionnaires distributed	66
Returned questionnaires	55
Response rate	83.3%

Out of the 66 questionnaires distributed, 55 were successfully completed and returned, yielding a response rate of 83.3%, which is adequate for analysis and generalization of findings.

4.2.2 Reliability Test

Average interitem covariance:	0.074697
Number of items in the scale:	45
Scale reliability coefficient: (Cronbach's alpha)	0.7897

The reliability test (Cronbach's alpha) of 0.7897 suggests that the items used in the scale demonstrate acceptable internal consistency. This implies that the items are sufficiently correlated and measure a common underlying construct, making the scale reliable for further statistical analysis. The average inter-item covariance of 0.074697 also reflects a moderate level of association among the items, supporting the conclusion that the scale is well-structured and consistently captures the intended concept.

4.2.3 Socio-demographic Profile of Respondents

This section describes the demographic and socio-economic characteristics of the respondents, including gender, age, education level, occupation, household size, stakeholder category, and

length of residence in the project area. The data provide context for interpreting community perceptions.

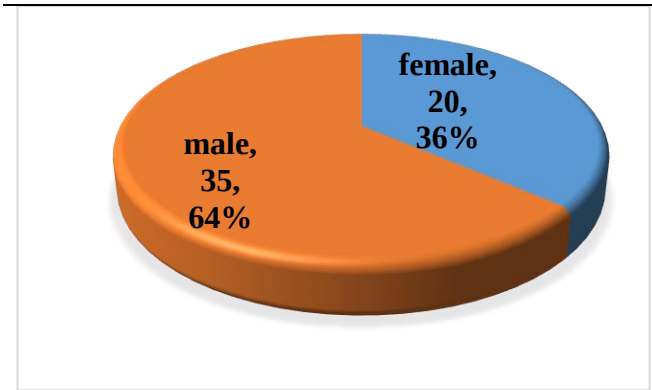

Figure 6: Gender distribution

Male respondent dominated sample, with 64% male and 36% female participants. This suggests that land-related issues such as wayleaves acquisition may predominantly involve men, either due to cultural norms, land ownership patterns, or decision-making roles within households and communities.

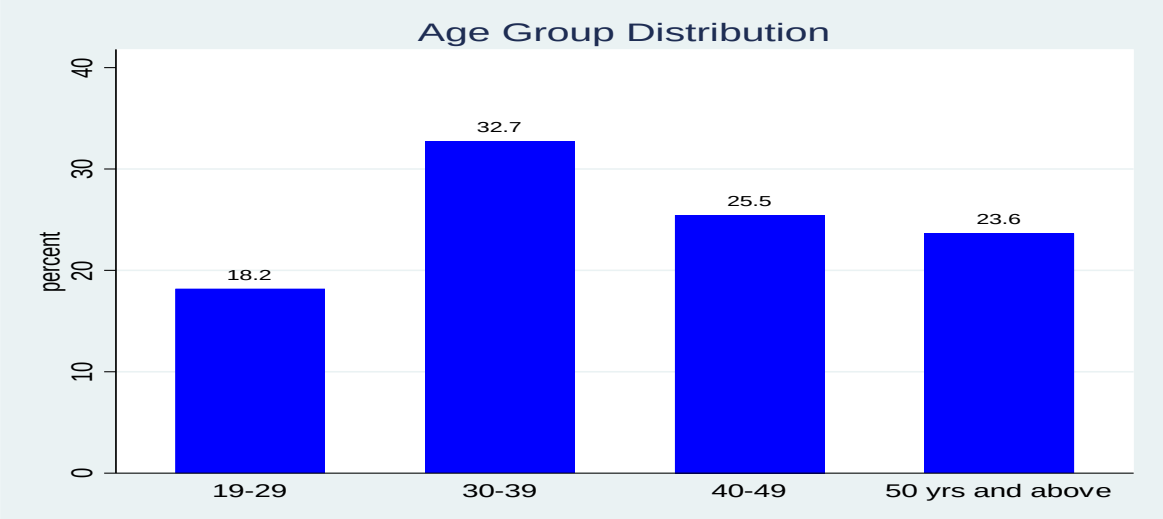

Figure 7: Age distribution

The age distribution shows that the majority of respondents are between 30 and 49 years old, comprising 32.7% of the sample. This age bracket typically represents the most economically active and socially responsible group, often involved in decision-making at household and community levels. The relatively lower representation of younger adults (18.2%) reflects either their limited involvement in land matters or lower interest in participating in such studies. Meanwhile, the 23.6% of respondents aged 50 and above represent elders who might hold traditional authority or historical perspectives on land use, making their input critical for culturally sensitive policies.

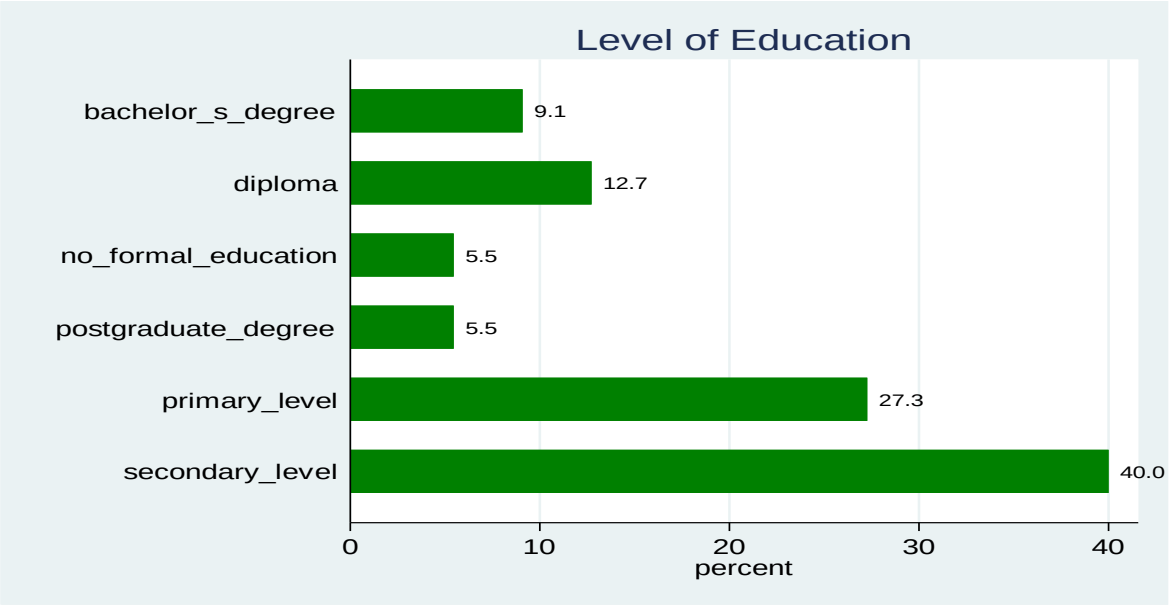

Figure 8: Education attainment by respondents

The majority of respondents had attained only secondary (40%) or primary (27.3%) education, while a smaller fraction held tertiary qualifications. Low levels of education may contribute to susceptibility to misinformation or distrust in formal institutions, reinforcing the need for simplified and locally tailored awareness campaigns

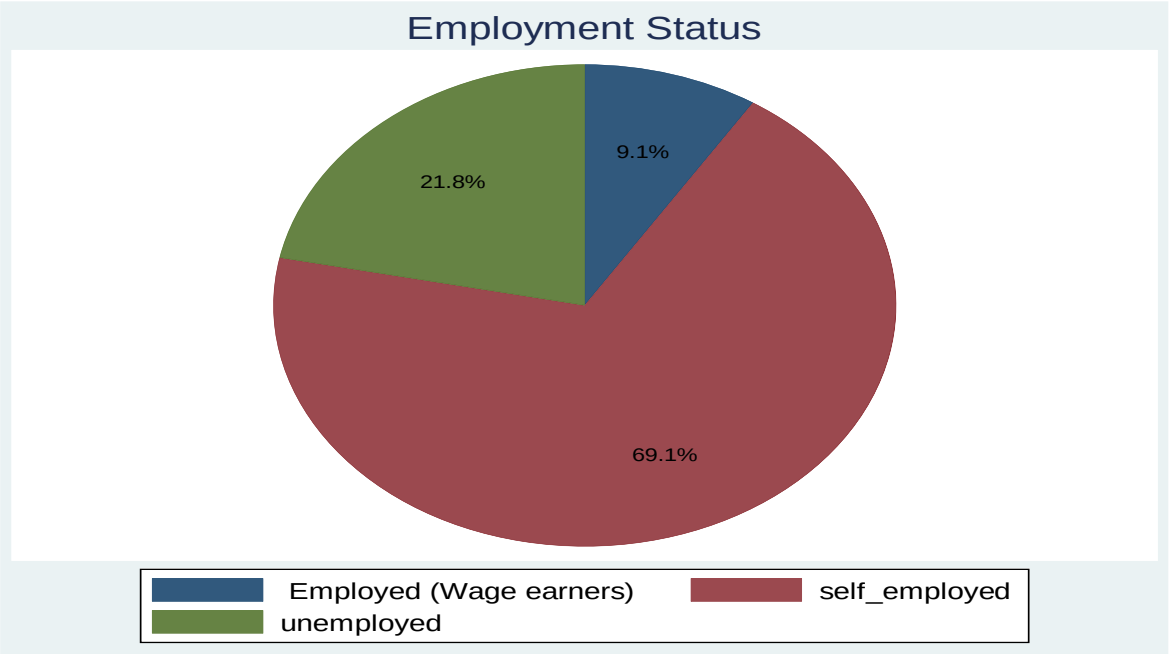

Figure 9: Employment status of respondents

The employment status reveals that a majority (69.1%) are self-employed, with a notable 21.8% unemployed. The dominance of self-employment reflects a rural or semi-urban setting

where informal livelihoods such as farming, trade, or crafts prevail. This economic profile suggests a high dependency on land for income, thus making land acquisition projects potentially disruptive to livelihoods.

