MINISTRY OF WATER, SANITATION AND IRRIGATION

ATHI WATER WORKS DEVELOPMENT AGENCY (AWWDA)

NATIONAL URBAN WATER SUPPLY AND SANITATION PROGRAM

MURANG'A CLUSTER WATER AND SEWERAGE PROJECT

RESETTLEMENT ACTION PLAN (RAP)

JULY, 2024

CONSULTANT

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FACT SHEET

PROJECT NAME	National urban Water Supply and Sanitation Program - Murang'a Cluster Water and Sewerage Project.
ASSIGNMENT NAME	Consultancy Services for Design and Construction Supervision of Murang'a Cluster Water and Sewerage Project.
RAP REPORT	Resettlement Action Plan for Murang'a Cluster Water and Sewerage Project.
IMPLEMENTING AGENCY	Athi Water Works Development Agency (AWWDA).
FUNDING AGENCIES	Government of Kenya through a loan from African Development Bank.
CONSULTANTS	Losai Management Ltd.
START DATE	February 2024
COMPLETION DATE	21 March,2024
TEAM LEADER	Eng. Lawrence Mwangi
TARGET SETTLEMENTS	Thithi, Githingiri, Maragua, Weithega, Murang'a, Kawariua, Kanyenyaini, Chomo, Rwegetha, Chathanda, Kenol, Kabati, Rwathia

SUBMISSION DETAILS

Certificate of Declaration and Document Authentication

This Resettlement Action Plan (RAP) for **Murang'a Cluster Water and Sewerage Project** has been prepared under **Consultancy Services for Design and Construction Supervision of Murang'a Cluster Water and Sewerage Project** by Losai Management on behalf of Athi Water Works Development Agency (AWWDA).

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Signed: Date : July 2024

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LIST OF ACRONYMS

AfDB	African Development Bank
AIDS	Acquired Immune Deficiency Syndrome
AWWDA	Athi Water Works Development Agency (AWWDA)
Consultant	Losai Management Limited
CBO	Community-Based Organization
CG	County Government
CGRC	Community Grievance Redress Committee
DCC	Deputy County Commissioner
ESIA	Environmental Social and Impact Assessment
EMSF	Environmental and Social Management Framework
EMCA	Environmental Management and Coordination Act
FGD	Focused Group Discussions
GOK	Government of Kenya
GO	Grievance Officer
GRC	Grievance Redress Committee
HIV	Human Immunodeficiency Virus
HDPE	High-Density Poly Ethylene
ICT	Information and Communications technology
KeNHA	Kenya National Highways Authority
KeRRA	Kenya Rural Roads Authority
KURA	Kenya Urban Roads Authority
MCA	Member of County Assembly
MUSWASCO	Murang'a South Water and Sanitation Company
MoPW	Ministry of Public Works
MOWIS	Ministry of Water and Sanitation
M& E	Monitoring and Evaluation
NGO	Non-Governmental Organization
NLC	National Lands Commission
PA	Project Area
PAPs	Project Affected Persons
PMU	Project Management Unit
RAP	Resettlement Action Plan
RIC	Resettlement Implementation Committee
RC	Resettlement Committee
WASREB	Water Services Regulatory Board
WRA	Water Resources Authority
WSPs	Water Service Providers

SPA	Service Providers Agreement
STP	Sewerage Treatment Plant

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GLOSSARY OF TERMS

The following terms are used in this RAP, and shall have the following meanings unless stated otherwise. Other important concepts as used have been defined inside the text where they apply.

Resettlement Action Plan (RAP): A public document which specifies the procedures and actions to be undertaken to mitigate adverse effects, compensate losses, and provide development benefits to project affected households. RAP is recommended for less than 200 PAPs.

Compensation: Money or payment in kind to which affected people are entitled in order to replace a lost asset, resource or income.

Compulsory acquisition: means the power of the State to deprive or acquire any title or other interest in land for a public purpose subject to prompt payment of compensation;

Census: is a data collection technique of completing enumeration of all PAPs and their assets through household questionnaire. Census's objectives are; to prepare a complete inventory of PAPs and their assets as a basis for compensation, to identify non-entitled persons, and to minimize impact of later influx of "outsiders" to project area.

Cut – off date: Date of completion of the census and assets inventory of persons affected by a project. Persons occupying the project area after the cut-off date are not eligible for compensation or resettlement assistance.

Displaced persons: Persons who are affected by the involuntary taking or clearing of land or resulting in:

Relocation or loss of shelter

(i) Loss of assets or access to assets; or

(ii) Loss of income sources or means of livelihood whether or not the affected persons must move to another location.

***Entitlement*:** Range of measures comprising compensation, income restoration, transfer assistance, income substitution, and relocation that are due to affected people, depending on the nature of their losses, to restore their economic and social base.

Freehold: means the unlimited right to use and dispose of land in perpetuity subject to the rights of others and the regulatory powers of the national government, county government and other relevant state organs;

Grievance Redress procedures: set out the time frame and mechanisms for resolutions of complaints about resettlement from PAPs. Grievance redress can be provided through informally-constituted local committees with representation from key stakeholder groups. Grievances can also be addressed through formal channels, with unresolved grievances being dealt with at progressively higher levels.

Income restoration/Livelihood restoration: Re-establishing the incomes sources and livelihoods of affected people

Rehabilitation: Re-establishing incomes, livelihoods, living and social systems

Involuntary resettlement: Resettlement is involuntary when it occurs involves the displacement of people arising from development projects such as, water projects, bridges, national parks, and roads which encroach on their productive assets, cultural sites and income sources, land, grazing fields, other assets, etc. This is usually necessity for people affected by a development project to relocate and to rebuild their lives, incomes and asset bases elsewhere.

Land: Agricultural and/or non-agricultural land and any structure thereon whether temporary or permanent and which may be required for the project.

Land expropriation: Process whereby a public authority, usually in return for compensation, requires a person, household, or community to relinquish rights to land that it occupies or otherwise uses.

Land acquisition: The taking of or alienation of land, building or other assets thereon for purposes of the project activities implantation.

Disturbances allowance: Refers to the 15% additional cost to the total sum of compensation on affected assets (Crops, trees and structures), business and Land of a Project affected person.

Project affected households (PAHs): A household that is affected if one or more of its members either is affected by sub-project activities, by loss of property, land, loss of access, or otherwise affected in any way by the implementation of the project activities.

Project-affected person: Any person who, as a result of the implementation of a project, loses the right to own, use, or otherwise benefit from a built structure, land (residential, agricultural, or pasture), annual or perennial crops and trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily, business, occupation, work, place of residence or habitat adversely affected; or standard of living adversely affected.

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

Resettlement Policy Framework (RPF) is an instrument to be used throughout the Program implementation. The RPF sets out the resettlement objectives and principles, organizational arrangements and funding mechanisms for any resettlement that may be necessary during implementation. The RPF guides the preparation of Abbreviated Resettlement Action Plans of individual sub projects in order to meet the needs of the people who may be affected by the project.

Resettlement Action Plan (RAP): A time-bound action plan with a budget, setting out resettlement strategy, objectives, options, entitlements, actions, approvals, responsibilities, monitoring and evaluation. a document in which the project sponsor or other responsible entity specifies procedures that it will follow and the actions that it will take to mitigate adverse effects, compensate losses, and provide development benefits to persons and communities affected by an investment project.

Replacement cost: is the method of valuation of assets that helps determine the amount sufficient to replace lost assets and cover transaction costs for:

(i) Agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes.

(ii) Land in urban areas, it is the pre-displacement market value of land of equal Size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.

(iii) Houses and other structures, it is the market cost of the materials to build a **Replacement structure** with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset.

Resettlement assistance: Support provided to people who are physically displaced by a project. Assistance may include transportation, food, shelter, and social services that are provided to affected people during their relocation. Assistance may also include cash allowances that compensate affected people for the inconvenience associated with resettlement and defray the expenses of a transition to a new locale, such as moving expenses and lost work days.

Stakeholders: Those who have an interest in project development and who will be involved in the consultative process, and includes any individual or group affected by, or that believes it is affected by the project; and any individual or group that can plan a significant role in shaping or affecting the project, either positively or negatively, including the host community/population.

Socio-economic survey: is carried out in order to prepare profile of PAPs and to prepare for Basic Resettlement Plan. About 20 percent sample of PAPs population is surveyed through household questionnaires.

The survey results are used: -

(i) To assess incomes, identify productive activities, and plan for income restoration,

(ii) To develop relocation options, and iii. To develop social preparation phase
for vulnerable groups.

Squatter/encroacher: means a person who occupies land that legally belongs to another person without that person's consent.

Sewerage-This is the infrastructure that conveys *sewage* or surface runoff (storm water, melt water, rainwater) using *sewers*. *Sewerage* ends at the entry to a *sewage* treatment plant or at the point of discharge into the environment.

Valuation: the art or science of establishing the value (worth) of a particular interest in property for a specific purpose and at a particular moment in time; taking into considerations all the features of the property and considering all the underlying factors of the market.

Vulnerable Groups**:** People who by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status may be more adversely affected by resettlement than others and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits.

Way leave: A Right of Way (RoW) over the land of another. This RoW is for carrying sewer, drain, power line or pipeline into, though, over or under any lands but in so doing may interfere with the existing buildings

EXECUTIVE SUMMARY

The Government of Kenya, through Athi Water Works Development Agency has proposed to develop water supply and sewer systems within Muranga County. The proposed project include detailed design of water works, preparation of Resettlement Action Plan and Environmental and Social Impact Assessment studies and preparation of tender documents.

African Development Bank (AfDB) is financing the proposed water Project. This summary therefore provides highlights on the project description; the project location and affected sites; objectives of Resettlement Action Plan; public consultations; legal and institutional framework; social economic survey and PAP census; eligibility criteria; potential impacts and mitigation measures; income restoration program; implementation arrangements; implementation process; RAP implementation activities and schedule; grievance redress mechanism; costs and budget; monitoring and evaluation; and conclusions and recommendations(commitments).

E-1: Compensation Summary Sheet

COMPENSATION SUMMARY SHEET		
	Variables	Data
A. General		
	Region / Province / Department	Murang'a County
	Municipality / District	Gatanga, Maragua, Murang'a, Kangema -Kangari
	Village / Suburb	Thithi, Githingiri, Maragua, Weithega, Murang'a, Kawariua, Kanyenyaini, Chomo, Rwegetha, Chathanda, Kenol, Kabati, Rwathia
	Activity (ies) that trigger resettlement	(Construction of water storage tanks, Water and Sewer lines, intake works, Construction of WTP(s) and STP(s)
	Project overall cost	Ksh. **2,783,954,520.00** **(VAT Inclusive**)

	Overall resettlement cost (KSH)	**Ksh. 152,271,888.03**
	Applied cut-off date (s)	March 20, 2024 and March 22, 2024
	Dates of consultations with the people affected by the projects (PAP)	Between 13th February 2024 to 14th May 2024
	Dates of the negotiations of the compensation rates / prices	16th April to 14th May 2024
B. Specific information		
	Number of people affected by the project (PAP)	200
	Number of physically displaced	2
	Number of economically displaced	196 (4 are Public Institutions)
	Number of affected households	64
	Number of females affected	59
	Number of vulnerable affected	16
	Number of major PAP	64
	Number of minor PAP	136
	Number of total right-owners and beneficiaries	196 (4 are Public Institutions)
	Number of households losing their shelters	2
	Total area of lost arable/productive lands (ha)	19.8141 Ha

	Number of households losing their crops and/or revenues	196 (4 are Public Institutions)
	Total areas of farmland lost (ha)	**19.9586**Ha
	Estimation of agricultural revenue lost (USD)	Ksh. 25,986,000.89 (USD. 193,204.47)
	Number of buildings to demolish totally	2
	Number of buildings to demolish totally at 50%	0
	Number of buildings to demolish totally at 25%	0
	Number of trees-crops lost	33,728
	Number of commercial Kiosks to demolish	1
	Number of ambulant/street sailors affected	0
	Number of community -level service infrastructure disrupted or dismantled	3 (Ethernet, Power lines and Water services)
	Number of households whose livelihood restoration is at risk	0

E.1 Introduction

Rapid population growth faces challenged to access to water and sanitation in Kenya.

E.1.1. Background

Kenya faces challenges in providing adequate water and sanitation to its growing population. Currently, only 70% of Kenyans have access to drinking water, and **32%** have access to sanitation. Rapid urbanization and a growing population, expected to reach **48%** urban by **2030,** increasing pressure on infrastructure and financial resources.

