

NORTHERN COLLECTOR TUNNEL LAST MILE PROJECT – LOT 2

RESETTLEMENT ACTION PLAN

THINDIGUA AND LIOKI AREAS WATER DISTRIBUTION

13 July 2026

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in Joint
Venture
with



Losai
Management
Limited



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RECIPIENTS

Name	Entity
Eng Joseph KAMAU	AWWDA

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Acronyms and abbreviations

AFD	Agence Française de Développement
AWWDA	Athi Water Works Development Agency
BDA	Business Disturbance Allowance
BOQ	Bill of Quantities
CoK	Constitution of Kenya
CBO	Community Based Organization
EMCA	Environmental Management Coordination Act
ESIA	Environmental Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
FY	Financial Year
GO	Grievance Officer
GOK	Government of Kenya
GRM	Grievance Redress Mechanism
IDA	International Development Association
KSHS	Kenya Shillings
LRP	Livelihood Restoration Plan
KIAWASCO	Kiambu Water and Sewerage Company
KPLC	Kenya Power and Lightning Company
M&E	Monitoring and Evaluation
NEMA	National Environment Management Authority
NCT	Northern Collector Tunnel
NGO	Non-Governmental Organization
NLC	National Land Commission
NWSC	Nairobi Water and Sewerage Company
ID	Identification Cards
PAP	Project Affected Persons
PCU	Project Coordination Unit
PIU	Project Implementation Unit
RAP	Resettlement Action Plan
ROW	Right of Way
RPF	Resettlement Policy Framework
WASREB	Water Services Regulatory Board

GLOSSARY OF TERMS USED IN THE DOCUMENT

The following terms as derived from the Environmental and Social Risk Management Policy by the AFD and used in this RAP shall have the following meanings unless stated otherwise.

Census: A field survey carried out to identify and determine the number of project-affected persons (PAP), their assets, and potential impacts; in accordance with the procedures satisfactory to the relevant government authorities, and the AFD Environmental and Social Risk management Policy.

Compensation: The payment in kind, cash or asset for asset given as a mitigation measure for loss of livelihoods and/or other assets, including fixed assets thereon, in part or whole.

Cut-off date: The date at which the census of PAPs within the project area boundaries commenced. This is the date on and beyond which any person whose asset, business and tenancy will not be eligible for compensation.

Corridor of Impact: This will include businesses, structures and shops that are on the wayleave or road reserve which would be affected once works begin.

Entitlement: This is the eligibility to receive in kind compensation for the partial destruction of property (Walls, Verandahs and Fences) and for the loss of business income.

Economic Displacement: This will include the small and large businesses that will lose income as a result of the proposed works which include rehabilitation and extension of the water pipeline.

Livelihood Restoration: These are a set of measures deployed to address the project impacts on PAPs so as to ensure the living standards of the PAPs are either maintained or improved compared to pre-project conditions.

Project-affected persons (PAPs): Persons who, for reasons of the involuntary taking or voluntary contribution of their land and other assets under the project, result in direct economic and/or social adverse impacts, regardless of whether the PAPs physically relocate. The impact on PAPs is through involuntary displacement.

Project-affected sites: Clearly defined and/or surveyed areas or places earmarked for takeover, permanently or temporarily, for purposes of implementing project activities.

Involuntary displacement: The involuntary taking of land resulting in direct or indirect economic and social impacts caused by:

- *Minimized access to assets*
- *loss of income sources or means of livelihood, whether or not the project-affected person has moved to another location.*

Resettlement Action Plan (RAP): Also known as a Resettlement and Compensation Plan, a resettlement instrument (document) prepared when sub-project locations are identified and involves land acquisition which leads to or involves the physical displacement of persons, and/or loss of shelter, and/or loss of livelihoods and/or loss, denial or restriction of access to economic resources. RAPs are prepared by the project owners (managers or their appointed representative) impacting on the PAPs and their livelihoods and contain specific and legally binding requirements for compensation of the PAPs before the implementation of such project activities.

Full Replacement cost: The rate of compensation for lost assets must be calculated at full replacement cost, that is, the market value of the assets plus transaction costs.

Unknown PAPs: These are missing PAPs whose business/residential assets were established on the Right of Way but whose personal details were not captured during the census survey since they were not available and could not be located even after several follow ups. The coordinates and photos of the structures belonging to the unknown PAPs have been captured in the asset register.

Vulnerable PAPs: Vulnerable groups/people are defined as individuals, groups, households, or communities who by virtue of gender, locality, age, physical or mental disability, economic disadvantage, or social and

cultural status who may be disproportionately impacted by the project's activities and who may therefore require additional support or assistance. This group of people will need assistance adjusting to changes introduced by the Project. However, the impacts of this project are minimal, temporary and reversible. Therefore, the project will have this category of PAPs considered in the livelihood restoration plan.

Structure Owners: These are PAPs who own structures, either temporary or permanent. These structures are used for both business and residential purposes. The PAPs whose part of the walls and/or verandahs will be destroyed also belong to this category.

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EXECUTIVE SUMMARY

E1 Project Overview

The Northern Collector Tunnel Last Mile Project – Lot 2 covers the Thindigua and Lioki service areas in Kiambu County, implemented by Athi Water Works Development Agency (AWWDA) in partnership with Kiambu Water and Sewerage Company (KIAWASCO), financed by the Agence Française de Développement (AFD) and the Government of Kenya.

This project aims to expand water distribution networks to urban and peri-urban areas that are underserved, improving reliable, safe, and affordable water supply for households, businesses, and institutions. The works include about 58.9 km of new High-Density Polyethylene (HDPE) and epoxy-coated steel pipelines with all installations confined to existing public road reserves and wayleaves, thus ensuring minimal disruption and no physical land acquisition.

E2 Project Rationale

The areas covered under Lot 2 have experienced rapid urbanization driven by population growth, housing development, and expansion of commercial and industrial activities. However, water supply has not kept pace with demand, leading residents to rely on expensive and often unsafe borehole water or private vendors.

The NCT Last Mile Project – Lot 2 therefore aims to:

- Enhance water quality and reliability by replacing informal and unregulated water sources;
- Support the Kenya Vision 2030 objectives for universal water access; and
- Improve public health, economic productivity, and environmental sustainability by reducing reliance on groundwater abstraction.

E3 Purpose of the RAP

The Resettlement Action Plan (RAP) has been developed to guide the management of social impacts resulting from construction activities under the NCT Lot 2 project. While no land acquisition or physical resettlement will occur, temporary economic and access disruptions are anticipated due to trench excavation, pipe laying, and reinstatement activities.

The objectives of the RAP are to:

- Identify and document Project-Affected Persons (PAPs) and affected assets;
- Establish a cut-off date to define eligibility;
- Ensure timely and adequate compensation at full replacement cost before impact. Where feasible and appropriate, ensure the Project prioritises reinstatement of affected assets (e.g., pavements, verandahs, boundary walls, and paved access areas) to equivalent or agreed standards.
- Develop a Livelihood Restoration Plan (LRP) for short-term income support;
- Safeguard vulnerable groups through targeted assistance; and
- Establish a Grievance Redress Mechanism (GRM) and monitoring framework for transparent implementation.

E4 Legal and Institutional Framework

The RAP has been prepared in compliance with the Constitution of Kenya (2010), Land Act (2012), Land Value (Amendment) Act (2019), National Land Commission Act (2012), and the Environmental Management and Coordination Act (1999).

At the international level, it aligns with the AFD Environmental and Social Risk Management Policy (2022) and draws from World Bank Environmental and Social Framework (ESF, 2016); in

particular the standard on land, restrictions on land use and involuntary resettlement (ESS5) as a benchmark for best practice. These frameworks collectively ensure:

- Avoidance or minimization of resettlement;
- Compensation at full replacement cost;
- Livelihood restoration and vulnerability support; and
- Transparent participation and grievance handling.

Key institutions include:

- **AWWDA** – Lead implementing agency and financier liaison;
- **KIAWASCO** – Service provider and local implementation partner;
- **Kiambu County Government** – Local coordination and approvals;
- **NEMA** – Environmental compliance;
- **Local Administration (Chiefs and Ward Administrators)** – Mobilization and grievance resolution.

E6 Public Participation and Stakeholder Engagement

An extensive and inclusive public consultation process was undertaken to ensure that all community members and stakeholders were informed and their feedback integrated into project planning. Key

1. Meetings Held:

Location	Date	Venue
Thindigua	29 th October 2025	Chief's Office Grounds
Lioki	5 th November 2025	Kamiti sub location assistant chief office, Anmer Village

The RAP and ESIA teams committed to:

- Restricting works to public wayleaves;
- Providing advance public notices and signage;
- Ensuring reinstatement of pavements and verges; and
- Involving Chiefs and Residents' Associations in grievance management.

E7 Anticipated Impacts

The project will not cause physical displacement or loss of land ownership. However, temporary impacts are expected, including:

- Partial damage to boundary walls, verandahs, pavements, and gates cabros.
- Short-term access restrictions to businesses and residences.
- Temporary business income loss; and
- Dust, noise, and traffic disruptions during construction.

Positive Impacts:

- Reliable piped water for domestic and commercial use;
- Reduced cost of water for residents;
- Improved hygiene and reduced disease incidence;
- Enhanced property values and local employment.

E8 Compensation and Eligibility

Compensation will be guided by the Land Act (2012), AFD policy, and principles of fairness, adequacy, and transparency.

Eligible PAPs include:

1. Property owners whose physical assets (walls, pavements, verandahs, gates) are affected;
2. Traders who lose income temporarily due to restricted access; and
3. Vulnerable groups (elderly, disabled, low-income households) who require additional assistance.

A cut-off date will be announced publicly before enumeration and that was 30th October 2025. Only PAPs identified and verified before the cut-off will be eligible for assistance.

Compensation will be cash-based and paid prior to any impact, with all records witnessed by local administrators and PAP representatives.

E9 Livelihood Restoration Plan (LRP)

Although impacts are temporary, a Livelihood Restoration Plan has been developed to support affected persons.

Key measures include:

- Disturbance allowances for temporary business losses (2–5 days);
- Local labour prioritization for youth and women during construction;
- Small in-kind restart kits for vulnerable micro-traders;
- Financial literacy and safety awareness clinics;
- Community sensitization on compensation procedures; and
- Continuous monitoring to ensure livelihoods are restored post-reinstatement.

E10 Vulnerable Groups

Vulnerability screening identified individuals and households at heightened risk of livelihood disruption. These include:

- Elderly-headed households;
- Persons with disabilities;
- Women-headed or child-headed households; and
- Extremely poor or chronically ill individuals.

Such PAPs will receive **priority communication, assistance during disclosure, help with documentation and payment processing, and follow-up monitoring** to ensure full recovery.

E11 Grievance Redress Mechanism (GRM)

A functional and accessible three-tier GRM will address all complaints promptly and transparently:

Level	Composition	Function
Community Level (GRC)	Chief, Assistant Chief, PAP representative, women & youth leaders	Receive and mediate minor grievances
Sub-County Committee	Ward Administrator, AWWDA/KIAWASCO representative, local leaders	Escalation of unresolved cases
Project Coordination Unit (AWWDA HQ)	RAP Team Leader, PIU Sociologist, Legal Advisor	Final internal resolution and record
External Redress	Environment and Land Court	Final recourse if internal options fail

All grievances will be logged, acknowledged within 7 days, and resolved within 30 days.

E12 Budget and Implementation

The total RAP implementation budget for NCT Lot 2 (Thindigua/Lioki areas) is estimated at 7,821,055 Kshs. covering compensation, disturbance allowances, livelihood restoration, GRM, and administrative costs.

Item	KES
Value of the property that will be impacted	3,281,555
Disturbance Allowance	2,709,500
Administration Costs	1,830,000
Total	7,821,055

RAP compensation will be implemented on a phased basis, aligned with the Contractor's approved works programme and the availability of counterpart funding allocations within each financial year. Each work section or site will be released for construction only after all PAPs affected in that section or site have been fully compensated and provided with applicable assistance.

Where payment to an affected PAP cannot be completed due to unresolved succession, ownership, legal, documentation, or other administrative matters beyond the Agency's control, the PAP's entitlement will be duly recognized and the corresponding compensation secured for settlement upon resolution of the outstanding matter. Such cases will be individually documented, monitored and followed up to facilitate resolution and subsequent payment in accordance with the applicable RAP and legal requirements.

RAP implementation monitoring, stakeholder engagement and grievance management will continue throughout project implementation, with outstanding compensation cases tracked through to resolution.

E13 Monitoring and Evaluation

Monitoring will be both internal (by AWWDA and the supervision consultant) and external (by an independent evaluator). Key indicators include:

- Number and percentage of PAPs compensated before construction in each affected section or site;
- Number of vulnerable PAPs assisted;
- Percentage of grievances resolved within stipulated timelines; and
- Percentage of traders who resume normal operations within 30 days post-works.

A final RAP completion audit will confirm compliance, satisfaction, and livelihood restoration.

E14 Conclusion

The Northern Collector Tunnel Last Mile Project – Lot 2 (Thindigua and Lioki areas) is a socially and environmentally compliant investment that will significantly improve water access, reliability, and public health in Kiambu county.

The RAP demonstrates that:

- No physical displacement or land acquisition will occur;
- Temporary economic impacts are minimal and fully mitigable;
- Compensation and livelihood restoration meet both Kenyan law and international best practice; and
- Institutional mechanisms, including grievance redress and monitoring, are robust and community-based.

With effective implementation, the project will enhance local livelihoods, strengthen KIAWASCO's service capacity, and contribute directly to Kenya Vision 2030, the Sustainable Development Goal 6 (Clean Water and Sanitation), and the AFD's commitment to sustainable urban infrastructure.

1 INTRODUCTION

1.1 Background Information

The Athi Water Works Development Agency (AWWDA), under the Ministry of Water, Sanitation and Irrigation, is implementing the Northern Collector Tunnel (NCT) Last Mile Lot 2 project with financing from the Agence Française de Développement (AFD). The project aims to enhance water production, transmission, and distribution within the Nairobi Metropolitan Region to meet the growing demand for safe and reliable water supply.

As part of these Additional Works, AWWDA, in partnership with the Kiambu Water and Sewerage Company (KIAWASCO), proposes to implement water reticulation networks for the Thindigua and Lioki service areas in Kiambu County. These works will extend water distribution from the existing Northern Collector Tunnel bulk system through newly designed offtakes, ensuring last-mile connectivity to households, businesses, and institutions.

The proposed water reticulation works will significantly improve access to potable water in two rapidly growing service areas that currently experience intermittent and unreliable supply. However, construction activities may cause temporary disturbances, affect roadside traders, or result in partial loss of assets situated along public corridors. To address these potential social impacts, this Resettlement Action Plan (RAP) has been prepared in accordance with Kenyan laws, AWWDA's environmental and social safeguards framework, and AFD's Environmental and Social Standards.

The RAP outlines measures for the identification, valuation, and compensation of affected persons and assets, and provides a framework for livelihood restoration, grievance management, and monitoring during implementation.

1.2 Situational Review

The Nairobi Metropolitan region continues to face mounting water supply challenges driven by rapid urbanization, population growth, and land-use changes. Kiambu County, being part of this metropolitan area, has witnessed a transformation from predominantly agricultural landscapes to high-density residential and commercial developments, particularly along major corridors such as Kiambu Road and Kamiti–Kirigiti–Lioki.

Despite its proximity to Nairobi and its integration into the metropolitan supply system, Kiambu County still experiences periodic water shortages and distribution inequities. Existing networks are overstretched, and many residents rely on private boreholes, water vendors, or informal connections whose quality and cost vary widely.

The Northern Collector Tunnel Project, commissioned to transfer additional water from the Aberdare catchment into the Ndakaini Dam and onward to Nairobi, was conceived to address the supply deficit for Nairobi and its satellite towns, including Kiambu. However, while the bulk infrastructure has greatly enhanced system capacity, several emerging service zones such as Thindigua and Lioki remain underserved due to the absence of comprehensive distribution networks to convey the bulk water to end users.

The proposed Thindigua and Lioki reticulation works are therefore a critical extension designed to optimize the benefits of the NCT system by ensuring efficient distribution within Kiambu's high-demand growth zones.

1.3 Overview of the Water Situation in Thindigua and Lioki-Kiambu county

Water supply in Kiambu County is managed by the Kiambu Water and Sewerage Company (KIAWASCO). The county's demand for potable water continues to increase owing to rapid population growth, urban development, and industrialization, particularly in peri-urban zones adjoining Nairobi.

According to the Design Report for the Proposed Water Reticulation Networks for Thindigua and Lioki Service Areas (KIAWASCO, 2025):

- The combined design demand for the two service areas is projected to reach approximately 11,530 m³/day by 2045, based on population growth and expansion trends.
- The current allocation from the Northern Collector Tunnel bulk system stands at 7,500 m³/day, indicating that the proposed distribution network will enhance utilization efficiency and improve pressure management.
- **Thindigua Service Area**, located along Kiambu Road, is a high-density mixed-use development with apartment complexes, commercial facilities, schools, and institutions. Water demand is high, and supply interruptions are common.
- **Lioki Service Area**, extending around Lioki, Kirigiti, and Ngewa areas, has lower but steadily increasing demand due to the conversion of agricultural land into residential and semi-urban estates. Current water supply is intermittent, forcing residents to rely on boreholes and vendors.

The limited reach of the existing distribution system, coupled with inadequate pipe capacity and network pressure, has constrained KIAWASCO's ability to meet consumer needs. The proposed reticulation networks will therefore ensure reliable service delivery, equitable access, and reduced reliance on informal water sources.

1.4 Project Area and Scope

The project covers two key service zones within Kiambu County:

- **Thindigua Service Area:** Located along the Kiambu–Ruiru corridor, covering Thindigua, Njathaini, and adjacent neighborhoods near Ridgeways and Kiambu Town. The offtake for this service area is located along the NCT transmission line at approximately Ch.44+100–Ch.44+600.
- **Lioki Service Area:** Located further north within Githunguri Sub-County, encompassing Lioki, Kirigiti, Ngewa, and nearby settlements, drawing water from the NCT offtake at approximately Ch.35+100–Ch.35+200.

The project footprint lies mainly within public road reserves and designated wayleaves, minimizing the need for private land acquisition and reducing the scale of resettlement-related impacts.

The project scope of works include:

- Laying of primary, secondary, and tertiary distribution pipelines of varying diameters (as per hydraulic design);
- Installation of valves, flow meters, air valves, washouts, and associated fittings;
- Construction of valve chambers, junctions, and control points;
- Consumer connections and metering; and
- Reinstatement of excavated surfaces, including paved areas, access roads, and walkways.

1.5 Summary of Thindigua and Lioki Distribution Networks

The two area networks have been designed to distribute water efficiently from the NCT system through HDPE pipelines, with pressure regulation, control fittings, and chambers to ensure operational reliability and ease of maintenance. The alignments are confined to existing public road reserves, minimizing land acquisition or displacement.

i. Thindigua Network

- Comprises 77 distribution lines covering approximately 38.6 km.
- Pipe diameters range from 355 mm to 50 mm, constructed using HDPE PN 12.5 material.
- Hydraulic review confirms acceptable velocity (0.4–1.8 m/s) and pressure (18–60 m) ranges.
- Includes 5 Tees, 6 Scour Valves, 13 Air Valves, 1 Pressure Reducing Valve (PRV), 22 Wash-outs, and 49 Chambers.
- The network is optimized for medium- to high-density residential zones and institutional areas in Thindigua.

ii. Lioki Network

- Consists of 26 lines with a total length of 20.3 km.
- Pipe diameters range between 160 mm and 50 mm, also in HDPE PN 12.5.
- Velocity ranges between 0.3–1.5 m/s, with pressures controlled through two PRVs at offtake points.
- Includes 4 Scour Valves, 5 Air Valves, 8 Wash-outs, 4 Reducers, and 19 Chambers.
- Designed for emerging residential and mixed-use areas, ensuring stable service and future expansion potential.

TABLE 1-1: SUMMARY OF PROPOSED WATER DISTRIBUTION NETWORKS

Parameter	Thindigua	Lioki
Total Length	38.6 km	20.3 km
Pipe Range	355–50 mm	160–50 mm
Pressure Control	1 PRV	2 PRVs
Material	HDPE PN 12.5	HDPE PN 12.5