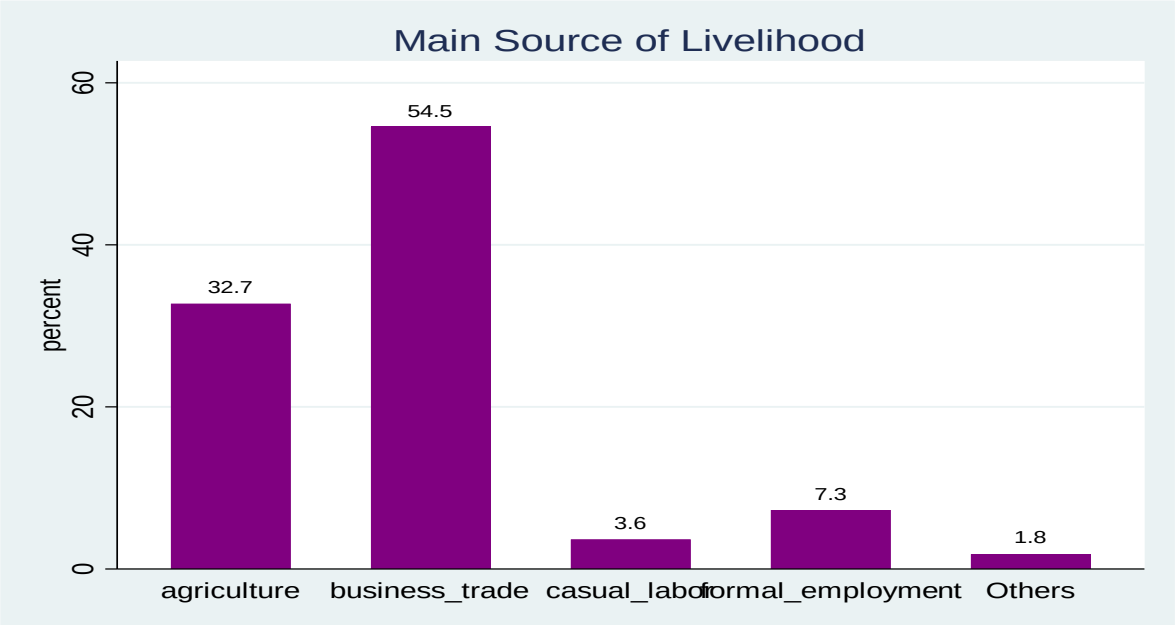

Figure 10: Main source of livelihood

Over half (54.5%) of the participants depend on business and trade, while 32.7% rely on agriculture. This highlights the critical role of land and local markets in sustaining household income. Both agriculture and informal business are highly sensitive to land availability and accessibility, implying that wayleaves acquisition—which often involves displacement or restricted access to land—can pose a direct threat to these livelihoods. The economic vulnerability associated with these sectors necessitates inclusive planning and compensation mechanisms that safeguard income continuity during and after infrastructure development. Only a small proportion of respondents reported formal employment (7.3%) or casual labor (3.6%) as their primary source of livelihood, indicating limited engagement in wage-based or structured employment.

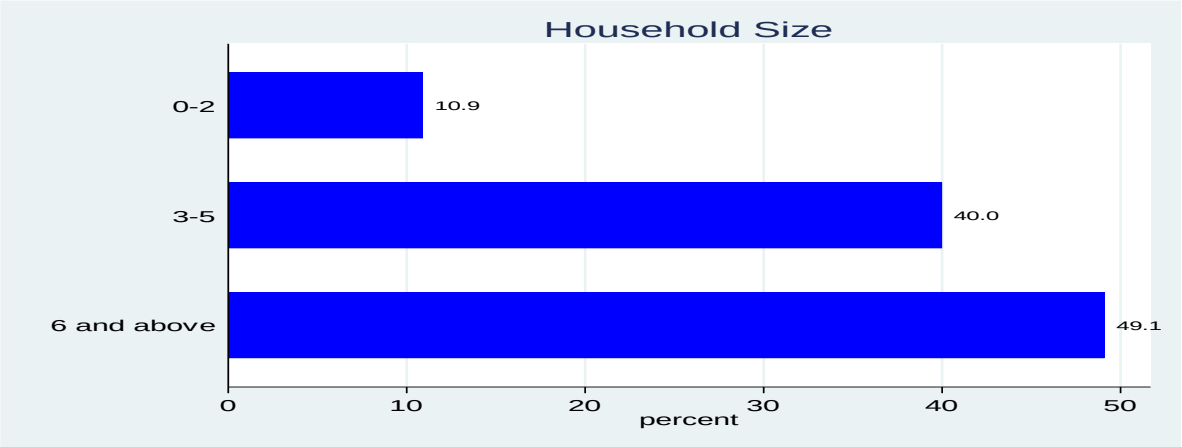

Figure 11: Household size

Household size data indicates that nearly half (49.1%) of the respondents belong to large households (six members and above), while only 10.9% are in smaller units (0–2 members). Larger households are typically associated with higher dependency ratios and greater pressure on land and resources. As such, any land acquisition or compensation process must consider the broader social and economic impact on entire households rather than treating each respondent as an isolated unit. Household size also influences vulnerability and may determine how compensation is utilized, making it a critical factor in planning equitable outcomes

4.3 The Socio-economic Factors Influencing Community Perceptions on Wayleaves Acquisition

Factor analysis/correlation	Number of obs	=	55
Method: principal-component factors	Retained factors	=	3
Rotation: (unrotated)	Number of params	=	18

Table 1: Factor analysis/correlation

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	1.983	0.584	0.283	0.283
Factor2	1.399	0.350	0.200	0.483
Factor3	1.049	0.201	0.150	0.633
Factor4	0.848	0.150	0.121	0.754
Factor5	0.697	0.161	0.100	0.854
Factor6	0.536	0.048	0.077	0.930
Factor7	0.487	.	0.070	1.000

LR test: independent vs. saturated: chi2(21) = 41.44 Prob>chi2 = 0.0049

Factor analysis presents the initial eigenvalues from the principal component analysis (PCA), showing that three factors were retained based on the Kaiser criterion (eigenvalues > 1). The three factors explain a cumulative 63.3% of the total variance, indicating a reasonably strong

factor structure from seven variables. The significant LR test (p = 0.0049) suggests that the correlation matrix is not an identity matrix, confirming the data is suitable for factor analysis. At this stage, the goal is to identify how the socio-economic variables group together, and the eigenvalues guide us in determining how many meaningful factors exist (Hair et al., 2014). The next step is factor extraction and rotation to clarify these groupings.

Table 2: Rotated factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Uniqueness
People with higher income levels are more likely to accept wayleaves acquisition		0.328		0.6274
Unemployment increases resistance to wayleaves projects			0.747	0.2906
Households with stable incomes are more open to compensation agreements		0.623		0.4345
Higher education levels increase understanding of wayleaves processes		0.870		0.3031
Financial dependence on land discourages acceptance of wayleaves	0.806			0.3284
The presence of alternative sources of income reduces resistance to land acquisition		0.344	-0.823	0.3050
Poor compensation discourages community members from accepting wayleaves	0.866			0.2792

(blanks represent abs(loading)<.3)

The rotated factor loadings Table provides a clearer thematic structure by simplifying the associations between variables and factors, enhancing interpretability. Factor 1 loads strongly on financial dependence on land (0.806) and poor compensation (0.866). These strong positive loadings reflect a dimension related to economic vulnerability, where communities reliant on land or unsatisfied with compensation terms tend to resist wayleaves acquisition. The financial pressure and land-dependence explain this group of perceptions, aligning with findings by Mwangi & Kariuki (2015), who argue that insecure livelihoods reduce openness to land-use negotiations.

Factor 2 is dominated by higher levels of education (0.870) and stable household income (0.623). This cluster points to a factor that captures income security and education levels, where greater economic stability fosters a more cooperative attitude toward compensation and acquisition. This supports literature such as Juma et al. (2021), which notes that communities with reliable livelihoods are more receptive to infrastructure projects involving land.

Factor 3 is primarily defined by unemployment levels (0.747) and presence of alternative

income (-0.823). This suggests a dimension tied to economic diversification. The strong negative loading of alternative income sources indicates that such individuals may view land acquisition more pragmatically. The use of oblique promax rotation assumes that factors are correlated, which is appropriate given the interconnectedness of socio-economic variables (Costello & Osborne, 2005).

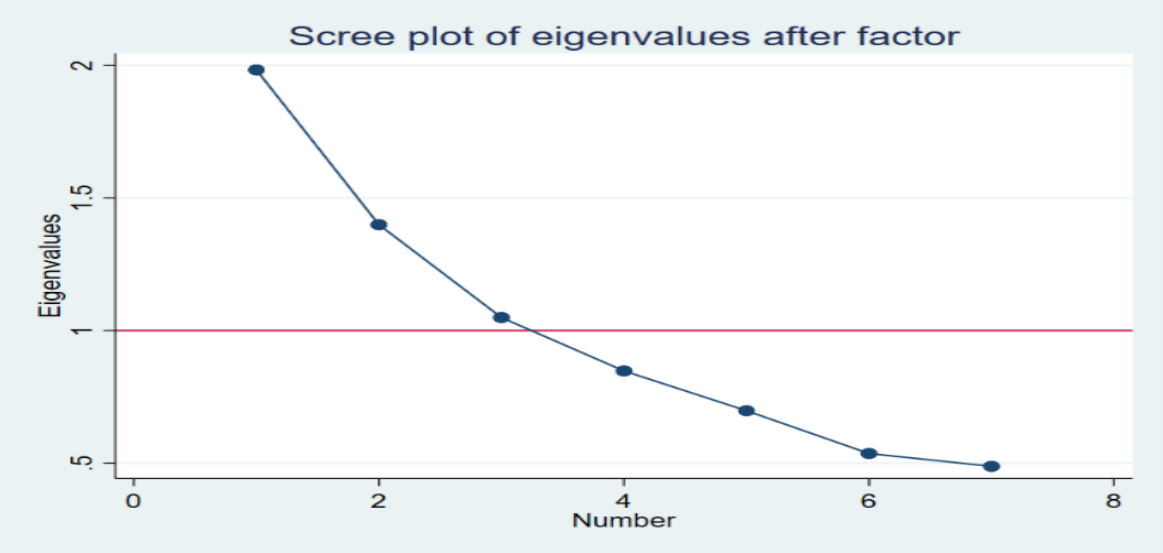

Figure 12: Scree plot for Social economic factors

In summary, the analysis of socio-economic factors influencing community perceptions on wayleaves acquisition reveals three major underlying dimensions: economic hardship and compensation sensitivity, employment and income stability, and education coupled with livelihood diversification. Communities facing poor compensation and high financial dependence on land exhibited strong resistance to wayleave projects, while those with higher or stable incomes showed greater openness to compensation agreements. In addition, individuals with higher educational attainment and access to alternative income sources demonstrated better understanding and less resistance to land acquisition processes.