E.1.2. Program Objective

The Government of Kenya aims for universal access to water and sanitation by 2030 to enhance health, quality of life, and economic growth. The program will execute water and sewerage projects to improve living standards and climate resilience.

E.1.3. Program Components

Water Supply & Sanitation Infrastructure: This includes the Construct and rehabilitate water and sanitation infrastructure, focusing on last-mile connectivity; **Watershed Management:** Implement climate-adaptive measures and best practices for water catchment protection; **Institutional Development Support:** Provide equipment, enhance WSP capacities, improve billing systems, and promote hygiene; **Program Management:** Establish coordination and implementation units to support daily operations, audits, and monitoring and **Knowledge Management:** Train women and youth, share knowledge, conduct research, and create an innovation hub.

E 1.4. Consultancy Services

Losai Management Limited has been engaged to undertake detailed design, tender document preparation, and ESIA and RAP studies for the Murang'a Water Supply and Sanitation Project. This project, funded by the African Development Bank, targets water and sewerage projects across various towns in Kenya.

The RAP report, structured into 13 chapters, covers from project impacts to consultation and community participation. It aims to ensure the sustainability of the project and a return on investment, all while adhering to environmental and social safeguards.

Scope of Consultancy Services includes:

Detailed design for the Murang'a Cluster Water and Sewerage Project, including sewerage works for Kabati, Maragua, and Murang'a Towns, and multiple water supply projects; Preparation of Environmental and Social Impact Assessment (ESIA), Resettlement Action Plan (RAP) and Preparation of tender documents.

The RAP covers: Kabati Sewerage; Thithi – Githingiri and Chathanda – Kenol Water Supply Systems; Maragua Sewerage; Upgrading of Tuthu and Rwathia Water Supply Systems; Gakoigo WTP – Kambiti Water Supply System; Extension of sewers for Murang'a Town and Last-mile connections and storage tanks.

E1.5. Environmental and Social Safeguards

Safeguard documents, including ESIA and RAP, have been prepared by the Consultant and AWWDA. These documents outline the environmental and social management plans required for project approval by NEMA and AfDB.

E1.6 RAP report Structure: This RAP report is structured into several chapters, each addressing aspects of the project and its impacts on affected persons.

Chapter 1 serves as an introduction, providing background information on the project, its objectives, overview, scope of consultancy services, and environmental and social safeguards documents.

Chapter 2 delves into the project description, detailing the project area, components, and associated costs.

Chapter 3 outlines the objectives and principles of the RAP, including the problem statement, objectives, guiding principles, scope, and methodology.

Chapter 4 discusses the legal and institutional framework within which the project operates, including national legal laws, the Constitution of Kenya, and institutional arrangements.

Chapter 5 presents the social-economic baseline condition, covering the context, methodology, objectives of the socioeconomic survey, and profiles of project-affected persons in various locations.

Chapter 6 focuses on the impacts of the project on affected persons, institutions, land, structures, crops, trees, and businesses.

Chapter 7 elaborates on the eligibility criteria and entitlements for compensation, including the cut-off date and entitlement matrix.

Chapter 8 addresses consultation and community participation, outlining the aims, stakeholder categories, future stakeholder plans, implementation process, and livelihood restoration program.

Chapter 9 discusses grievance redress mechanisms,

Chapter 10 presents resettlement and compensation strategies,

Chapter 11 covers valuation methodology and budget, and

Chapter 12 outlines the monitoring and evaluation framework for the project.

Chapter 13: Conclusion and Recommendations /Commitment.

Annexes

E.2. Project Description

E. 2. 1. Project Area Description

The project is located within the jurisdiction areas of four Water Services Providers (WSPs), under Murang'a County Government and licensed by WaSREB. These include: **Murang'a Water and Sanitation Company (MUWASCO):** MUWASCO's jurisdiction covers parts of Kiharu and Maragua sub-counties. The main target areas for the project are Kambiti and Maragua Ridge locations; **Murang'a South Water and Sanitation Company (MUSWASCO):** MUSWASCO serves three sub-counties: Kandara, Kigumo, and Murang'a South. The project's main focus areas are Kangari and Kenol; **Gatanga Water and Sanitation Company (GATAWASCO):** GATAWASCO's service area is Gatanga Sub-County, covering a total area of 528.8 km², with 164 km² served. The project targets Kiunyu and Samuru Locations and **Murang'a West Water and Sanitation Company (MWEWASCO):** MWEWASCO serves Kangema and Kiharu Sub-Counties.

E. 2.2. Project Component

The Water and Sewerage components are spread out in the following WSP area of jurisdiction as tabulated below:

Table 1-1: Summary of the water supply interventions

Water Service Provider	Prioritized Project	Description of Scope
Gatanga Water and Sanitation Company (GATAWASCO)	Thithi Githingiri Water Supply System	Construction of 4000m3/day intake - 0.3 km raw water mains (OD 315 mm) - Water treatment works 4000m3/day - OD 280-225 mm 10.5km transmission mains - OD 225 mm 6.5km transmission mains - OD 160 mm 12km transmission mains - 2500m3 Kiawahiga tank
	Chomo –Rwegetha Laini Water Project	Laying of 7.8 km raw water mains (OD 280 mm) - Construction of Proposed treatment works 3000m3/day - Laying of proposed OD 315mm 0.3km transmission mains - Laying of proposed OD 225 mm 7.7km transmission mains - Laying of proposed OD 160 mm 8.1km transmission mains

Water Service Provider	Prioritized Project	Description of Scope
Murang'a South Water and Sanitation Company (MUSWASCO)	Chathanda - Kenol Water Supply System	Rehabilitation of intake (upgrading/ new) - Rehabilitation of Raw Main 10.5km - Construction of 4000m3/day Treatment works - Extension of OD 200 pipeline 4km - Construction of tank 250m3 at Mutheru - Construction of tank 1000m3 at t/works
	Kenol-Kabati sewerage	21 km of reticulation sewers - 4 km of trunk mains - Makutano STP Phase II works (AP 3, MP 2 & 3, SDB)
Murang'a West Water and Sanitation Company (MWEWASCO)	Upgrading of Tuthu Water Supply system	2500m3 tank at Kanyenyaini sec - 2000m3 tank at Kawariua - 2km OD 225 mm pipeline replacement
Murang'a Water and Sanitation Company (MUWASCO)	Sewer works	Maragua Sewerage System and Sewer Treatment Woks - Muranga Sewerage System

E.2.2.1. Water Intervention

Gakoigo-Kambiti Water Supply System

The existing Gakoigo-Kambiti Water Supply System comprises a dam, DN 400 mm raw water mains, and a treatment facility. Though designed for a capacity of 8,000 m3/d, the current operational capacity is limited to 4,500 m3/d due to constraints in the distribution network. To address this, the proposed project aims to augment the distribution capacity. The system draws water from the perennial River Maragua, with an existing water treatment plant designed for 8,000 m3/d. The proposed includes laying a 22.6 km long HDPE pipeline with a diameter of 225 mm and pressure ratings ranging from PN 12.5 to PN 16 for water transmission.

Tuthu Water Supply Systems

The proposed Upgrading of Tuthu Water Supply Systems aims to address existing challenges in the infrastructure, the absence of a treatment plant leading to heightened increased turbidity levels during the wet season. The project includes the establishment of new intake works along the South Mathioya River, situated upstream to allow for gravity flow of raw water to the proposed treatment plant, with an abstraction capacity of 4,000 m3/d. A raw water main will convey water from the new intake to the treatment works, at 1000 m downstream. A new water treatment plant with a capacity of 4,000 m3/d will be constructed to treat the raw water drawn from the river. The project also involves the installation of two storage tanks, with capacities of 1000 m3 at Kawariua and 2500 m3 at Kanyenyaini, ensuring adequate storage for treated water before distribution. These upgrades aim to improve the reliability and efficiency of the water supply system in the Tuthu area, enhancing water quality and accessibility for local communities.

Chathanda – Kenol Water Supply System

This component has an Operational capacity of 1,500 m3/d, below its assessed 4,000 m3/d capacity due to pipeline issues. The project aims to Upgrade to achieve optimal operational efficiency and meet the design capacity. The Water Source is River Chathanda, a perennial river, with water quality affected by increased turbidity during rainy spells. The proposed component Include:

Rehabilitation/upgrading of intake weir, raising to 4m, with a draw-off chamber and screens; Desilting of the reservoir to improve water quality; Extension of existing 7 km long, OD 280 mm raw water mains by 4 km to connect to the Mareira Treatment Plant; Water Treatment Works: Designed for a capacity of 4,000 m3/d to address water quality concerns; Transmission mains - Existing DN 200 mm transmission main from the Mariira tank to Kariguini(Makuta no water and sewerage project). The pipeline will transmit the 4,000 m3/d flow; Storage Tank Construction of a 1000 m3 reinforced concrete tank at Mariira; Masonry break pressure tank – Construction of a 250 m3 tank at Mutheru and Last mile Connectivity to increase water coverage 107 km of water distribution lines under the MUSWASCO area.

Thithi - Githingiri Water Supply System- (Under Priority 2 of the project)

The Construction of a new system with a design capacity of 4,000 m3/d to serve Githingiri and surrounding areas. This component will include:

Intake Works: Sourcing water from River Thithi, with a design capacity of 4,000 m3/d; Raw Water Main: Drawing water from the intake to a treatment works 400 m downstream; Treatment Works: Designed for a capacity of 4,000 m3/d, the Chathanda system; Transmission Mains: A 23 km pipeline will convey water to the 2500 m3 Kiawahiga tank, then to Githingiri and Thika Green areas; Storage Tank: Proposed 2500 m3 RC storage tank at Kiawahiga and Last Mile Connectivity: Construction of 75 km of water distribution lines under GATAWASCO area.

Rwathia Water Supply System:

Storage Tank: Proposed 2500 m3 RC water storage tank at Weithaga for the Rwathia system; Last Mile Connectivity: Construction of 180 km of water distribution lines under MWEWASCO area.

E2.2.2. Sewer Intervention

Kabati Sewerage System:

This component will Collect wastewater from Kabati town and surrounding areas to drain into trunk Sewer 2 built under the Makutano sewerage project previously constructed as part of the Makutano Sewerage Project.

Sewer	Design Summary
Trunk Sewer	Total Length = 3,800 m 300 mm Dia = 3100m 400 mm Dia = 700 m
Lateral Sewers	Total Length = 21,000 m 250 mm Dia = 21,000 m
House Hold Connections	500 household connections

Figure 0-1: Proposed Sewer Network for Kabati and Environs

Maragua Sewerage System

The component will include the following:

Sewer	Design Summary
Trunk Sewer	Total Length = 13,530 m 300 mm Dia = 3660m 400 mm Dia = 9870m
Lateral Sewers	Total Length = 9,097 m 200 mm Dia = 9,097m

Trunks will merge into a main interceptor trunk to convey sewage for treatment at the new Maragua sewage treatment plant.

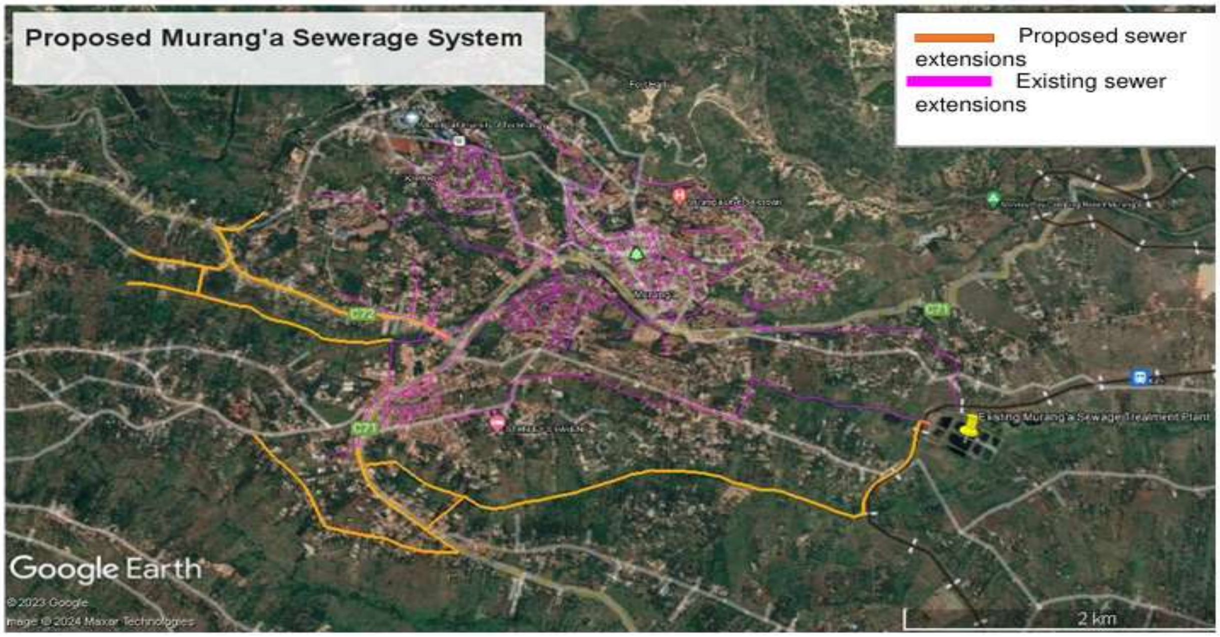

Figure 0-2: Layout of proposed Sewer extensions for Murang'a Town

Maragua Sewage Treatment Plant

The Maragua Sewage Treatment Plant comprises components, including inlet works for sewage intake, anaerobic ponds for organic matter decomposition, facultative ponds allowing aerobic and anaerobic treatment, maturation ponds for further sewage treatment, sludge drying beds for solid residue disposal, and utility buildings with site infrastructure access roads, drainage, and water supply.