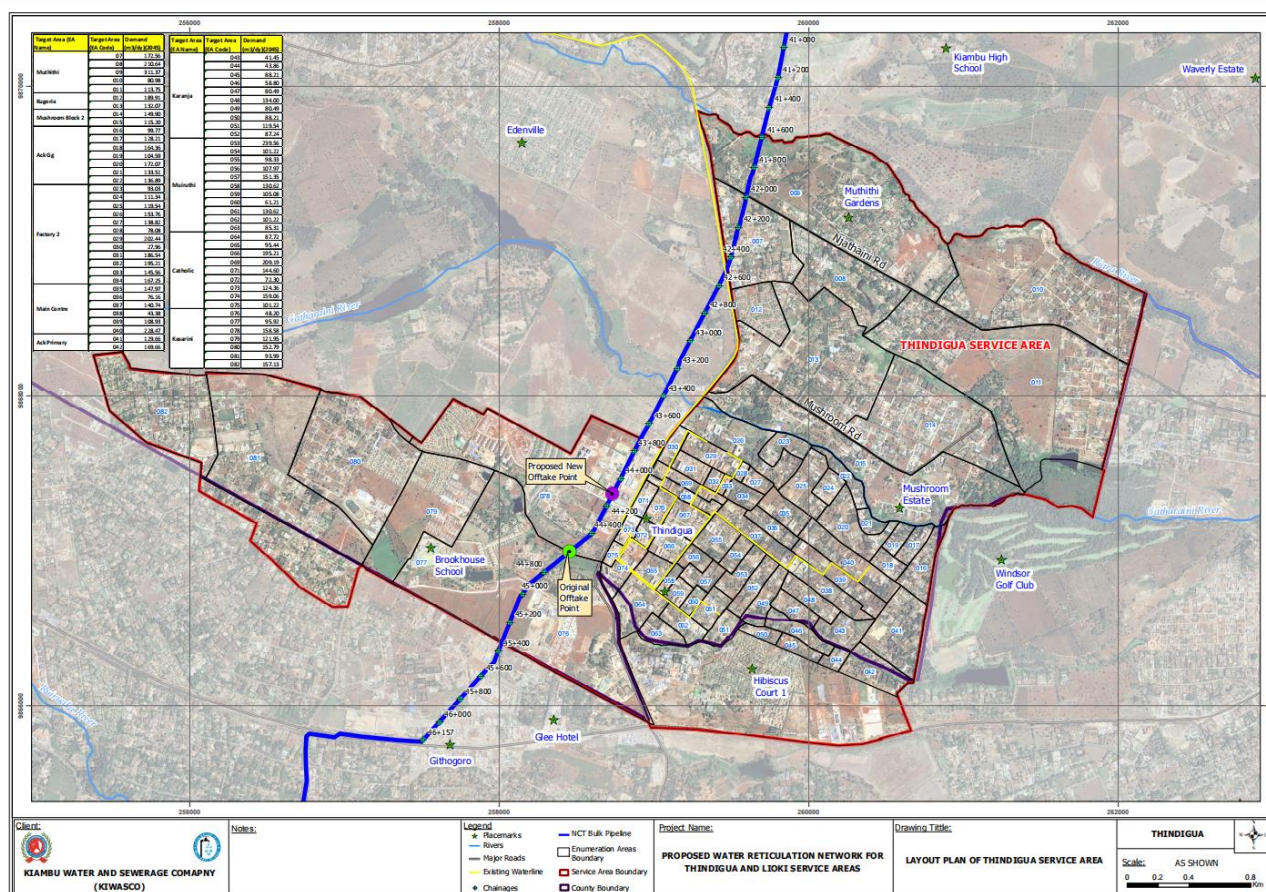


FIGURE 1-1: THINDIGUA LAYOUT

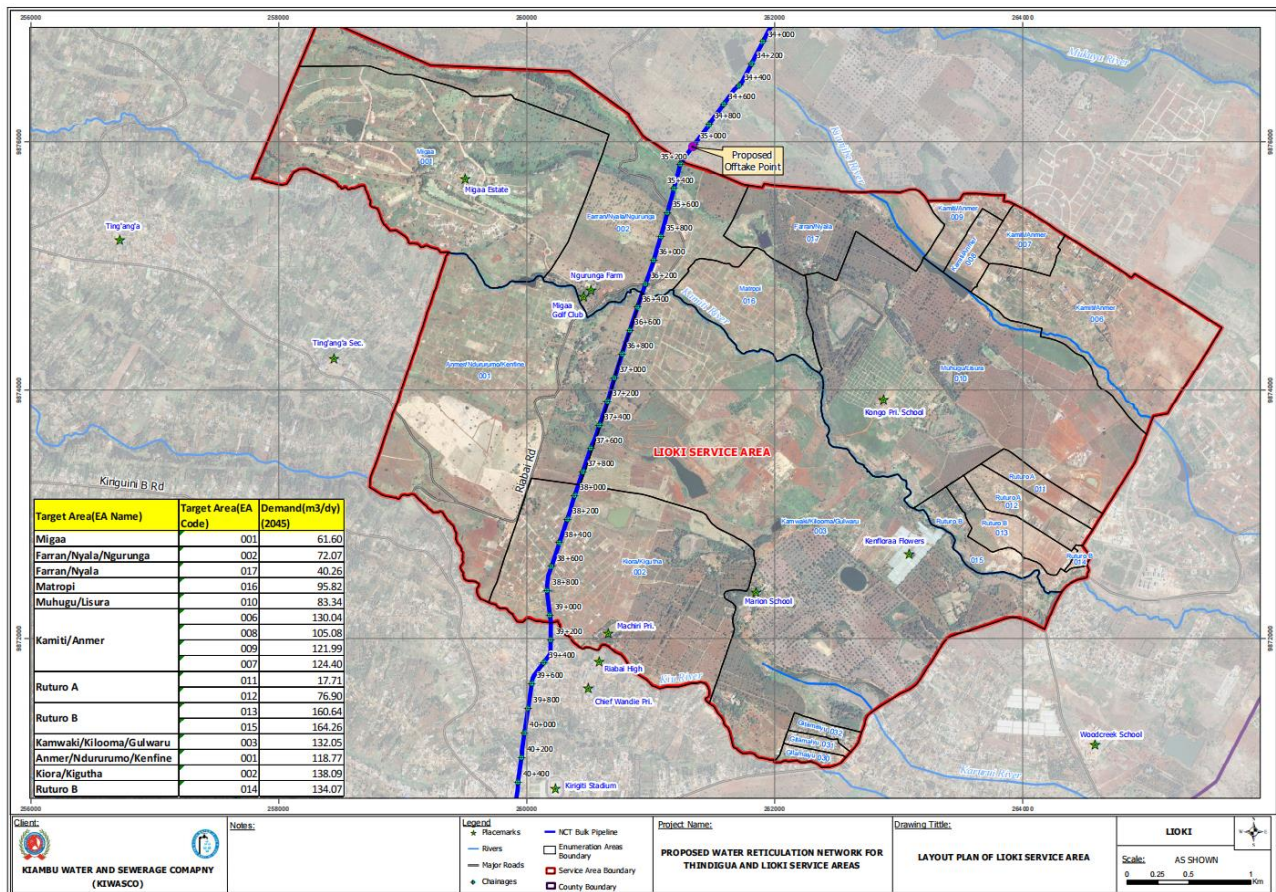


FIGURE 1-2: LIOKI LAYOUT

1.6 Project Rationale

The rationale for implementing the Thindigua and Lioki reticulation networks is anchored on the need to enhance access to safe and reliable water within the growing urban areas of Kiambu County. The project seeks to provide a consistent, high-quality supply of water to households, schools, and businesses, thereby addressing the current challenges of intermittent and inadequate service.

It further aims to optimize existing investments by maximizing the benefits of the Northern Collector Tunnel (NCT) infrastructure and extending its reach to communities that have historically remained underserved. Through this expansion, the project will reduce inequality in water distribution and ensure that peri-urban populations in Kiambu County enjoy equitable service delivery comparable to Nairobi and other fully serviced zones.

In addition, the initiative supports urbanization and economic growth by providing essential water infrastructure that complements the area's rapid residential, commercial, and institutional development. Ultimately, the project will contribute to improved public health and welfare by reducing reliance on unsafe water sources, promoting better hygiene, and enhancing overall community wellbeing.

2 OBJECTIVES OF THE RESETTLEMENT ACTION PLAN

2.1 Introduction

This Resettlement Action Plan (RAP) has been prepared for the proposed Thindigua and Lioki water reticulation networks to be implemented by the Athi Water Works Development Agency (AWWDA) in partnership with the Kiambu Water & Sewerage Company (KIAWASCO), with financing from Agence Française de Développement (AFD). The RAP provides the operational framework for identifying, assessing, and addressing the social and economic impacts likely to result from the laying of new water distribution pipelines, ancillary structures (valve chambers, PRVs, flow meters), and consumer connections within the confirmed corridors and road reserves for the two service areas.

While the engineering design seeks to avoid permanent land acquisition by routing mains within public wayleaves and road reserves, short-term disturbances are anticipated; particularly where roadside businesses, kiosks, access ways, or minor structures are located immediately adjacent to the proposed trenches.

This RAP therefore sets out the procedures for:

- identifying Project Affected Persons (PAPs);
- determining eligibility for compensation and assistance;
- defining compensation principles and valuation procedures; and
- establishing the institutional, financial, and grievance mechanisms necessary for transparent and equitable RAP implementation.

2.2 Overall Objectives of the RAP

The principal objective of this RAP is to ensure that all persons and assets affected by the Thindigua and Lioki reticulation works are identified, adequately compensated, and assisted so that their livelihoods and living standards are restored to pre-project levels or better, consistent with Kenyan law and AFD environmental & social safeguard requirements.

Specifically, the RAP seeks to:

1. Identify and document all PAPs, structures, and livelihood activities likely to be affected along the confirmed pipeline routes.
2. Assess the magnitude of impacts, distinguishing between temporary disturbances, partial losses, and any permanent effects.
3. Define eligibility criteria and establish a clear cut-off date to avoid speculative claims.
4. Develop fair compensation measures at full replacement cost for affected assets and disturbance allowances for temporary business interruption.
5. Provide livelihood restoration support for traders or households that may lose income during construction.
6. Ensure effective stakeholder participation through consultations and disclosure of project information.
7. Define institutional responsibilities of AWWDA, KIAWASCO, the County Government, and the supervision consultant in RAP execution.
8. Establish a grievance redress mechanism (GRM) to handle complaints promptly and transparently.
9. Set up monitoring and evaluation (M&E) procedures to track progress, verify compliance, and document lessons learned.

2.3 Specific Objective of the RAP

In addition to the overall goal, this RAP pursues the following specific objectives:

- To ensure all works remain confined to public corridors and wayleaves.
- To establish an accurate socio-economic baseline for affected households and enterprises to guide impact assessment and future monitoring.
- To guarantee equitable and transparent valuation of affected assets, with independent verification where necessary.

- To provide special support to vulnerable groups i.e. elderly persons, women-headed households, and persons with disabilities so that they are not disproportionately affected.
- To maintain continuous communication with community representatives and local administration before, during, and after construction.
- To ensure all PAPs affected in each work section or site are fully compensated and provided with applicable assistance before civil works commence in that section or site, in line with national policy and donor standards.

2.4 Methodology And Approach of the RAP

The RAP has been developed through a participatory, evidence-based process combining desk review of engineering designs, geospatial data and national legal instruments with targeted field engagement in the proposed service areas. The approach consisted of the following key stages:

1. Review of Project Designs and KMZ Alignments

Design drawings, hydraulic modelling outputs, and the Priced Bill of Quantities were reviewed to identify the proposed mains, offtake locations, pipe sizes, and the anticipated extents of excavation and ancillary works. These technical data guided the initial social screening and corridor mapping used in the RAP.

2. Reconnaissance and Field Verification

Field reconnaissance was carried out along the major corridors identified in the design drawings to record land use, presence and proximity of structures to the carriageway, roadside commerce concentrations, and potential high-interaction zones.

3. Stakeholder Consultations

Stakeholder mapping and consultations were undertaken with the County authorities, KIAWASCO technical staff, local administration, community leaders, residents' associations leaders and representatives, Churches, schools, traders and other interest groups. Feedback from these meetings informed the RAP mitigation framework.

4. Development of Data Collection Tools

Structured survey tools were designed for the forthcoming enumeration and asset-inventory exercise. The questionnaires were digitized using Kobo Toolbox to ensure data accuracy, geotagging of assets, and secure storage for analysis.

5. Preliminary Impact Screening

A rapid screening exercise was conducted along each corridor to classify expected impacts as temporary, partial, or minor permanent, depending on proximity of structures and nature of activity. The findings confirmed that physical displacement is unlikely; impacts will mainly involve temporary business interruption and partial damage to minor assets like pavements and cabros.

6. Establishment of Cut-off Date

A formal cut-off date of 30th October 2025 was well announced. It was the first date of enumeration exercise in Kiambu county specifically Thindigua. This date marked the end of eligibility for compensation and ensure fairness in identifying legitimate PAPs.

7. Preparation of Entitlement Framework and Implementation Arrangements

The entitlement framework and institutional structure were developed in accordance with the Land Act (2012), Water Act (2016), the AWWDA Resettlement Policy Framework (2020), and the AFD Environmental and Social Risk Management Policy. These instruments guarantee that compensation is

based on full replacement cost and that vulnerable persons receive targeted assistance during RAP implementation.

2.5 Scope of the RAP

This RAP applies to the proposed works for the Thindigua and Lioki service areas and covers all activities and impacts reasonably expected during construction and initial operation phases. Its scope includes:

- All activities related to excavation, pipe laying, testing, and reinstatement within the designated road reserves.
- Any temporary economic disruptions to roadside traders, kiosks, or service providers.
- Partial structural impacts such as boundary-wall or pavement damage within the construction corridor.
- Community health, safety, and access issues arising during works.
- Livelihood-restoration assistance and grievance handling for affected persons.

No physical relocation of households is anticipated. The focus of this RAP is therefore on temporary livelihood impacts, partial asset disturbance, and procedural safeguards to ensure that all affected persons are duly compensated and reinstated once construction is complete.

3 POTENTIAL PROJECT IMPACTS

3.1 Introduction

This chapter presents the anticipated positive and negative impacts associated with the implementation of the Northern Collector Tunnel (NCT) Last Mile Project – Additional Works (Thindigua–Lioki Distribution Network) in Kiambu County.

The assessment is based on the KIAWASCO design report, field reconnaissance surveys, valuation mapping, and stakeholder consultations undertaken with residents, business operators, and local authorities.

The proposed works include the construction of water distribution pipelines, including installation of valves, chambers, and consumer connections, and the reinstatement of roads, pavements, and driveways upon completion.

All construction activities are confined to existing public roads and wayleaves, thus minimizing the likelihood of land acquisition or physical displacement. However, due to the built-up nature of Thindigua and Lioki where properties, businesses, and driveways closely border the road reserve; localized, temporary social impacts are expected during construction.

These impacts may include short-term interference with access, partial damage to minor structures (walls, pavements, or gates), and temporary loss of business income for small traders. The section also highlights the expected positive outcomes, proposed mitigation measures, and support mechanisms for affected and vulnerable persons.

3.2 General Description of the Project Area

The project traverses two high-density, rapidly urbanizing zones within Kiambu Sub-County i.e. Thindigua and Lioki; each with distinct settlement patterns and exposure to potential impacts.

i. Thindigua Area:

Located along Kiambu Road, Thindigua has evolved from a peri-urban settlement into a high-rise, mixed-use residential and commercial hub. It features apartments, gated communities, and small retail centres along estate roads such as Kasarini Drive, Thindigua Road, and Kirigiti Link. Many buildings have perimeter walls and paved driveways extending into the road reserve, increasing susceptibility to minor construction impacts.

ii. Lioki Area:

Lioki is predominantly residential with emerging commercial centres along Lioki–Kiu Road, Mumbi Drive, Ruturu and Gathage Road. The terrain is moderately hilly, and several properties are built close to the road edge. Informal kiosks, small hardware shops, and car wash points are common along the corridor.

Given the project's urban context, most impacts will be temporary, localized, and reversible, and can be managed effectively through advance notification, community liaison, and prompt reinstatement of affected assets.

TABLE 3-1: PROJECT AFFECTED AREA

Proposed Line path in Mushroom gardens estate



Ruturu area, Lioki



One of the schools near the distribution line, lioki



Project affected person-Livelihood disturbance



3.3 Classification of Potential Impacts

Based on the field observations and layouts, impacts are categorized into physical, economic, and community/social types as given in Table 3-2.

TABLE 3-2: SUMMARY OF IMPACTS OF PROPOSED WATER DISTRIBUTION CORRIDORS

Category	Description	Likely Impact Characteristics
Physical Impacts	Affect physical assets or structures located within or close to the pipeline corridor.	Partial damage to pavements, gates, fences, or small garden structures during excavation or reinstatement.
Economic Impacts	Affect income-generating activities or livelihoods.	Temporary business disruption, loss of income for roadside traders, temporary relocation of kiosks or workspaces.

Category	Description	Likely Impact Characteristics
Community and Social Impacts	Affect access, movement, safety, or overall community well-being.	Temporary traffic obstruction, safety hazards, noise and dust, restricted pedestrian access, utility disruption.

3.4 Anticipated Positive Impacts

Implementation of the Thindigua–Lioki Water Distribution Project will result in multiple long-term social and economic benefits for residents and institutions within Kiambu County, including:

1. The project will directly increase access to safe and affordable water for residents of Thindigua and Lioki areas, reducing reliance on private vendors and boreholes.
2. Reliable water supply will reduce the prevalence of waterborne diseases, improve hygiene standards, and enhance public health across households and institutions.
3. Affordable and consistent water access will benefit small businesses and industries, enabling expansion and supporting new economic opportunities.
4. The integration of new distribution networks with AWWDA's transmission system will improve KIAWASCOs operational efficiency, reduce non-revenue water, and stabilize supply.
5. Construction activities will create short-term employment for local residents and suppliers, while also enhancing skills among youth engaged as casual workers.
6. The project will contribute to reducing the social and gendered burden of water collection by ensuring piped supply closer to homes, benefiting women and children in particular.

3.5 Anticipated Negative Impacts

Although no permanent land acquisition or physical displacement will occur, localized, short-term impacts may arise during construction. These include:

1. Temporary Access Restrictions and Business Disruption

Traders and small business operators situated close to road reserves in Lioki mainly in Ruturu area and Thindigua shopping zones may experience short-term interruption of activities. Access to certain shops and driveways may be restricted as trenches are opened and backfilled.

2. Partial Damage to Minor Assets

Some perimeter walls, paved driveways, and garden edges lie within the construction corridor and may be partially disturbed. The project will ensure reinstatement or full replacement at equivalent standard.

3. Utility Disruptions

Existing service lines (water, electricity, or telecommunication ducts) may be inadvertently affected during excavation. Coordination with KPLC and telecommunication companies will be maintained to prevent extended service interruption.

4. Traffic and Safety Hazards

Open trenches may temporarily impede pedestrian and vehicle movement, particularly in busy estate roads and school zones. The contractor will provide proper barricades, signage, and controlled crossings.

5. Dust, Noise, and Waste Generation

Excavation and haulage of spoil material may generate dust and noise. Watering of roads and proper waste disposal will be implemented.

6. Occupational Health and Safety Risks

Construction workers and nearby residents may face safety risks if protective measures are not enforced. The contractor will ensure compliance with OHS guidelines, PPE usage, and training.

3.6 Summary of Potential Impacts by Project Zone

TABLE 3-3: PROJECT IMPACT BY AREA

Area	Key Roads/Corridors	Dominant Land Use	Primary Type of Impact	Mitigation Priority
THINDIGUA	Kasarini Drive, Thindigua Highway Road, Kirigiti Link, Mushroom Road,	High-rise residential and commercial estates	Partial driveway and pavement damage; temporary access restrictions. Given the residential nature of the project corridors, some degree of noise and dust is also expected.	Medium
LIOKI	Lioki-Kiu Road, Kiambu-Kamiti Road, Ruturu area	Residential and mixed-use commercial	Temporary disruption to traders, noise, dust, and access limitation	High

3.7 Preliminary Estimate of Project-Affected Persons (PAPs)

The RAP enumeration identified affected assets, livelihood disturbances and institutional or community facilities within the Thindigua and Lioki project areas. Table 3-4 presents the recorded impacts by category and location.

TABLE 3-4: AFFECTED ASSETS AND IMPACT INSTANCES

Impact Category	Thindigua	Lioki	Total
Pavements/Gate Cabros/Verandahs	130	2	132
Livelihood disturbance	116	24	140
Institutional or community facilities affected	2		2
Structures	62	11	190
Trees/Crops/Flowersbeds	61	1	62
Total Estimated assets and impact instances	371	38	409

The PAP and asset registers were reviewed and harmonised to establish the verified number of PAPs in each project area. The resulting PAP totals are presented in Table 3-5

TABLE 3-5: NUMBER OF AFFECTED PAPS

Project area	Number of PAPS
Thindigua	221
Lioki	38
Total	259

3.8 Vulnerable Groups

During field consultations and enumeration, particular attention was given to identifying vulnerable persons who may experience disproportionate hardship as a result of project impacts. Vulnerability in the context of this RAP includes but is not limited to:

- Elderly household heads, particularly those without active income or family support.
- Female-headed households, especially single mothers or widows dependent on small informal businesses.
- Persons with disabilities (PWDs) who may face challenges accessing information, mobility, or livelihood restoration support.
- Low-income earners or daily-wage workers who may lose income even for short construction periods.
- Chronically ill or socially marginalized individuals identified during the census.

Each vulnerable PAP will receive special assistance in addition to normal compensation, which may include:

- Priority processing of compensation payments.
- Assistance with completing documentation.
- Support during demolition, relocation, or reinstatement of affected assets; and
- Monitoring to ensure livelihoods are restored to pre-project levels or better.
- 22 No. vulnerable households disaggregated as per the table below were identified;

TABLE 3-6: VULNERABLE PAPS

Category of Vulnerable PAPS	Number of Households	Project Area
Elderly (≥70 years)	3	Thindigua (1), Lioki (2)
Women-headed households	5	Thindigua (4), Lioki (1)
Persons with disabilities	1	Lioki
Informal low-income traders	4	Lioki (3), Thindigua (1)
Elderly and very poor	3	Lioki (2) Thindigua (1)
Chronically ill	6	Lioki (3) Thindigua (3)
Total Vulnerable PAPS	22	

3.9 Mitigation and Management Measures

Mitigation measures are essential to reduce or eliminate potential negative impacts and to ensure smooth implementation of the project.

TABLE 3-7: MITIGATION MEASURES

Potential Impact	Proposed Mitigation Measure
Access restriction to shops and driveways	Provide a 7 day notice prior to works; phase works; create temporary pedestrian and vehicle crossings
Damage to boundary walls or pavements	Restore or compensate at full replacement cost
Business disruption	Provide disturbance allowance or temporary relocation assistance

Dust and noise pollution	Regular watering of open trenches for dust suppression; work during daytime only
Traffic and safety risks	Provide warning signs, barriers, and traffic marshals
Interference with utilities	Liaise with service providers before excavation
OHS risks for workers	Enforce PPE use and safety procedures
Vulnerable groups affected	Provide targeted assistance and follow-up monitoring

3.10 RAP Implementation Cost

The total cost of RAP implementation including compensation, disturbance allowances, livelihood restoration, administration, and monitoring is highlighted in the table below;

TABLE 3-8: RAP IMPLEMENTATION COST

No.	Component	Description of Activities	Estimated Cost (KES)
1	Compensation for Affected Structures	Covers replacement cost for impacted walls, fences, verandahs, gates, and paved access areas along the Thindigua/Lioki areas. Valuation based on current construction market rates as assessed by the valuer.	2,816,005
2	Disturbance Allowances (Temporary Income Loss)	Payment to traders and small business owners for verified short-term disruptions (3 days). Includes 10% disturbance margin to cushion temporary loss of income.	2,709, 500
3	Vulnerable Group and Livelihood Support	Targeted assistance for vulnerable PAPs (elderly, women-headed households, and persons with disabilities), small in-kind business support, and short skills-enhancement sessions.	250,000
4	Trees/Crops/ Flower beds	Replacement categories include (i) mature fruit trees, (ii) non-fruit shade trees, (iii) annual crops/vegetable beds and (iv) ornamental flower beds. Payments or in-kind replacement (seedlings/planting and soil/restoration) will be offered depending on the category and owner preference; where replacement planting is selected, a short-term maintenance support of up to 6 months will be provided by the LRP	465,550
4	Livelihood Restoration Programme (LRP)	Community-based programmes to restore income through training, mentorship, awareness, and public communication during implementation.	300,000
5	RAP Administration and Grievance Redress Mechanism (GRM)	Operational costs for RAP implementation, logistics, community mobilization, GRM management, documentation, and disclosure meetings across all sites.	300,000
6	Monitoring and Evaluation (M&E)	Internal and external monitoring of RAP progress, compliance verification, and final evaluation report upon completion.	230000

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4 SOCIO-ECONOMIC PROFILE OF PROJECT AFFECTED PERSONS

4.1 Introduction

A socio-economic survey was conducted within the Thindigua and Lioki service areas to complement the Resettlement Action Plan (RAP) and provide an empirical basis for understanding the demographic, social, and economic characteristics of potentially affected persons. The findings presented below summarize key trends observed from the sampled households and business entities, offering insights relevant for resettlement planning, compensation, and livelihood restoration.

4.2 Geographic Distribution of Respondents

The survey revealed a distinct spatial concentration of respondents, with 82.86% residing in Thindigua and 17.14% in Lioki. This imbalance reflects the relatively higher population density, commercial activity, and infrastructure development in Thindigua compared to the predominantly agricultural character of Lioki. Consequently, the majority of project-related socio-economic effects will be concentrated within Thindigua.

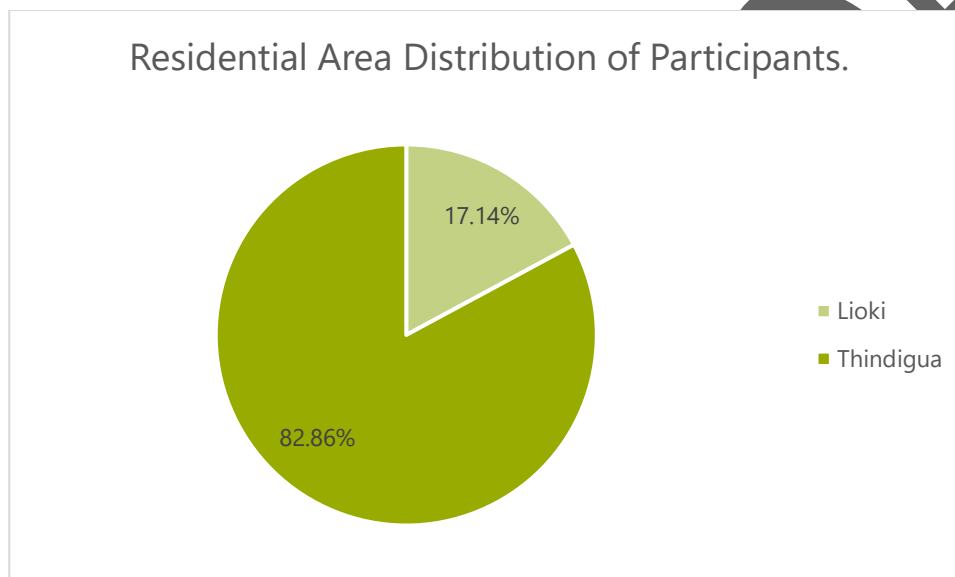


FIGURE 4-1: DISTRIBUTION OF RESPONDENTS

4.3 Nature of Respondents

The sample comprised 57.14% business or trader entities and 42.86% household respondents. This distribution demonstrates a moderate bias toward commercial respondents, implying that findings related to business livelihoods, income streams, and trade practices are slightly more represented than those related to domestic water use and household-level social impacts.