4.4 The Influence of Cultural and Regional Factors on Community Perceptions Regarding Wayleaves Acquisition.

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	2.095	0.802	0.299	0.299
Factor2	1.293	0.117	0.185	0.484
Factor3	1.176	0.180	0.168	0.652
Factor4	0.997	0.335	0.142	0.794
Factor5	0.662	0.269	0.095	0.889

Factor6	0.393	0.009	0.056	0.945
Factor7	0.384	.	0.055	1.000

LR test: independent vs. saturated: chi2(21) = 59.50 Prob>chi2 = 0.0000

The results in section 4.4 suggest that cultural and regional factors significantly shape community perceptions regarding wayleaves acquisition, with three primary factors (Factor1, Factor2, and Factor3) explaining approximately 65.2% of the total variance. The likelihood ratio (LR) test result ($\chi^2(21) = 59.50$, $p < 0.001$) confirms that the factor model is statistically significant and better fits the data than a model assuming variable independence. This implies that there is a strong, structured relationship among cultural and regional variables affecting how communities respond to land acquisition projects, thus justifying their inclusion as critical dimensions in the analysis. The individual factors are explained in the next section.

Table 3: Rotated factor loadings (pattern matrix) and unique variances

Variable	**Factor1**	**Factor2**	**Factor3**	**Uniqueness**
Land ownership traditions affect wayleaves acceptance.			-0.3757	0.6635
Religious beliefs influence how communities respond to wayleaves acquisition.			0.8774	0.2305
Regional differences affect compensation expectations.	-0.4872	0.9002		0.2426
Traditional leaders influence land decisions in my community.	0.3439	0.4371	0.5084	0.3938
Some communities are more resistant to land-related projects due to past experiences.	0.3028	0.7256		0.2393
Cultural attachment to land makes compensation ineffective.	0.9383			0.2138
Certain ethnic groups are more resistant to land acquisition for projects.	0.5801		-0.3155	0.4520

Note: Blanks represent abs(loading)<.3)

The rotated factor loadings revealed three distinct latent themes, rooted in deeply embedded socio-cultural dynamics. The first dominant theme, represented by Factor 1, relates to emotional and identity-based attachments to land. This is reflected by the high loading of cultural sentiments that weaken the power of compensation mechanisms (loading = 0.9383) and ethnic-based resistance patterns (loading = 0.5801). This imply that for many communities, land is not merely an economic resource but a symbol of heritage, belonging, and identity. Consequently, monetary compensation may not fully address their emotional and cultural losses, which justifies the high explanatory power of these elements in the factor structure.

Factor 2 reflects intergenerational and collective historical experiences that shape perceptions of land projects. The strong loading on regional differences in compensation expectations (loading = 0.9002) and previous communal resistance due to past experiences (loading = 0.7256) suggests that historical injustices or uneven development may influence how communities react to new land-related interventions. These findings are further strengthened by the influence of traditional leaders and elders (loading = 0.4371), who often act as custodians of historical memory and guide community decisions. The uniqueness values for these items remain relatively low, indicating that they are well explained by this factor and are essential in understanding resistance patterns at a regional and historical level.

Factor 3 highlights the role of religious and normative belief systems in shaping responses to wayleaves acquisition. Religious ideologies significantly influence perceptions (loading = 0.8774), which suggests that some belief systems may either promote stewardship over land or discourage engagement with state-driven land acquisition schemes. Interestingly, the variable on land ownership traditions also loads moderately on this factor (loading = -0.3757), underscoring how religious and customary laws often intersect in rural land tenure systems. The relatively low uniqueness of the variables under this factor indicates that religious and customary norms are central to community decision-making.

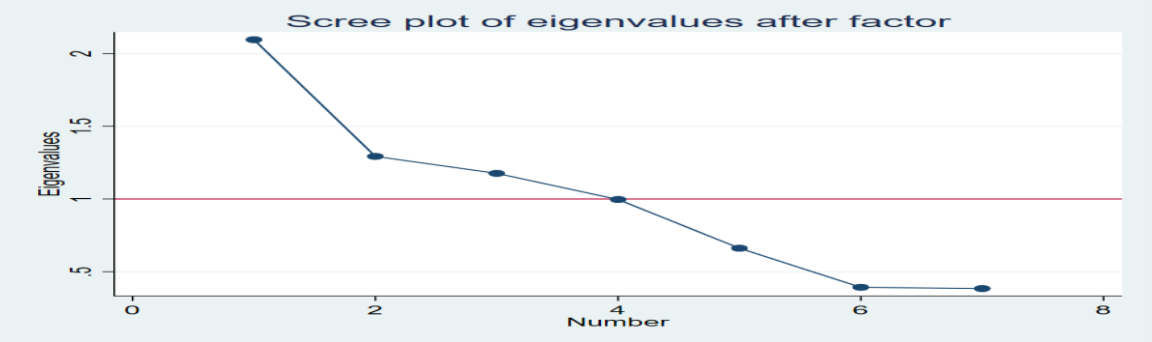

Figure 13: Scree plot for Cultural and Regional Factors

4.5 Awareness, access to information, stakeholder engagement and legal and policy factors on wayleaves acquisition among stakeholders

Table 4: Awareness, access to information, stakeholder engagement and legal and policy factors Rotated factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Uniqueness
(a) AWARENESS AND INFORMATION							
I have received enough information about wayleaves acquisition.		0.3091	0.6216				0.2818
Community members clearly understand compensation processes.		0.8635					0.2682

Public meetings about wayleaves acquisition are effective.		0.8645					0.2244
The media (radio, TV, newspapers) provides sufficient information about wayleaves.				0.715			0.3559
Lack of information leads to resistance against wayleaves acquisition.	0.8625						0.2163
Misinformation from third parties contributes to community resistance.	0.8853						0.2059
More government-led awareness campaigns are needed.	0.6632			0.4907			0.2574
b). STAKEHOLDER ENGAGEMENT							
The government involves communities in wayleaves discussions.	-0.4189		0.3574	0.3991			0.3686
Local leaders represent community interests in wayleaves negotiations.	-0.4397	0.4637	0.3321				0.2351
Women and marginalized groups are included in discussions.				0.8618			0.1988
There is transparency in stakeholder meetings.			0.6898			-0.3015	0.2977
More community engagement leads to better wayleaves acceptance.	0.3838				0.608		0.3078
Authorities prioritize investor interests over community concerns.		0.4586	-0.9208				0.226
The consultation process lacks proper representation of all affected groups.	-0.505		-0.416		0.3252		0.3757
c). LEGAL AND POLICY FACTORS							
The legal framework for land acquisition is clear and easy to understand						0.8513	0.2959
There are sufficient legal protections for affected landowners						0.7586	0.306
Weak enforcement of land policies increases disputes over wayleaves					0.8486		0.3118
Government policies prioritize infrastructure development over community rights		-0.34			0.6729		0.3259
Awareness of legal rights empowers landowners during wayleaves acquisition					0.4215	-0.4104	0.5846
LR test: independent vs. saturated: chi2(171) = 431.64		Prob>chi2 = 0.0000					

The factor analysis of stakeholders' perceptions on wayleaves acquisition identifies six thematic dimensions shaping awareness, engagement, and reactions toward land-related projects. The first factor, interpreted as "***Community Trust and Information Clarity***," is defined by strong loadings on misinformation (0.8853), the role of inadequate information in resistance (0.8625), and the perceived need for more government-led campaigns (0.6632). These variables, with low uniqueness values (e.g., 0.2059 for misinformation), emphasize how information asymmetry and distortion significantly influence community resistance to wayleaves acquisition. The strength of this factor suggests that stakeholders' understanding

and acceptance of land projects are critically undermined by a lack of credible, clear, and accessible information.

The second factor, best described as "***Effectiveness of Engagement and Representation***," is primarily associated with how well communities comprehend compensation processes (0.8635), the perceived effectiveness of public meetings (0.8645), and the quality of stakeholder inclusion (e.g., local leader representation at 0.4637 and women's inclusion at 0.8618). The low uniqueness scores for these variables (e.g., 0.2244 for public meetings) indicate their strong contribution to the factor. However, negative loadings, such as -0.4397 for local leader engagement and -0.4189 for government inclusion efforts, point to a lack of confidence in current engagement practices. This suggests that while mechanisms for community participation exist, they may not be sufficiently inclusive or transparent, especially regarding marginalized voices, hence impacting community perceptions negatively.

The third thematic grouping, "***Policy Ambiguity and Legal Uncertainty***," is anchored by high loadings on legal clarity (0.8513), landowner protections (0.7586), and weak enforcement of land policies (0.8486). These items point to a systemic issue where the legal framework, although present, is either poorly communicated or inconsistently applied. The moderately low uniqueness values (e.g., 0.306 for landowner protections) confirm that these variables are well captured within this factor. Stakeholders who are unaware or distrustful of legal protections are more likely to view wayleaves acquisition with skepticism. Thus, the presence of a law is insufficient without active education, equitable enforcement, and visible accountability.