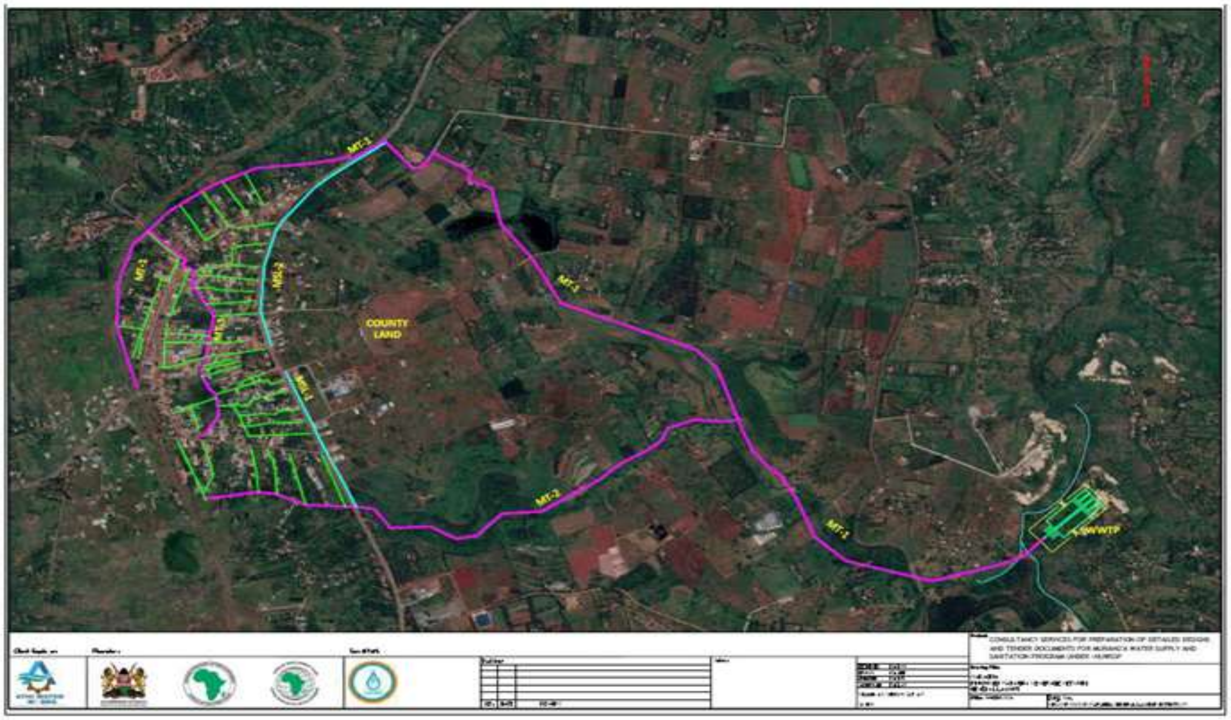

Figure 0-3: Layout Map for Maragua Sewerage System

E.2.3. Water Project Cost

The total cost for the proposed upgrading works is **Ksh. 1,318,797,127** (Kenyan Shillings One billion three hundred eighteen million seven hundred ninety-seven thousand one hundred twenty-seven).

E2.4. Sanitation Project Cost

The total cost for the proposed upgrading works is Ksh**. 1,069,315,710 (**Kenyan Shillings One billion sixty-nine million three hundred fifteen thousand seven hundred ten).

E2.5. Land Requirement for the Water and Sewer Interventions

The table below shows the land requirement for water and sewer interventions.

Table 0-2: Summary of Land Requirement for Proposed Works

Location	Land Requirement in hectares (ha)
Muranga	0
Maragua	19.06
Gatanga	0.1716
Kangari-Kangema	0.727
Total	**19.9586**

E.3. Objectives and Principles of RAP

The Resettlement Action Plan (RAP) was prepared following AfDB Involuntary Resettlement Policy, AfDB Integrated Safeguards Systems - Operational safeguard number 2, and Kenyan government laws. The objectives of the RAP are as follows: Describe national and AfDB requirements for resettlement due to the project activities; Identify the Project Affected Persons and Households (PAH) and their potential losses; Provide for an agreed plan for their compensation and resettlement due to the project activities and Provide principles, policies, institutional framework schedules and funding mechanisms for any loss and resettlement needs that may occur as a result of implementing the project.

E. 3.1. Problem and Need for RAP:

Anticipated displacement impacts include reclamation of riparian reserves, land acquisition for project infrastructure, and consent acquisition from relevant authorities.

The AfDB's safeguards policy OS2 outlines objectives to avoid or minimize involuntary resettlement, provide compensation, improve living conditions, and establish monitoring mechanisms.

E3.2. Objectives of the RAP include: Raise awareness, conduct surveys, provide socio-economic assessments, establish compensation processes, determine compensation rates, and outline preferred resettlement options for affected persons (PAPs) and Comply with AfDB standards, Kenyan laws, and international best practices.

E3.3. Principles of the RAP include RAP principles such as fair compensation for all affected by the project, opportunities for improving livelihoods, consultation with affected communities, and eligibility for resettlement regardless of formal land rights.

E.3.4. Scope of the RAP: This section Integrates social safeguards guidelines outlined in AfDB's Involuntary Resettlement Policy. Activities include data review, PAP identification, legal review, land acquisition planning, public consultations, socio-economic surveys, and asset valuation.

E.3.5. RAP Approach and Methodology: This section indicated the approach and methodology based on project survey plans and detailed designs, including document review, fieldwork, community consultations, socio-economic surveys, and asset valuation.

E. 4. Legal and Institutional Framework:

The chapter provides an overview of the legal and institutional framework relevant to land acquisition and resettlement in Kenya, particularly the implementation of a specific project. A summary of the key points is as follows:

E. 4.1. National Relevant Laws:

The legal framework for land acquisition within the Resettlement Action Plan (RAP) is supported by several key legislative acts in Kenya. The National Land Policy (NLP) and the Constitution of Kenya, 2010, provide the foundational principles for land acquisition, emphasizing the necessity of public purpose and the requirement for just compensation. The Land Act, No. 6 of 2012, grants the National Land Commission (NLC) authority to compulsorily acquire land and manage public land, ensuring transparent processes and fair treatment of affected landowners. Complementing these laws, the NLC Act outlines the commission's responsibilities, including land acquisition and compensation mechanisms. The Physical Planning Act supports these efforts by guiding land use planning practices. Additionally, the Environment and Land Court Act (2011) establishes a specialized court to adjudicate disputes related to land, including cases of compulsory acquisition. The Matrimonial Property Act (2013) ensures equitable division of property acquired during marriage, recognizing both monetary and non-monetary contributions. The Land Laws (Amendment) Act (2016) introduces guidelines for fair evictions, ensuring affected parties receive adequate notice, are consulted, and provided with alternative accommodation and fair compensation, adhering to constitutional safeguards and international standards.

E.4.2. Institutional Frameworks:

This Highlights various governmental bodies such as the Ministry of Water, Sanitation and Irrigation will oversee project execution, secure funding, and ensure compliance with legal and international standards related to the projects. The National Environment and Management Authority (NEMA) monitors environmental impacts, ensure compliance with environmental regulations, and facilitate public participation in environmental management decisions. The Water Resource Authority regulate water resources, including allocation, protection, and quality management, to ensure sustainable use and conservation. The Department of Occupational Health and Safety (DOSHS) will ensure workplace safety and compliance with occupational health standards during project implementation. County Governments will provide local regulatory oversight, support community involvement, and integrate environmental and socio-economic considerations into project planning. The Water Services Regulatory Board (WASREB) will regulate the water and sanitation sector, ensuring compliance with standards and regulations to protect public health and interests, during the operational phase of the project. The Kenya Rural Roads Authority (KeRRA) and Kenya Urban Roads Authority (KURA) will provide approvals for road reserves and wayleaves, ensuring the project doesn't disrupt road networks or compromise road safety.

E4.3. African Development Bank's Safeguard Policy and Guidelines:

The AfDB's policies aim to mitigate adverse environmental and social impacts of projects, including involuntary resettlement, biodiversity conservation, pollution prevention, labor conditions, and gender equality; The Bank's Poverty Reduction Policy focuses on strategies to reduce poverty in African countries. A revised policy on Disclosure and Access to Information ensures transparency and stakeholder engagement in AfDB operations.

E.4.3.1. Differences between Kenyan Laws and the African Development Bank Policy

Table 0-2: Differences between Kenyan Laws and the African Development Bank Policy

Policy Area	AfDB OS2	Kenyan Legislation	Gap Filling Measures

General Requirements	Avoid involuntary resettlement where feasible. - Minimize resettlement impacts. - Ensure displaced people receive assistance to improve standards of living. Provide explicit guidance on resettlement issues. Set up monitoring mechanism.	Land Act outlines procedures for project consultation. Guarantees fair compensation. Does not avoid resettlement if for public interest. Compensation determination subjective.	Ensure resettlement issues considered in project design. Implement compensation and assistance provisions.
Process Requirements	Inclusive consultation. Advance dissemination of information. Reasonable review period. Public hearings.	Land Act outlines consultation and grievance procedures.	Implement consultation procedures from both sources. Provide alternative grievance mechanisms.
Grievance & Redress Mechanism	Establish credible local mechanism.	Land Act provides for grievance redress through	Adopt alternative grievance mechanisms.

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	Accessible to stakeholders. Responses recorded.	NLC and judicial system.	Legal redress available.
Eligibility & Entitlements	Three groups eligible for compensation. Preference to land-based compensation. Assistance for improved livelihoods.	Land Act recognizes various land rights and interests. Unclear on cut-off date.	Include all categories of affected persons in compensation. Implement cut-off procedures.
Compensation Procedures	Determined through consultation. Preference to land-based compensation. Total project cost includes resettlement. Assistance to improve standards of living.	Land Act favors cash compensation. Interpretation of just compensation unclear.	Consider all options before cash compensation. Implement prompt compensation at full replacement cost.

	Transparent procedures. Non-land-based options considered. Prioritize housing security and benefit sharing. Address cultural aspects.		
Valuation	Market cost for replacement structures.	Land Act stipulates just compensation but lacks specificity.	Apply compensation measures outlined in OS2.

E.5. Socio-Economic baseline conditions:

E.5.1. Socio-Economic Context

Socio-economic data for the project was collected through field surveys and interviews. Census and assets inventory were conducted to compile a register of potential project affected persons (PAPs). The survey categorized PAP activities along the wayleaves and with economic features to be displaced by the project.

E.5.2. Methodology:

Data for establishing socio-economic baseline conditions was derived from various methods including public consultations, census surveys, socio-economic surveys, land and asset valuation, and key informant interviews.

These methodologies aimed to provide viewpoints and both qualitative and quantitative results.

Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS), and validation was done through cross-referencing with site surveys, technical team observations, and key informant interviews.

E.5.3. Objective of the Socio-Economic Survey:

The primary goal was to gather information on the socio-economic characteristics of PAPs.

Specific objectives included examining socio-economic aspects, investigating land tenure and status, profiling PAPs in the project area, and addressing key issues during project implementation. Other objectives included identifying current occupants for potential resettlement, describing affected households, determining asset loss, identifying vulnerable groups, understanding land tenure systems, analyzing social interactions, and providing baseline data for monitoring and evaluating livelihood restoration and sustainable development efforts.