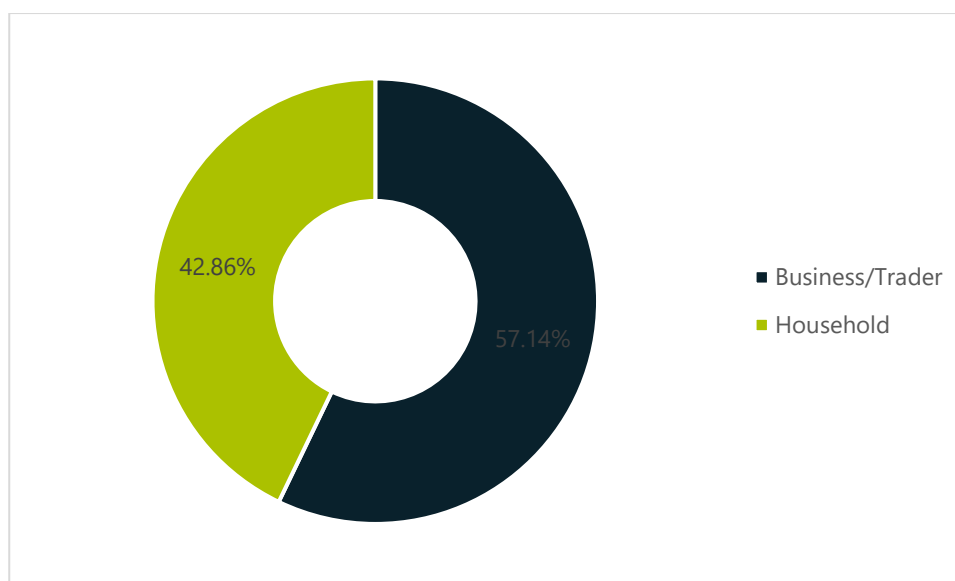


FIGURE 4-2: NATURE OF RESPONDENTS

4.4 Household Characteristics

Among the interviewed households, 60% were male-headed and 40% female-headed, indicating a relatively balanced but male-dominant household leadership pattern. Family sizes are generally small and close-knit: half of all households have two or fewer male members, and three-quarters have three or fewer. Similar patterns apply to female members. This structure suggests that most households are nuclear in nature, with manageable dependents; facilitating focused engagement and efficient compensation or support planning during RAP implementation.

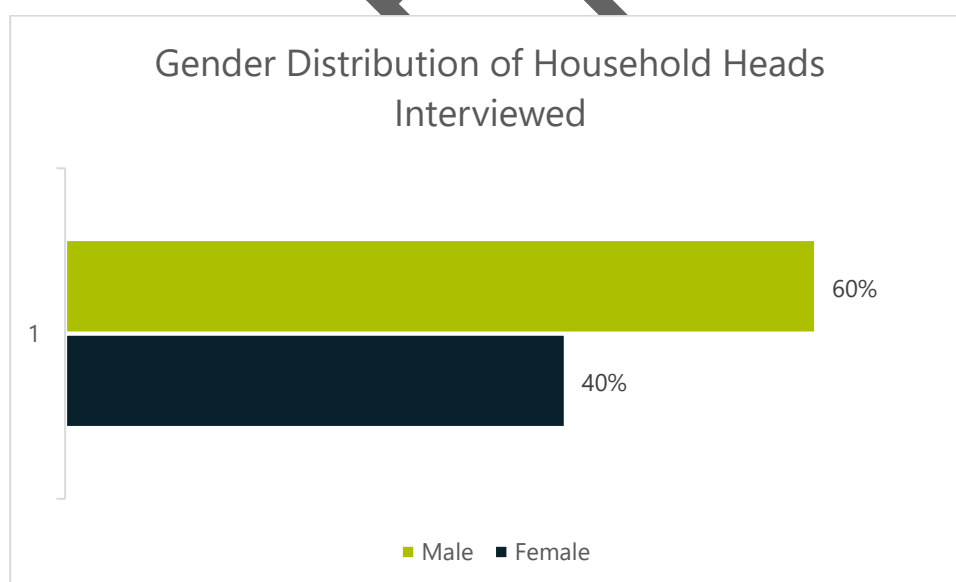


FIGURE 4-3: GENDER DISTRIBUTION

4.5 Vulnerability Status

The survey shows that 60% of households have no vulnerable members, while 20% include a chronically ill person, 13% include an elderly member, and 7% include a widow or widower. Although the majority are not highly vulnerable, about two in five households face health or age-related vulnerability. The RAP therefore integrates targeted assistance measures to safeguard such groups during project implementation.

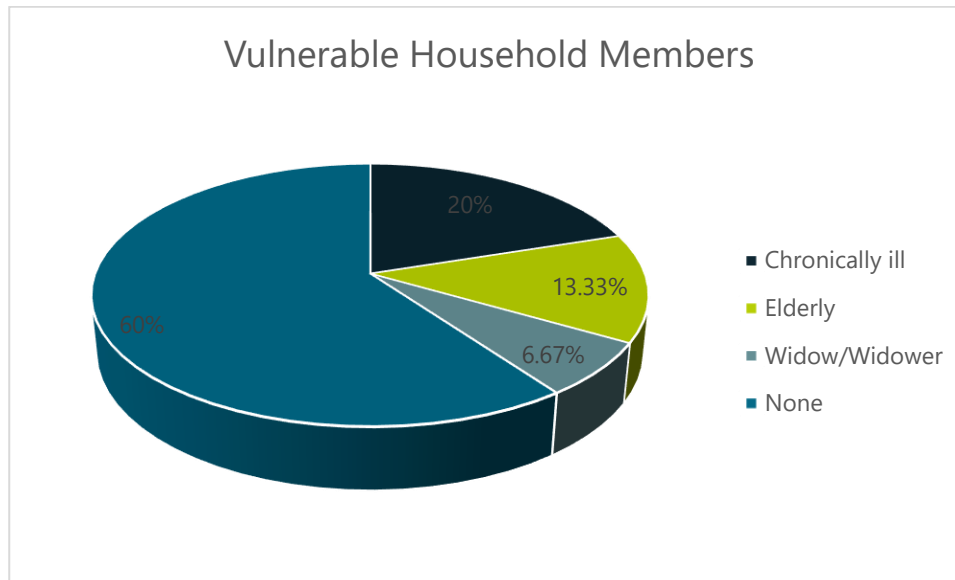


FIGURE 4-4: VULNERABILITY STATUS

4.6 Housing Tenure and Structure

Approximately 60% of households rent their dwellings, while 40% are homeowners, predominantly in Thindigua. This indicates that most affected persons are tenants and underscores the need for transparent communication between tenants, landlords, and the implementing agency to ensure equitable treatment.

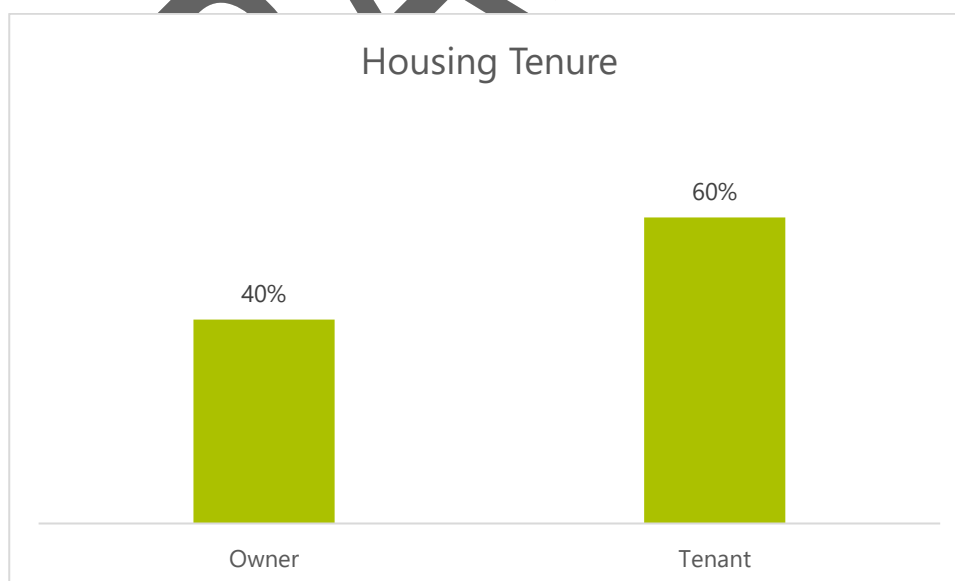


FIGURE 4-5: HOUSING TENURE

Structurally, 87% of buildings are permanent, and 13% are semi permanent, suggesting the area is well-established with long-term settlements. Consequently, compensation will primarily involve established households with higher expectations for fair and transparent valuation.

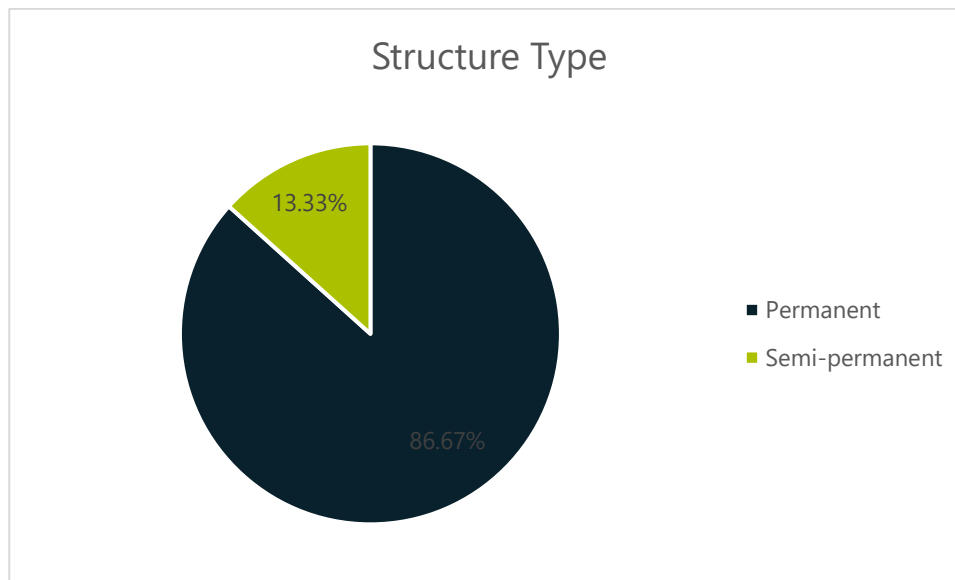


FIGURE 4-6: STRUCTURE TYPE

4.7 Length of Residence

A significant share of residents have lived in the area long enough to be considered settled: 40% for 5–10 years, 33% for 10–15 years, 13% for 15–20 years, and 13% for over 20 years. Nearly half the respondents have resided in the area for over a decade, reflecting strong community cohesion and ownership. This emphasizes the importance of early, respectful communication to maintain goodwill during project activities.

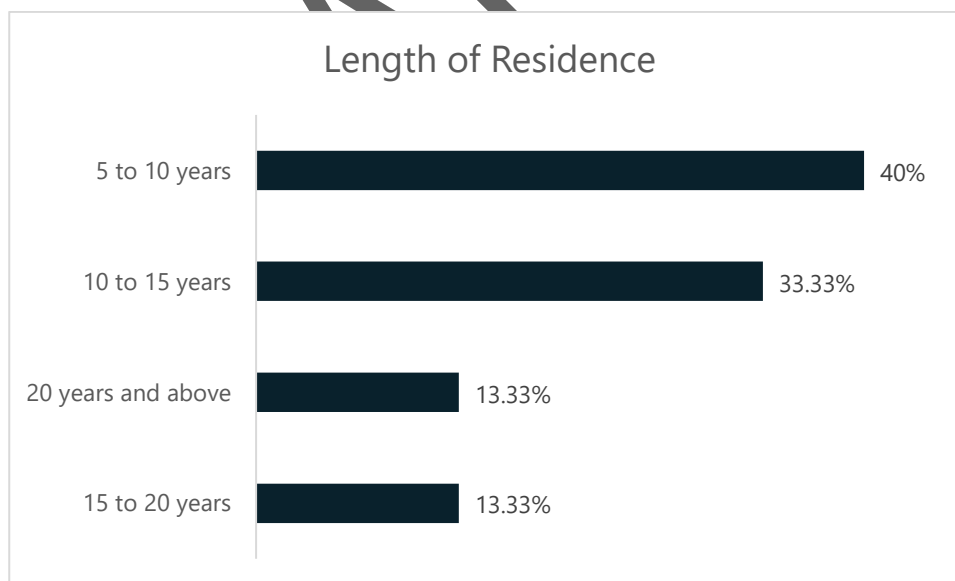


FIGURE 4-7: LENGTH OF RESIDENCE

4.8 Livelihood Sources

Livelihoods are diverse, though business dominates local economic life. Approximately 47% of respondents engage in trade, 27% hold full-time employment, and 13% each rely on casual labour or small-scale farming. With nearly half depending on business income, construction activities must be carefully scheduled to minimize disruption and maintain stable livelihoods.

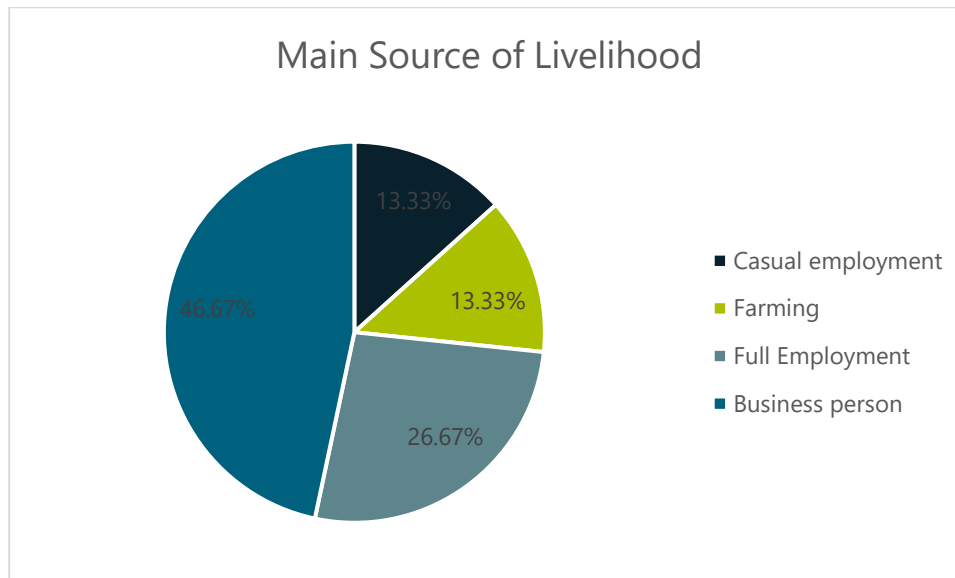


FIGURE 4-8: MAIN SOURCE OF LIVELIHOOD

4.9 Household Income Levels

Income levels indicate a predominantly middle-income population: 40% earn above KSh 40,000 monthly, 27% between KSh 10,001–20,000, 20% between KSh 20,001–30,000, 7% between KSh 30,001–40,000, and 7% below KSh 5,000. This distribution suggests moderate to relatively high purchasing power, with a small fraction of low-income households who may need targeted livelihood support.

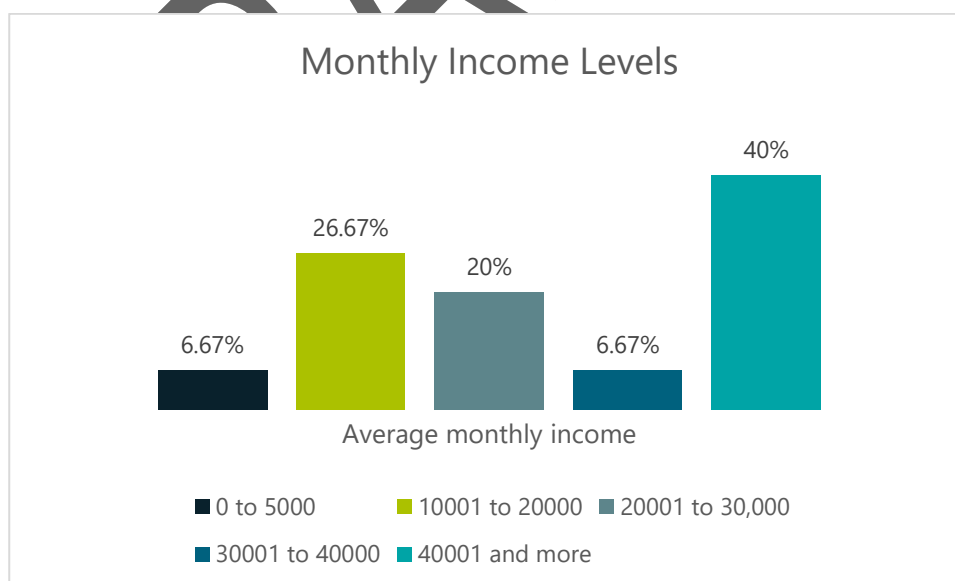


FIGURE 4-9: INCOME LEVELS

4.10 Access to Basic Services

Access to essential services is relatively high: 80% of households have water access, 100% have electricity, and 87% have sanitation facilities. However, 20% still lack reliable water, and 13% lack proper sanitation. The proposed project directly addresses these service gaps and is therefore expected to deliver immediate and highly visible social benefits.

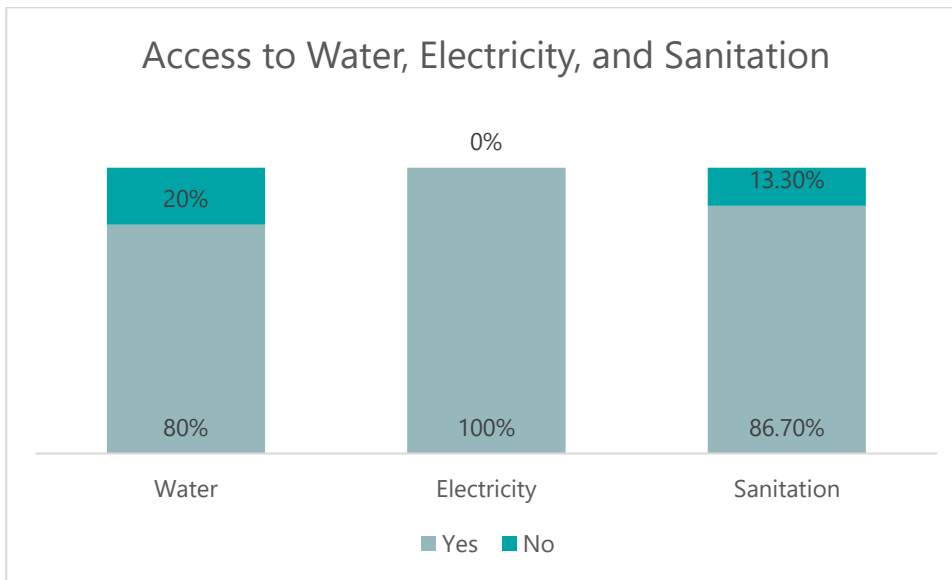


FIGURE 4-10: BASIC SERVICES ACCESS

4.11 Business Profile

Most businesses in the area are small-scale but stable enterprises: 45% have been operational for 3–5 years, 30% for 1–2 years, 20% for 6–10 years, and 5% for over a decade.

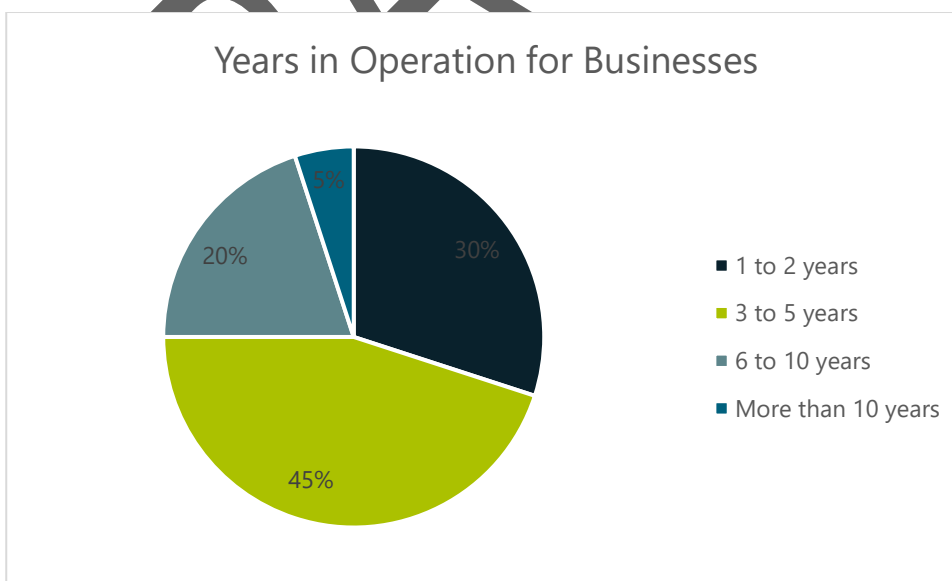


FIGURE 4-11: YEARS OF OPERATION

Business types are dominated by retail shops and groceries (50%), followed by service providers and clothing/shoe traders (15% each), Jua Kali artisans (10%), and food, beverage, garage, and other enterprises (5% each). This indicates a vibrant local economy anchored on retail trade and small-scale services.

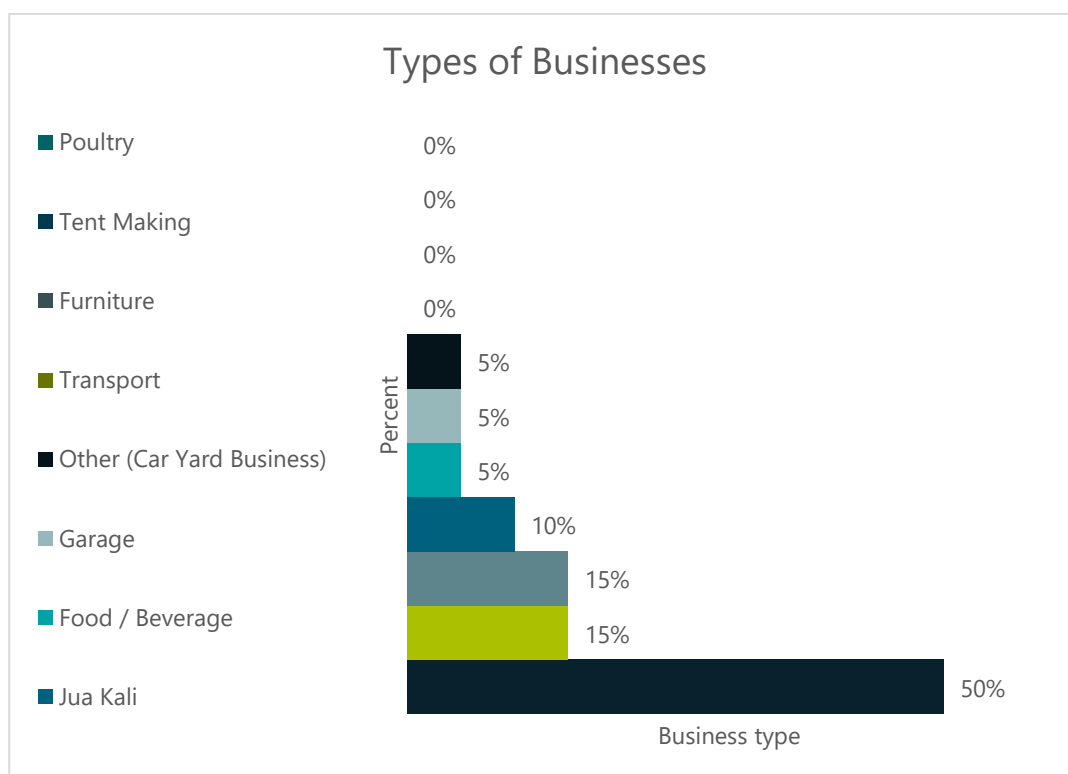


FIGURE 4-12: TYPES OF SAMPLED BUSINESS

In terms of structure, 55% operate from permanent premises, 30% from semi-permanent, and 15% from temporary setups—with 100% being sole proprietorships. This underscores the personal nature of local enterprise, where disruptions could directly affect individual livelihoods.