A fourth significant theme emerges as "***Perceived Inequity in Institutional Priorities***," driven by the perception that investor interests are prioritized (loading = -0.9208) and that government policies favor infrastructure over community welfare (loading = 0.6729). These strongly loaded but oppositely signed variables indicate a polarization in stakeholder trust, with some perceiving a deliberate marginalization of community concerns in favor of economic development. The negative loading for consultation representation (-0.505) further supports this sentiment. With uniqueness values consistently below 0.33, this factor reflects deep-rooted mistrust in the institutional processes surrounding wayleaves, indicating the need for structural reforms that balance national development goals with social justice and inclusivity.

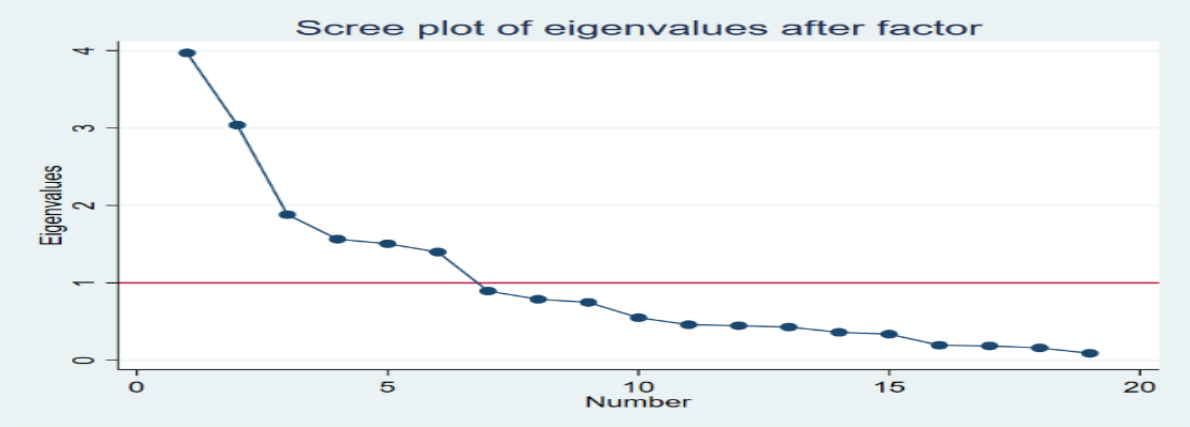

Figure 14: Scree plot for Awareness, access to information, stakeholder engagement and legal and policy factors

4.6 Overall Factors influencing community perceptions of wayleaves acquisition ranked

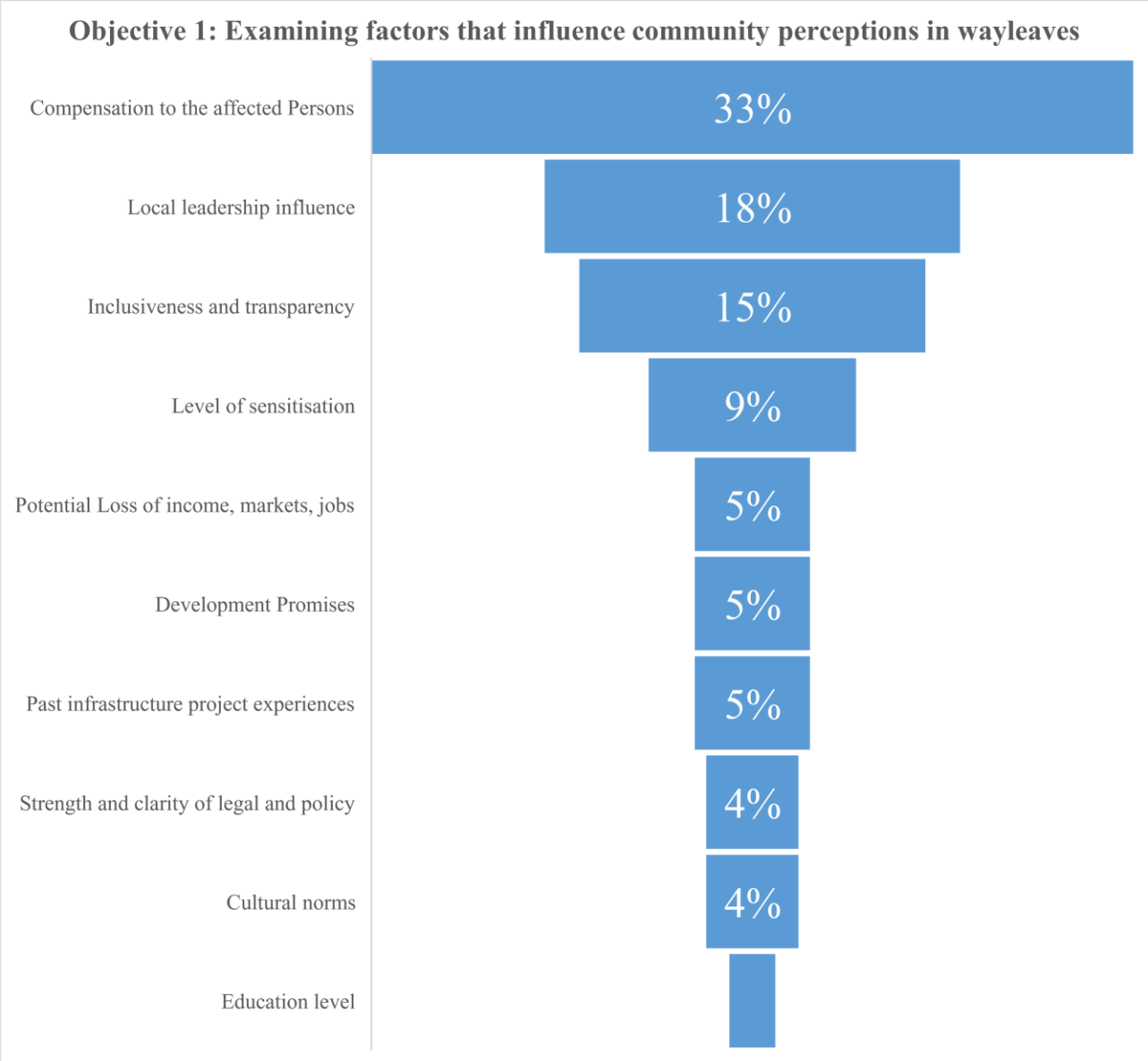

Figure 5: Factors influencing community perceptions of wayleaves acquisition

The results in Table above reveal that perceptions of compensation fairness and adequacy are the most dominant factor, ranked first by 33% of respondents. This finding is consistent with earlier factor analysis results and literature, which emphasize that fair, timely, and adequate compensation significantly, shapes how communities respond to land acquisition (Kakumba & Pastory, 2021; Nalule, 2019). Local Leadership influence followed as the second most cited factor (18%), highlighting how deeply entrenched communities especially in rural areas value their representatives and their opinions. Inclusiveness and transparency in stakeholder engagement was ranked third (15%), emphasizing the community's demand for meaningful involvement and clear communication during project implementation (Komakech, 2020). Most respondents considered other factors such as awareness and information dissemination (9%), past infrastructure project experiences (5%), Development promises (5%), legal frameworks (4%), and cultural/regional influences (4%) less influential, but they remain critical for ensuring long-term community cooperation and legitimacy. The rankings provide practical insight into which areas require prioritization in policy and practice, particularly placing compensation at the center of future project planning and execution.

4.7. Impact of Community Perceptions on Wayleave Acquisition

Table 6: Impact of Community Perceptions on Wayleave Acquisition

Variable	Factor1	Factor2	Uniqueness
Negative perceptions delay project approvals	0.897		0.196
Communities with poor perception resist infrastructure projects	0.912		0.166
Negative past experience reduces trust in government projects		0.644	0.461
Positive perceptions increase cooperation	0.817		0.293
Community trust influences negotiation willingness		0.781	0.379

Note: Blanks represent abs(loading)<.5)

The factor analysis results in Table 6 show that community perceptions significantly affect the progression and outcome of wayleave acquisition processes. The first major theme that emerged relates to project progress and community resistance, which strongly loaded on Factor 1. Two variables — associated with delayed project approvals and outright resistance to rural infrastructure — demonstrated high loadings (0.897 and 0.912 respectively), indicating that negative community attitudes are a critical barrier to the timely implementation of wayleave-related projects. This supports earlier findings by Atieno and Wambugu (2021), who noted that

community discontent and opposition often stem from unresolved grievances, particularly over compensation and exclusion from decision-making.

The second dominant theme centers on trust and relationship dynamics between communities and implementing agencies, captured under Factor 2. This reflects that prior negative experiences with similar government-led infrastructure initiatives significantly erode trust, while positive interactions foster willingness to negotiate. A factor loading of 0.644 for reduced trust due to past experiences and 0.781 for the influence of trust on willingness to cooperate reinforces the argument made by Mugisha and Mbabazi (2020) that communities base their future support on how they were treated in previous interventions. When trust is broken, perceptions become a powerful obstacle to engagement.

Finally, another critical insight is the role of cooperation linked to positive perceptions, with a high loading (0.817) under Factor 1. This finding confirms that when communities feel informed, respected, and fairly treated, they are more likely to support wayleave processes without conflict. This aligns with studies by Nyambura (2022) and the World Bank (2019), which emphasize that trust-building and inclusive engagement are key to reducing resistance and expediting land acquisition. Together, these results suggest that the impact of community perceptions is both immediate—through delays and resistance—and long-term—by shaping the likelihood of sustained community cooperation.