E.5.4. Social Economic Profile for the Project Affected Persons

The social-economic aspects for all PAPs within Gatanga, Maragua, Kangema-Kangari, and Murang'a areas were analyzed. The assessment covered various aspects including gender distribution, household headship, vulnerable groups, education level, sources of income, affected assets, monthly income, loss of livelihood, sources of water, and sanitation facilities.

This Resettlement Action Plan (RAP) provides an assessment of the socio-economic characteristics of the Project Affected Persons due to the water and sewerage infrastructure project in Murang'a County. A census survey involving 196 PAPs was conducted, comprising 137 male, 59 female and 4 Nr. Public Institutions. The analysis included details from four locations: Gatanga, Maragua, Kangema-Kangari, and Murang'a.

E.5.4.1. Gatanga Location:

Number of PAPs: 115 (85 PAPs are male, 24 PAPs are female, 5Nr. Unknown PAPs and 1 public Institution); **Household Head Gender**: 73% male-headed, 27% female-headed; **Vulnerable Groups**: 9 elderly individuals (8% of the population); **Education Levels**: 51% secondary school, 29% primary school, 18% university/tertiary, 2% no formal schooling; **Income Sources**: 79% farmers, 16% small business owners, 3% civil servants, 2% unemployed; **Affected Assets**: 53% crops, 31% trees, 7% land, 9% structures; **Monthly Income**: 55% below 10,000 Kshs, 24% between Ksh. 10,000-15,000; **Loss of Livelihood**: 97% economic displacement, 3% physical displacement; **Water Sources**: 70% from Gatanga Water and Sanitation Company, 19% rainwater harvesting and Sanitation Facilities: 93% pit latrines, 7% flush toilets.

E.5.4.2. Maragua Location:

Number of PAPs: 52 (33 males, 19 females); **Household Head Gender**: 73% male-headed, 27% female-headed; **Vulnerable Groups**: 2 elderly individuals (4% of the population); **Education Levels**: 57% primary school, 29% secondary school, 10% university/tertiary, 4% no formal schooling; **Income Sources**: 44% small business owners, 21% farmers, 19% traders, 9% civil servants, 7% unemployed; **Affected Assets**: 42% private land, 33% crops, 20% trees; **Monthly Income**: 55% below 10,000 Kshs, 24% between Ksh. 10,000-15,000; **Loss of Livelihood**: 21% economic displacement; **Water Sources**: 59% from Murang'a Water and Sanitation Company, 20% rainwater harvesting and **Sanitation Facilities**: 94% pit latrines, 6% flush toilets

E.5.4.3. Kangema-Kangari Locations:

Number of PAPs: 5 (40% male-headed, 20% female-headed, 40% institutions); **Vulnerable Groups**: 2 elderly individuals (40% of the population); **Education Levels**: 75% secondary school, 25% no formal schooling; **Income Sources**: 75% self-employed, 25% unemployed; **Affected Assets**: 60% private land, 40% public land; **Monthly Income**: 33% below 10,000 Kshs, 67% between Ksh. 10,000-30,000; **Water Sources**: 60% from water service providers, 40% rainwater harvesting and **Sanitation Facilities**: 93% pit latrines, 7% septic-connected flush toilets.

E. 5.4.4. Murang'a Location:

Number of PAPs: 28 (31% male-headed, 21% female-headed, 48% unidentified); **Vulnerable Groups**: 2 elderly individuals (7% of the population); **Education Levels**: 50% secondary school, 38% primary school, 13% no formal schooling; **Income Sources**: 73% farmers, 27% small business owners; **Affected Assets**: 93% trees and crops, 7% structures; **Monthly Income**: 71% below Ksh. 10,000; **Water Sources**: 85% from MUWASCO, 15% rainwater harvesting and **Sanitation Facilities**: 80% pit latrines, 20% septic-connected toilet

E. 5.4.5. Overall Project Impact and Mitigation:

The t**otal number of PAPs is** 200 (137 males, 59 females, 4 public institutions) and the **Impact on Institutions**: 4 institutions affected (Gituamba Primary School, Mariira University, Kanyanyaini, and Mutheru Primary).

All eligible PAPs will receive compensation and assistance based on the nature of their losses. This includes cash compensation, statutory disturbance allowance, livelihood restoration training, and other support for vulnerable groups.

E.6. Project Impacts on PAPs Impacts on Project Affected Persons (PAPs)

The project will economically displace 196 PAPs, including 137 male PAPs and 59PAPs female, and impact four public institutions. The detailed impacts are as follows:

E6.3. Impact on Institutions

Four institutions will be impacted by the project; **Gituamba Primary School**: A 2500m3 reinforced concrete storage tank is proposed for the Thithi-Githingiri Water Supply project component; **Mariira University**: A water treatment plant with a capacity of 4,000 m3/d is planned, along with the construction of a 1000 m3 reinforced concrete tank at Mariira; **Kanyenyaini Primary School**: A 2500 m3 reinforced concrete water storage tank is designated for Weithaga as part of the Rwathia system and **Mutheru Primary School**: Construction of a 250 m3 masonry break pressure tank is scheduled for the Chathanda-Kenol Water Supply Project component.

E.6.4. Land Impact

The majority of the pipelines will be laid on road and riparian reserves, requiring minimal land acquisition. A total of 64 PAPs will lose land across the affected locations:

Land Affected by Location

No private Land will be affected by the Murang'a project components; Maragua: 19.06 Ha; Gatanga: 0.1716 Ha and Kangari-Kangema: 0.727 Ha. The t**otal** area affected is 19.9586 Ha.

E.6.5. Structural Impact

Project activities will affect various structures, including 1 temporary Business Kiosk in Maragua; 2 Permanent Houses in Maragua; 5 Fences and Gates- (2 in Gatanga, 3 in Maragua). In total the number of structures that will be affected is 8.

E.6.6. Impact on Crops and Trees

The project will impact a number of crops and trees along road reserves, riparian reserves, and private land as follows: Murang'a: 194 crops, 3082 trees; Gatanga: 2183 crops, 23162 trees; Kangema: 0 crops, 0 trees and Maragua: 392 crops, 4715 trees. In t**otal**: 2,769 crops, 30,959 trees.

E6.7. Impact on Businesses

Economic displacement will affect 195 farmers and one business owner with a temporary iron-walled shop.

Mitigation Measures

Compensation and livelihood restoration plans are formulated to support affected individuals. Measures include: Cash compensation at full replacement value for land and structures; Statutory disturbance allowance of 15% of the compensation amount; Adequate time for PAPs to harvest crops or salvage materials and Livelihood restoration training and additional support for vulnerable households.

E.7. Eligibility for Compensation and Cut-Off Date

The Murang'a Cluster Water and Sewerage Project will result in the displacement of 196 Project Affected Persons (PAPs), including 59 females and 137 males, as well as four public institutions. Compensation and resettlement assistance are provided under the AfDB OS2 on Involuntary Resettlement. Eligible individuals fall into three categories: those with formal legal rights to land, those with a claim to land or assets, and those without recognizable legal rights to the land they occupy.

The cut-off date for eligibility was disclosed during census activities, ensuring that assets present before the specified dates are eligible for compensation.

Table 6-1: Cut Off Date

Location	CUT-OFF DATE DISCLOSED
Maragua - Water and Sewer Components	March 22, 2024
Murang'a - Water and Sewer Components	March 20, 2024
Kangema – Kangari ----Water Component	March 20, 2024
Gatanga - Water Component	March 22, 2024

No person is eligible to entitlements if moving into the designated sewer and water project area after the Cut-Off-Date.

E.7.4. Entitlement Matrix

The entitlement matrix outlines compensation and assistance based on the type of property affected and the PAP's status as a landowner, structure owner, or squatter/encroacher. This includes cash compensation for land, structures, and crops/trees, along with disturbance allowances and livelihood restoration support.

Table 6-2: Entitlement Matrix

Category of Affected Person	Type of Property	Proposed Entitlement/Mitigation	Other Assistance
Registered Landowner	Land	Cash Compensation at Full Replacement Value	- 15% disturbance allowance for all PAPs
(Formal legal rights to land)			- Restoration support for households with vulnerable persons.
			- Livelihood restoration training
Structure and Business Owners	Movable and other Structures	Cash compensation for all structures at replacement cost	- 15% disturbance allowance for all PAPs
			- Provision of adequate time to salvage building materials
			- Restoration support for vulnerable households
			- Livelihood restoration training
Owners of Affected Crops/Trees	Crops and Trees	Compensation for damaged crops, trees, etc. at market value	- 15% disturbance allowance for all PAPs
			- Provision of adequate time to harvest
			- Restoration support for vulnerable households
Squatter/Encroacher	Land	N/A	N/A
	Crops, Trees, Business, etc.	Cash compensation for all affected assets at replacement cost	- 15% disturbance allowance for all PAPs
			- Provision of adequate time to harvest or salvage building material
			- Livelihood restoration training - Restoration support for households with vulnerable persons

E.8.Consultation and community participation

The consultation and community participation process for the Murang'a Cluster Water and Sewerage Project involved extensive engagement with various stakeholders, including host communities and affected persons (PAPs). Public consultations were conducted at different stages of the project to gather input, address concerns, and raise awareness about the project's impacts.

E8.1. Aims and Objectives of Stakeholders Consultation and Public Participation (CPP)

The aims included identifying stakeholders, understanding their concerns, managing expectations, collecting relevant information, and ensuring compliance with regulations.

8.2. Key Stakeholder Categories:

Stakeholders were categorized into primary and secondary groups: including water service providers, government officials, community representatives, and civil society organizations. Consultations were held through public meetings and interviews, with a focus on addressing concerns regarding compensation, project impacts, and implementation timelines. Feedback from stakeholders informed project design and mitigation measures as outlined in the table below:

Table 7-0: Stakeholder Categories

No.	Name	Category
Primary Stakeholders		
1.	GATAWSCO, MUSWASCO & MWEWASCO	Water Service Provider
2.	Kenya Forest Service-County Forest Conservator	Kenya Forest Service
3.	National Government Administrative Office Deputy County Commissioners (DCC), Chiefs/ Assistant chiefs	National Government
4.	Murang'a County Government, Ward Administrator	County Government
5.	Kigumo Sub- County Officials	Sub- County
6.	Water Resources Authority (WRA) officers	Water Regulatory Body
7.	Water Resource Users Association (WRUA) Officials	Water Regulatory Body
8.	Public Health Officer	National Government
9.	Village Elders	Community Representatives
10.	Area Residents	Community
11.	Community Groups	Community
Secondary Stakeholders		
12.	Physical Planning Officer	National/County Government Agencies and Ministries
13.	Sub-county Lands Registrar	

Key concerns raised by stakeholders included: compensation for land and structures, water supply sufficiency, project commencement dates, and employment opportunities for locals. Responses included transparency, adherence to regulations, and the involvement of stakeholders in decision-making processes.