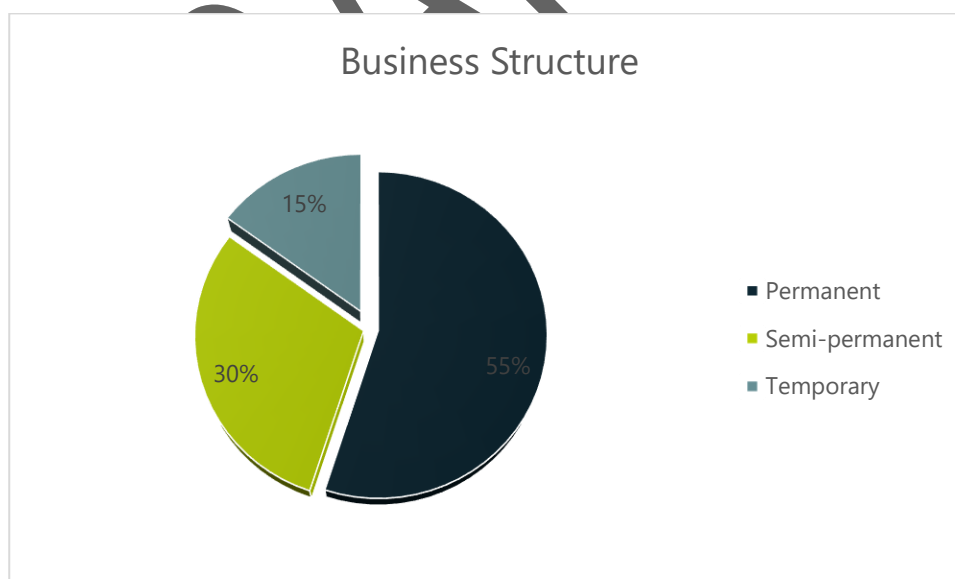


FIGURE 4-13: BUSINESS STRUCTURE TYPE

Survey findings indicate that 45% of the assessed businesses presented formal documentation supporting their operation, while 55% did not have formal business documents available at the time of the survey. Among the businesses that presented documentation, 56% provided a business permit and 44% provided an operating licence. These percentages relate only to the documented businesses and not to the entire surveyed population. Each business was classified according to the principal document presented during the survey.

The valuation methodology applied under this RAP follows the full replacement cost approach for all affected structures and improvements, including walls, verandas, kiosks, paved aprons, and cabro surfaces. Trees and crops will be compensated based on prevailing market replacement values. Compensation for loss of business income will be calculated using the verified average daily turnover multiplied by the adopted period of three (3) days, with an additional 10% margin applied.

In cases where owners do not possess formal ownership documents, eligibility and entitlements will be established through a verification process. This will rely on locally accepted evidence such as witness statements, dated photographs, and available utility receipts to ensure objective, transparent, and fair determination.

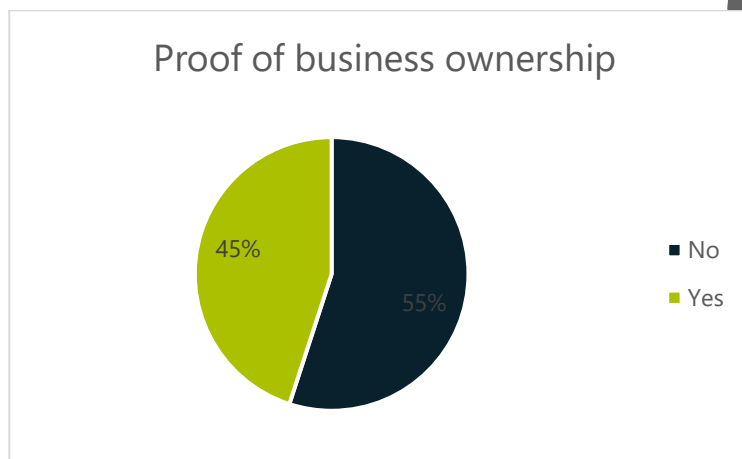


FIGURE 4-14: PROOF OF BUSINESS OWNERSHIP

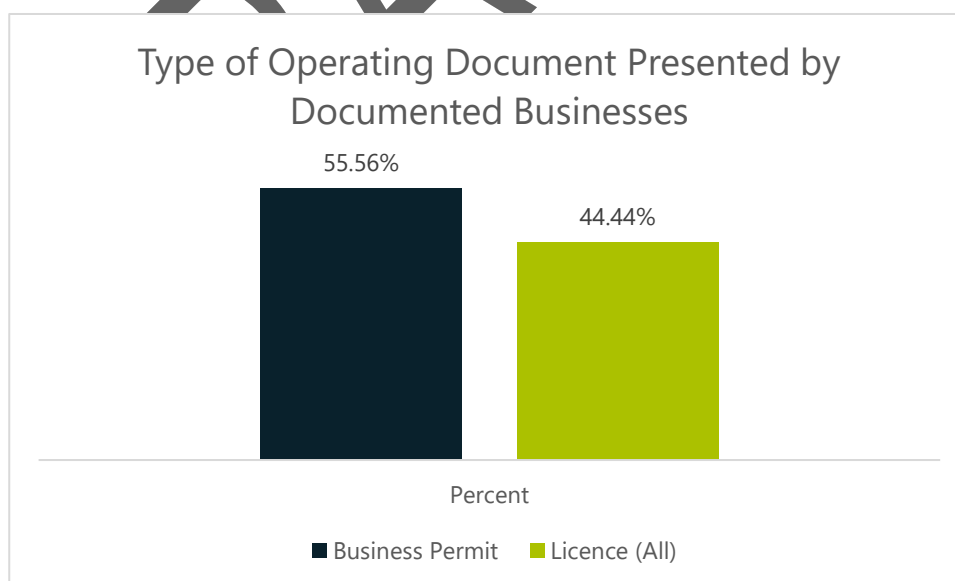


FIGURE 4-15: TYPE OF OPERATING DOCUMENT

4.12 Employment within Businesses

Most businesses are small employers. The median workforce comprises two male employees (average 1.9) and one or fewer female employees (median 0.5). This reflects a male-dominated employment structure, though opportunities exist to promote gender inclusion through project-related livelihood initiatives.

4.13 Business Income Levels

Daily business revenues vary considerably: 55% earn up to KSh 5,000, 25% earn above KSh 40,000, 10% earn between KSh 5,001–10,000, and another 10% between KSh 10,001–20,000. This distribution suggests a mix of micro and mid-scale enterprises, requiring tailored livelihood restoration measures to suit different levels of impact and dependency.

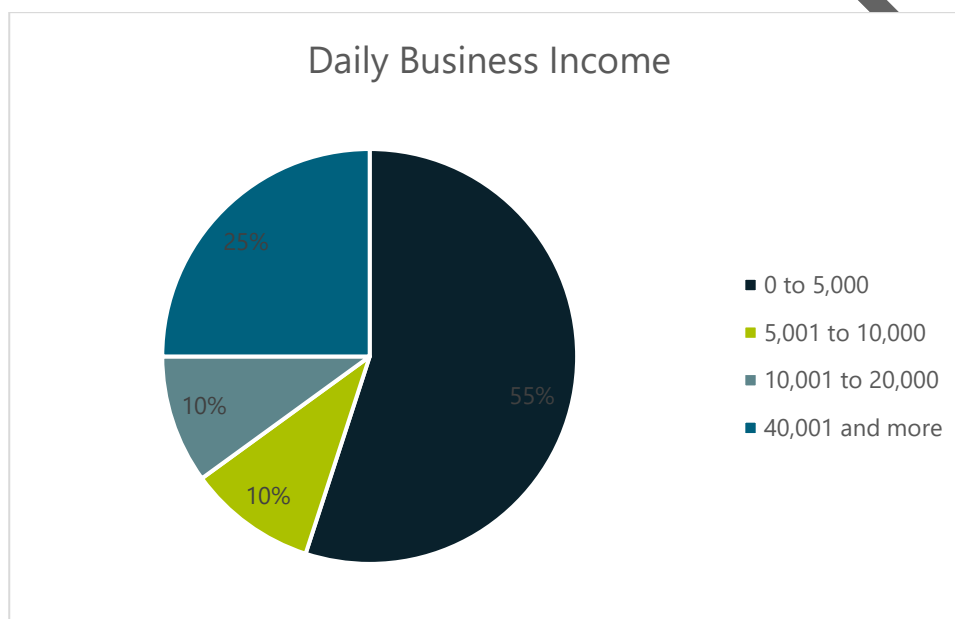


FIGURE 4-16: BUSINESS INCOME

4.14 Asset Impacts and Loss Types

The survey indicates that 66% of residents expect no asset impact, while 34% anticipate partial or full loss of assets. Among those affected, 55% report land impacts that mainly comprises of pavements, paved aprons and cabro surface extensions, 27% structures, and 18% kiosks. These losses primarily involve small-scale, business-related structures such as pavements, kiosks, and roadside installations.



FIGURE 4-17: AFFECTED ASSET

Approximately 83% of cases are partial losses, while 17% constitute full loss, suggesting that most impacts can be mitigated through in-situ reinstatement and partial compensation measures.

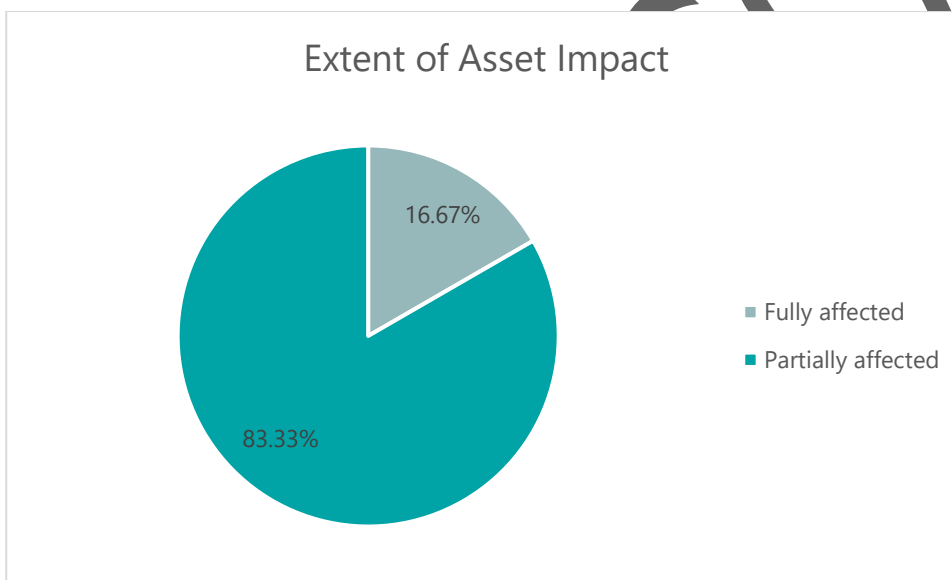


FIGURE 4-18: EXTENT OF AFFECTED ASSET

4.15 Community Perception and Support

Respondents unanimously (100%) expressed strong support for the proposed piped water project, viewing it as a transformative initiative for improving water reliability and community wellbeing. An overwhelming 94% cited improved access to clean water as the project's main benefit, while 3% each mentioned job creation and food opportunities during construction. This high level of endorsement indicates strong community ownership and readiness to collaborate with AWWDA and KIAWASCO in successful project delivery.

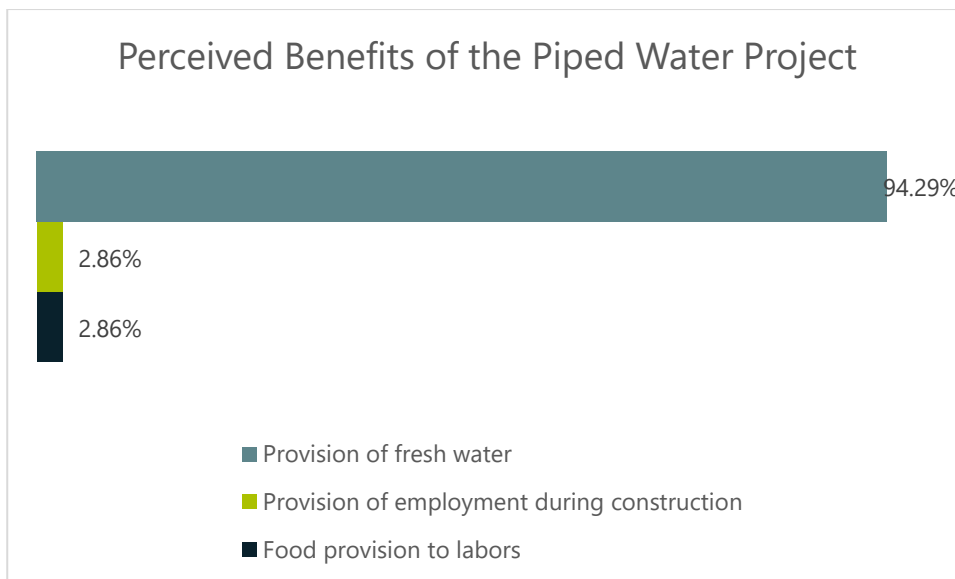


FIGURE 4-19: PERCEIVED BENEFITS OF THE PROJECT

5 LEGAL, POLICY AND INSTITUTIONAL FRAMEWORK

This chapter outlines the legal, policy, and institutional framework governing the implementation of the Resettlement Action Plan (RAP) for the Northern Collector Tunnel (NCT) Last Mile Project – Lot 2, covering the Thindigua and Lioki areas Distribution Works within Kiambu County.

It sets out the legal operating environment for compensation arising from temporary interruption of access and livelihoods during the laying of water pipelines. The chapter highlights the major provisions of Kenya's land legislation with respect to involuntary resettlement, giving an overview of the Kenya Land Policy (2009), the Constitution of Kenya (2010), and related laws dealing with land ownership, use, acquisition, valuation, and compensation.

The section also compares the Kenyan framework with the World Bank's ESS5 on land, restrictions on land use and involuntary resettlement now referenced as a global best-practice standard and aligns the RAP with the Agence Française de Développement (AFD) Environmental and Social Risk Management Policy (2022). It concludes with a review of the institutional arrangements relevant to the project.

5.1 Summary of Relevant Resettlement Legal Statutes Applicable to The Project

A summary is presented in Table 5-1.

TABLE 5-1: SUMMARY OF RELEVANT LEGAL STATUTES APPLICABLE TO THE PROJECT

Legal Framework	Functional Relationship to Resettlement
Constitution of Kenya (2010)	Recognizes the right of every citizen to acquire and own property (Article 40), guarantees the right to clean and safe water (Article 43(1)(d)), and allows the State to regulate land use for public benefit (Article 66). Article 47 requires fair administrative action and written reasons for any decision that limits individual rights.
Land Act, No. 6 of 2012 (Revised 2020)	Governs land administration and provides the framework for compulsory acquisition, valuation, and compensation for public benefit. Section 111 and 120 ensure prompt and fair compensation, including disturbance allowances.
Land Registration Act, 2012 (Revised 2022)	Provides the system for registration and proof of interests in land, confirming ownership and legitimacy of claims eligible for compensation.
National Land Commission Act, 2012	Establishes the National Land Commission (NLC) responsible for managing public land and conducting compulsory acquisitions on behalf of the State and County Governments.
Land Value (Amendment) Act, 2019	Introduces standardized compensation criteria, mandating market value plus disturbance allowance for all affected properties.
National Land Policy (Sessional Paper No. 3 of 2009)	Provides policy guidance on land administration, acquisition, and compensation procedures, emphasizing equity, transparency, and accountability.
Water Act, 2016	Aligns water governance with the Constitution. Establishes AWWDA, WASREB, and KIAWASCO as key institutions in water infrastructure and service provision.

Urban Areas and Cities (Amendment) Act, 2019	Gives county governments responsibility for spatial planning, infrastructure control, and coordination of service delivery.
Environment and Land Court Act, 2011	Establishes a superior court to adjudicate disputes relating to land, valuation, and environmental management.
Environmental Management and Coordination Act (EMCA), 1999 (Revised 2015)	Provides the overarching legal framework for environmental protection, mandating ESIA and mitigation measures for all infrastructure projects.
Public Participation Act, 2023	Standardizes and enforces public participation processes in government and development projects, ensuring inclusivity, transparency, and proper documentation.
Valuers Act (Cap 532)	Establishes the Valuers Registration Board to regulate the profession of valuation and ensure qualified valuers determine compensation for affected assets.

5.2 National Relevant Laws

The National Land Policy ("NLP" or "Policy") was adopted in August 2009 with the aim of providing an overall framework for new legislation and defining key measures required to address critical issues such as land administration, access to land, land use, and restitution related to historical injustices and an outdated legal framework. The NLP addresses constitutional issues such as compulsory acquisition and development control. Section 45 of the NLP defines compulsory acquisition as "the power of the State to extinguish or acquire any title or other interest in land for a public purpose, subject to prompt payment of compensation." Under the current Constitution, the Land Act 2012 empowers the National Land Commission (under the guidance of Minister for Lands) to exercise the power of compulsory acquisition on behalf of the State. Similarly, the NLP empowers the National Land Commission to compulsorily acquire land.

According to the NLP, the exercise of compulsory acquisition in the past has been conducted with abuses and irregularities. The NLP therefore calls for a revision of such power and requires the GoK:

- To review the law on compulsory acquisition to align it with the new categories of land ownership (public, private and community land);
- To harmonize the framework for compulsory acquisition to avoid overlapping mandates;
- To establish compulsory acquisition criteria, processes and procedures that are efficient, transparent and accountable;
- To institute legal and administrative mechanisms for the exercise of the power of compulsory acquisition by the State through the National Land Commission; and
- To confer pre-emptive rights on the original owners or their successor in title where the public purpose or interest justifying the compulsory acquisition fails or ceases.

The NLP provides the policy foundation for fair, prompt, and transparent compensation for affected persons. It also promotes public participation and accountability in all land-related decisions affecting communities.

5.3 The Kenyan Constitution (2010)

The Constitution of Kenya, 2010, protects the sanctity of private property rights and states that no property can be compulsorily acquired by the Government except in accordance with law. Article 40(3) states:

"The State shall not deprive a person of property of any description, or of any interest in, or right over, property of any description, unless the deprivation—results from an acquisition of land or an interest in land or a conversion of an interest in land, or title to land, in accordance with Chapter Five; or is for a public purpose or in the public interest and is carried out in accordance with this Constitution and any Act of Parliament that –

- i. Requires prompt payment in full, of just compensation to the person; and
- ii. Allows any person who has an interest in or right over, that property a right of access to a court of law.

The Constitution empowers the state to exercise the authority of compulsory acquisition. Land Act 2012 (LA) designates the National Land Commission (NLC) as the agency empowered to compulsorily acquire land.

- **Article 10:** Establishes national values of participation, equity, transparency, and accountability.
- **Article 40:** Protects the right to property; prohibits deprivation except for public purposes, requiring prompt, full, and just compensation and access to courts.
- **Article 43(1)(d):** Guarantees the right to clean and safe water in adequate quantities.
- **Article 47:** Provides for fair administrative action with written reasons for any decision that limits rights.
- **Articles 60–68:** Define principles of land policy, calling for equitable, productive, and sustainable use of land.
- **Article 62:** Declares public roads, streets, and wayleaves to be public land held in trust by the national government.

No private land acquisition will occur. All works are confined to existing road reserves and wayleaves. Compensation will cover temporary disruption of business operations, loss of access, or minor damage to improvements located within public land, in accordance with Articles 40 and 47.

5.4 The Land Act (2012) and Land Laws (Amendment) Act (2016)

The **Land Act (No. 6 of 2012)** is Kenya's principal legislation governing land management, including compulsory acquisition, administration, and compensation. It was amended in 2016 to harmonize various land laws and align them with the Constitution.

Key Provisions:

- **Part VIII (Sections 107–133):** Details the process for compulsory acquisition of land for public use.
- **Section 111:** Ensures compensation is fair, just, and paid promptly.
- **Section 120:** Provides for disturbance allowances and relocation costs.
- **Section 133:** Allows compensation for lawful improvements on public land, even where no land is taken.
- **Section 157(2):** Criminalizes unlawful occupation or obstruction of public wayleaves but allows the State to address such cases through lawful means.

The project will not acquire land but will compensate for temporary or minor impacts on structures, pavements, or businesses within public wayleaves. Encroachments will be handled through fair engagement and livelihood restoration rather than legal enforcement.

5.5 Land Acquisition Act

This Act provides guidelines on land expropriation by the State or Government for the general benefit of the community. The Act considered that the owners of the acquired land should be compensated, and their grievances addressed. The Land Acquisition Act (Cap 295) provides for the compulsory acquisition of private land and property held under Registered Lands Act, Cap 300 and the Land Titles Act, Cap 281. Public land administered under the Government Lands Act, Cap 280 but used for private development in leases can also

be compulsorily acquired under the Land Acquisition Act. Stringent conditions have been set out under the Act if compulsory acquisition must take place. In this case compensation may take two forms. One form is cash compensation, and the other is land compensation. Cash compensation is provided for under section 9 of the Act. The amount entitled to the landowner is paid directly to them but in situations of prolonged dispute, the commissioner of lands is required to deposit the money in a court of law pending resolution of the dispute. Section 12 of the Act allows the Commissioner of Lands to award land of equivalent value as compensation

They will be no compulsory acquisition of land in this RAP.

5.6 Urban Areas and Cities Act (Amendment, 2019)

The Act provides the legal framework for the management and governance of urban areas. It mandates county governments to develop master plans and regulate spatial development to ensure orderly growth and service provision.

Key Provisions:

- Section 26(b): Authorizes counties to prepare and implement master plans for infrastructure development.
- Section 26(c): Mandates control over land use, subdivision, and zoning of public and private land.
- Section 44: Permits counties to partner with public or private entities in implementing infrastructure projects.

The project aligns with the Kiambu County Spatial and Urban Development Plans and supports local development objectives, particularly in water infrastructure expansion and improved urban service delivery.

5.7 Land Registration Act (2012) Revised-2022

The Land Registration Act consolidates registration of interests in public and private land, ensuring transparency and protection of ownership rights.

Key Provisions:

- Section 24: Confers absolute ownership rights upon registration.
- Section 25: States that registered titles are indefeasible except by court order.
- Section 79: Allows rectification of registers for fraud or error.
- Section 42: Prohibits transfer of unsurveyed or unregistered subdivisions.

This Act provides the legal basis for verifying ownership of structures and improvements affected along the project route, ensuring that compensation is paid only to legitimate claimants.