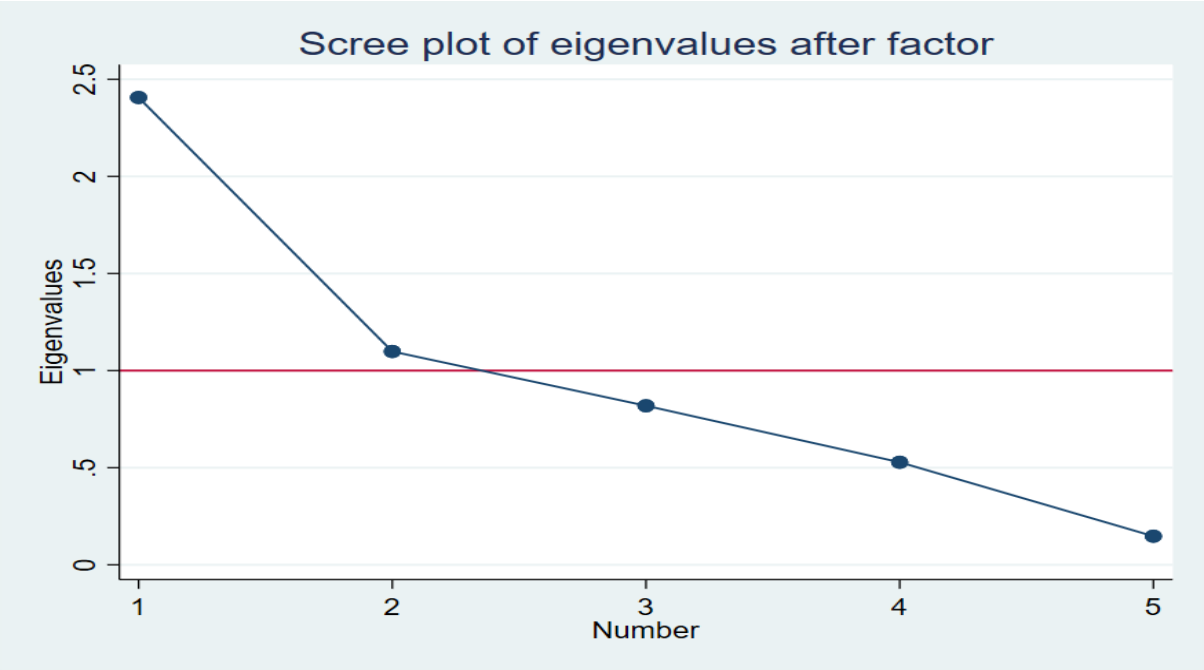

Figure 15: Scree plot for Impact of Community Perceptions

4.8 Preferred Strategies for Improving Community Participation and Reducing Conflicts

Table 7: Preferred Strategies; Rotated factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Uniqueness
Community meetings and sensitization programs improve participation in wayleaves acquisition.	0.423	0.654		0.229
Providing fair and timely compensation reduces conflicts in wayleaves acquisition.	0.713	0.404		0.155
Engaging community leaders in decision-making enhances acceptance of wayleaves acquisition.		0.906		0.238
Clear and transparent communication from project implementers builds trust in the wayleaves acquisition process.	0.769		0.3696	0.137
Alternative dispute resolution mechanisms, such as mediation, reduce conflicts in wayleaves acquisition.	0.587	0.3946		0.369
Legal and policy frameworks should be strengthened to protect community interests in wayleaves acquisition.			0.9751	0.028
Participation in rural electrification decision-making should be mandatory for affected communities.	-0.9236	0.3899		0.227

Note: Blanks represent abs(loading)<.3)

The results suggest three major strategic dimensions that communities perceive as essential for improving participation and minimizing conflict during wayleaves acquisition.

The first factor can be interpreted as "***Trust-Building through Fairness and Communication***." This theme is driven by high loadings on transparent communication (0.769), provision of fair and timely compensation (0.713), and the usefulness of dispute resolution mechanisms (0.587). These loadings reflect strong support for practical measures that build trust and reduce friction, supported by very low uniqueness values (e.g., 0.137 for communication and 0.155 for compensation), indicating these strategies are highly representative of the underlying construct. This highlights that conflict is often rooted not just in process, but in perceived fairness, clarity of information, and the degree to which implementers act in good faith.

The second emerging theme revolves around "***Community-Led Engagement and Representation***." The strongest loading here is on involving local leaders in decision-making (0.906), followed by moderate loadings on community meetings and sensitization (0.654). These findings, with low uniqueness (e.g., 0.238 for leadership involvement), suggest a broad consensus that grassroots leadership plays a central role in facilitating understanding and

improving acceptance of infrastructure-related land acquisitions. When communities see familiar and trusted individuals advocating for them, especially in structured forums like sensitization meetings, their willingness to participate improves significantly. This reflects a preference for bottom-up engagement rather than top-down imposition of development projects.

The third factor identified was "***Institutional Accountability and Policy Empowerment.***" It is most strongly defined by the need for stronger legal and policy frameworks (0.9751), which has an extremely low uniqueness of 0.028, suggesting that this is a very pure measure of the theme. The desire for legal empowerment and protections illustrates a strategic shift from reactive participation to proactive rights assertion. Notably, the variable reflecting mandatory participation in electrification decisions has a strong negative loading (-0.9236) on Factor 1, which may indicate some community skepticism or fatigue regarding imposed participation that lacks real influence.

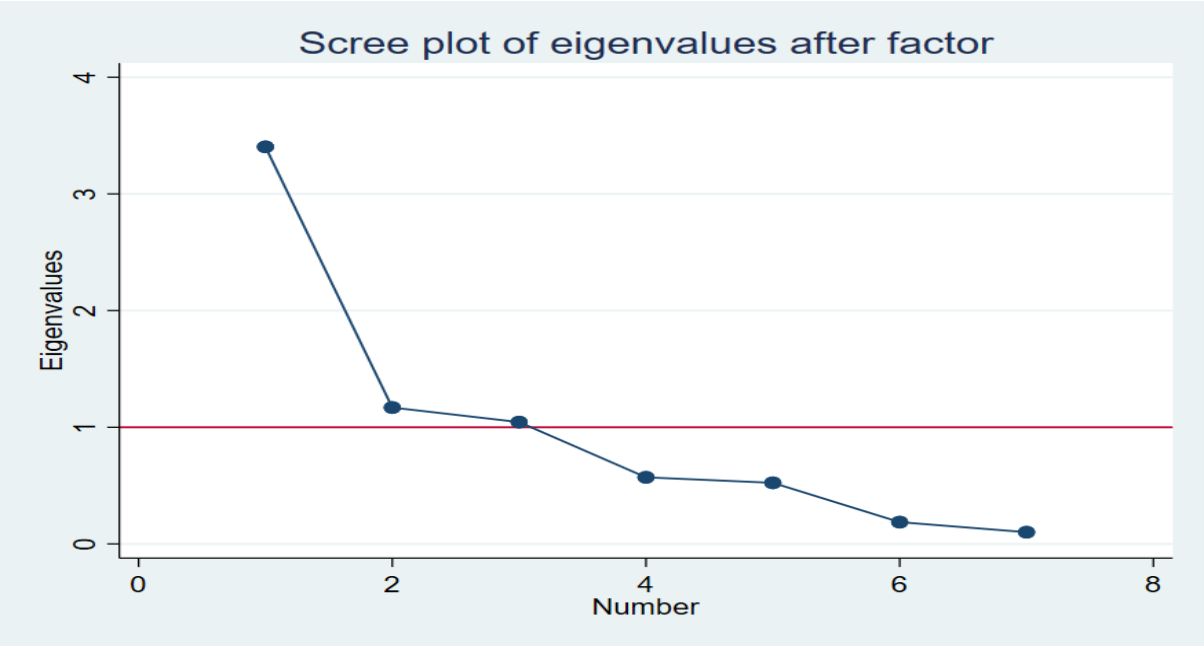

Figure 16: Scree plot for Preferred Strategies for Improving Community Participation

4.5 Discussion of Results

4.5.1 Factors that influence community perceptions of wayleaves acquisition

Socio-economic circumstances emerged as a significant influence on how communities perceive wayleaves acquisition, with education levels, employment status, and household size playing central roles. Respondents with lower formal education and informal employment were more skeptical of compensation procedures and legal protections, echoing findings by Kitchin & Tate (2013), who noted that lower socio-economic groups often lack access to legal information and institutional support. Similarly, Gebre and Gugerty (2017) emphasized that

individuals with limited education are less likely to engage confidently with formal land acquisition processes, resulting in mistrust and resistance. The dominance of self-employment and reliance on agriculture also indicates a high sensitivity to land loss, as argued by Ubink (2008), who observed that land represents not only a livelihood base but also economic security in many African rural settings. These dynamics shape community perceptions and heighten concerns when compensation or alternative arrangements are perceived as insufficient.

The role of **cultural beliefs** and regional dynamics was strongly linked to resistance or acceptance of wayleaves acquisition. In one interview, a community elder said, "*This land was given by our ancestors. No amount of money can pay for that*," highlighting the cultural attachment that complicates the compensation-based approach. Ethnic identity and regional differences in how land is managed further intensified these sentiments. Community responses were influenced by traditional land tenure systems, ethnic perceptions, and spiritual attachment to land, which aligns with findings by Toulmin and Quan (2000), who stressed the deep cultural significance of land in African societies. Furthermore, Alden Wily (2011) argued that resistance to externally imposed infrastructure is often rooted in perceived disrespect for customary land governance and traditional authorities. Regional disparities in compensation expectations and the influence of past marginalization also resonate with studies by Boone (2014), which demonstrate that historical grievances and power imbalances significantly affect community trust in government-led land processes. This underscores the importance of integrating cultural sensitivity and regional inclusiveness into infrastructure planning.