Table 7-1: Summary of Public Meetings Held

Water Component				
No.	**Meeting Dates**	**Venue**	**Location**	**No. of Participants (M-Male, F-female)**
1.	13/02/2024	Kiriani-Ndunyu Chege	Gatanga- Thithi	20 (16M and 4F)
2.	14/02/2024	Kiawahiga Grounds	Gatanga -Kiawahiga	17 (14M and 3F)
3.	26/02/2024	Mariira Farm	Kigumo-Mariira Farm & Gwa Kibugi	19 (12M and 7F)
4.	04/03/2024	Gwa Kibugi	Mariira- Kigumo	40 (29M and 11F)
5.	11/03/2024	Kiriani-Ndunyu Chege	Gatanga- Thithi	22 (18M and 4F)
6.	15/03/2024	Gathanji Grounds	Gathanji	17 (14M and 3F)
7.	8th May 2024	Gakoigo (Chiefs Office)	Maragua	30(17M and 13F)
Sewer Component				
No	**Date**	**Venue**	**Location**	**No. of Participants**
1.	14./03/2024	Kiawamburi open area	Kiawamburi	23 (18M and 5F)
2.	14/03/2024	Majoice Open Ground	Majoice-Mbiri	34 (14M and 20F)
3.	14/03/2024	St Mary's Njoguini	St Mary's Njoguini	30 (18M and 12 F)
4	23rd April 2024	Maragua Ridge (Chiefs Office)	Maragua	23 (10M and 13F)
5	14th May 2024	Kiawamburi - Majoyce	Muranga	26(17m and 8F)

Table 0-1: Summary of PAPs that have signed the Consent Forms

DESCRIPTION	Total Number of Project Affected Persons (PAPs)	No. of Absentee PAPs	No. of consents signed	REMARKS
GATANGA	115	5	109	**Gatanga** - 1 public Institution - - 5 PAPs who have not signed consent forms in Gatanga- under priority 2. The chief has written a letter confirming their absence this RAP preparation. This Scope will

				be implemented under Priority 2.
KANGEMA TO KANGARI	6	0	3	**Kangema to Kangari** 3 Public Institutions
MARAGUA	52	27	25	27 PAPs who have not signed consent forms - under priority 2, the chief has written a letter confirming tracing them during or before commencement of Priority 2
MURANGA	27	16	11	16 PAPs who have not signed consent forms- under priority 2, the chief has written a letter confirming tracing them during or before commencement of Priority 2
TOTAL	200	48	148	**Summary** - 148 PAPs and 4 Public Institutions (consent signed under Priority 1). -16 PAPs pending consent under priority 2 in Muranga. -27 PAPs pending under priority 2 (Gakoigo) in Maragua. **-** 5 PAPs who have not signed consent forms in Gatanga- under priority 2

Table7.3: Stakeholder Concerns/Comments and Responses

Location	Comments	Response
Water Component		
Kiriani-Ndunyu Chege	The community members inquired whether the	Consultant representative, stated that PAPs' (Project Affected Persons) whose land parcels are affected by the construction works

Location	Comments	Response
Water Component		
	community members affected will be compensated	of the Intake and treatment works will be duly compensated. He specified that individuals situated within riparian areas and engaged in farming activities would solely be eligible for compensation of crops affected, with no provision for land compensation.
	The Community members inquired about how the riparian will be established from the river.	The Consultant representative responded to the community members' query regarding the establishment of riparian boundaries from the river. He explained that the Water Resources Authority (WRA) oversees all matters concerning river riparian marking. According to WRA protocols, riparian zones are determined based on the size of the river, with assistance from hydrologists who assess various factors to establish the boundaries.
	The community members wanted to know whether they will still draw water from the river.	The consultant conveyed to the attendees that they will still be permitted to draw water from the area, albeit from a distance away from the newly constructed Intake.
	The community inquired on when the Project will commence	The consultant stated that the commencement date of the project will be communicated once all the necessary documentation and approvals have been cleared, and a no objection has been obtained for the implementation of the RAP and commencement of works.
	The community inquired on how much they will be paid and the compensation channels that will be used	The consultant stated that the valuation of the affected land parcels will be carried out by NLC, aligning with current market prices. Subsequently, negotiations and agreements regarding compensation will be reached with the PAPs.
Kiawahiga	The community members enquired whether the Project will supply	The consultant articulated that the project's objective is to enhance water supply in the area by building a Water storage tank and increasing the water intake, thereby ensuring sufficient water supply.

Location	Comments	Response
Water Component		
	sufficient water to the Residents of Kiawahiga	
	The community members enquired about the water charges	Gatanga Water and Sanitation officials communicated that upon the completion of the project, residents are encouraged to visit the Gatanga Water and Sanitation Company to gain information about the applicable charges. However, the process for application and the charges for connection will be communicated in detail. He further clarified that these charges constitute a percentage that has been set by WASREB that's relative to the amount of water consumed.
	The community members wanted to know whether the Project will affect private land	The consultant stated that the water lines will be constructed within existing road wayleaves, and all PAPs will be eligible for compensation. In addition, some private land/property will be affected, and compensation will be provided accordingly, this will mainly affect land parcels at the intakes and water/sewer treatment works.
Mariira Farm & Wa Kibugi	The Community requested for an explanation on rehabilitation and what it entails	The Consultant explained to the meeting that rehabilitation is majorly replacing damaged water infrastructure. This includes water pipes.
	The Community was in agreement that they are the main causes of pipes damage.	The Consultant further stated that people take precaution when it comes to protecting the existing underground infrastructure. This entails refraining from construction of permanent structures and no planting of trees above the water lines. Residents must adhere to these measures to ensure continued access to water and to safeguard the infrastructure.

Location	Comments	Response
Water Component		
	The Community inquired on quality of water pipes to be laid. The existing water pipes block easily due to waste collected from the intake works at Chathanda.	The Assistant Engineer responded by assuring the residents that the quality of the pipes is assured and that the intake works will be well protected and maintained to prevent dumping of wastes.
	The Community requested for prioritization of employment opportunity to the locals	The Sociologist informed the residents that employment opportunities will be prioritized for locals, especially for unskilled labor. This will be communicated through the local chief's office, with unskilled labor being recruited from this group.
Location	**Comments**	**Response**
Sewer Component		
Kiawamburi	Macharia Waweru requested for more consideration in his area of residence.	The MUWASCO official took note of the area and pledged to assess its viability for consideration. He stated that if found viable, it will be taken into consideration
	Peter Mucheke enquired on whether the project will install the lateral lines.	The MUWASCO officials explained the scope of the project to the residents, stating that it will entail components for the installation of the main trunk and lateral sewer lines.
Majoice-Mbiri	Susan Wanja complained that people of Majoice area have not been considered for sewer yet	The MUWASCO official explained the scope in detail, outlining that the main trunk would be constructed first, followed by the construction of the lateral sewers. He clarified to the community that the trunk sewer precedes the laterals lines which serve the consumers/community.

Location	Comments	Response
Water Component		
	they were the ones who had requested the County for the services.	
	Alex Wambugu asked if the project can take a whole piece of private land.	It was explained that the land requirement for the project component will vary depending on the affected portion. This will also be explained further during the valuation and inventory collection exercise. The project primarily occupies a small area of land, mostly underground. The RAP will focus on minimizing disruption and resettlement.
	Murathi stated that the quorum in the meeting was a bit small. He expressed it as a small representation of the community	It was stated that this was an initial meeting. More public engagements will follow and more people will get engaged along the way. Those present at the meeting were also encouraged to pass the message and to be showing up in public forums.

Future stakeholder engagement plans:

The RAP has proposed future stakeholder plans to be put in place which include: continuous consultation, awareness-raising, and updates on project progress. Implementation of the Resettlement Action Plan will be overseen by a dedicated committee/Project Implementation Unit, with provisions for verification, compensation, and livelihood restoration support for affected persons. Livelihood restoration activities include training on sustainable agriculture practices, financial management, micro-credit facilities, employment opportunities, and HIV/AIDS awareness.

The consultation process will aim to address stakeholder concerns, enhance project transparency, and ensure community ownership and participation throughout project implementation.

E. 8.4. The Resettlement Action Plan implementation process

The Resettlement Action Plan implementation process involves setting up a Resettlement Committee by the AWWDA, the project proponent. This committee will oversee the verification of Project Affected Persons details and ensure the facilitation of compensation or assistance benefits. The committee's responsibilities include mobilizing PAPs, keeping them informed about project stages, and creating awareness among communities along project routes.

The committee will ensure early identification of agencies responsible for compensation, and income restoration. It will ensure compliance with the Resettlement Plan and Environmental Management Plan and oversee land acquisition and compensation payment to PAPs. Additionally, it will monitor completed water and sewerage project components to ensure the objectives of the resettlement plan are met.

The implementation of this RAP will involve four components: notification, verification of affected properties, preparation of entitlements through land acquisition, and relocation and resettlement of PAPs where necessary.

E. 8.5. Livelihood Restoration Program (LRP)

The Livelihood Restoration Program (LRP) outlined in this RAP emphasizes the multifaceted nature of livelihoods and the need for a variety of approaches to restore income and community support networks. Key principles include providing choices for Project Affected Persons to determine the best options for their households, active participation of PAPs in decision-making, and targeted support for vulnerable households.

Transition allowances (vulnerable categories of PAPs will be provided assistance to salvage materials were need be) are highlighted as necessary but require clear eligibility criteria and endpoints in addition livelihood restoration training will be offered to all PAPs. The background of livelihood restoration focuses on farming businesses and shops in the affected area, with proposed activities including training on sustainable agriculture practices, literacy on financial management to avoid misuse of compensation funds, linking to micro-credit enterprises, and prioritizing affected PAPs, especially women and vulnerable groups, for employment opportunities arising from the project:

- Financial management training is essential for PAPs receiving cash compensation to prevent misuse of funds. Sustainable agriculture practices training will be provided to enhance soil health and crop yields.
- PAPs will be linked to micro-credit facilities to encourage savings and investment.
- Priority in employment, particularly unskilled and semi-skilled positions, will be given to PAPs during construction, overseen by a Labour Recruitment Plan.
- HIV/AIDS awareness training will be conducted due to the increased risk associated with worker migration.

This RAP has provided a lump sum budget of **KSH. 9,5 16,993. (Kenya Shillings Nine Million Five Hundred and sixteen Thousand Nine Hundred and Ninety-Three)** to enable AWWDA undertake Livelihood restoration activities listed above.

E. 9. Grievance Redress Mechanism (GRM)

This RAP outlines a comprehensive Grievance Redress Mechanism (GRM), related to water and sewerage development. It establishes a structured approach to receiving, assessing, and resolving grievances from affected parties and stakeholders. The GRM aims to provide affected groups with a formal channel to address concerns or complaints about project implementation. It emphasizes the need for prompt, transparent, culturally appropriate, and cost-free resolution of grievances to maintain positive stakeholder relationships and manage project risks effectively.

E9.1. Grievance Structure:

The GRM consists of three tiers: Tier 1: Community/village level mediation; Tier 2: Project administration level resolution and Tier 3: Involvement of a higher-level committee if grievances remain unresolved.

E.9.1.1. Grievance Redress Committee (GRC):

GRC Comprise of representatives from various stakeholders responsible for arbitration, mediation, and negotiation including the project proponent to resolve grievances fairly and promptly. Regular meetings and sub-committees may be formed as needed.

E.9.1.2. Key Staff Responsibilities include:

The following are the GRM responsibilities: Grievance officer coordinates GRM activities; Formation of GRCs' before project commencement; Awareness campaigns about GRM; Assisting in redressing grievances and maintaining record and Provision of necessary resources for GRM operation.

E.9.3. Handling Specific Grievances include:

This RAP report highlights a dedicated mechanisms for addressing gender-based violence (GBV), sexual exploitation, abuse, and harassment (SEAH) related issues; Various points for receiving complaints, including government offices, project offices, and community representatives; Complaints can be received through multiple channels like writing, verbal communication, emails, Grievances are logged, assessed, and acknowledged within specific time frames.

E.9.4. Redress Process Include:

The report has put in place: The identification, assessment, acknowledgment, and response development stages; Resolutions at different tiers with specified time frames; Communication of response and closure of grievances; Option for further escalation to higher tiers or alternative dispute resolution mechanisms if needed.

Table 8: Summary of Grievance Redress Process

Process	Description	Time frame (No. of Days)	Other information
Identification of grievance	Face to face; phone; letter, e-mail; Recorded during public/community interaction;	1	
Grievance assessed and logged	Significance assessed and grievance recorded or logged (i.e. in the GRM log book)	4-7	Significance criteria: Level 1 – one off event; Level 2 – complaint is widespread or repeated; Level 3- any complaint (one off or repeated) that indicates breach of law or policy or provisions in other project documents
Grievance is	Acknowledgement of grievance through	4-7	

Process	Description	Time frame (No. of Days)	Other information
acknowledged	appropriate medium		
Development of response	Grievance solved at Tier 1 Project level Response development with input from management/ complainant/relevant stakeholders.	4	GO and complainant to sign off
Response signed off	Grievance closed Redress action approved at appropriate levels	Within above timelines	RE to sign off
Grievance not solved, passed to GRC	Grievance passed to appropriate party for resolution (GRC) – Tier 2. Redress action approved at appropriate levels.	7	GRC and complainant to sign off
Implementation and communication of response	Redress action implemented and update of progress on resolution communicated to complainant.	Within 7 days	
Complaints Response	Redress action recorded in grievance log book. Confirm with complainant that grievance can be closed or determine what follow up is necessary.	4-7	
Grievance not solved	Grievance passed to appropriate party for resolution. Final decision communicated to the complainant.	At most 7 days	Complainant to sign off
Close grievance	Record final sign off of grievance. If grievance cannot be closed, return to step 2 or refer to sector ministry or recommend third-party arbitration or resort to court of law.	4-7	Final sign off on by AWWDA

E9.1.6. GRM Jurisdiction include:

The GRM framework is project-specific and complements existing government redress processes; Government redress mechanisms take priority over the project-specific GRM and Grievance Redress Committees operate with defined terms of reference, tenure, and closure timelines.

E.9.1.7. Building Awareness and Training will include:

AWWDA Environmental and Social specialists will train project staff, PIU, and Works Supervision consultant on GRM procedures; Stakeholders will be trained on GRM procedures and formats, and project site notices will be displayed with contact information and Translation of GRM materials into local languages and distribution at administration offices along the project area will be conducted as needed.