5.8 National Land Commission Act

The National Land Commission (NLC) will undertake compensation. NLC is an independent government commission whose establishment was provided for by the Constitution of Kenya, 2010 to, amongst other things, manage public land on behalf of the national and county governments, initiate investigations into present or historical land injustices and recommend appropriate redress, and monitor and have oversight responsibilities over land use planning throughout the country. [1] It was officially established under The National Land Commission Act, 2012. Pursuant to

Article 67(2) of the Constitution, the functions of the Commission are:

- To manage public land on behalf of the national and county governments;

- Compulsory acquire land for national and county governments
- Compensate acquired land on behalf of national and County government
- To recommend a national land policy to the national government;
- To advise the national government on a comprehensive programme for the registration of title in land throughout Kenya;
- To conduct research related to land and the use of natural resources, and make recommendations to appropriate authorities;
- To initiate investigations, on its own initiative or on a complaint, into present or historical land injustices, and recommend appropriate redress;
- To encourage the application of traditional dispute resolution mechanisms in land conflicts;
- To assess tax on land and premiums on immovable property in any area designated by law; and
- Monitor and have oversight responsibilities over land use planning throughout the country.

Under the National Land Commission Act, the Commission shall:

- *On behalf of, and with the consent of the national and county governments, alienate public land;*
- *Monitor the registration of all rights and interests in land;*
- *Ensure that public land and land under the management of designated state agencies are sustainably managed for their intended purpose and for future generations;*
- *Develop and maintain an effective land information management system at national and county levels;*
- *Manage and administer all unregistered trust land and unregistered community land on behalf of the county government; and*
- *Develop and encourage alternative dispute resolution mechanisms in land dispute handling and management.*
- *Implement Settlement programmes on behalf of national and county governments as outlined in section 134 of the Land Act.*
- *Administer the Land Settlement Fund in accordance with section 135 of Land Act*
- *Manage the Land Compensation Fund*
- *Identify ecologically sensitive areas that are within public land and demarcate and take any other justified action on those areas and act to prevent environmental degradation and climate change in accordance with the Land Act.*
- *Reserve public land for the establishment of approved settlement programmes, and where public land is not available, purchase private land subject to the Public Procurement and Disposal Act, 2005 or any other law as provided for in section 134 (5) of the Land Act.*
- *Set aside land for investment purposes in accordance with section 12(3) of the Land Act.*
- *Approve compulsory acquisitions, wayleaves, easements and analogous rights.*
- *Ensure that the investments, in land benefit local communities and their economies.*

- *Make regulations prescribing the criteria for allocation of public land, such regulations to prescribe forms of ownership and access to land under all tenure systems.*
- *The procedure and manner of setting aside land for investment should respect mechanisms of benefit sharing with local communities.*

Since no private land is being acquired, NLC's involvement will be advisory; supporting AWWDA and KIAWASCO on matters of public wayleaves and validation of compensation where necessary.

5.9 Environment and Land Court Act (2011)

The Act gives effect to Article 162(2) (b) of the Constitution by establishing the Environment and Land Court that has original and appellate jurisdiction. According to Section 4 (2) and (3), it is a court with the status of the High Court. It exercises jurisdiction throughout Kenya and pursuant to section 26, is expected to ensure reasonable and equitable access to its services in every county. The principal objective of this Act is to enable the Court to facilitate a just, expeditious, proportionate and accessible resolution of disputes governed by the Act. The Court exercises its jurisdiction under Section 162 (2) (b) of the Constitution and has power to hear and determine disputes relating to —

- Environmental planning and protection, climate issues, land use planning, title, tenure, boundaries, rates, rents, valuations, mining, minerals and other natural resources;*
- Compulsory acquisition of land;*
- Land administration and management;*
- Public, private and community land and contracts, choses in action or other instruments granting any enforceable interests in land; and*
- Any other dispute relating to environment and land.*

Nothing in the Act precludes the Court from hearing and determining applications for redress of a denial, violation or infringement of, or threat to, rights or fundamental freedom relating to land and to a clean and healthy environment under Sections 42, 69 and 70 of the Constitution.

The ELC Act forms the final legal recourse within the project's Grievance Redress Mechanism (GRM). PAPs dissatisfied with project-level resolutions may escalate their grievances to the Court as a last resort.

5.10 Environmental and Management Coordination Act No. 387 Of 1999 (Revised 2015)

The EMCA establishes the National Environment Management Authority (NEMA) and provides a comprehensive framework for environmental governance in Kenya.

Key Provisions:

- Mandates Environmental and Social Impact Assessments (ESIAs) and Audits for all projects with potential environmental or social impacts.
- Requires Environmental and Social Management Plans (ESMPs) to mitigate adverse impacts.
- Prescribes penalties for environmental degradation and non-compliance.
- Ensures coordination among lead agencies for environmental management.

An ESIA was prepared in parallel with this RAP in compliance with EMCA. Its findings guide mitigation measures for dust, noise, waste, and safety. The RAP integrates social safeguards identified in the ESIA and ensures compliance through monitoring during construction.

5.11 The Valuers Act (Cap 532)

This Act establishes the Valuers Registration Board and regulates the profession of valuation in Kenya. It prescribes registration requirements, a code of conduct, and disciplinary measures for misconduct (false entries, misleading statements by omission, acceptance of commissions/discounts, etc.). Only registered valuers may undertake professional valuation work for compensation purposes, and the Board maintains the official register of practitioners.

All valuations of affected improvements (e.g., walls, gates, paved aprons, canopies, kiosks) will be carried out by registered valuers and documented in the asset register. Their reports will form the basis of compensation calculations at full replacement cost plus applicable disturbance allowances.

5.12 Matrimonial Property Act (No. 49 Of 2013)

The Act governs proprietary rights between spouses. It recognises both monetary and non-monetary contributions (domestic work, child care, companionship, management of family business/property) when determining beneficial interests. It presumes property acquired during marriage is jointly owned unless proved otherwise, and recognises trust principles for property registered in one spouse's name.

Where affected improvements lie on property with a marital interest, the payment process will respect joint rights. During disclosure and compensation verification, both spouses (where applicable) will be notified and recorded to minimise disputes and safeguard vulnerable spouses.

5.13 The Sexual Offences Act, 2006

This Act protects people and employees from any unwanted sexual attention or advances by staff members. This act ensures the safety of women, children and men from any sexual offences which include: rape, defilement, indecent acts. This law will govern the code of conduct of the Contractor's staff and provide repercussions of any wrongdoing. The sexual offense act, 2006 supports Kenya Employment Act of 2007 that a worker should not be harassed sexually so as to receive preferential treatment at workplace or detrimental treatment on present or future employment.

Project Affected Persons (PAPs) as well as project workers should not be harassed sexually for them to receive their payments.

5.14 The Children Act (No. 29 of 2022)

This Act protects the welfare of children within the Country. The Act identifies children as a person below the age of 18 years old and protects them from any exploitation. Of particular importance to this project, is section 10, which protects the child from economic exploitation and any work that interferes with his/ her education, or is harmful to the child's health or physical, mental, spiritual, moral or social development.

No child will be exploited during the implementation of the project and implementation of this updated RAP. The project will ensure that all project staff and contractor staff are above 18 years of age.

5.15 Evictions Guidelines, 2020

The policy guidelines recommend that the Government shall take all appropriate steps to prohibit, prevent and provide remedies in all cases of forced evictions whether carried out or threatened by State or non-State actors. The Government shall take all necessary steps to legally prohibit forced evictions. The Government shall apply all appropriate civil and/or criminal penalties against any person or entity whether public or private, who carries out a forced eviction in breach of the law. The Government shall ensure that protections against forced evictions, the right to secure tenure and the right to adequate housing shall be guaranteed without discrimination of any kind as to race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. The Government shall guarantee the equal right of women and men to the enjoyment of the rights articulated within the present Guidelines. The Government shall also take special

action to provide sufficient protection to vulnerable groups such as women, people living HIV/AIDS, children, and people with disabilities, the sick and the elderly. The Government shall secure, by all appropriate means including the provision of security of tenure, the maximum degree of effective protection against the practice of forced evictions for all persons. The Government shall actively monitor and carry out quantitative and qualitative evaluations to determine the number, type and long-term consequences of evictions, including forced eviction, that occur within their jurisdiction and territory of effective control. Monitoring reports and findings should be made available to the public and concerned international parties in order to promote the development of best practices and problem- solving experiences based on lessons learned. The policy guideline advise that the Government shall entrust an independent national body such as the Kenya National Human Rights Commission, to monitor and investigate forced evictions and State compliance with these guidelines and international human rights law.

No evictions are planned. The Project will provide 7 day advance notice of works, safe passage/temporary access arrangements, and compensation for temporary disturbance/damage to improvements within wayleaves. Vulnerable households and traders will receive additional facilitation where needed.

5.16 The Prevention, Protection and Assistance to Internally Displaced Persons and Affected Communities Act, 2012

The provisions of this Act are guided by the Bill of Rights under the Constitution of Kenya. (2010). Section 5 of the Act lists development projects among the displacing factors and outlines involvement of the affected persons through awareness, sensitization, training and education on causes, impact, consequences and prevention measures. Section 6 of the Act provides that displacements and relocation from land required for a development project will only be justified by a compelling and overriding public interest. The procedures to follow are listed under section 22 and include: -

- *Justification as to why the displacement is unavoidable and that there is no other feasible alternative;*
- *Seeking free and informed consent from the affected persons;*
- *Holding public hearing on project planning;*
- *Giving reasonable notice to allow the affected persons review and react to the displacement conditions; and that*
- *Displacement process should reflect respect to human rights.*

Relocation of the affected persons should, according to section 22 of the Act, be guided by the following factors: -

- *Full information on the affected persons and ensuring their participation;*
- *Identification of safe, adequate and habitable alternatives;*
- *Availability of safety, nutrition, health, and hygiene as well as protection at the new location; and*
- *Acceptability by the host communities in the new location where re-location is implemented.*

Physical displacement is not anticipated. If temporary relocation of a movable kiosk or stall becomes necessary for a short section, it will follow notice, agreement, compensation for lost income, and reinstatement; avoiding any outcome that amounts to forced eviction.

5.17 County Governments Act, 2012

The local government act was repealed after the final announcement of all the results of the first elections held under the Constitution as per the County Governments Act of 2012. Under section 134 subsection (1), The Local Government Act is repealed upon the final announcement of all the results of the first elections held

under the Constitution. It further states in section 134, subsection (2) reads “All issues that may arise as a consequence of the repeal under subsection (1) shall be dealt with and discharged by the body responsible for matters relating to transition”. The Project will according to the County Government act of 2012 ensure that the Project activities conform to the regulation that shall be passed.(section 135 (1) The Cabinet Secretary may make regulations for the better carrying out of the purposes and provisions of this Act and such Regulations may be made in respect of all county governments and further units of decentralization generally or for any class of county governments and further units of decentralization.) comply to the set regulations and by laws.

This is the primary law governing the development of counties and thereby will be crucial during implementation of the Project. The proponent intends to work hand in hand with Nairobi County Government and the representatives have been part of the earlier key stakeholder consultations.

The project designs are approved by the requisite county government departments which also involved public participation. However, the area is also encroached by small businesses who will be disturbed during construction and there will be livelihood restoration programs for the PAPs

5.18 The Physical and Land Use Planning Act (2019)

The Act provides for national, county and local physical and land-use plans and regulates development control. It requires development permission and, where relevant, environmental assessment for activities likely to have significant impacts.

All the applicable planning consents from Kiambu County will be obtained. Trenching and reinstatement will be aligned with approved corridor cross-sections, and honour utility coordination and traffic management conditions.

5.19 International standards on Involuntary resettlement-ESS5

Although the project is financed by the Agence Française de Développement (AFD) and primarily follows the AFD Environmental and Social Risk Management Policy (2022), it also draws on widely accepted international standards to guide compensation, livelihood restoration, and engagement with affected persons. The most relevant benchmark is the World Bank Environmental and Social Framework (ESF, 2016), particularly Environmental and Social Standard 5 (ESS5): Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Objectives of ESS5

The objective of ESS5 is to ensure that any project involving physical or economic displacement is planned and implemented responsibly and equitably. It seeks to avoid resettlement wherever possible, and where unavoidable, to minimise impacts through the consideration of feasible design alternatives. ESS5 requires that compensation be provided at full replacement cost and that livelihoods are restored or improved so affected persons are not left worse off. It further mandates that compensation be delivered prior to the onset of project impacts, with particular attention given to the needs of vulnerable groups. Meaningful participation, clear and timely information disclosure, and access to a fair and responsive grievance mechanism are essential components. Finally, ESS5 emphasises continuous monitoring to ensure that all commitments and mitigation measures are fully achieved.

Key Principles

- Avoidance and minimisation: The design confines all works to existing road reserves and wayleaves to prevent land acquisition.
- Fair and timely compensation: All losses—whether structural or livelihood-related—will be compensated at full replacement cost before works begin on any affected stretch.
- Livelihood support: Traders and small business operators will receive disturbance allowances and support under the Livelihood Restoration Programme (LRP).

- Support for vulnerable PAPs: Individuals requiring additional help, including the elderly, PWDs, and women-headed households, will receive tailored assistance during implementation.
- Transparency and participation: Consultations have been held with residents, local leaders, institutions and businesses, and these engagements will continue throughout the project.
- Clear grievance handling: A multi-tier Grievance Redress Mechanism (GRM) is in place at community, site, and project level to ensure issues are addressed promptly and fairly.
- Monitoring: Regular monitoring will track how compensation is delivered, whether livelihoods are restored, and how effectively grievances are resolved.

In the NCT Last Mile – Lot 2 (Thindigua/Lioki areas), these principles are integrated into every stage of the RAP process:

- ✓ No land acquisition is expected since all activities fall within existing public corridors.
- ✓ Anticipated impacts are largely temporary—such as access interruptions, minor damage to frontages, or short-term business disruptions.
- ✓ Compensation and allowances will be paid before construction begins along any affected frontage.
- ✓ Vulnerable PAPs will receive additional support to facilitate smooth participation and access to entitlements.
- ✓ The GRM will operate throughout implementation to ensure concerns are resolved in a structured and transparent manner.
- ✓

5.20 GAP Analysis: World Bank ESS5 and Kenyan Legal Framework

TABLE 5-2: GAP ANALYSIS

ESS5 Requirement	Kenyan Legal Framework	Comparison	Bridging Measure in This RAP (NCT-Lot-2)
Avoid or minimise involuntary resettlement	The Land Act (2012) permits compulsory acquisition for public-interest projects, including water supply infrastructure. The law does not explicitly require an assessment of alternatives to avoid displacement or minimise impact on people's livelihoods.	ESS5 emphasises early-stage design measures to avoid or minimise physical and economic displacement wherever technically feasible. Kenyan laws focus more on the process of acquisition than on exploring alternatives.	The pipeline alignments were reviewed alongside available alternatives and confined fully within existing public road reserves and wayleaves. This ensures that no land will be acquired and no household will be physically displaced. Minor alignment adjustments were made specifically to avoid built-up frontages or structures.
Restore or improve livelihoods	The Land Act (2012) provides for compensation for lost assets but does not explicitly require restoration of livelihood levels or economic well-being after displacement.	Partial gap – Kenyan laws address monetary compensation but do not consider livelihood support, income continuity, or restoration outcomes required under ESS5.	The RAP includes disturbance allowances, temporary access facilitation, compensation for verified income loss, and a Livelihood Restoration Programme (LRP) targeting traders, kiosk operators, and other informal businesses. Support will ensure income levels are sustained or restored following construction.
Compensation at full replacement cost	The Land Value (Amendment) Act (2019) prescribes compensation at market value plus disturbance allowance. However, it does not explicitly outline inclusion of ancillary costs such as labour for rebuilding, transaction costs,	Kenyan law is broadly aligned but less comprehensive. ESS5 requires full replacement cost, which covers the total cost of restoring an asset to its original standard without depreciation.	Valuation under this RAP strictly applies ESS5 full replacement cost principles. All assessments include materials, labour, transport, and other reinstatement expenses without depreciation. All valuations are

ESS5 Requirement	Kenyan Legal Framework	Comparison	Bridging Measure in This RAP (NCT-Lot-2)
Recognition of informal, untitled, and non-registered users	transport of materials, or taxes, and may allow depreciation considerations. The Constitution (2010) recognises occupants in good faith, while the Land Act (2012) recognises written and unwritten rights. However, it does not explicitly require compensation or assistance for informal operators, tenants, mobile traders, or temporary users of public land.	Partial gap – ESS5 recognises all persons affected by the project (including non-title holders, tenants, and informal users) if they were present before the cut-off date.	carried out by registered valuers and verified during disclosure. The RAP identifies all affected persons within the construction wayleave; whether titled or untitled who were present before the cut-off date. This includes tenants, kiosk operators, food vendors, and mobile traders. These PAPs are eligible for disturbance allowances and livelihood assistance.
Compensation and support must precede impacts	The Land Act (2012) requires “prompt and just” compensation but does not explicitly specify that compensation must be paid before displacement or before access to property is restricted.	Largely consistent in principle, but ESS5 is explicit on sequencing: PAPs must receive their entitlements prior to any impact.	The RAP clearly states that all compensation, allowances, and livelihood support must be fully processed and paid before the contractor begins works in any affected frontage. Construction activities will only proceed after confirmation of payment.
Accessible, timely and culturally appropriate grievance redress	Kenyan law provides for administrative review and judicial processes through the National Land Commission (NLC) and the Environment and Land Court (ELC). These mechanisms, while legally robust, can be lengthy, formal, and costly for local communities.	ESS5 requires projects to establish a simple, culturally appropriate, and time-bound project-level GRM that is accessible to all PAPs, including vulnerable groups.	A multi-tier GRM has been established, beginning at community level and escalating to project and agency levels where necessary. The GRM emphasises early resolution, fairness, and timely response and is actively communicated to PAPs during consultations.
Monitoring, evaluation, and completion audit	EMCA (1999, Rev. 2015) and the Land Act (2012) provide general monitoring provisions but do not outline specific requirements for monitoring	Clear gap – ESS5 requires ongoing monitoring of compensation delivery, grievance management,	The RAP provides for continuous monitoring by AWWDA, tracking compensation timelines, grievance resolution,

ESS5 Requirement	Kenyan Legal Framework	Comparison	Bridging Measure in This RAP (NCT-Lot-2)
	or evaluating resettlement outcomes, livelihood restoration, or GRM performance.	and livelihood restoration, including independent verification and a completion audit.	reinstatement quality, and livelihood outcomes. An independent monitor will verify key stages and prepare a completion report confirming whether ESS5 requirements have been fully achieved.

5.21 French Development Agency Environmental and Social Risk management Policy 2022

The French Development Agency (AFD) Environmental and Social Risk Management Policy integrates environmental and social considerations throughout the entire project cycle. The policy requires all financed projects to undergo systematic risk screening and categorisation, ensuring that environmental and social risks are identified early and managed appropriately. It emphasises the mitigation hierarchy to first avoid, then minimise, and where necessary, restore or compensate for any residual impacts. Specifically, the policy mandates avoidance or minimisation of resettlement, compensation at full replacement cost before impacts occur, and restoration of livelihoods for affected persons. Equal attention is given to gender inclusion and protection of vulnerable groups, meaningful stakeholder consultation, and the establishment of accessible grievance redress mechanisms. Continuous monitoring, evaluation, and transparent reporting are also integral to ensure accountability and sustained compliance throughout implementation.

AFD further promotes key principles that underpin responsible project management, including transparency and accountability in compensation processes, active stakeholder engagement and information disclosure, respect for human rights and due diligence, and strengthening of clients' environmental and social management capacity. These principles aim to ensure that AFD-financed projects not only mitigate negative impacts but also deliver long-term social and economic benefits to the communities involved.

In alignment with AFD's policy, the NCT Last Mile Project – Lot 2 (Thindigua/Lioki areas) has been designed to remain strictly within existing public wayleaves, thereby eliminating the need for land acquisition. All entitlements for affected persons will be provided at full replacement cost, complemented by disturbance allowances to cover verified temporary income losses. The RAP process integrates vulnerability screening during the enumeration and disclosure stages to ensure that disadvantaged groups receive additional support. A documented Grievance Redress Mechanism (GRM) and a comprehensive RAP monitoring framework are in place to track implementation progress, resolution of grievances, and livelihood restoration outcomes.

TABLE 5-3: CATEGORY OF PAPS AND LOST ASSETS

Category of PAPS / Lost Asset	Kenyan Law	Proposed Compensation Approach (This RAP)
Land users (no land acquisition in Lot 2)	Land Act recognises interests; compensation context-specific.	No land take. For lawful landscaping/crops within the reserve that are affected: replacement cost and practical reinstatement. If any private land is unexpectedly affected due to design adjustments, works will stop immediately at that location. The project will first confirm the impact through an engineering review, notify the affected landowner(s) and the NLC, carry out an independent valuation, and prepare entitlements in line with the Land Act and ESS5. Compensation will be completed before works resume. All steps and agreements will be recorded and communicated through the GRM and local administration.
Owners of temporary structures (kiosks, pavements, canopies, sheds, verandahs)	Article 40 protects property; Land Act provides for compensation of improvements.	Replacement cost for affected structures + disturbance allowance for verifiable lost income; facilitate safe temporary relocation and return post-works.
Owners of permanent improvements (boundary walls, gates, paved driveways, manholes, valve chambers)	Constitution & Land Act (ss.111, 133) provide for compensation of lawful improvements.	Replacement cost and like-for-like reinstatement to County standard; coordinate access ramps to keep businesses reachable where feasible.
Informal/mobile traders	Constitution recognises good-faith occupants; law less explicit on all users.	Disturbance allowance based on verified average turnover; prior notice of 7 days; temporary trading bays identified with local administration where needed.
Vulnerable PAPS (elderly, PWDs, women-/child-headed HHs, chronically ill)	Equality & non-discrimination under Constitution; sector policies encourage inclusion.	Priority processing, accompaniment during disclosure/payment, and tailored facilitation (e.g., ramps, queue-jumping, documentation help).

5.22 Institutional Responsibilities

Responsibility for ensuring that all aspects of resettlement and compensation planning, and implementation are taken into consideration falls to project proponents or project implementation bodies. The main institutions that will be involved in RAP implementation and operation of the infrastructure are briefly described below:

TABLE 5-4: KEY INSTITUTIONS AND THEIR ROLES

Institution	Roles Expected
Athi Water Works Development Agency (AWWDA)	Lead Implementing Agency. Ensure RAP compliance and budgeting; supervise enumeration, valuation, disclosure and payment; manage GRM at project level; oversee reinstatement to County standards; monitor and report on RAP/ESMP implementation to AFD & MWSI.
Kiambu Water & Sewerage Company (KIAWASCO)	Water Service Provider and future operator. Provide technical inputs during construction; coordinate service connections; support community liaison and complaint resolution related to operations.
Kiambu County Government • Land, Housing, physical planning and urban development • Water, Environment, Natural resources and climate change	Issue permits/wayleave consents; approve traffic management plans; verify reinstatement; participate in barazas and the GRM; help identify temporary trading areas and manage market/orderly street use during works.
National Land Commission (NLC)	Advisory/verification on public land/wayleaves where disputes arise; guidance on compensation principles if any case escalates beyond project mechanisms.
WASREB / WRA	WASREB: service quality and consumer protection; WRA: resource management and permitting. Ensure regulatory compliance relevant to distribution services.
NEMA	ESIA/ESMP approvals; compliance inspections and environmental audits during construction and early operation.
National Government Administration Offices (CC, DCC, ACC, Chiefs, Assistant Chiefs,)	Community mobilisation; witness disclosure; support grievance resolution; help manage temporary access and trading arrangements.
Residents' Associations & CBOs (e.g., Thindigua Residents Association, Mushroom Gardens Residents Association, Migaa Residents Association etc.	Community liaison; disseminate work schedules; co-design practical access solutions; monitor reinstatement quality with residents.

6 PUBLIC PARTICIPATION, COMMUNITY AND STAKEHOLDER CONSULTATIONS

6.1 Introduction

Public participation and stakeholder consultation are core to RAP preparation and implementation in Kenya. The Constitution of Kenya (2010) (Articles 10, 35, and 69) anchors the right to information, transparency, and inclusive decision-making. The Public Participation Act (2023) gives the operational framework for involving the public in decisions that affect them.