The analysis revealed that limited awareness and the prevalence of misinformation significantly contributed to resistance towards wayleaves acquisition. One respondent explained, "*We only hear rumors from neighbors or boda boda riders. If they want us to cooperate, they must speak to us directly and clearly*." Respondents pointed to inadequate communication from authorities and insufficient use of trusted information channels, findings supported by Arnstein (1969), who famously discussed the ladder of citizen participation, emphasizing the role of information in meaningful engagement. Likewise, Mwangi & Mutua (2016) noted that in Kenya, lack of transparency and poor dissemination of project information led to suspicion and conflict in electrification projects. Akintoye et al. (2016) found that communities that received consistent, clear information through trusted sources (e.g., local leaders and media) were more likely to support energy projects. These results stress the need for structured, transparent, and culturally resonant awareness campaigns to improve perceptions.

The level and quality of stakeholder engagement played a decisive role in shaping community perceptions and their eventual response to wayleaves acquisition. Communities felt excluded,

especially marginalized groups such as women and the poor, which undermines trust. A local youth leader in Bugamba Sub-county remarked, "*They bring tractors and poles before even holding one proper meeting with us. Who does that? We're not involved, just told to agree*." This is consistent with the work of Cornwall (2008), who emphasizes the importance of inclusive participation in decision-making processes. Okoth-Ogendo (1999) asserts that tokenistic consultation rather than genuine involvement leads to conflict and project delays. Transparency in meetings and visible involvement of local leaders—when present—were associated with higher acceptance, mirroring findings by World Bank (2015), which recommends embedding participatory governance in infrastructure development. These findings reinforce the argument that inclusive stakeholder engagement is not merely procedural but foundational to successful rural electrification initiatives.

Respondents' past interactions with development initiatives—especially those involving land acquisition—strongly influenced current perceptions. Communities with prior negative experiences, such as unfair compensation or unfulfilled promises, exhibited higher resistance levels. This reflects the conclusions of Vanclay (2004), who highlighted how cumulative negative experiences contribute to a 'legacy of mistrust.' Similarly, studies by Ndi and Batterbury (2017) in Cameroon found that failed rural electrification efforts left communities skeptical of new initiatives, even when framed as participatory. Mwangi et al. (2020) further argue that transparency and accountability in previous projects are critical trust-building components for future infrastructure efforts. Therefore, understanding historical project impacts is key to designing better engagement and communication strategies that address lingering community grievances.

The clarity and enforcement of legal frameworks were perceived as inadequate, contributing to insecurity and conflict. Participants expressed concerns over weak legal protections and policies that appear to prioritize national infrastructure goals over community rights. In Kanyangongi, a retired civil servant remarked, "*We have been here before. They took land for roads and paid us peanuts. This time, we want to see the documents first*." Cousins (2007), who asserts that weak institutional frameworks undermine landholder confidence in formal acquisition processes echo these concerns. Meanwhile, Deininger et al. (2008) stress the importance of secure land rights in ensuring voluntary participation and reducing litigation in land acquisition projects. Kanyinga (2009) also found that when communities perceive laws as ambiguous or selectively enforced, resistance becomes more pronounced. This calls for strengthening legal literacy, simplifying policy language, and ensuring equitable enforcement to build public confidence in land-related policies.

4.5.2 Impact of Community Perceptions on Wayleaves Acquisition for Rural Electrification

The study revealed that negative perceptions within communities contribute significantly to project delays. This reflects the broader understanding that public perception can either facilitate or frustrate infrastructure projects, especially where land is involved. Communities that perceive the process as biased, rushed, or unbeneficial tend to demand clarification, more time for consultation, or reject the project entirely. This aligns with the findings of Atieno and Wambugu (2021), who noted that perception-related delays stem from unresolved fears of exploitation. Similarly, Komakech et al. (2022) emphasize that when trust is lacking, even small misunderstandings can stall implementation. During a key informant interview with a local council leader in Rwampara, he remarked, "*When people are not consulted early or feel that they are being pushed, they choose to wait and delay, even if it costs them*." This clearly demonstrates that community buy-in must be cultivated well in advance to avoid procedural standstills.

The findings further indicated that poor community perceptions often translate into outright resistance to wayleaves acquisition. This resistance is often driven by a history of exclusion, unmet promises, or perceived injustice in compensation or relocation processes. Gollwitzer et al. (2020) argue that resistance is not necessarily rooted in a rejection of development but rather in a defense mechanism against being disadvantaged. Mwaura and Oino (2021) support this view, explaining that resistance intensifies when communities believe that their voices do not matter. A female landowner in Kanyangongi village stated in an interview, "*The last time they brought electricity, some of our land was taken without even a letter. We were left watching. This time, we must be heard*." This underscores the need for meaningful engagement and a well-documented process to counter past injustices and current fears.

In addition, the study showed that negative past experiences with similar projects significantly reduce trust in government-led initiatives. This erosion of trust undermines current negotiations, even when intentions are good. O'Brien and Mutibwa (2020) affirm that communities that have experienced forced evictions or unfair compensation before are highly skeptical of any new land-related projects. According to Nalule (2022), historical memory in rural Uganda is strong and often guides present-day reactions. A sub-county chairperson who stated, "*People are not afraid of development — they are afraid of being cheated again*", echoed this. Such responses highlight the importance of learning from past implementation failures to restore community confidence and encourage cooperation.

On the contrary, the results revealed that communities with positive perceptions were more cooperative and supportive of the wayleaves acquisition process. When the process was

transparent, compensation fair, and dialogue consistent, respondents showed a willingness to collaborate. This is in line with the findings of Nyambura (2022) and World Bank (2021), which concluded that inclusive planning and benefit-sharing improve community ownership of development interventions. A Local council chairperson from Ngugo Parish asserted, "*I accepted because they came early, talked to me, and explained what we would get. It was different from before*." Such experiences show that positive perception is a powerful catalyst for smoother project implementation and should be actively nurtured.

The study confirmed that community trust plays a vital role in influencing negotiation willingness. Communities that trusted the project implementers or government representatives were more likely to come to the negotiation table with an open mind. Atkinson et al. (2021) noted that trust is a critical ingredient in project sustainability, as it reduces transaction costs and minimizes resistance. Likewise, Kirumira and Mubiru (2020) found that consistent and honest communication enhances negotiation success. A youth leader from Bugamba shared, "*When we trust who is leading the process, we don't hesitate to participate. But if there's any sign of cheating, we shut down*." These sentiments point to the need for integrity, openness, and continuity in community engagement efforts, especially where land acquisition is concerned.

4.5.3 Strategies for Improving Community Participation and Reducing Conflicts

The study identified community meetings, sensitization programs, and the active engagement of local leaders as vital strategies for fostering participation and minimizing conflicts in the wayleaves acquisition process. These community-focused communication channels emerged strongly in the factor analysis, underscoring the importance of inclusive dialogues and structured consultations in enhancing transparency and trust. As Ajayi and Ojo (2011) observed, such participatory approaches empower communities by ensuring their voices are heard and their concerns addressed. Abunyewah et al. (2019) further argue that involving local leaders in planning cultivates a sense of ownership and social cohesion, which reduces tension. In an interview, one community representative stressed, "Regular meetings give us a chance to express our views, making us feel respected and part of the process," reinforcing the qualitative evidence that community engagement is central to project acceptance.

Compensation emerged as another core strategy for conflict reduction, with respondents emphasizing that fair and timely monetary reparation is critical to diminishing resistance. This finding corroborates Vanclay's (2017) research, which suggests that disputes over compensation are often the primary reason behind resistance to land acquisition. Communities view compensation not only as a legal entitlement but also as a form of recognition for their socio-economic contributions and loss of livelihood. Olanrewaju and Abdul-Aziz (2015)

highlight that prompt and fair compensation mitigates conflict by demonstrating respect for community rights, while several respondents noted “When compensation is delivered on time and at fair value, we are more willing to cooperate.” This perspective indicates that integrating robust compensation strategies that address both monetary and non-monetary losses can effectively reduce grievances.

The study revealed that strengthening legal and policy frameworks plays a significant role in securing community interests. Respondents consistently expressed that weak regulatory mechanisms and unclear legal protections contribute to exploitation and marginalization, which in turn fuel resistance. This sentiment aligns with Ayee et al. (2011), who argue that community distrust often originates from the absence of enforceable land and infrastructure laws. Complementing this view, Jafry and Ochieng (2012) stress the critical need for institutional arrangements that formalize community participation and provide accessible dispute resolution mechanisms, such as mediation and arbitration. In one interview, a local government official remarked, “Without strong legal backing and clear policies, communities remain vulnerable, and conflicts are inevitable,” emphasizing the centrality of legal safeguards in promoting equitable outcomes.

The analysis underscored that positive strategies, when implemented collectively, foster a cooperative environment that greatly enhances project success. When transparency, fair compensation, robust legal protections, and continuous community engagement are in place, residents report an increased willingness to negotiate and support electrification initiatives. This comprehensive approach not only addresses immediate procedural barriers but also rebuilds long-term trust between community members and project implementers. Studies by World Bank (2021) and Nyambura (2022) support this holistic model, suggesting that a combination of robust stakeholder engagement and clear legal frameworks is essential to reducing conflict and accelerating infrastructure development. Collectively, these strategies provide a roadmap for future projects aimed at achieving balanced, inclusive, and sustainable rural electrification outcomes.

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CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the key findings from the analysis, draws conclusions based on the study objectives, and provides actionable recommendations for policy, practice, and future research to support more inclusive and conflict-sensitive rural electrification efforts.

5.2 Summary of Key Findings

5.2.1 Summary of Factors Influencing Community Perceptions on Wayleaves Acquisition

The study found that socio-economic characteristics significantly influenced how communities perceive the acquisition of wayleaves for rural electrification. Among the 55 respondents, a majority (69.1%) were self-employed, and 40% had attained only secondary education, with 27.3% having completed only primary education. This indicates that most community members operate in informal economic settings with relatively low formal education, which may limit their understanding of technical processes like wayleaves acquisition. Furthermore, the household size data revealed that nearly half (49.1%) had six or more members, which could increase concerns over land loss and compensation adequacy. These socio-economic constraints may heighten sensitivity to compensation, transparency, and inclusion in project decisions, shaping perceptions of fairness and trust.