E.9.1.9. Monitoring and Reporting will include:

This RAP report has guided monitoring and reporting of GRM which will include: Social Safeguards Specialists and/or Environmental specialists will prepare monthly reports on GRM issues.; The Grievance Redress Committee will review grievances and recommend changes in implementation procedures if needed and Monitoring indicators include the number of active project complaints, percentage of redressed claims, and percentage of unresolved complaints.

E.9.1.10. GRM Budget:

The allocated budget for GRM in the Resettlement Action Plan **is Ksh. 9,516,993.00 (**Kenya Shillings Nine million five hundred sixteen thousand nine hundred ninety-three) which constitute 10% of the total RAP cost.

E. 10. Resettlement and Compensation Strategies

This report outlines the Resettlement and Compensation Strategies for the project, emphasizing fair and prompt compensation for Project Affected Persons and adherence to key principles as summarised below:

E10.1. Key Principles that have informed this RAP include:

Minimize resettlement or relocation by exploring alternative measures; Compensate PAPs before project works start, ensuring their livelihoods are not disrupted; Award fair compensation values and involve PAPs in compensation preferences; Provide a statutory disturbance allowance and ensure communication with affected parties and address grievances fairly and promptly, ensuring special assistance for vulnerable groups.

E.10.2. Resettlement Implementation Arrangements are as follows:

Various organizations, including AWWDA and consultants, have defined roles in the resettlement process. Activities include preparation of Resettlement Action Plan, validation of assets and ownership, compensation payments, and livelihood restoration.

E10.4. Valuation and Legal Issues:

Compensation valuation follows provisions outlined in the Land Act, aiming for transparency, equity, and accountability.

E10.5. Institutional Arrangement:

E10.5.1. Athi Water Works Development Agencys' PIU oversees RAP implementation, with specific roles for safeguard experts, community engagement, and monitoring.

E10.5.2. Ministry of Water, Sanitation, and Irrigation coordinates with other ministries, agencies, and counties regarding RAP issues.

E10.5.3. RAP Implementation Schedule entail:

Activities such as RAP preparation, approval, disclosure, formation of grievance management committees, validation of assets, compensation payments, and livelihood restoration; After RAP approval, disclosure will occur after 120 days before implementation, with activities involving land appropriation by NLC and transfer of titles to the state will be an ongoing process.

E.11. 11. Valuation Methodology and Budget

E. 11.1. Valuation Methodology

The RAP's valuation methodology was based on assessing property value considering market factors, encompassing data on social, economic, governmental, and environmental attributes. The process included:

Collecting local market conditions and asset/property details and considering the enjoyment or compensation rights.

In Kenya, land compensation includes all related expenses and disturbances, possibly exceeding normal market rates. The valuation in this RAP incorporated five methods: **Comparison Method**: Adjusts similar properties to determine value, despite data limitations; **Investment Method**: Relies on an active investment market, facing similar data limitations; **Full Replacement Cost Approach**: Assesses property value based on acquisition and building costs, ensuring no physical or economic disadvantage to PAPs; **Profit Method**: Values property based on hypothetical business profits when rental or sales data are inadequate and **Residual Method**: Calculates value by subtracting development costs from estimated future value for properties with development potential.

The **Full Replacement Cost Approach** was chosen to ensure accurate property value assessment, protecting PAPs' interests.

E.11.2. Factors Considered During Valuation

E. 11.2.1. Land Acquisition

The National Land Commission (NLC) oversees land acquisition for public purposes as per the Constitution of Kenya (2010) and Land Act 2012. Responsibilities include: Implementing settlement programs; Administering the Land Settlement and Compensation Funds; Identifying and managing ecologically sensitive areas; Reserving public land for approved settlement programs or purchasing private land if necessary and approving compulsory acquisitions and ensuring investments benefit local communities.

The NLC will manage gazettement, issue notices, undertake valuation inspections, determine claims, and handle compensation payments.

E.11.2.2. Basis for Valuation for Land

The RAP requires additional land for pipe laying and working space, necessitating compulsory acquisition under the Land Act. Compensation factors include: Size of the affected land; Value influenced by the project component (water/sewer) and Replacement cost principle.

The land-market comparable approach, analyzing recent sale prices of similar parcels, was used to determine open market value, ensuring fair and current compensation.

E.11.2.3. Valuation of Structures, Crops, and Trees was based on the gross market value, considering investment in materials, labor, and inputs. Factors included: Market value and annual yield; Priority to harvest crops and salvage materials and Market rates and legal frameworks for compensation.

E.11.3. RAP Budget

a. GATANGA

Table 9-0: Summary RAP Budget for Gatanga

No.	Property	Total No. of Affected Units	Total Amount (Ksh.)
1	Land (0.1716 Ha)	10	Ksh1,272,300.00
2	Trees	2183	Ksh14,998,500.00
3	Crops	23162	Ksh4,141,500.89
4	Structures	1	Ksh25,824.00
Total Cost of Land, Trees, Crops and Structures (Ksh.)			Ksh20,438,124.89
Add 15% Disturbance allowance (Ksh.)			Ksh3,065,718.73
Subtotal 1- Compensation Cost (Ksh.)			**Ksh23,503,843.62**
GRM implementation Add 10% of Subtotal 1 (Ksh.)			Ksh2,350,384.36
Monitoring and evaluation Add 15% of Subtotal 1 (Ksh.)			Ksh3,525,576.54
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh3,525,576.54
Trainings 10% of Subtotal 1(Ksh.)			Ksh2,350,384.36
Subtotal 2(Ksh.)			**Ksh11,751,921.81**
Contingency @ 10% of compensation cost of Subtotal 1(Ksh.)			**Ksh2,350,384.36**

Grand Total (Ksh.)	**Ksh37,606,149.79**

b. MARAGUA

Table 9-1: Summary RAP Budget for Maragua

No.	Property	Total No. of Affected Units	Total Amount (KShs)
1	Land (19.06ha)	52	Ksh51,769,876.00
2	Trees	392	Ksh3,324,000.00
3	Crops	4,715	Ksh1,744,020.00
4	Structures	4	Ksh1,392,075.00
Total Cost of Land, Trees, Crops and Structures			Ksh58,229,971.00
Add 15% Disturbance allowance (Ksh.)			Ksh8,734,495.65
Subtotal 1- Compensation cost (Ksh.)			**Ksh66,964,466.65**
GRM implementation Add 10% of Subtotal 1(Ksh.)			Ksh6,696,446.67
Monitoring and evaluation Add 15% of Subtotal 1(Ksh.)			Ksh10,044,670.00
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh10,044,670.00
Trainings 10% of Subtotal 1(Ksh.)			Ksh6,696,446.67
Subtotal 2(Ksh.)			**Ksh33,482,233.33**
Contingency @ 10% of compensation cost of Subtotal 1 (Ksh.)			**Ksh6,696,446.67**
Grand Total (Ksh.)			**Ksh107,143,146.64**

c. MURANG'A

Table 9-2: Summary RAP Budget for Murang'a

No.	Property	Total No. of Affected Units	Total Amount (KShs)
1	Land	0	Ksh0.00
2	Trees	194	Ksh1,413,000.00
3	Crops	3082	Ksh364,980.00
4	Structures	0	Ksh0.00
Total Cost of Land, Trees, Crops and Structures			Ksh1,777,980.00

Add 15% Disturbance allowance (Ksh.)	Ksh266,697.00
Subtotal 1 compensation cost (Ksh.)	**Ksh2,044,677.00**
GRM implementation Add 10% of Subtotal 1(Ksh.)	Ksh204,467.70
Monitoring and evaluation Add 15% of Subtotal 1(Ksh.)	Ksh306,701.55
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)	Ksh306,701.55
Trainings 10% of Subtotal 1(Ksh.)	Ksh204,467.70
Subtotal 2(Ksh.)	**Ksh1,022,338.50**
Contingency @ 10% of compensation cost of Subtotal 1(Ksh.)	**Ksh204,467.70**
Grand Total (Ksh.)	**Ksh3,271,483.20**

d. KANGEMA-KANGARI

Table 9-3: Summary RAP Budget for Kangema/Kangari

No.	Property	Total No. of Affected Units	Total Amount (KShs)
1	Land (0.727ha)	2	Ksh2,310,385.00
2	Trees	0	Ksh0.00
3	Crops	0	Ksh0.00
4	Structures	0	Ksh0.00
Total Cost of Land, Trees, Crops and Structures			Ksh2,310,385.00
Add 15% Disturbance allowance (Kshs.)			Ksh346,557.75
Subtotal 1- compensation cost (Ksh.)			**Ksh2,656,942.75**
GRM implementation Add 10% of Subtotal 1(Ksh.)			Ksh265,694.28
Monitoring and evaluation Add 15% of Subtotal 1(Ksh.)			Ksh398,541.41
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh398,541.41
Trainings 10% of Subtotal 1(Ksh.)			Ksh265,694.28
Subtotal 2(Ksh.)			**Ksh1,328,471.39**
Contingency @ 10% of compensation cost of Subtotal 1(Ksh.)			**Ksh265,694.28**
Grand Total (Ksh.)			**Ksh4,251,108.42**

e. OVERALL RAP BUDGET

Table 9-1: Overall RAP Budget (Gatanga, Maragua, Kangema/Kangari and Murang'a)

Overall Summary			
No.	**Property**	**Total No. of Affected Units**	**Total Amount (Ksh.)**
1	Land (19.9586ha)	64.00	Ksh55,352,561.00
2	Trees	2769	Ksh19,735,500.00
3	Crops	30,959	Ksh6,250,500.89
4	Structures	5	Ksh1,417,899.00
Total Cost of Land, Trees, Crops and Structures (Ksh.)			Ksh82,756,460.89
Add 15% Disturbance allowance (Ksh.)			Ksh12,413,469.13
Subtotal 1- Compensation Cost (Ksh.)			**Ksh95,169,930.02**
GRM implementation Add 10% of Subtotal 1(Ksh.)			Ksh9,516,993.00
Monitoring and evaluation Add 15%of Subtotal 1(Ksh.)			Ksh14,275,489.50
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh14,275,489.50
Trainings Add 10% of Subtotal 1(Ksh.)			Ksh9,516,993.00
Subtotal 2(Ksh.)			**Ksh47,584,965.01**
Contingency @ 10% of compensation cost on subtotal 1 (Ksh.)			**Ksh9,516,993.00**
Grand Total (Ksh.)			**Ksh152,271,888.03**

E.12. Monitoring and Evaluation

E.12.1. Monitoring and Evaluation

The primary aim of monitoring and evaluation (M&E) in this RAP is to ensure the effective implementation of the plan, track progress, and address any emerging issues. This involves aligning the implementation with the established plan, budget, and timeline, providing insights into progress, identifying challenges, and taking corrective actions. The RAP monitoring plan includes three main components:

Performance Monitoring: This involves continuous tracking and evaluation of project activities, outputs, and outcomes against indicators and targets. This will enable assess implementation processes and identify areas for improvement.

Impact Monitoring: This includes Impact monitoring assesses the effects and implications of RAP implementation on stakeholders, communities, and the environment. It will measure the implementation achievement of objectives, such as livelihood restoration and environmental sustainability.

Table 10: Activities, data and responsibility for monitoring and evaluation of RAP implementation

Project Stage	Parameter	KPI Indicators	Verifier	Responsibility	Frequency
Land acquisition and resettlement planning	Public meetings held	Number of public meetings held	Minutes of meetings	AWWDA	During implementation reported to the Bank monthly through the monthly report
	Census report completion	Completion of assets, inventory taking	Census report	AWWDA	During implementation
	Permanent land acquisition progress	Issuance of awards, Disbursement of compensation payments, Grievance redress procedures	Copies of letters, payment vouchers, bank account records	AWWDA, NLC, National Security and Interior Coordination	reported to the Bank monthly through the monthly report

	Compensation for land	Loss of housing and other structures, House demolition	Copies of payment vouchers, verification of houses constructed	AWWDA, NLC, Ministry of Public Works, National Security and Interior Coordination	During implementation and reported to the Bank through Monthly report
	Relocation and construction	Partial impacts on houses and other structures, Acquisition and preparation of alternative land, Construction of housing, infrastructure, and social facilities	Compensation for demolition, new construction and re-organization of land, Voucher payment, Actual construction	AWWDA	Half-yearly and reported to the Bank in Half Yearly reports
	Land sub-division and actual construction activities	Number of plots, Number of houses, Construction types	Records of issuance of land and compensation amount, verification of construction	AWWDA, National Lands Commission (NLC), Ministry of Public Works	Every month until completion of construction activities, or as per requirement by project sponsor

			activities	(MoPW)	
Project implementation and Defects Liability Period	Arising grievances	Compensation amount and payment, Rehabilitation of Infrastructures, Relocation, Handling conflicts	Payment audits, Records of grievances and resolutions	Task Force of Compensation & Resettlement Committee, contracted research or consulting agency, development NGO	Twice a year, One year after resettlement for the socio-economic survey

iii. Completion Audit

At the conclusion of RAP implementation, a completion audit will evaluate overall achievements, outcomes, and compliance with project objectives, standards, and regulations. This will include reviewing RAP, financial records, and on-the-ground activities to ensure all requirements are met.