Under development partner financing (here AFD), community participation is both a statutory requirement and good practice. The AFD Environmental and Social Risk Management Policy (2022) and ESS5 emphasize meaningful consultation, timely disclosure, and the effective participation of Project-Affected Persons (PAPs) throughout the RAP process.

This RAP incorporates extensive community and stakeholder consultations conducted in the project areas, including Thindigua and Lioki, to ensure that communities and relevant institutions were fully informed about project objectives, scope, anticipated impacts, and mitigation measures.

6.2 Objective Of Community Consultations

The engagement sought to:

- ✓ Inform stakeholders on project objectives, design, scope, and timelines.
- ✓ Provide two-way dialogue to capture community expectations and concerns.
- ✓ Identify and map PAPs and socio-economic dynamics within the corridor.
- ✓ Promote transparency in resettlement/compensation processes.
- ✓ Surface and include the voices of vulnerable groups in RAP decisions.
- ✓ Establish a functional Grievance Redress Mechanism (GRM).
- ✓ Strengthen collaboration across AWWDA, KIAWASCO, County, local administration (NGAO), and communities.

6.3 Community Members and Stakeholder Consulted

The consultants-RAP team led by the lead RAP expert undertook intensive public consultations at all the proposed sites in *Lioki and Thindigua areas* ensure that all concerns regarding the project implementation activities and the associated impacts on the local people and their livelihood activities were raised and openly discussed. Two public participation meetings were conducted. The minutes and signed attendance list of the participants consulted is attached in the Annex 1.

6.4 Consultation Methodology

The RAP and ESIA teams worked together and adopted a participatory, multi-tier approach that combined structured public meetings with continuous field-level engagement. This approach ensured that information flowed in both directions from project institutions to communities and vice versa creating an inclusive and transparent decision-making environment.

The engagement process was guided by the principles of early disclosure, inclusivity, transparency, and respect for local governance structures, and it was conducted in close coordination with AWWDA, KIAWASCO, the County Government of Kiambu, and the National Government Administrative Officers (NGAO).

The process unfolded through the following steps:

1. Introductory Meetings

Prior to field consultations, the RAP and ESIA teams conducted introductory and courtesy meetings with the area Chiefs, Assistant Chiefs, and Ward Administrators in Lioki and Thindigua areas.

These meetings were essential for:

- Briefing local leaders on the project objectives, alignment, and scope of the RAP and ESIA studies;
- Seeking their guidance on appropriate venues, community entry protocols, and mobilisation strategies;
- Identifying local dynamics such as active resident associations, water committees, youth and women groups, and vulnerable populations; and
- Establishing communication channels for ongoing liaison and grievance reporting.

2. Public Barazas (Community Meetings)

Two public barazas were conducted in Lioki and Thindigua to provide project information and obtain community feedback. A total of 106 community members participated. The Lioki meeting was attended by 71 participants, comprising 45 men and 26 women, including five elderly participants classified as vulnerable. The Thindigua meeting was attended by 35 participants, comprising 22 men and 13 women, including two elderly participants classified as vulnerable. Overall, the meetings were attended by 67 men and 39 women, including seven elderly vulnerable participants.

TABLE 6-1: PUBLIC MEETING ATTENDANCE

Consultation area	Date	Male	Female	Total participants	Vulnerable participants—elderly
Lioki	5 th Nov 2025	45	26	71	5
Thindigua	29 th Oct 2025	22	13	35	2
Total		67	39	106	7

Each baraza was chaired by the area Chief and attended by representatives from AWWDA, KIAWASCO, and the RAP/ESIA consulting teams. The sessions provided a platform to:

- Present the background and objectives of the Northern Collector Tunnel (NCT) Last Mile Project – Lot 2;
- Explain the proposed water distribution routes and clarify that all works would remain within existing road reserves and public wayleaves;
- Discuss anticipated temporary impacts, mitigation measures, compensation principles, and project timelines;
- Introduce the Grievance Redress Mechanism (GRM) and how community members can lodge concerns; and
- Capture local expectations and recommendations for integration into project planning.

Mobilisation notices were disseminated through Chiefs' offices, Residents' Associations, and local WhatsApp and church groups several days before each meeting to guarantee wide participation.

3. Key Informant Interviews (KIIs)

To supplement the community-wide consultations, the team conducted Key Informant Interviews (KIIs) with selected leaders and technical actors who hold strategic insight or influence. Interviewed informants included:

- Chiefs and local leaders;
- The Member of County Assembly (MCA)
- Resident Association leaders
- KIAWASCO technical staff and engineers.

Six key informants were interviewed during preparation of the RAP. The interviewees comprised three men and three women.

TABLE 6-2: KEY INFORMANT INTERVIEWS

Consultation method	Male	Female	Total interviewed	Vulnerable participants
Key informant interviews	3	3	6	0

The KIIs helped capture governance perspectives, institutional challenges, and community expectations regarding water supply reliability, local employment, safety, and coordination with existing borehole operators. Insights from these interviews shaped the RAP's stakeholder engagement framework, institutional roles, and grievance management structure.

4. Feedback Documentation and Integration

All consultations were fully documented through detailed minutes, attendance registers, and photographs. Issues raised were classified thematically covering areas such as access management, compensation procedures, employment, safety, reinstatement, and communication.

6.5 Key Issues, Community Feedback and Responses

6.5.1 Thindigua area

As part of stakeholder engagement activities for the preparation of the Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP), a public participation meeting was held on 29th October 2025 at the Chiefs Camp, Thindigua Location, Kiambu County. The meeting brought together representatives from the Athi Water Works Development Agency (AWWDA), Kiambu Water and Sewerage Company (KIAWASCO), Consultant (Egis in JV with Losai), local administration, and community members.

The purpose of the meeting was to introduce the proposed Thindigua Water Reticulation Project, sensitize the community on its scope, and collect feedback on potential social and economic implications. Residents actively participated by asking questions, expressing concerns, and providing suggestions aimed at ensuring the project's smooth and inclusive implementation. The key issues raised, along with responses and agreed actions are summarized in the table below.

TABLE 6-3: SUMMARY OF ISSUES AND AGREED ACTIONS – THINDIGUA

Concern Raised	Response / Clarification Provided
Will the new water pipes be large enough to accommodate future demand and population growth?	KIAWASCO confirmed that the system design already factors in future expansion and population increase. It will operate on a gravity-fed mechanism, ensuring efficient water pressure and flow across all households. Pipe sizes are adequate for long-term service coverage.
When will the project commence, and when will the community start receiving water?	The Consultant explained that works will begin immediately after submission and approval of ESIA by NEMA and RAP reports by financier and client. The project team committed to fast-tracking approvals to ensure residents access clean and safe water promptly.

Will the new water tariffs be higher than existing ones, especially for those with meters?	The KIAWASCO representative clarified that tariffs are standardized and publicly accessible via the company's website. Domestic and commercial consumers are billed differently per the approved regulatory framework. No arbitrary increases will be introduced.
Will local people be considered for employment during project implementation?	The Consultant assured that local labour will be prioritized, with recruitment coordinated through the area Chief's office.
What happens if my fence or structures near the road are affected during pipe-laying?	The Consultant explained that the project will identify and reinstate any affected structures, pavements, verandahs and cabros to its initial state.
How will the community be informed of the upcoming RAP and ESIA field activities?	The Consultant stated that all RAP-related activities (enumeration and identification of affected persons) will commence immediately and the meeting serves as the key notice to the activities. The consultant team on ground will work with the community elders to ensure full participation and transparency.
General community perception of the project	After clarifications, the community expressed overwhelming support and appreciation for the project and pledged full cooperation during RAP and ESIA implementation.

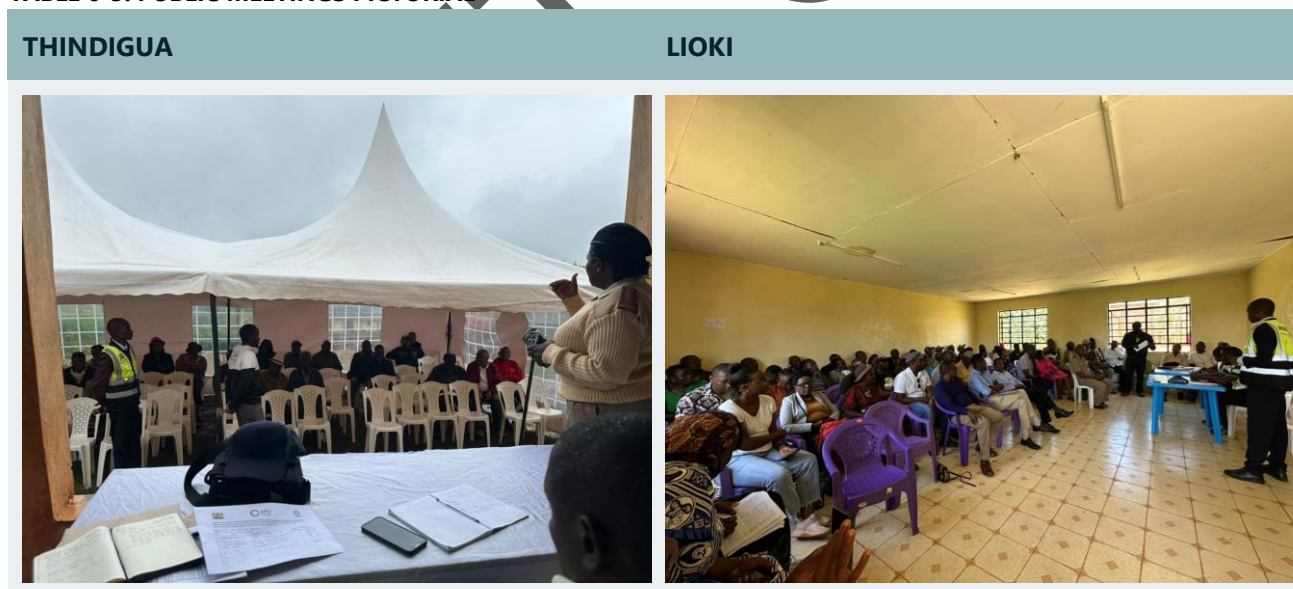
6.5.2 Lioki Area

TABLE 6-4: SUMMARY OF ISSUES AND AGREED ACTIONS – LIOKI

No.	Key Concern / Question	Response / Clarification Provided
1	What is the expected timeline for project commencement?	The Consultant clarified that construction will commence once the ESIA and RAP reports are approved by NEMA, the client and the financier and final engineering designs are completed. Preparatory work is already underway to ensure a timely start.
2	What is the source of water for the project?	The Consultant explained that water will be tapped from the existing main pipeline of the NCT and distributed.
3	What will be the community's role once the pipe is laid, and how will wayleaves be managed?	KIAWASCO explained that consumers will be responsible for meter ownership and individual connection applications. The RAP process will identify those that are affected within the wayleave. The consultant urged the community to own the project once its installed.
4	Will there be a water reservoir to improve supply reliability?	The Consultant clarified that no reservoir is included in the current project scope, but the system is designed for direct distribution to individual consumers.
5	Will billing be on a monthly subscription?	Water supply will be on an individual consumer billing system based on meter readings, ensuring accountability and fair usage charges.

6	What will be the applicable water rates per unit?	KIAWASCO confirmed that the applicable rates per unit will be available on the KIAWASCO website guided by WASREB. Consumers will be able to view monthly units consumed.
7	Concern about the current unsafe water leading to health issues.	The Community Health Volunteer reported that current sources are contaminated, causing waterborne diseases. She welcomed the proposed project as a critical intervention that will benefit households, schools, and hospitals.
8	Concern about bulk water payment system for estates.	Direct individual billing from KIAWASCO will be done and not Bulky billing to estates. This will protect the different consumers.
9	Employment opportunities for local youth during excavation works.	The Chief requested that local youth be given priority. The Consultant confirmed that local recruitment will be coordinated through the Chief's office during construction.
10	How will residents know about upcoming RAP activities?	The Consultant confirmed that all RAP field activities, including identification of Project Affected Persons (PAPs), will kickstart the next day after the public participation meeting.
11	General community perception of the project	After receiving clarifications, the community expressed strong support and appreciation for the project and its anticipated social benefits.

TABLE 6-5: PUBLIC MEETINGS PICTORIAL





6.6 SUMMARY-KEY INFORMANT INTERVIEWS

A summary of the Key Informant Interviews done in Lioki and Thindigua are presented in Table 6.6.

TABLE 6-6: KEY INFORMANT INTERVIEWS

Key Informant / Institution	Main Issues and Insights Raised
Chief, Thindigua – Jackline Wanjiru	- Highlighted that most areas in Thindigua experience severe water shortages, with some households receiving water only once a week. - Requested comprehensive community sensitization by KIAWASCO, as residents currently associate the company mainly with sewerage services, while water supply is known to be provided by NWSC. Residents therefore need clear communication that KIAWASCO will now handle both water and sewer services. - Emphasized that the project must ensure delivery of clean, safe, and reliable water to the community. - Recommended that the main schools and health institutions within Thindigua be prioritized for early connection.
Chief, Kamiti Location (Lioki) – Esther Wambui	- Requested that future planning also consider inclusion of sewer infrastructure, as the area faces serious sanitation challenges. - Reported a high prevalence of waterborne diseases due to reliance on contaminated river sources, leading to school absenteeism among children. - Recommended that the project provide a dedicated water connection to the Assistant Chief's office at Kamiti Sub-location, where a new National Government Administration Police Division Headquarters is under development.
MCA, Ting'ang'a Ward – Hon. Lawrence Mwaura	- Urged the project team to consider the unique demographic and topographic characteristics of the area, which vary significantly across the service zones.. - Opposed bulk water supply to estates, recommending individual metering and billing to avoid disputes and ensure accountability. • Noted that many residents currently depend on Kamiti River, which is highly polluted, and emphasized the urgency of the project.

**Purity Kiruri –
Mushroom Gardens
Residents Association**

**Kinuthia Peter –
Thindigua Residents
Association Chairman**

**Bernard –
Representative, Runda
Mhasibu Estate**

- Requested that the following key public institutions be prioritized for early water connection:–
 - ✓ ACK Kamiti Anmer Primary School with ECD
 - ✓ Kongo Primary School with ECD
 - ✓ Machiri Primary School with ECD
 - ✓ Upcoming ACK Kamiti Secondary School
 - ✓ Anmer Dispensary– St. Anne’s Lioki Dispensary
 - ✓ Upcoming Ndumberi Dairy at Kamiti Corner
- Recommended that AWWDA and KIAWASCO collaborate with Nairobi City Water and Sewerage Company (NCWSC) to utilize the existing water infrastructure already laid within Mushroom Estate instead of installing new pipelines.
- Cited the need to avoid additional costs to residents associated with installing feeder pipes from the central line to dispersed homes.
- Noted that the existing network has functioned effectively for over five years and could still serve the estate.
- Reusing the current system would minimize road disruptions and community inconvenience during works.
- Proposed that the main trunk line at the Kiambu–Mushroom Road junction (installed by NCWSC) be linked to the new AWWDA network to improve efficiency and integration.
- Requested that Thindigua Comprehensive School and ACK St. Mary’s School be prioritized for water connections as key community institutions.
- Advised that pipeline installation should remain within the furthest edge of the road reserve to avoid potential conflicts with future road expansion works.
- Noted that Thindigua’s varied topography with both high and low-lying areas should be carefully considered in the distribution design to ensure uniform water pressure and access.
- Informed the team that Runda Mhasibu currently relies on the main NWSC line, which adequately serves residents.
- Recommended that the proposed AWWDA line should augment and strengthen the existing system rather than duplicate it.
- Called for early coordination and consultation between NWSC and KIAWASCO before works commence to avoid service overlap or conflict.
-



FIGURE 6-1: KEY INFORMANT CONSULTATION-THINDIGUA

7 COMPENSATION AND RESETTLEMENT STRATEGY

7.1 Compensation Framework

The constitution allows for the National Government and County government to acquire land in the public interest. The assessment for compensation under this updated RAP is, therefore, statutory and all steps have been taken to comply with the statutory provisions.

According to the law in the constitution, the following PAPs will be eligible for compensation:

- a) *Those who have formal rights to land (including customary and statutory rights of occupancy recognized under Kenyan law);*
- b) *Those who do not have formal legal rights to land at the time of PAP census but have a claim to such land or assets provided that such claims are recognized under Kenyan laws, or become recognized through a process identified in the resettlement and compensation plan; and*
- c) *Those who have no claim to land they are occupying or using.*

There appears to be no legal basis for compensation for land, for PAPs along the Right of Way since the main impacts are partial destruction of property, minimized access to residential areas and business premises. The affected households are entitled to compensation for those whose physical assets will be impacted.

The individual PAPs impacted will be compensated for the portions of their verandahs or walls destroyed by the contractor.

7.2 Compensation Principles

The compensation principles to be followed are derived from the Kenyan national legislation and the best practices around the world on involuntary resettlement. These principles, including the valuation procedures, were all explained to the PAPs and other community members during the community dialogues and stakeholder consultations

- a) *Resettlement and compensation of PAPs will be carried out in compliance with relevant Kenyan laws.*
- b) *All PAPs physically or economically displaced shall be adequately, promptly and equitably compensated before the commencement of works at the project-affected sites. All efforts will be taken to provide necessary assistance for PAPs to restore their livelihoods.*
- c) *Special consideration will be given to disadvantaged and/or vulnerable people such as women, children, the very old and the disabled. Provision will be made to enhance their access to their compensation payments. For example, the consent of spouses and children where it applies shall be sought as a prerequisite for compensation payment, as provided by the Land Act (2012).*
- d) *The project will promote and provide compensation as an option for especially vulnerable groups and project affected community resources and facilities.*

7.3 Eligibility For Compensation

The concept of eligibility is used with respect to the definition of PAPs and the criteria for determining their qualification for compensation and other resettlement assistance.

7.3.1 Eligibility for Compensation and 'Cut-Off' Date

The project affected persons, irrespective of their status, are eligible for compensation if they occupied the land, have their assets on the land or engaged in any livelihood income-generating activity at the proposed

water distribution lines Right of Way sites before the entitlement 'cut-off date'. The entitlement 'cut-off' date refers to the time when the census and assessment of PAPs and their property in the project area commenced. This was explained to the community members and agreed with PAPs during community dialogues and the PAP census. Thereafter, no new cases will be considered for in kind compensation.

At the start of the asset and census survey, and in order to avoid an influx of additional persons, **cut-off date was established to be on 30th October 2025**

The cut-off date was well-advertised, through discussions with PAPs and local leaders, via chiefs' barazas. Those who encroach on the area after the established cut-off dates will not be eligible for assistance. The following categories are eligible for compensation:

- a) *People who will have limited access to houses/structures (commercial or residential) as a result of the proposed project activities.*
- b) *People who rent structures (tenants) in the set-out project area for operating businesses or kiosk, and whose kiosks are to be temporarily removed or relocated; (encroachers)*
- c) *People whose trees will be affected by acquisition of set-out project area or the physical project activity implementation; (encroachers)*

The list of the identified properties and owners (PAPs) is attached as in the Valuation Roll. During the community and public consultations, compensation process was explained to the PAPs and other stakeholders and **the preferred option was cash compensation.**

Both in principle and in the context of the Project, eligibility for compensation defines:

- Conditions for cash compensation for those on the ROW.
- Who is entitled to receive cash compensation, and who is not; and
- What evidence is expected in order to support a claim for cash compensation

These eligible losses and entitlements are elaborated in a detailed Entitlement Matrix.

7.3.2 Exclusion for Eligibility

As described in earlier section of this RAP, all involuntary displacement (resettlement) is eligible for cash compensation with the exception of four main categories of loss, which are explicitly classified as ineligible for compensation:

- Losses arising from loss of structures or activities in the ROW, or in any of the sub-project areas impacted by the Project, that post-date the cut-off date;
- Losses arising from loss of structures or activities outside the ROW
- Losses claimed on a fraudulent basis or by material misrepresentation of facts e.g. of identity, ownership, employment, or nature of asset or use of land.

7.3.3 Ownership Categories and Category of Losses

The categories of eligible losses and PAPs eligible for cash compensation are those experiencing permanent or temporary losses of the following assets:

- Residence (owner) of affected structures on the ROW
- Temporary owners (tenants) on the ROW

- Formal business premises/established enterprises in the project ROW
- Informal business within ROW (business operators or rent tenant) without County Government License to operate
- Crop/tree owners on the ROW
- Infrastructure (ancillary to a main structure that is unaffected, such as block wall, store, outhouse, latrine, well or borehole)
- Annual or perennial crops, trees

Thus, all eligible affected people are entitled to appropriate in kind compensation regardless of whether or not they have legal rights to the land. Eligibility for in kind compensation does not create or confer a right where none previously existed — e.g. it does not make legal the illegal occupation of land.

Assets are referenced throughout the document using the following descriptive terms:

- *Fixed or permanent, defined as a permanent structure with block and/or concrete foundations.*
- *Non-fixed, defined as a structure that is dug into the earth in some way, by poles, timbers, etc., but having no permanent block/concrete foundation*
- *Moveable-defined as an object which can feasibly be moved by hand by one or two people out of the ROW temporarily without the use of vehicles or other machinery (i.e. a blanket, box, table, stool etc.)*

Impacts are referenced throughout this updated RAP using the following descriptive terms:

- **Temporary Impact**-defined as an impact for which the duration is only expected to last until completion of construction activities
- **Permanent Impact**-defined as an impact which is expected to be permanent into the future as a result of the construction of the proposed infrastructure
- **Full Impact**-defined as an impact, which occurs to a structure in its entirety and no part of the structure, is expected to remain viable. This term is particularly applicable in cases where an exterior wall needs to be demolished, compromising the structural integrity of the structure as a whole.
- **Partial Impact**-defined as an impact, which occurs only to part of a whole structure in cases where the remainder of the structure is expected to remain viable. This term is particularly applicable in cases where an asset may be connected to a main structure but which is clearly structurally independent of the main structure.

7.4 Forms Of Compensation

7.4.1 Compensation

This RAP recommends to provide cash compensation for all PAPs. Reinstatement will be granted in this RAP for the walls, verandas, tarmac roads, and drainage systems as well so as to lower the RAP's cost. This was well explained during public consultation meetings and was agreed by all the community members present.

This RAP provides for the following in compensations:

- *Vehicular access from tarmac roadways:*
- *Public Latrines, boreholes and water points, for reasons of technical acceptability: The Project provides for continuity of service; technical standards have to be observed, and the risk must be mitigated that*

people may take the money and not replace the service (in-kind required). "In-kind" in this context and for Project purposes is interpreted to mean replacement of water supply and/or sanitation services, but not necessarily the replacement of the impacted asset.

- Cash compensation for individual/household PAPs whose portions of their properties are being impacted.
- *KPLC electricity poles*: The contractor in liaison with KPLC will work together to move the electricity poles back rather than provide monetary compensation to KPLC.
-
- Where feasible, the project shall prioritise reinstatement of affected assets to an agreed standard. Where reinstatement is not practical, the affected party may elect cash compensation at full replacement cost. Where the Contractor does the reinstatement, the works will be inspected and certified by supervising consultant and AWWDA prior to handover.

7.4.1.1 Perimeter Block Walls and Fences

The project will compensate/reinstate (where applicable) all the impacted properties and this includes walls, fences, verandahs, or other ancillary structures.

7.4.1.2 Cut-Off-Date

The cut off date was established to be as on **30th October 2025**.

The cut-off date were announced, through discussions and agreements with PAPs and local leaders, via chiefs' barazas. Those who encroach on the area after the established cut-off dates will not be eligible for assistance.

It is important to note that any structures or activities established in the project area after cut-off date will not be compensated but those who could have been mistakenly omitted from the census, will be reviewed against evidence, and referred to the GRM for resolution.