Cultural and regional affiliations also played a critical role in influencing community attitudes toward wayleaves acquisition. The findings showed that communities felt underrepresented and often excluded from decision-making, particularly women and marginalized groups. Factor analysis results highlighted strong loadings for variables related to inclusiveness, with women and marginalized group inclusion scoring 0.8618. Cultural norms in some regions tend to favor male-dominated decision-making structures, which may alienate vulnerable groups, leading to skepticism or resistance toward electrification projects. In addition, regional histories of infrastructure-related grievances likely contributed to a climate of mistrust, reinforcing negative perceptions and conflict potential when community values and identities are not acknowledged.

Access to accurate and timely information was another key determinant of perception. The analysis revealed that community resistance was strongly linked to misinformation and lack of awareness, with variables such as misinformation from third parties (0.8853) and lack of information leading to resistance (0.8625) showing high factor loadings. This reflects that many community members rely on informal sources for critical project information. Only a small proportion believed that media coverage was sufficient (0.715), and the effectiveness of

public meetings was under scrutiny (0.8645). These findings underscore a major communication gap between project implementers and beneficiaries, which fosters suspicion and reduces public confidence in the legitimacy and intentions of the wayleaves process.

Stakeholder involvement—or the lack thereof—emerged as a dominant theme influencing perceptions. Factor loadings demonstrated a strong belief in the value of community engagement, with engagement of women and marginalized groups (0.8618) and local leaders' representation (0.4637) viewed positively. However, concerns were also raised about transparency and equity in consultations, with variables indicating that authorities prioritized investors over community concerns (-0.9208). Moreover, the consultation process was perceived as lacking adequate representation, and weak community-government dialogue further fueled resistance. These findings reveal that meaningful and inclusive stakeholder participation is essential for improving trust and minimizing opposition to wayleave activities.

The study found that historical experiences with previous infrastructure projects significantly shaped current community attitudes. Respondents who had previously experienced unfulfilled promises, delayed compensation, or exclusion from planning processes were more likely to perceive new wayleaves projects with skepticism. These past negative experiences serve as reference points, particularly when current engagements resemble previous failures. The call for more government-led awareness campaigns (0.6632) reflects a desire to prevent repetition of past mistakes and improve future project reception.

Legal and policy frameworks were found to be pivotal in shaping perceptions. Respondents rated the clarity of land acquisition laws (0.8513) and sufficiency of legal protections (0.7586) as important. Weak enforcement of land policies (0.8486) was seen as a major driver of disputes, while awareness of legal rights empowered communities (0.5846) to participate more confidently in wayleaves processes. However, some participants noted that government policies often prioritized infrastructure over community rights (0.6729), exacerbating perceptions of injustice. These insights highlight that robust and transparent legal systems, coupled with accessible rights education, are essential to improving community trust in rural electrification projects.

5.2.2 Impact of Community Perceptions on Wayleaves Acquisition

The study revealed that community perceptions significantly impacted the success and pace of wayleaves acquisition for rural electrification projects. Negative perceptions, often rooted in previous experiences of inadequate compensation, lack of participation, and misinformation, led to resistance, project delays, and in some cases, outright rejection of electrification infrastructure. Key variables such as "negative perceptions leading to conflict" (loading = 0.8484) and "perceived injustice in compensation" (loading = 0.7573) strongly suggested that

when communities felt sidelined or exploited, they became less cooperative. Moreover, a considerable number of respondents believed that decisions were being made without adequate consultation, further fueling mistrust and discontent.

The lack of transparency in the compensation process and the perception that government and private developers prioritized investors' interests over local welfare (factor loading = -0.9208) were also central to the pushback against wayleaves. Such sentiments often led to legal disputes, land ownership conflicts, and delayed project implementation timelines. The results align with observations that public opposition, even in the absence of legal grounds, can materially obstruct infrastructure projects due to strong communal ties to land and local leadership influence.

On the other hand, where communities had positive perceptions—driven by effective stakeholder engagement, adequate information sharing, and equitable treatment—the acquisition process was smoother and more cooperative. Respondents indicated that mutual respect, clear legal communication, and inclusive planning reduced the risk of conflict and enhanced trust in project goals. This suggests that community perceptions act as both a catalyst and a barrier in rural electrification; they shape whether projects are welcomed or resisted, thereby directly affecting both cost-efficiency and timelines of development efforts.

5.2.3 Strategies for Enhancing Participation and Reducing Conflicts

The study identified several effective strategies that could significantly enhance community participation and mitigate conflicts in wayleaves acquisition for rural electrification. One of the most strongly supported strategies was the strengthening of legal and policy frameworks to safeguard community interests, as shown by a high factor loading of 0.9751. Respondents emphasized that having enforceable legal instruments that protect land rights and ensure fair treatment during infrastructure projects would reduce suspicion and resistance. In addition, ensuring that communities are aware of their rights through civic education and legal literacy programs was considered a critical first step toward building trust.

Another prominent strategy was involving community leaders in the decision-making process, which recorded a strong factor loading of 0.906. Leaders were perceived as trusted intermediaries who could effectively communicate project goals and negotiate community concerns. Their involvement ensured that projects were locally contextualized and more likely to be accepted. Similarly, clear and transparent communication from project implementers emerged as a key factor in building trust, as indicated by a loading of 0.769. Respondents valued regular, honest engagement, including open forums, community meetings, and feedback mechanisms, which enabled mutual understanding and reduced misinformation.

The study also highlighted the importance of non-adversarial conflict resolution mechanisms, such as mediation, with a significant factor loading of 0.587. Alternative dispute resolution approaches were preferred over lengthy and often costly legal battles. Providing timely and fair compensation was seen as a critical deterrent to conflicts, with a loading of 0.713. When community members felt that compensation matched the value of their land and was delivered promptly, their willingness to participate increased. These findings suggest that a combination of legal reforms, inclusive planning, effective communication, and fair compensation can foster cooperation and reduce opposition in wayleaves acquisition processes.

5.3 Conclusions

5.3.1 The factors Influencing Perceptions

The study concludes that community perceptions of wayleaves acquisition are significantly shaped by a combination of socio-economic conditions, cultural and regional dynamics, awareness levels, stakeholder engagement, past experiences, and the prevailing legal and policy environment. Communities with limited economic resources, low levels of education, or marginalization are more likely to perceive wayleaves acquisition negatively due to fears of unfair treatment or displacement. Cultural beliefs and regional histories of infrastructure development also play a role in shaping skepticism or acceptance. Furthermore, poor communication and exclusion from decision-making processes deepen mistrust, especially where communities have previously encountered unfulfilled promises or unresolved grievances. The absence of clear legal protections further exacerbates negative perceptions, reinforcing the need for inclusive, informed, and rights-based approaches in managing wayleaves acquisition.

5.3.2 The impact of Perceptions on Wayleaves Acquisition

Community perceptions were found to have a profound effect on the progress and success of wayleaves acquisition processes. Where perceptions were negative—often due to lack of consultation, fears of inadequate compensation, or unresolved past disputes—there was resistance, delays, and, in some cases, active conflict. Conversely, communities that felt informed, respected, and fairly treated were more likely to cooperate and support project implementation. This highlights that the success of rural electrification initiatives hinges not only on technical execution but also on social dynamics, particularly how the community interprets the intentions and actions of implementing agencies. Ignoring perceptions leads to opposition, whereas positive perception nurtures partnerships that facilitate smooth project roll-out.

5.3.3 Preferred Strategies for Community Participation and Conflict Reduction

To enhance participation and reduce conflicts in wayleaves acquisition, the study concludes that a multi-pronged strategy is essential. Strengthening legal and policy protections ensures that communities have formal mechanisms for redress and confidence in the process. Actively involving local leaders and ensuring transparent communication help bridge the gap between communities and implementers, making the process feel more inclusive and respectful. The adoption of alternative dispute resolution methods, such as mediation, fosters quicker and more amicable conflict resolution. Moreover, timely and fair compensation reassures affected persons of the project's integrity. Together, these strategies build trust, empower communities, and pave the way for more sustainable and cooperative infrastructure development.

5.4 Recommendations

5.4.1 Policy Recommendations

Based on the findings, there is a pressing need to strengthen policy frameworks that guide wayleaves acquisition for rural electrification. Policymakers should develop and enforce clear, rights-based legal provisions that prioritize community inclusion, fair compensation, and environmental justice. Guidelines should mandate prior informed consent, ensure that community voices—especially those from vulnerable groups—are meaningfully included in planning and decision-making, and institutionalize alternative dispute resolution mechanisms to handle conflicts efficiently. Integrating wayleaves acquisition procedures into broader rural development and land governance policies will promote coherence and transparency in land-related interventions. Strengthening these policies will build community trust and minimize resistance to rural infrastructure projects.

5.4.2 Practical Recommendations

Project implementers should adopt inclusive and participatory approaches that emphasize continuous stakeholder engagement throughout the project lifecycle. This involves conducting regular community sensitization meetings, clearly communicating project goals, procedures, and compensation packages, and ensuring transparency at every stage of the acquisition process. Local leaders and community-based organizations should be empowered to act as intermediaries in engagement and conflict resolution. Furthermore, fair and prompt compensation should be guaranteed to maintain goodwill. Implementers should also document and address grievances from previous infrastructure projects to avoid repeating past mistakes. By applying these practical steps, implementers can build social license, enhance cooperation, and ensure the smooth execution of rural electrification initiatives.