E. 12.2. Internal Monitoring and Reporting will include: Internal Monitoring will be conducted by AWWDA's project implementation unit, focusing on progress against targets and **Internal Reporting will be** compiled monthly and quarterly, submitted to AfDB, detailing census survey results and socio-economic impacts.

E.12.4. Monitoring Indicators include the following: Process Indicators: Adequacy of budget, administrative costs, RAP Steering Committee staffing, grievance resolution mechanisms; **Output Indicators:** Compensation disbursement, relocation progress, construction program impacts, inter-agency coordination and **Impact Indicators:** Restoration of pre-displacement income levels, security of tenure on remaining land.

E.12.4.1 Evaluation Tools in this RAP will include: Focused Group Discussions (FGD) will include: Engaging various stakeholder groups; **Key Informant Interviews:** Conduct with knowledgeable individuals about relocation; **Stakeholder Meetings:** Collect detailed information on project performance; **Structured Direct Observations:** Field assessments of RAP implementation and **Informal Surveys/Interviews:** Non-sampled surveys with PAPs, workers, and staff.

Reporting and Audits as highlighted in this RAP will include Internal Reports: Monthly and quarterly reporting on compensation, assistance to vulnerable groups, and complaint resolutions and **External Audits:** Annual audits and a final Implementation Completion Audit to assess if objectives were met.

The budget allocated in this RAP is **Ksh. 14,275,489.50** (Kenya shillings fourteen million two hundred seventy-five thousand four hundred eighty-nine shillings and fifty cents), which constitutes 15% of the total compensation costs for monitoring and evaluation activities.

E. 13.1 Conclusion:

The RAP for the Murang'a County water and sanitation improvement project identifies both positive and negative impacts. The positive impacts include improved water access and sanitation, while the negative impacts include loss of livelihood for some PAPs. To mitigate these adverse effects, fair compensation will be provided to affected persons. A comprehensive monitoring program is recommended to ensure the effectiveness of social mitigation measures and address any unforeseen issues. The RAP emphasizes a participatory approach involving the County Government of Murang'a, AWWDA, Other stakeholders, AfDB, and PAPs to facilitate planned activities according to the schedule.

E.13.2. Commitments:

Timely Compensation and Grievance Resolution:

- AWWDA will ensure that all affected persons are compensated promptly to minimize the time required for livelihood restoration.
- Grievances raised by PAPs will be resolved fairly and promptly.

Sensitization Exercises:

- The social safeguard/implementation team will conduct sensitization activities to enhance women's land rights, ensure proper use of compensation funds, and prevent gender-based violence.

Collaboration with Relevant Institutions:

- AWWDA will collaborate with the County Government of Murang'a and other relevant institutions for timely RAP implementation, including grievance redress and maintaining the pipeline wayleave.

Notice for Salvaging Assets:

- AWWDA will provide a three-month notice to PAPs to allow them to salvage their assets.

Monitoring and Evaluation:

- AWWDA will undertake ongoing monitoring and evaluation of the RAP during and after implementation to ensure compliance and address any arising issues.

1. INTRODUCTION

1.1. General background

Access to water and sanitation in Kenya is facing challenges to keep pace with population growth. Currently, only 70% of Kenyans have access to drinking water, and a mere 32% have access to sanitation. According to the Kenya Population and Housing Census in 2019, the population was estimated at 47.5 million, with 31% residing in urban areas. With an annual population growth rate of 2.2%, there is significant pressure on existing infrastructure. As urban migration continues, projections indicate that by 2030, approximately 30 million Kenyans (48% of the population) will live in cities. This urbanization surge places even greater demands on urban infrastructure and stretches the limited financial resources available for essential services.

Despite these challenges, rapid urbanization in Kenya has driven GDP growth, fostered economic transformation, boosted productivity, and created income and employment opportunities. Towns serve as vital hubs for sustainable economic growth and social development.

Since the enactment of the Constitution of Kenya in 2010, responsibility for devolved services has shifted to the 47 County Governments. This decentralization has led to an increase in urban populations, placing additional pressure on local authorities to meet the growing demands for water and sanitation.

In this regard, MWSI has developed a national water sector investment and financing plan, aggregated from County Government plans: The National Water and Sanitation Investment and Financing Plan (NAWASIP). NAWASIP outlines key result areas for rural and urban water supply and sanitation from 2023 to 2030. By 2030, it is projected that Ksh. 236 billion (USD 1.6 billion) will be required for urban water supply and Ksh. 365 billion (USD 2.4 billion) for urban sanitation. This program aims to support both the National and County Governments in bridging the financing gap for water supply and sanitation infrastructure development in urban areas of Kenya.

1.2. Program objective

The Government of Kenya has prioritized the achievement of universal access to water services and sanitation by 2030. The sector aims to enhance health, improve the quality of life, and reduce poverty levels by fostering private sector growth through sustainable investment in water and sanitation services.

The program's specific objective is to execute water supply and sewerage projects across various towns in Kenya. The goal is to stimulate commercial activities, spur economic growth, enhance the quality of life for residents, and boost resilience against climate variability and change. This initiative will expand both water and sewerage coverage nationwide and promote private sector development.

1.3. Programe overview

The program will comprise five components:

Component A: Water Supply & Sanitation Infrastructure

This component involves constructing and rehabilitating water supply infrastructure (intakes, pipelines, water treatment plants, reservoirs, distribution networks, last-mile connections, and metering) and sanitation infrastructure (wastewater treatment plants, trunk sewers, lateral sewers, last-mile connections, ablution blocks). The first priority, as agreed with the Government, will be providing last-mile connectivity to projects implemented under the Bank-financed Kenya Towns Sustainable Water Supply and Sanitation Program to ensure the functionality of the installed infrastructure and ultimate access to services for project beneficiaries.

Component B: Watershed Management

This will include climate-adaptive measures for water catchment protection and incorporate best practices for watershed management within the project area.

Component C: Institutional Development Support

This component aims to ensure the sustainability of the constructed infrastructure and guarantee a return on investment. It will include:

- Provision of water and wastewater testing laboratories and equipment to Water Service Providers and KEWI.
- Provision of equipment to manage non-revenue water and sewer maintenance.
- Support for WASREB and WRA.
- Capacity enhancement for WSPs to improve technical, commercial, and financial performance and prepare bankable projects.
- Support to improve billing and revenue collection systems.
- Promotion of sanitation and hygiene.

- Preparation of future investment projects.

Component D: Program Management

A Program Coordination Unit (PCU) will be established at the Ministry of Water, Sanitation, and Irrigation (MOWSI), and Project Implementation Units (PIUs) will be established for each water sector institution, staffed by adequately skilled personnel. This component will support daily program operations, implement environmental and social management plans (ESMPs), and conduct program financial and technical audits, as well as monitoring and evaluation.

Component E: Knowledge Management

This component involves capturing, storing, and sharing knowledge and experiences to improve productivity and retain critical program information. Specific activities will include:

- Training women and youth on managing water and sanitation businesses arising from the program.
- Organizing workshops and seminars for knowledge and experience sharing.
- Conducting research and formulating an innovation hub.

Under Component A of the program, Murang'a Cluster Water and Sewerage project has been proposed under the Ministry of Water Sanitation and Irrigation to be implemented by **Athi Water Works Development Agency**. The project is situated within the service areas of four Water Services Providers (WSPs): Murang'a Water and Sanitation Company (MUWASCO), Murang'a South Water and Sanitation Company (MUSWASCO), Murang'a West Water and Sanitation Company (MWEWASCO), formerly Kahuti WSP, and Gatanga Water and Sanitation Company (GATAWASCO). The Ministry of Water, Sanitation, and Irrigation (MWSI) aims to ensure access to clean and safe water in adequate quantities, provide reasonable standards of sanitation, and achieve food security as stipulated in Article 43 (b), (c), and (d) of the Constitution.

1.4. Consultancy Services

Losai Management Limited consultants have been engaged under a consultancy contract by the Athi Water Works Development Agency to undertake consultancy services for the **Murang'a Cluster Water and Sewerage project**

1.4.1 Scope of Consultancy Services

To undertake consultancy services for the detailed design, preparation of tender documents, and ESIA and RAP studies for the Murang'a Water Supply and Sanitation Project. The project is being implemented under the National Urban Water Supply and Sanitation Program, funded by the African Development Bank. The assignment commenced in December 2023 and is set to be completed by July 2024. The following were undertaken:

1.4.1 Scope of Consultancy Services

Preparation of Detailed Design for Murang'a Cluster Water and Sewerage Project:

- Sewerage works for Kabati, Maragua, and Murang'a Towns
- Thithi - Githingiri and Chomo Phase II Water Supply Project
- Upgrading of Chathanda – Kenol Water Supply System
- Upgrading of Tuthu and Rwathia Water Supply Systems
- Gakoigo WTP – Kambiti Water Supply System

Preparation of the Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for the project.

Preparation of Tender Documents.

This report includes RAP details for the following project components:

- Kabati Sewerage systems
- Thithi – Githingiri and Chathanda – Kenol Water Supply Systems
- Maragua Sewerage
- Upgrading of Tuthu and Rwathia Water Supply Systems
- Gakoigo Watert Treatment Plant (WTP) – Kambiti Water Supply System
- Extension of sewers for Murang'a Town
- Last-mile connections and storage tanks for the three involved WSPs

1.5. Environmental and Social Safeguards Documents

Safeguard documents for the Murang'a Cluster Water and Sewerage Project have been prepared by the Athi Water Works Development Agency (AWWDA) through the consultant. These documents encompass the Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plans (RAP). A summary of the safeguard documents is listed below:

Table 1-1: Required Safeguard Documents

#	COMPONENT	SCOPE	SAFEGUARDS INSTRUMENT REQUIRED
1	**Water Works:** Water intakes, treatment plants, Raw and Treated Gravity Mains, Distribution lines, Storage Tanks/BPT and Last mile Connection water lines	Thithi - Githingiri and Chomo phase II Water Supply Project Upgrading of Chathanda – Kenol Water Supply System Upgrading of Tuthu and Rwathia Water Supply systems	Preparation of ESIA and Submission to NEMA and AfDB for approval. Preparation of RAP Report and submission to the Bank for approval.
2	**Sewerage Works:** Waste water Treatment Plants, Trunk Sewers and Last mile connection sewer lines	Sewerage works for Kabati, Maragua and Muranga Towns,	Preparation of ESIA and Submission to NEMA and AfDB for approval. Preparation of RAP Report and submission to the Bank for approval.

1.6. RAP Report Structure:

This RAP report is structured into several chapters, each addressing aspects of the project and its impacts on affected persons.

Chapter 1: serves as an introduction, providing background information on the project, its objectives, overview, scope of consultancy services, and environmental and social safeguards documents.

Chapter 2: delves into the project description, detailing the project area, components, and associated costs.

Chapter 3 outlines the objectives and principles of the RAP, including the problem statement, objectives, guiding principles, scope, and methodology.

Chapter 4 discusses the legal and institutional framework within which the project operates, including national legal laws, the Constitution of Kenya, and institutional arrangements.

Chapter 5 presents the social-economic baseline condition, covering the context, methodology, objectives of the socioeconomic survey, and profiles of project-affected persons in various locations.

Chapter 6 focuses on the impacts of the project on affected persons, institutions, land, structures, crops, trees, and businesses.

Chapter 7 elaborates on the eligibility criteria and entitlements for compensation, including the cut-off date and entitlement matrix.

Chapter 8 addresses consultation and community participation, outlining the aims, stakeholder categories, future stakeholder plans, implementation process, and livelihood restoration program.

Chapter 9 discusses grievance redress mechanisms,

Chapter 10 presents resettlement and compensation strategies,

Chapter 11 covers valuation methodology and budget,

Chapter 12 outlines the monitoring and evaluation framework for the project, and

Chapter 13: Conclusion and Recommendations /Commitment.