7.4.1.3 Entitlement Matrix

A summary of the entitlements is presented in the entitlement matrix, in the table below;

TABLE 7-1: ENTITLEMENT MATRIX

Impact	Affected Asset / Situation	Entitled Person	Compensation / Assistance
Partial loss of frontage structures	Section of perimeter wall, fence, steps, verandah, canopy, private drain/culvert, paving/cabro within reserve	Owner of affected asset	Cash at full replacement cost (materials, labour, fees/taxes, transport; no depreciation). Sequenced works + prompt reinstatement.
Temporary business disruption	Short-term closure or restricted access during trenching/backfill (3 days)	Business owner/operator (formal or informal) present by cut-off	Disturbance allowance (verified income loss) + access facilitation measures (ramps/planks, signage). Paid before works at frontage.
Temporary loss of access	Customers/residents cannot easily access premises during works	Owners and tenants	Access management (temporary crossings, signage, traffic marshals) +

			rapid reinstatement. No cash unless verified income loss.
Ancillary outbuildings	Small stores/sheds/steps/platforms structurally independent of main building	Owner	Cash at replacement cost or in-kind reinstatement where safer/faster.
Trees and crops	Trees/crops within the trench corridor/working width	Tree/crop owner (present at cut-off)	Cash per Kenya Forestry service/County schedules (replacement value). 7 days Advance notice to harvest annuals where feasible.
Public/shared utilities	Public latrines, standpipes, community water points	Community/County	In-kind reinstatement to approved technical standard; ensure continuity of service.
Encroachers (informal use of reserve)	Informal traders/kiosks within reserve impacted temporarily	Owner/operator present at cut-off	Disturbance allowance (verified) + access facilitation; no land compensation.
Utility assets (KPLC poles, telecom)	Conflicts with poles/cables in trench line	Utility companies	Relocation by coordination with utilities (no cash to utilities in RAP; handled under works/utilities MOUs).

7.5 RAP Disclosure and Communication to RAPs

Following approval of the RAP, AWWDA, with support from KIAWASCO, the Supervision Consultant, the local administration and community representatives, will undertake formal disclosure in Thindigua and Lioki. Disclosure will ensure that every Project-Affected Person (PAP) understands the project impacts, eligibility criteria, compensation entitlements, payment procedures, implementation schedule, livelihood restoration measures and the Grievance Redress Mechanism.

The RAP will be communicated to PAPs through the following measures:

- Community disclosure meetings:** Separate disclosure meetings will be conducted in Thindigua and Lioki at accessible venues. The meetings will explain the approved RAP, categories of impacts, compensation principles, construction schedule, livelihood restoration measures and grievance procedures.
- Direct notification of individual PAPs:** Each PAP will be contacted through telephone calls, SMS messages and, where practical, written notices delivered through the local administration. Notifications will indicate the date, time and venue of the disclosure and entitlement-verification meeting.
- Individual entitlement disclosure:** Each PAP will receive a confidential entitlement form indicating the affected asset or livelihood activity, assessed impact, valuation basis, compensation or reinstatement entitlement, applicable allowances, payment method and the process for raising a grievance. Individual compensation amounts will not be announced during public meetings.
- Disclosure of RAP documents:** Copies of the non-confidential RAP or its summary will be made available at the AWWDA and KIAWASCO offices and at the relevant Chief's and Assistant Chief's offices

in Thindigua and Lioki. Public notices will identify the locations where the documents can be reviewed. Personal information and individual compensation amounts will be excluded from publicly accessible copies.

5. **Accessible communication:** Information will be presented in English and Kiswahili and explained orally in a language understood by the affected communities. PAPs who cannot read or write will receive an oral explanation of their entitlements in the presence of a trusted witness of their choice.
6. **Support for vulnerable PAPs:** Elderly persons, persons with disabilities, chronically ill persons and other vulnerable PAPs will receive priority communication, home visits where necessary, assistance with documentation and support in completing payment requirements.
7. **Continuous construction information:** PAPs will be informed in advance of the expected commencement date, duration and location of works affecting their property, access or livelihood. Updates will be communicated through calls, SMS messages, local administrators, residents' associations, public notices and community liaison personnel.

All disclosure activities will be documented through attendance registers, signed entitlement-acknowledgement forms, copies of notices, photographs and telephone/SMS communication logs. Signing an acknowledgement form will confirm receipt and explanation of the entitlement but will not prevent a PAP from raising a grievance. No civil works will commence in an affected section until the PAPs in that section have received their compensation and applicable assistance.

The proposed communication approach is consistent with the existing institutional responsibilities assigned to AWWDA, KIAWASCO, local administrators, residents' associations and community organisations for disclosure, mobilisation and dissemination of project information.

7.6 Property Valuation Principles and Determination of Compensation Rates

Property valuation in Kenya is carried out by valuation professionals registered under the Valuers Act Cap. 532 of the laws of Kenya. A registered Valuer (with Valuers Registration Board) is a trained professional who has a thorough knowledge and understanding of the factors that create, maintain, or diminish values of real estate or assets. Valuation of assets is done in accordance with the Practice Statements and Guidance Notes published by the International Valuation Standards Committee (IVSC), adopted and recognized by international accounting standards and risk management professionals. This valuation for the entitlement in this RAP has been done by a Registered valuer. A copy of the valuers practicing licence is attached to this report.

7.7 Valuation Approaches

Generally, there are five methods of valuation of fixed assets that are relevant to the Kenyan market; (1) Cost Approach or Contractor's Method (2) Sales or Direct Comparison Method (3) Investment Method (4) Residual Method (5) Profits Method. Below is the brief description of the five traditional methods of valuation

7.7.1 Cost Approach or Contractor's Method

This approach is based on answering the question, "How much does it cost to build the same structure today?" It includes the cost of design plus other professional fees. This cost of replacement approach is sometimes referred to as the contractor's approach or contractor's test and is used mainly to value individual structures and machinery. All components of the impacted structure must be compensated for on a material by material basis. The data to come up with unit costs is normally obtained from hardware shops, quantity surveyors, contractors, government departments, and other sources as necessary. As this method requires descriptive data on the improvements being valued, the first step in the contractor's method is data collection. The second step is to determine an accurate cost estimate. Costs consist of all expenditures necessary to complete construction of a house or other building. They are either direct or indirect costs. Direct costs include materials

and unskilled labor, while indirect costs include skilled labor and the monetary cost of obtaining a building permit, registering the house with relevant government agency, and designing fees if hiring an architect to design the house. The usual practice is that of the use of the unit-in-place cost segregated method adopted when estimating replacement cost for a property or section of a property. This method expresses all direct costs of the structural component as units. The costs for building components, such as floors, roofing, and walling are expressed as cost per square meter. Different materials used in building one component have their own material unit cost. Percentage or lump-sum adjustments for features not included in comparative unit cost may be made with the unit-in-place method. This method is used to value properties where there is no general demand and thus for which comparable evidence is absent. If such properties are sold, the price required by the vendor would normally be the cost of construction plus the value of land for an alternative property. Therefore, this method requires estimates of the value of the land in its existing use and of the gross replacement cost of buildings and other site works from which appropriate deductions may then be made to allow for age, condition, economic or functional obsolescence and environmental and other factors which might result in the existing property being worth less than a new replacement.

7.7.2 Direct Comparison Approach

The direct comparison method of valuation is the most commonly used method when valuing residential properties in Kenya. This method involves the use of more than two comparable property transactions recently conducted within the same or similar geographical location to the subject property being valued. The direct comparison approach requires the following steps: data collection; analysis of market data to develop a group of properties for comparison; selection of attributes for adjustment; application of the approach to adjust the sales prices of comparable properties to the subject property; and analysis of the adjusted sales prices to estimate the value of the subject property. The direct comparison method assumes that the value of a property is arrived at by direct comparisons made with other similar available property transactions in the area or vicinity. Considerations are made with reference to location, accessibility, demand and supply positions, quality and standard of the built up structures, age and condition, and the prevailing economic and property market trends. Sale values are then analysed and processed to form units of value per square meter of the total external floor area of the buildings. These are then compared with the subject property on the same basis to arrive at an adjusted unit of value and apply the same to the subject property while allowing for similarities and dissimilarities accordingly. Comparable sales of properties can be extracted from the Ministry of Lands or obtained from the Kenya Revenue Authority's Stamp duty which is charged at 4% of any property transfer or from established property consultants/estate agents. Therefore, the availability of adequate comparable property transactions within a given location is key to adopting the comparative approach.

7.7.3 Investment Method — Income Approach

This method relies on capitalizing the annual income flow from a property to come up with the market value after outlays are deducted. It assumes that a secure income such as rent or other cash inflows are obtained either monthly, quarterly, or annually from the tenant who has the right to occupy the premises for an agreed period of time as enshrined in the lease agreement signed between the landlord and the tenant. The process of converting future income flows to present value capital sum is known as capitalization, which in essence is the summation of the future benefits each discounted to the present at an appropriate market-derived discount rate of interest. The success of this method requires appropriate and adequate data on rentals, yields, and outlays. This method of valuation is better for the valuation of commercial and industrial properties than for residential properties.

7.7.4 Residual Method/Development Method

This method is commonly used for properties that have development or redevelopment potential. Properties in question would be valued based on their worth after renovation or redevelopment, less the cost of the improvements. Since the values used would be based on estimates, the figure used would be more speculative than other methods as the supposed "development" or "redevelopment" would be a projection. The method

makes a number of assumptions and concerning costs of construction, design and monitoring, costs of securing and financing, and the anticipated developer's profit. The residual method is used for valuation of properties with latent value, which could be released by further development. It calculates the residual value, which essentially is the value that a prospective developer would be prepared to pay for the site aiding property development decisions by indicating the possible values of the development once completed and by providing a guide as to the likely profits. If the developer's profit is negative, then the proposed development is considered not viable.

7.7.5 Profits Method

This is used to value properties that derive their value on various factors, which combine to produce a potential level of business. In some instances, the factors are so unique that comparison with other similar properties is impractical. A filling station is an example of a property that is commonly valued using this method.

7.8 Choice of Valuation Methodology

The type and extent of the assets impacted, along with the principle that no PAP should be left worse off than they were prior to project implementation, determined the method of valuation for assets.

7.8.1 Permanent Structures and Other Improvements Assets

Buildings and structural works, fences, including chain link fences, cemented floors, permanent walls, iron walls, gates, and other permanent improvements are valued based on current 'replacement costs' of similar or equivalent structures. For, physical assets that will be partially damaged like verandas, walls and fences, the affected persons will be provided with an option for cash compensation.

7.8.2 Crops and Trees

The details of crops have been assessed and valuation/compensation rates based on replacement costs of similar or comparable trees and crops. The exact replacement costs have been drawn from Department of Agriculture and for trees Kenya Forest Services offices in Nairobi.

In situations where the farmer cannot be given sufficient notice to harvest his/her crop, compensation will be paid based on the market value of the non-perennial crop.

Compensation rates were calculated in compliance with the full replacement value principle, based on the following:

- *V: Average market value of the produce;*
- *D: Average period of time required to re-establish the tree to a mature production level, in years;*
- *CP: Cost of planting (seedling, soil preparation, initial fertilization);*
- *CL: Cost of the labor required to maintain the crop during the period of time needed to re-establish it to its previous production level.*

The compensation amount C is determined by application of the following formula:

The formula for the loss of seasonal crops is $C = V \times A$

Compensation for crops will be done on the basis of the requirements of Kenyan laws. Compensation of annual crops is according to the market value of the crop.

7.8.3 Semi-Permanent Buildings and Other Improvements

Buildings and other improvements (of a non-permanent nature) have been assessed using the replacement cost approach of similar or comparable structures and will be compensated for any that will be impacted during the works.

7.8.4 Valuation Approach adopted

Real estate valuation establishes a property's current market value and the price an investor or buyer should pay for it if the subject property were up for sale in an arm's length transaction. The main approaches to valuation include cost, income, and direct comparison. For our RAP valuation assessment, the cost approach whereby the valuer determines the amount it would take to rebuild, repair or replace a particular building was employed. The method is best suited as it is the most accurate in the quest to appropriate a budget to the contractor who will be requested to replace or rebuild any damaged property to indemnify the respective owners.

Land values for all concerns were neglected as they are all on public land/way leaves.

Disclaimer: Although the current design confirms that all works will take place within existing public road reserves and wayleaves hence no land acquisition is required; the RAP recognises that design adjustments or unforeseen site conditions may, during implementation, necessitate limited acquisition of privately held land. Should such circumstances arise, works at the affected location will be suspended until the impact is verified, affected owners and the National Land Commission (NLC) are formally notified, an independent ESS5-compliant valuation and entitlement assessment is undertaken, and all compensation or assistance measures are fully delivered prior to resumption of works. All procedures will be documented and communicated transparently through the established GRM.

- **Residential Houses**

In the valuation of any residential concerns, the most recent costs of constructions as per the Institute of Quantity Surveyors of Kenya handbook were applied. The values were adjusted to suit each property's current state of repair and maintenance from each subject property's current physical condition.

All subject properties were measured remotely via Google Earth to obtain an estimate plinth/built-up area covered by each property. Once the built-up area is ascertained, it's then multiplied by their respective rates of construction.

- **Perimeter walls/fences and gates**

For any perimeter walls and fences, their linear meter coverage was obtained then multiplied by specific rates depending on the quality and type of building materials. The cost of any gate's replacement is also dependent on the materials used and size.

- **Verandahs and Pavements**

For each part or whole veranda to be affected, a similar method to that of residential houses was applied. The area to be demolished is multiplied by the construction rate of verandas to obtain an estimate cost of replacement.

- **Kiosks and other Temporal structures**

For all temporal structures, a uniform rate of construction was used. However, values differed as the kiosks are also varied in terms of size. Most temporal structures nonetheless had similar types of construction materials being either corrugated iron sheets mounted on timber posts and frames, metallic sentry boxes or fully wooden.

8 LIVELIHOOD RESTORATION PLAN

8.1 Purpose and Approach

The LRP sets out practical measures to ensure that any temporary economic disturbance from trenching, laying, testing and reinstatement of the Thindigua/Lioki distribution mains is short-lived, fairly compensated, and effectively cushioned, so that Project-Affected Persons (PAPs) can return to (or improve upon) their pre-project income levels.

Key characteristics of Lot 2 that shape this LRP:

- All works are within existing public wayleaves/road reserves—no land acquisition is anticipated.
- Impacts are temporary and reversible (access, frontage structures, short-term business interruption).
- PAPs include formal and informal traders, frontage businesses, property owners/tenants, and a smaller number of asset owners with walls, verandahs, gates, or trees within the working strip.
- Cut-off dates will be announced per area (Thindigua/Lioki) immediately before enumeration; only persons/assets verified on or before each area's cut-off will be eligible.

The plan aligns with Kenyan law, AWWDA practices, and international good practice (replacement-cost compensation, vulnerability support, meaningful engagement, and verifiable monitoring).

8.2 Anticipated Impacts

Impacts below reflect what we expect to be affected;

Impact Category	Thindigua	Lioki	Total
Pavements/Gate Cabros/Verandahs	130	2	132
Livelihood disturbance	116	24	140
Institutional or community facilities affected	2		2
Structures	62	11	190
Trees/Crops/Flowersbeds	61	1	62
Total Estimated PAPs	371	38	

8.3 Vulnerability

Vulnerability in this RAP refers to people who, because of age, disability, chronic illness, household status (e.g., women-headed, child-headed), extreme poverty, or literacy barriers, may experience disproportionate hardship from even short construction disruptions.

Screening is built into enumeration and disclosure. Identified vulnerable PAPs will receive enhanced assistance (priority communication, assistance with documentation and mobile money setup, fast-track payment, guided access management during works, and in justified cases short bridge support for business restart).

TABLE 8-1: NUMBER OF VULNERABLE PAPs

Category of Vulnerable PAPs	Number of Households	Project Area
Elderly (≥ 70 years)	3	Thindigua (1), Lioki (2)
Women-headed households	5	Thindigua (4), Lioki (1)
Persons with disabilities	1	Lioki
Informal low-income traders	4	Lioki (3), Thindigua (1)
Elderly and very poor	3	Lioki (2) Thindigua (1)
Chronically ill	6	Lioki (3) Thindigua (3)
Total Vulnerable PAPs	22	

TABLE 8-2: PROPOSED SUPPORT MEASURES

Category of Vulnerable PAPs	Number of Households	Project Area	Proposed Support Measure
Elderly (≥70 years)	3	Thindigua (1), Lioki (2)	Priority assistance during disclosure, facilitation to and from meeting venues, and expedited compensation processing.
Women-headed households	5	Thindigua (4), Lioki (1)	Financial management guidance, joint verification with family or witnesses, and inclusion in local labour or awareness programmes.
Persons with disabilities (PWDs)	1	Lioki	Physical escort assistance, documentation and payment facilitation, and close follow-up through the GRM team.
Informal low-income traders	4	Lioki (3), Thindigua (1)	Provision of small business restoration kits (umbrella, display tables, signage) and prioritisation in temporary trading areas during works.
Elderly and very poor	3	Lioki (2), Thindigua (1)	Food and basic support packages during construction, guidance through compensation procedures, and monitoring of welfare post-payment.
Chronically ill	6	Lioki (3), Thindigua (3)	Coordination with local health facilities for continued access to care, fast-tracked payment processing, and household-level follow-up support.
Total Vulnerable PAPs	22	—	—

8.4 Livelihood Restoration

8.4.1 Proposed Programmes

Proposals for Programs to be implemented for LRP:

- Skill oriented training to enhance their skills and improve their livelihood opportunity (business skills, financial management)
- Specific skill training targeting women so they can support male counterpart in livelihood earning
- Vulnerable- additional support to involve them in other means of livelihood
- Employment opportunities as per the available skills and project limitations
- PAPs to be engaged in various awareness programs covering business opportunities

8.4.2 Budget

The budget estimate for the LRP is given in Table 8-3.

TABLE 8-3: LRP BUDGET

No.	Programme	Activity Description	Beneficiaries	Duration	Estimated Cost (KES)
1	In-kind support for vulnerable households	Small business kits (e.g., tables, umbrellas, stock boost)	22 households	6 months	300,000
2	Livelihood mentoring options &	Business advisory, savings sensitization, and small-group sessions	10 PAPs	1 year	250,000
3	Skills enhancement & local hiring	Short training on work safety, record-keeping, customer handling	50 youth & women	3 months	300,000
4	Awareness, communication & GRM operations	Public meetings, posters, hotline management	All PAPs	1 year	250,000
Total Estimated LRP Budget					1050,000

8.5 Institutional Arrangements

The main objective of developing the livelihood restoration plan is to ensure that the PAPs get adequate attention with regard to coming up with mitigative measures towards ensuring that their livelihoods are secured. In this way it is expected that their property, income, production capacity and standard of living will be improved, or at least restored to their former levels. The guiding principles for the implementation of the RAP will be as follows:

- Resettlement or relocation has been minimized by taking into consideration all possible alternative measures such as rerouting lines that would lead to costly damages;
- All other activities related to the LRP will be communicated in advance to the PAPs using the preferred channels of communication;
- Where grievances arise, the respective PAPs will be given an opportunity to be heard, fairly and promptly;
- Measures will be taken to ensure that vulnerable groups get special assistance and support; and where spousal and children consent is needed, the provision will be enforced.

8.6 LRP Implementation Arrangements

The project will put together a Project Implementation Unit which will undertake day to day implementation of the LRP by giving directions and guidance in all aspects of the LRP Implementation including reporting to both the KIAWASCO and the AWWDA.

The PIU will serve as the Implementing Unit for the LRP, with a team dedicated to carrying out the respective activities and coordinating with KIAWASCO and AWWDA for implementation of proposed activities.

The key implementation processes of the LRP require continuous presence in the project area and continuous communication with authorities, resettlement committees and affected people. The project sociologist will lead this exercise.

Regarding the implementation of the LRP, the PIU has the following responsibilities.

1. Communication and Coordination

- Overall coordination with KIAWASCO, AWWDA and local administration with regard to the Project's RAP issues
- Establishment and implementation of good and operational relations to affected communities to develop a Public Consultation plan
- Communication and cooperation with Grievance Redress Committees (GRC) as key actors with implementation processes (i.e monitoring, identification of vulnerable people)

2. Management of RAP Implementation

- Organize validation meetings with PAPs to confirm the details of the properties that will be affected.
- Ensure women, disabled and children concerns are well taken care of and incorporated in the proposed livelihood restoration measures.
- Ensure the grievance committees are established and working;
- Collect all the needed documentation for grievances and compiling them;

3. RAP Implementation Unit Structure

The day-to-day role of the LRP implementation team will demand:

- Plan and coordinate cash compensation such as special assistance to vulnerable groups;
- Ensure that the compensation process and entitlements adhere to legal provisions such as spousal and children's consent where it applies, and following the succession Act in case of the death of a PAP;
- Ensure that the information needs of the PAPs are disseminated promptly and effectively;
- Establish, manage and update the LRP implementation database;

4. Monitoring and Evaluation

To ensure effective implementation of the Livelihood Restoration Plan (LRP), both internal and external monitoring will be undertaken to assess its effectiveness and ongoing progress.

Internal monitoring will be undertaken by Athi Water Works Development Agency (AWWDA), although this responsibility may be delegated to an independent party. Monitoring will be continuous throughout LRP implementation, and progress reports will be prepared and submitted monthly. Consolidated quarterly RAP implementation and compensation progress reports will also be submitted to AFD throughout project implementation. The reports will document the implementation status of LRP activities, compensation progress, support provided to affected and vulnerable households, challenges encountered and corrective actions taken.

External monitoring will be undertaken by an independent consultant. The consultant will review and evaluate the implementation of the LRP and prepare a midterm evaluation report for submission to relevant

stakeholders, including the donor, client and affected communities. A final summary of LRP implementation will be included in the RAP Completion Report upon completion of the full RAP implementation as part of the project closure documentation.

The independent consultant undertaking the evaluation will have appropriate experience in livelihood restoration planning and monitoring the implementation of livelihood restoration programmes.

Since the proposed livelihood restoration measures have not yet been finalised and adopted by the client, it is not currently possible to provide detailed monitoring indicators. However, the following preliminary indicators will be used:

- Number and location of households that have received in-kind support;
- Type of in-kind support provided;
- Number of resource centres identified for training;
- Satisfaction levels with courses offered at the identified training centres;
- Number of livelihood options identified; and
- Relevance of the identified livelihood options.

9 GRIEVANCES MANAGEMENT SYSTEM AND PROCEDURE

9.1 Grievance Procedure and Rationale

This section describes the procedure and mechanism through which community members and PAPs will be able to report, make, place/lodge or express a grievance against the project and its staff or contractors as part of the RAP implementation. It also describes the roles and responsibilities of different structures in resolving grievances. A grievance is any dissatisfaction or sense of injustice or unfairness felt by a person – in this respect a PAP or his/her representative in connection with his/her compensation entitlements, the RAP implementation process, the project developer, the contractor and other scenarios related to project implementation. The grievance is usually brought to the attention of the person(s) in charge, referred to in this RAP as the Grievance Officer (GO)

This grievance procedure is intended to put in place and facilitate accessible, prompt and cost-effective handling of grievances at the nearest points of service to community members and the PAPs.

The aim and purpose of this system are to make the grievance handling procedures accessible, prompt and affordable to the PAPs given the generally low values of some of the properties to be affected, and also provide an alternative to the costly and time-consuming formal court procedures for handling grievances and disputes. The objective of the grievance handling systems and procedure is to establish for the PAPs mechanisms for raising complaints related to compensation for loss of land and other livelihood properties and assets and having such complaints resolved as amicably as possible through acceptable and binding corrective actions. This grievance management system will be in place during the whole implementation period, including the exit period.