5.6 Recommendations for Further Research

Future research should explore longitudinal studies that assess how community perceptions and participation in wayleaves acquisition evolve over time, especially after project implementation. It would be beneficial to examine the long-term social and economic impacts of rural electrification projects on affected communities, particularly in relation to livelihoods, land rights, and social cohesion. In addition, comparative studies across different regions or countries could provide insights into how cultural, institutional, and policy variations shape community responses to wayleaves acquisition. Further research should also investigate the role of digital tools and technologies in enhancing transparency, community engagement, and conflict mitigation during infrastructure development processes.

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APPENDICES

Appendix I(a): Questionnaire

Title: Investigating the Impact of Stakeholder Sensitization on Wayleaves Acquisition in Rural Electricity Distribution Infrastructure Projects in Rwampara District.

SECTION A: DEMOGRAPHIC & SOCIAL ECONOMIC INFORMATION

(Tick the appropriate response)

1. **Gender**
    - ☐ Male
    - ☐ Female
2. **Age in complete years** _____
3. **Level of Education**
    - ☐ No Formal Education
    - ☐ Primary Level
    - ☐ Secondary Level
    - ☐ Diploma
    - ☐ Bachelor's Degree
    - ☐ Postgraduate Degree
4. Employment Status ☐ Unemployed ☐ Self-employed ☐ Employed in the private sector ☐ Employed in the public sector
5. Main Source of Livelihood ☐ Agriculture ☐ Business/Trade ☐ Formal Employment ☐ Casual Labor ☐ Other (Specify)
6. Household Size (Number of people living in your household) _____
7. **How long have you been involved in rural electrification projects?**
    - ☐ Less than 1 year
    - ☐ 1 – 3 years
    - ☐ 4 – 6 years
    - ☐ More than 6 years

SECTION B: FACTORS INFLUENCING COMMUNITY PERCEPTIONS ON WAYLEAVES ACQUISITION

8. **Which of the following factors do you think most influences wayleaves acquisition in your community? (Select one)**
    - ☐ Compensation
    - ☐ Potential Benefits
    - ☐ Potential Losses to the land
    - ☐ Acquisition of consent before construction
    - ☐ Local leadership involvement
    - ☐ Position of the elders and religious leaders
    - ☐ Level of sensitisation
    - ☐ Past Infrastructure project experiences
    - ☐ Level of education
9. When did you consent for the Powerline construction? ☐ First Time ☐ Second Time ☐ Third Time ☐ Never
10. (Using a 5-point Likert Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly Agree, rate the following statements)

B1. Socio-Economic Factors	**1**	**2**	**3**	**4**	**5**
People with higher income levels are more likely to accept wayleaves acquisition	☐	☐	☐	☐	☐
Unemployment increases resistance to wayleaves projects	☐	☐	☐	☐	☐
Households with stable incomes are more open to compensation agreements	☐	☐	☐	☐	☐
Higher education levels increase understanding of wayleaves processes	☐	☐	☐	☐	☐
Financial dependence on land discourages acceptance of wayleaves	☐	☐	☐	☐	☐
The presence of alternative sources of income reduces resistance to land acquisition	☐	☐	☐	☐	☐
Poor compensation discourages community members from accepting wayleaves	☐	☐	☐	☐	☐

B2. Cultural and Regional Factors	**1**	**2**	**3**	**4**	**5**
Land ownership traditions affect wayleaves acceptance.	☐	☐	☐	☐	☐
Religious beliefs influence how communities respond to wayleaves acquisition.	☐	☐	☐	☐	☐
Regional differences affect compensation expectations.	☐	☐	☐	☐	☐
Traditional leaders influence land decisions in my community.	☐	☐	☐	☐	☐
Some communities are more resistant to land-related projects due to experiences.	☐	☐	☐	☐	☐
Cultural attachment to land makes compensation ineffective.	☐	☐	☐	☐	☐
Certain ethnic groups are more resistant to land acquisition for projects.	☐	☐	☐	☐	☐

B3. Awareness and Information	**1**	**2**	**3**	**4**	**5**

I have received enough information about wayleaves acquisition.	☐	☐	☐	☐	☐
Community members clearly understand compensation processes.	☐	☐	☐	☐	☐
Public meetings about wayleaves acquisition are effective.	☐	☐	☐	☐	☐
The media (radio, TV, newspapers) provides sufficient information about wayleaves.	☐	☐	☐	☐	☐
Lack of information leads to resistance against wayleaves acquisition.	☐	☐	☐	☐	☐
Misinformation from third parties contributes to community resistance.	☐	☐	☐	☐	☐
More government-led awareness campaigns are needed.	☐	☐	☐	☐	☐

B4. Stakeholder Engagement	**1**	**2**	**3**	**4**	**5**
The government involves communities in wayleaves discussions.	☐	☐	☐	☐	☐
Local leaders represent community interests in wayleaves negotiations.	☐	☐	☐	☐	☐
Women and marginalized groups are included in discussions.	☐	☐	☐	☐	☐
There is transparency in stakeholder meetings.	☐	☐	☐	☐	☐
More community engagement leads to better wayleaves acceptance.	☐	☐	☐	☐	☐
Authorities prioritize investor interests over community concerns.	☐	☐	☐	☐	☐
The consultation process lacks proper representation of all affected groups.	☐	☐	☐	☐	☐

c). LEGAL AND POLICY FACTORS	**1**	**2**	**3**	**4**	**5**
The legal framework for land acquisition is clear and easy to understand	☐	☐	☐	☐	☐
There are sufficient legal protections for affected landowners	☐	☐	☐	☐	☐
Weak enforcement of land policies increases disputes over wayleaves	☐	☐	☐	☐	☐
Government policies prioritize infrastructure development over community rights	☐	☐	☐	☐	☐
Awareness of legal rights empowers landowners during wayleaves acquisition	☐	☐	☐	☐	☐

SECTION C: IMPACT OF COMMUNITY PERCEPTIONS ON WAYLEAVES ACQUISITION

Rate statements on a 5-point Likert Scale.

Statement	1	2	3	4	5
Negative perceptions delay project approvals	☐	☐	☐	☐	☐
Communities with poor perception resist infrastructure projects	☐	☐	☐	☐	☐
Negative past experience reduces trust in government projects	☐	☐	☐	☐	☐
Positive perceptions increase cooperation	☐	☐	☐	☐	☐

Community trust influences negotiation willingness	☐	☐	☐	☐	☐

SECTION D STRATEGIES FOR IMPROVING COMMUNITY PARTICIPATION AND REDUCING CONFLICTS

12. (Using a 5-point Likert Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = strongly Agree, rate the following statements as strategies for improving community participation and reducing conflicts in wayleaves acquisition)

Strategies	**1**	**2**	**3**	**4**	**5**
Community meetings and sensitization programs improve participation in wayleaves acquisition.	☐	☐	☐	☐	☐
Providing fair and timely compensation reduces conflicts in wayleaves acquisition.	☐	☐	☐	☐	☐
Engaging community leaders in decision-making enhances acceptance of wayleaves acquisition.	☐	☐	☐	☐	☐
Clear and transparent communication from project implementers builds trust in the wayleaves acquisition process.	☐	☐	☐	☐	☐
Alternative dispute resolution mechanisms, such as mediation, reduce conflicts in wayleaves acquisition.	☐	☐	☐	☐	☐
Legal and policy frameworks should be strengthened to protect community interests in wayleaves acquisition.	☐	☐	☐	☐	☐
Participation in rural electrification decision-making should be mandatory for affected communities.	☐	☐	☐	☐	☐

SECTION F: COMMUNITY EXPERIENCE WITH WAYLEAVES ACQUISITION (DEPENDENT VARIABLE)

Instructions: Rate your level of agreement:

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Statement	1	2	3	4	5
Wayleaves acquisition was done successfully in my area	☐	☐	☐	☐	☐
Community accepted the project without resistance	☐	☐	☐	☐	☐
Land disputes were managed effectively	☐	☐	☐	☐	☐
Land acquisition was fair and timely	☐	☐	☐	☐	☐
Compensation issues delayed acquisition (reverse)	☐	☐	☐	☐	☐

Electrification progressed without land delays	☐	☐	☐	☐	☐
Community perceptions influenced project success	☐	☐	☐	☐	☐

Do you have any additional comments or recommendations regarding wayleaves acquisition?

Thank you for your Participation

END

Appendix 1(b). Interview Guide

Background and Role

- What was your role under the rural electrification project in Rwampara District
- How long have you been involved with the rural electrification project

1. Community Awareness and Understanding of Wayleaves Acquisition

- Do you think community members fully understand the purpose and impact of wayleaves?
- What concerns do people raise about wayleaves acquisition?

2. Socio-Economic Factors Affecting Wayleaves Acceptance

- How do income levels affect people's willingness to accept wayleaves?
- Do you think employment status influences land-related decisions?
- How do land ownership and compensation affect people's decisions?
- Are wealthier individuals more open to wayleaves projects than low-income earners?

3. Cultural and Regional Factors

- How does culture influence land-related decision-making?
- Do religious beliefs play a role in the acceptance or rejection of wayleaves?
- Are traditional leaders consulted in wayleaves negotiations? If not, should they be?
- How do regional differences (e.g., rural vs. urban) affect perceptions of wayleaves?

4. Stakeholder Engagement and Consultation

- How are communities engaged in wayleaves decision-making?
- Do you think the government and electricity companies engage communities adequately?
- What are the major gaps in community engagement?
- What suggestions do you have to improve consultation and engagement?

5. Past Experiences with Infrastructure Projects

- Have past government projects influenced how the community views wayleaves?
- How do past experiences affect trust in the current wayleaves process?

6. Legal and Policy Issues

- Are people aware of the laws governing wayleaves acquisition?
- Do you think the compensation process is fair and transparent?

What policy changes would you recommend to improve the wayleaves process?
7. General Perceptions and Recommendations

- Overall, do you think wayleaves acquisition is beneficial to the community?
- What are the biggest concerns about the process?
- What recommendations would you give to make the process more acceptable to the community?

Table 8: Appendix II: Krejcie & Morgan table for calculating sample size (1970)

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970