9.2 Objectives of the GRM

The following are the objectives of establishing a GRM;

- To address complaints and grievances and enhance conflict resolution arising from, and during project implementation.
- Ensure transparency and accountability throughout the implementation of projects and programmes amongst the relevant stakeholders including project beneficiaries.
- Resolve any emerging environmental and social grievances in project areas.
- To promote relations between the project implementers, executors and beneficiaries.

9.3 Grievance Mechanism

The Grievance Mechanism is shown in Figure 9-1.

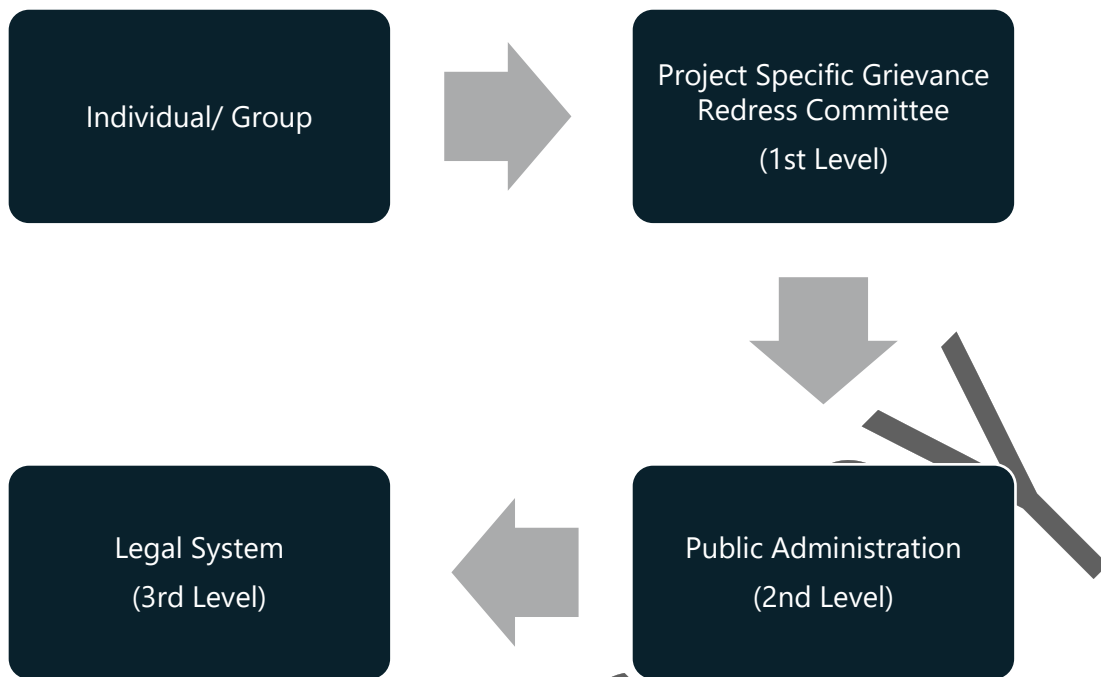


FIGURE 9-1: GRIEVANCE MECHANISM

Grievance management will provide three tiers of amicable review and settlement, with the first tier being domiciled within the project area. This will involve mediation by the GRC Committee members who will be based within the project area and will be easily accessible by any beneficiaries who have grievances to record. The members will include a male representative, woman representative, youth representative, religious representative, PWD representative, village elders and the local chief and sub-chief. The Committee will be chaired by the Sub Locational Chief.

The second level will integrate a **mediation committee** in case the grievance cannot be solved on the first level. This mainly involves the higher-level officers within the local administration. This committee will be chaired by the Assistant County Commission (ACC).

Finally, there will be the option for each complainant to resort **to court (third level)** in case there is no solution within the Project's grievance mechanism.

9.3.1 Grievance Mechanism Steps

First Level: Site Level (Village) Grievance and Resettlement Committees, this have been formed on every key area

This RAP prefers the first level of grievance or conflict redress on project related issues as a result of this project to be handled by the village elders and GRC committees. These committees will handle all forms of grievances in an amicable manner and as an alternative dispute resolution to formal process, which is normally lengthy and costly. Grievances not resolved by the site level committees will be taken to the second level.

In the affected sites as described above there will be a **Site –Level (Village) Resettlement and Compensation Committees** and the membership will include:

- *The sub locational chief-Chair*
- *Assistant chiefs,*
- *One project affected youth,*
- *One project affected woman,*
- *One project affected male*

- Religious representative
- A representative of vulnerable groups,
- Business representative.
- Ward Administrator representative
- Contractor representative (Works and Supervising Engineer)
- Contractors sociologist
- Consultant sociologist
- Or any other representation as may be deemed necessary by the community

Steps of the grievance process are described below.

1. Step 1: Receipt of Complaint/Grievance

A verbal or written complaint from a PAP or community member will be received by the Grievance Officer or an assigned contact officer in a given administrative jurisdiction/authority near to community level and recorded in a grievance log form.

A Grievance Officer (GO), who will be a staff of the supervising consultant or Contractor, will lead the grievance mechanism. Principal responsibilities of the GO will include:

- (a) Recording the grievances in grievance log form both written and oral, of the affected people, categorizing and prioritizing them and providing solutions within a specified time period.
- (b) Discussing grievances on a regular basis with the project coordinator and coming up with decisions/actions regarding issues that can be resolved at that level.
- (c) Informing the Project Coordinator of serious cases within an appropriate time frame.
- (d) Reporting to the aggrieved parties about developments regarding their grievances and the decisions of the PCU
- (e) Providing inputs into the monitoring and evaluation process.

The grievance team will hold meetings at **village level/ nyumba kumi level** where grievances are received by a contact person who would then hand over the received complaints to the GO, for entering into the grievance log form using the grievance form.

The grievance log form will indicate grievances, date opened/lodged, actions taken to address or reasons why the grievance was not acted upon (e.g. the grievance was not related to the resettlement process), information provided to complainant and date on which the grievance was closed.

Grievances can be lodged at any time, either directly to the GO based at the contractor's site office or the sub-county offices. The process of lodging a complaint is outlined below:

- a) The GO will receive a complaint from the complainant.
- b) The GO will ask the claimant questions in swahili language, write the answers in English and enter them in English onto the grievance form.
- c) The local leader (representative of an independent local civil society organization) and the complainant both sign the grievance form after they have both confirmed the accuracy of the grievance.
- d) The GO lodges the complaint in the grievance log.

2. Step 2: Determination of Corrective Action

If in their judgement, the grievance can be solved at this stage and the GO and a representative of a local independent civil society organization will determine a corrective action in consultation with the aggrieved person. A description of the action, the time frame within which the action is to take place, and the party charged with implementing the action will be recorded in the grievance database. Grievances will be resolved and the status reported back to complainants within 14 days. If more time is required, this will be clearly communicated and in advance to the aggrieved person. In cases that are not resolved within the stipulated time, detailed investigations will be undertaken and results discussed in the monthly meetings with the affected persons. In some instances, it may be appropriate to appoint independent third parties to undertake the investigations.

3. Step 3: Meeting with the Complainant

The proposed corrective action and the time frame in which it is to be implemented will be discussed with the complainant within **14 days** of receipt of the grievance. Written agreement to proceed with the corrective action will be sought from the complainant. If no agreement is reached, Step 2 will be revisited.

4. Step 4: Implementation of Corrective Action

Agreed corrective actions will be undertaken by AWWDA or the contractor within the agreed time frame. The date of the completed action will be recorded in the grievance database.

5. Step 5: Verification of Corrective Action

To verify satisfaction, the aggrieved person will be approached by the GO to verify that the corrective action has been implemented. A signature of the complainant will be obtained and recorded in the log (see Step 3). If the complainant is not satisfied with the outcome of the corrective action, additional steps may be undertaken to reach agreement between the parties. If additional corrective action is not possible alternative avenues may be pursued.

6. Step 7: Action by Grievance and Resettlement Committee

If the complainant remains dissatisfied and a satisfactory resolution cannot be reached, the complaint will be handled by the Grievance Committee. A dedicated Grievance Committee will be established to assess grievances that arise from disputes and membership will include:

- *One representative of the Sub-County Administration-Assistant County Commissioner; - National Government*
- *One representative of the Kiambu Water and Sewerage Company.*
- *One representative of Athi Water Works Development Agency.*
- *One representative of the construction contractor, acting as an observer*
- *Three representatives of the affected people, amongst them at least one woman, chosen i.e. from community based organizations, elders, traders.*
- *The resident engineer-Supervising consultant*

This committee must have a quorum of at least three persons. The Grievance Committee will be constituted for as long as grievances are being lodged.

Once the Grievance Committee has determined its approach to the lodged grievance, this will be communicated to the GO, who will communicate this to the complainant. If satisfied, the complainant signs to acknowledge that the issue has been resolved satisfactorily. If the complainant is not satisfied, however, the complainant notes the outstanding issues, which may be re-lodged with the Grievance Committee or the complainant may proceed with judicial proceedings.

7. Step 9: Alternative Action/Judicial Recourse and National Land Commission

In case this mechanism will not allow an amicable agreement to be reached, the complainant or the defendant can resort to seek hearing from National Land Commission (and could at any time).

The Land Act 2012 and National Land Commission Act 2012 obligate the NLC to manage grievances and disputes related to resettlement or land amicably. NLC will be expected to arbitrate or negotiate with PAPs or landowners that have any grievances concerning their compensation. The cascading structures they put in place are also expected to take up this responsibility.

TABLE 9-1 : GRIEVANCE HANDLING TIMELINES

Step	Grievance-handling activity	Timeline
1. Receipt and registration	The Grievance Officer receives the complaint, records it in the grievance log and provides acknowledgement to the complainant	Immediately, or within 2 calendar days of receipt
2. Assessment and determination of corrective action	The complaint is assessed, relevant information is verified and a proposed corrective action is identified	Within 7 calendar days of receipt
3. Meeting with the complainant	The proposed corrective action and implementation timeframe are discussed with the complainant	Within 14 calendar days of receipt of the grievance
4. Implementation of corrective action	AWWDA, KIAWASCO or the Contractor implements the agreed corrective action	Within the agreed timeframe, normally not exceeding 14 calendar days after agreement
5. Verification and closure	The Grievance Officer confirms with the complainant that the corrective action has been implemented satisfactorily and records closure	Within 3 calendar days after implementation
6. Review by the Grievance Committee	Unresolved grievances are referred to the Grievance Committee for further review and determination	Within 14 calendar days of referral
7. Appeal or external recourse	Where the complainant remains dissatisfied, the matter may be referred to the National Land Commission or the courts	The complainant may escalate the matter immediately after receiving the Committee's decision; external statutory timelines will apply

Where a grievance cannot be resolved within the stated period because of its complexity, the complainant will be informed in writing or verbally before the deadline, provided with the reason for the delay and advised of the revised resolution date. The status of all unresolved grievances will be reviewed during RAP implementation meetings

9.4 Capacity-Building Grievance Committee

The Grievance Committee members will be oriented with the grievance management system suggested in the RAP and provided with skills to handle complaints in a just and fair manner. The capacities of the Grievance

Redress Committee members will also be enhanced around conflict identification, conflict information analysis and conflict resolution as regards land disputes.

9.5 Other Alternatives

The other alternative recourse suggested as a last resort is for the complainant to seek redress in formal courts of law. The constitution establishes the Land and Environment Court (high court) and empowers this court to determine disputes relating to the amount of compensation to be paid for land acquired compulsorily in the public interest.

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10 IMPLEMENTATION OF THE UPDATED RAP

10.1 Rap Implementation Principles

The main objective of resettlement and compensation are to ensure that the PAPs get fair and prompt compensation. In this way it is expected that their property, income, production capacity and standard of living will be improved, or at least restored to their former levels. The guiding principles for the implementation of the RAP will be as follows:

- *Resettlement or relocation has been minimized by taking into consideration all possible alternative measures;*
- *Ensure the details of the impacted properties are well captured both before and after project implementation*
- *All other activities related to the RAP will be communicated in advance to the PAPs using the preferred channels of communication;*
- *Where grievances arise, the respective PAPs will be given an opportunity to be heard, fairly and promptly;*
- *Measures will be taken to ensure that vulnerable groups get special assistance and support; and where spousal and children consent is needed, the provision will be enforced.*

10.2 Rap Implementation Arrangements

The project will put together a Project Implementation Unit which will undertake day to day implementation of the RAP by giving directions and guidance in all aspects of the RAP Implementation including reporting to AWWDA.

The PIU will serve as Resettlement Implementing Unit for the RAP, with a team dedicated to carrying out the respective activities and coordinating with AWWDA for actual provision of compensation funds.

The key implementation processes of the RAP require continuous presence in the project area and continuous communication with authorities, resettlement committees and affected people. The project sociologist will lead this exercise.

Regarding the implementation of the RAP, the PIU has the following responsibilities.

Communication and Coordination

- *Overall coordination with KIWASCO, AWWDA and local administration with regard to the Project's RAP issues*
- *Establishment and implementation of good and operational relations to affected communities to develop a Public Consultation plan*
- *Communication and cooperation with Grievance Redress Committees (GRC) as key actors with implementation processes (i.e. compensation process, monitoring, identification of vulnerable people)*

Management of RAP Implementation

- *Organize validation meetings with PAPs to confirm the details of the properties that will be affected.*
- *Ensure women, disabled and children concerns are well taken care of and incorporated in the proposed livelihood restoration measures.*
- *Ensure the grievance committees are established and working;*
- *Collect all the needed documentation for grievances and compiling them;*

RAP Implementation Unit Structure

The day-to-day role of the RAP implementation team will demand:

- i. *Plan and coordinate compensation such as special assistance to vulnerable groups;*
- ii. *Ensure that the compensation process and entitlements adhere to legal provisions such as spousal and children's consent where it applies, and following the succession Act in case of the death of a PAP;*
- iii. *Ensure that the information needs of the PAPs are disseminated promptly and effectively;*
- iv. *Establish, manage and update the RAP implementation database;*
- v. *Contribute to the regular monitoring and evaluation of the RAP implementation; and*
- vi. *Consult and sensitize the community and PAPs with regard to the RAP implementation progress.*

10.3 Payment Procedures

10.3.1 Cash Compensation

AWWDA is responsible for cash compensation for all the PAPs who qualify.

10.3.2 Schedule of Implementation

The day-to-day coordination of the schedule will be done by the Supervision Consultant, and operational support from KIAWASCO, local administration, and the County Government. The implementation schedule will include:

- a) *the timetable for special assistance to vulnerable groups;*
- b) *the link between the RAP activities to the implementation of the overall sub-project components.*

RAP compensation will be implemented progressively by work section or site, aligned with the Contractor's approved works programme and the availability of counterpart funding allocations within each financial year. The PIU will maintain a rolling implementation and site-release schedule linking each planned work section to the affected PAPs, applicable entitlements, funding status and planned construction date. Monitoring and grievance management will continue throughout the RAP implementation cycle.

AWWDA will maintain a compensation-tracking register and review it weekly during RAP implementation. No work section, site or frontage will be released to the Contractor until all PAPs affected by that section, site or frontage have been fully compensated and any applicable assistance has been provided. Where payment is delayed by succession, ownership, legal, or administrative matters beyond the Agency's control, the PAP's entitlement will be secured and processed upon resolution.

10.3.3 Risks to Timely Compensation and Contingency Measures

AWWDA will maintain a compensation-tracking register and review it weekly during RAP implementation. Where compensation is delayed, the PAP's approved entitlement will remain valid and will not be reduced or cancelled. No works affecting the PAP's property, access or livelihood will commence until compensation and any applicable assistance have been provided.

TABLE 10-1: KEY RISKS TO TIMELY COMPENSATION

Key risk that could delay compensation	Preventive or corrective measure	Treatment of compensation
Incomplete identification, ownership, tenancy or payment documents	Verify documents during entitlement disclosure, provide each PAP with a document checklist and assist vulnerable PAPs to complete the requirements	The approved entitlement will be reserved and paid immediately after verification. Works affecting the PAP will not commence before payment
PAP is absent, has relocated or cannot be contacted	Trace the PAP through telephone calls, SMS, alternative contacts, local administrators and residents' representatives, while documenting all attempts	The compensation amount will remain earmarked for the PAP. The affected site or frontage will not be released for works until the PAP is located, verified and compensated.
Dispute over ownership, affected assets, eligibility or valuation	Conduct joint verification, review the census and asset register, undertake valuation review where necessary and refer unresolved cases to the GRM	The disputed entitlement will remain protected and processed upon resolution.
Delay in approval or release of RAP funds	Prepare a rolling funding forecast aligned with the Contractor's approved works programme and secure or earmark the compensation funds required for each upcoming work section before that section is released. Review fund availability weekly and resequence works where necessary.	No affected work section or site will be released to the Contractor until the required funds are available and all PAPs affected in that location have been compensated. Valuations will be updated where delays materially affect replacement cost.
Design changes or identification of additional eligible PAPs and impacts	Stop works in the affected location and undertake supplementary census, asset verification and valuation	Newly confirmed eligible PAPs will receive the same compensation and assistance applicable to comparable impacts before works begin

10.4 RAP Budget

The total budget for the in kind compensation implementation of the RAP compensation is **KES 7,821,055** only, inclusive of compensation costs for partially impacted physical assets, disturbance costs, contingency and administration costs.

TABLE 10-2: RAP BUDGET

Item	KES
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Value of the property that will be impacted. *(to be included in the Contractor's BoQ at replacement cost)* 3,281,555

Disturbance Allowance *(amount to be paid to PAPs, especially business owners—who are inconvenienced during works)* 2,709,500

Administration Costs *(includes facilitation of GRC/GRM during construction, RAP administration & disclosure logistics, basic M&E, and LRP delivery support)* 1,830,000

Total **7,821,055**

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11 MONITORING, EVALUATION SYSTEM AND RAP COMPLETION AUDIT

The purpose of monitoring and evaluation is to report on the effectiveness of the implementation of the RAP, and the outcomes and impact of compensation on the PAPs in relation to the purpose and goals of the RAP. This section describes the Monitoring and Evaluation (M&E) system for the RAP and describes the parameters and associated indicators to be monitored, and the monitoring milestones and resources, including the persons or institutions responsible for carrying out the monitoring activities. PMU's Monitoring Officer will be part of the RAP implementation team.

11.1 General Objectives of M&E

The general objective of the M&E system is to provide a basis for assessing the overall success and effectiveness of the implementation of the resettlement and compensation processes and measures. A number of objectively verifiable indicators (OVIs) will be used to monitor the impacts of the compensation and resettlement activities. These indicators will be targeted at quantitatively measuring the physical and socio-economic status of the PAPs, to determine and guide improvement in their social wellbeing. The following parameters will be used to guide the measurement of the RAP performance:

- a) *Each PAP household will have a digitized compensation file/record indicating his/her background situation before the in kind compensation. The file will contain personal information, affected asset, the in kind compensation agreed upon, the physical relocation/resettlement. This data will be entered into a database for comparative analysis at all levels;*
- b) *The mode of in kind compensation preferred by PAPs and used by the PIU;*
- c) *The use of other resettlement assistance by PAPs;*
- d) *The grievance handling outputs and outcomes for respective PAPs, if any;*
- e) *The number of grievances raised by the PAP and the time and quality of resolution;*
- f) *PAPs' ability to re-establish their livelihood activities and property, including alternative incomes; and*

The M&E will be undertaken at two levels:

- a) *Internal monitoring: This will be undertaken regularly by the PIU/Monitoring Officer; and,*
- b) *External evaluations (or end-time of RAP implementation): Evaluation will be necessary in order to ascertain whether the livelihood and income restoration goals and objectives have been realized.*

11.2 Monitoring the Compensation Process

11.2.1 Internal Monitoring Issues

The effectiveness of the RAP implementation process and activities will be monitored through internal monitoring. This will be undertaken by PIU.

Internal monitoring will be thematically carried out to ensure that all the impacted properties are reinstated as directed and the vulnerable groups are given specialized attention during project implementation, which the M&E officer should pay attention to, as summarized in the below:

TABLE 11-1: INTERNAL MONITORING

Thematic periods			
Resettlement period	compensation	payment	Post-resettlement compensation payment period
1.	Number of PAPs whose properties have been satisfactorily compensated.		1. Number of PAPs who have received compensation.
2.	Number of PAPs who have registered grievances with GO		2. Number of PAPs who have registered their grievance with Grievance Officer
3.	Number of PAPs whose grievances have been resolved		3. No of PAPs whose grievances have been resolved or otherwise,
4.	Number of vulnerable PAPs or groups identified and assisted during compensation		4. Number of vulnerable groups assisted and restored livelihood enterprise and assets.

11.2.2 Roles and Responsibilities

The roles and responsibilities of the Monitoring entity must be seen to directly contribute to the objectives of the internal monitoring process. The roles and responsibilities will involve:

- i. Setting up a system to collect on a monthly basis basic demographic and livelihood data about PAPs and having this data entered into a database for M&E;
- ii. The identification and improvement of indicators to measure the RAP performance;
- iii. The measurement of indicators at appropriate intervals;
- iv. Collecting and analyzing M&E data against pre-compensation baseline information to be able to track and isolate changes in the livelihoods of the PAPs;
- v. Setting up a system to enable the PIU to use M&E findings to improve or modify existing implementation measures or processes;
- vi. Maintaining in good order and regularly updating the M&E database;
- vii. Receiving information from other officers in the PIU, from the general community, from technical and political officers from sub-counties;
- viii. Giving feedback to other officers at AWWDA, stakeholders and representatives through monthly reports and consolidated quarterly reports to AFD;
- ix. Training and supervising locally recruited enumerators to collect data from the PAPs; and
- x. Undertaking specialized assessments for vulnerable PAPs and suggesting necessary interventions for such groups.

11.3 Monitoring Indicators

The relevant monitoring indicators against which to measure the RAP implementation effectiveness are presented in the table below. A monitoring form will be used for this purpose.

TABLE 11-2: PROPOSED MONITORING INDICATORS

Activity/Parameters	Indicators
Reinstatement of impacted individual/household, institutional and community/public assets	Number of PAPs with Verandahs, Walls and Fences who have been compensated to their satisfaction. Number of PAPs satisfied with the compensation offered
Community participation and public engagement	Number of disclosure meetings organized during the implementation of the RAP
Grievance management	Number of grievances received Number of grievances resolved promptly (in allowed time) Number of grievances not resolved in time but completed Number of outstanding grievances not resolved and why Number of grievances referred to KIAWASCO and AWWDA. Nature of outcomes from referred grievances, i.e. outstanding and why, or resolved

11.4 External Evaluation

AWWDA will initiate the process of external evaluation in collaboration with the PIU. To avoid conflict of interest, the external evaluation will be undertaken by an external evaluation agency. The external evaluation will also be thematically undertaken at two levels and will examine the RAP implementation effectiveness and outcomes.

11.5 RAP Completion Report

AWWDA will at the end of the RAP implementation submit a final report to the French Development Agency. The final report will indicate the effectiveness of the RAP implementation process, including: the organization and delivery of compensation payments and other resettlement measures; the grievance handling system; the M&E system; the community and public engagements, including vulnerable groups; and the socio-economic impacts of the resettlement measures. The final report will give an overall assessment of the RAP outputs against inputs indicating the planned activities completed and not completed as well as the lessons learnt during the RAP implementation.

11.6 RAP Completion Audit

The completion audit is intended to verify the results of the RAP implementation indicators, and to assess whether the RAP implementation achieved the resettlement objectives. A specific question for the final audit is whether livelihood and living standards have been restored or enhanced. If the answer is positive, then the RAP implementation will be completed. The RPF notes that the audit will also assess the efficiency, effectiveness, impact and sustainability of the RAP sub-project activities and document the lessons learnt for

application to future sub-projects or other projects in the sector and in the country. Finally, the completion audit will ascertain whether the resettlement entitlements were appropriate. AWWDA will submit the completion audit report to the French Development Agency for review and appropriate action.

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Annex 1: Public Consultation Meetings and Attendance Lists

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Annex 3: Satisfactory Re-instatement Form

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Annex 7: Grievance Log

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