Annexes

2. PROJECT DESCRIPTION

2.1 Project Area Description

The project is located within the service area of 4 Water services providers (WSPs), namely; Murang'a Water and Sanitation Company (MUWASCO), Murang'a South Water and Sanitation Company (MUSWASCO), Murang'a West Water and Sanitation Company (MWEWASCO) formerly Kahuti WSP, and Gatanga Water and Sanitation Company (GATAWASCO). These companies are owned by Murang'a County Government and are licensed by WaSREB, as described below:

- **i.** Murang'a Water & Sanitation Company (MUWASCO) jurisdiction area covers partly two sub-counties namely Kiharu and Maragua The main target area areas under this project are Kambiti and Maragua Ridge locations.
- **ii.** Murang'a South Water & Sanitation Company (MUSWASCO) jurisdiction area covers three sub-counties namely Kandara, Kigumo and Murang'a South. The main target area areas under this project are Kangari and Kenol.
- **iii.** The Gatanga Water and Sanitation Company (GATAWASCO) area of service is the Gatanga Sub-County. The total area of service is 528.8 km² but the actual served area is 164km². The target areas under this project are Kiunyu and Samuru Locations.
- **iv.** Murang'a West Water and Sanitation Company (MWEWASCO) area of service is Kangema and Kiharu Sub-County.

The figure below is a map of Murang'a county and presents the target for the main areas under this project.

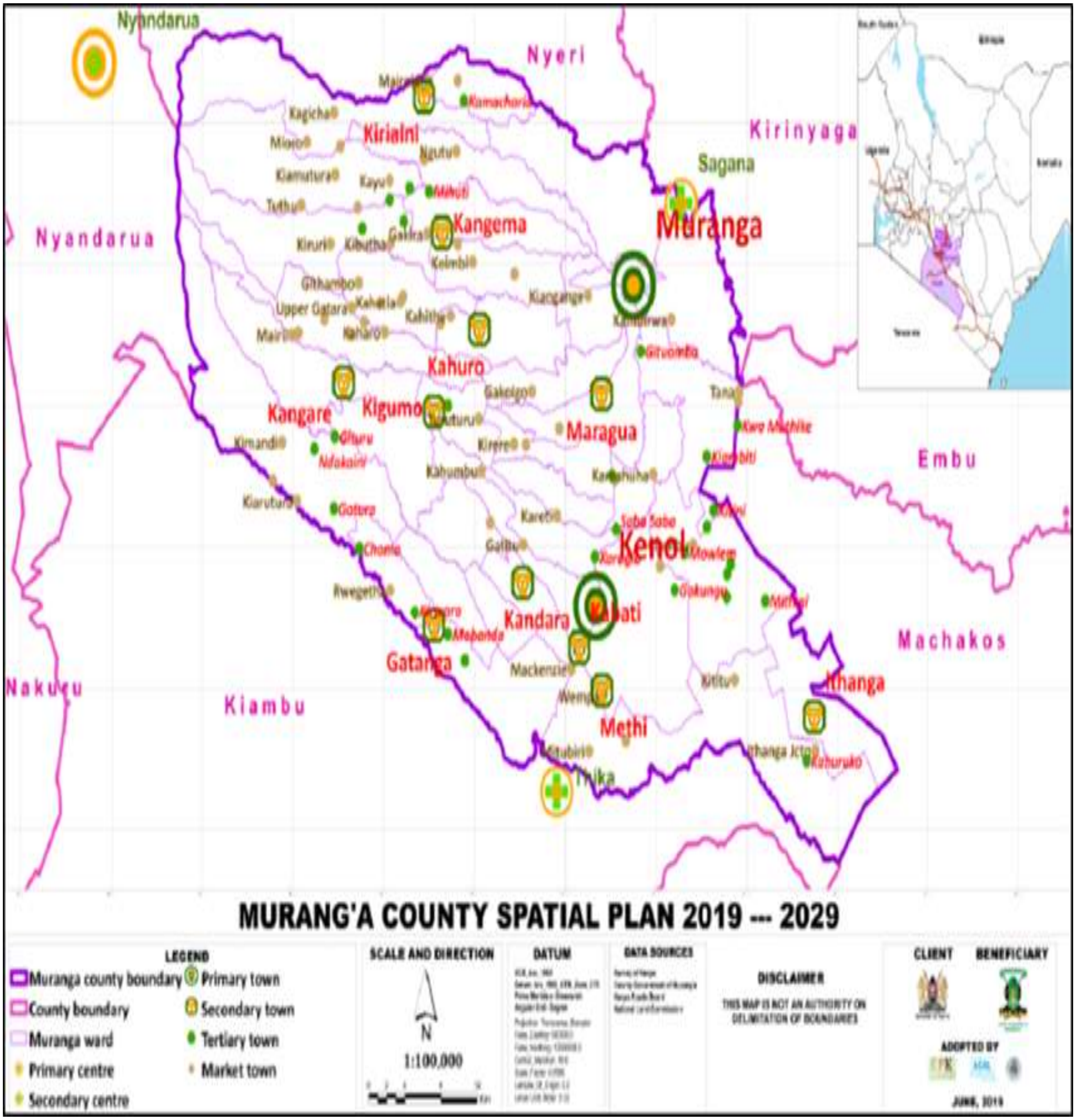


Figure 2-1: Murang'a County Map Highlighting the target for the main areas under this project.

2.2 Project Components

The project has Water and Sewerage components that are spread out in the following WSP area of jurisdiction as tabulated below:

Table 2-1: Project components for Murang'a Cluster Water and Sewerage Project

Water Service Provider	Prioritized Project	Description of Scope
Gatanga Water and Sanitation Company (GATAWASCO)	Thithi Githingiri Water Supply System	Construction of 4000m3/day intake - 0.3 km raw water mains (OD 315 mm) - Water treatment works 4000m3/day - OD 280-225 mm 10.5km transmission mains - OD 225 mm 6.5km transmission mains - OD 160 mm 12km transmission mains - 2500m3 Kiawahiga tank
	Chomo –Rwegetha Laini Water Project	- Laying of 7.8 km raw water mains (OD 280 mm) - Construction of Proposed treatment works 3000m3/day - Laying of proposed OD 315mm 0.3km transmission mains - Laying of proposed OD 225 mm 7.7km transmission mains - Laying of proposed OD 160 mm 8.1km transmission mains
Murang'a South Water and Sanitation Company (MUSWASCO)	Chathanda - Kenol Water Supply System	- Rehabilitation of intake (upgrading/ new) - Rehabilitation of Raw Main 10.5km - Construction of 4000m3/day Treatment works - Extension of OD 200 pipeline 4km - Construction of tank 250m3 at Mutheru - Construction of tank 1000m3 at t/works
	Kenol-Kabati sewerage	- 21 km of reticulation sewers - 4 km of trunk mains - Makutano STP Phase II works (AP 3, MP 2 & 3, SDB)
Murang'a West Water and Sanitation Company (MWEWASCO)	Upgrading of Tuthu Water Supply system	- 2500m3 tank at Kanyenyaini sec - 2000m3 tank at Kawariua - 2km OD 225 mm pipeline replacement

Water Service Provider	Prioritized Project	Description of Scope
Murang'a Water and Sanitation Company (MUWASCO)	Sewer works	- Maragua Sewerage System and Sewer Treatment Woks - Muranga Sewerage System

2.2.1 Water Interventions

i. Gakoigo-Kambiti Water Supply System

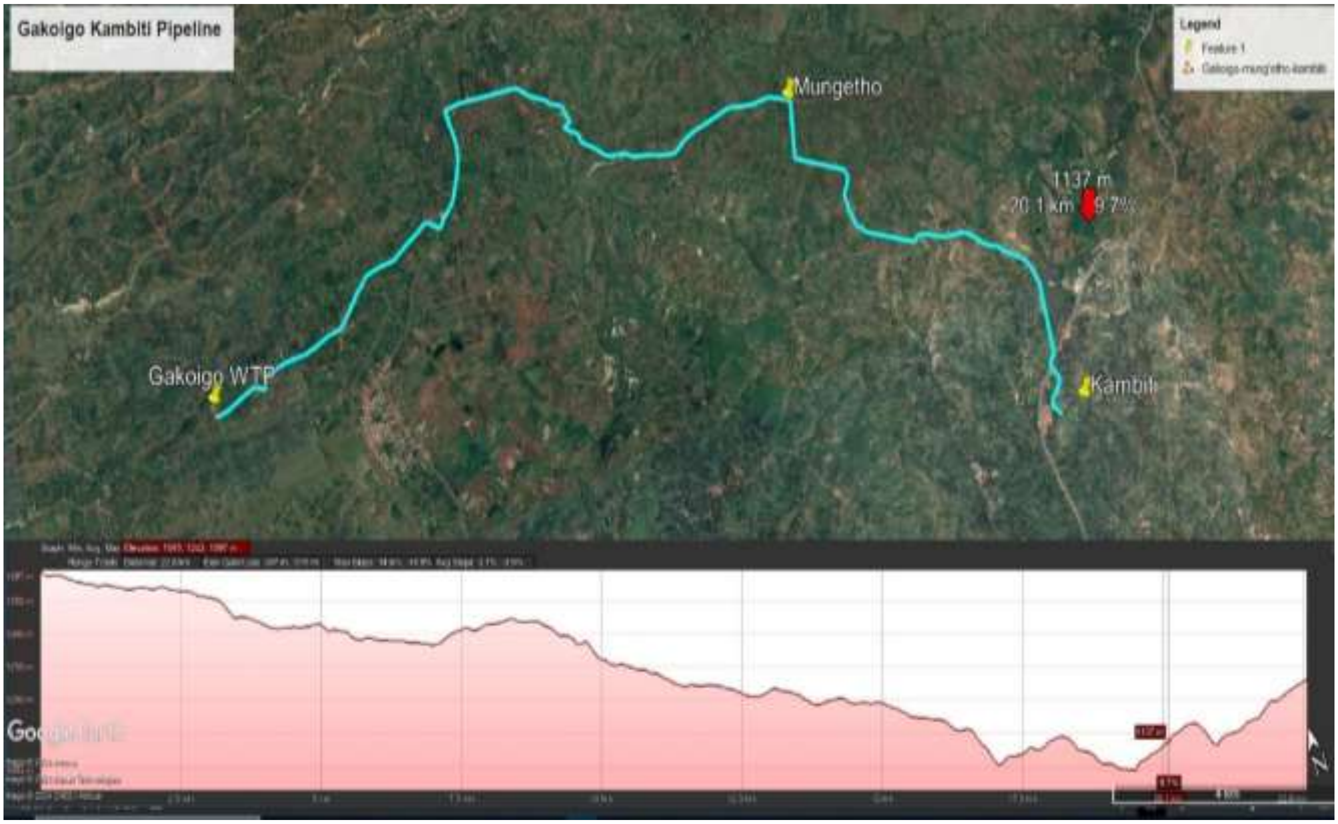
The existing system comprises a dam, DN 400 mm raw water mains, and a treatment facility. The design capacity of the system is 8,000 m^3/day; however, the current operating capacity is 4,500 m^3/day or less due to a limited distribution network. The proposed works for the Gakoigo-Kambiti Water Systems aim to increase the distribution capacity. The interventions for this system and a summary of the design analysis are presented in the sections below:

a) **Water Source** - The water source for this system is the Maragua River, which is a perennial river. There is an existing water treatment plant to address this need.

b) **Water Treatment Works** - The existing water treatment plant is designed for a capacity of 8,000 m^3/day.

c) **Transmission Water Mains** - The proposed water main is a 22.6 km long, OD 225 mm, HDPE pipeline (pressure ratings PN 12.5 to PN 16).

Figure 2-2: Layout and ground profile for the Gakoigo-Kambiti Pipeline



ii. Upgrading of Tuthu Water Supply Systems

The existing Tuthu system does not have a treatment plant, and turbidity levels in the raw water increase during the wet season. The proposed works include a new intake weir, a raw water main, and a treatment plant, as detailed below:

a) **Intake Works** - The proposed new intake works will source water from the South Mathioya River, which is perennial in nature. The intake is located 1 km upstream of the existing intake to allow for the gravity flow of raw water to the proposed treatment plant. The intake is designed to abstract 4,000 m³/day.

b) **Raw Water Mains** - The raw water main will draw water from the proposed intake to the proposed treatment works 1,000 m downstream.

c) **Treatment Works** - The water treatment plant is designed for a capacity of 4,000 m³/day.

d) **Storage** - The storage capacity includes 1,000 m³ at Kawariua and 2,500 m³ at Kanyenyaini.

Figure 2-3: Layout for the Tuthu Treatment Plant

iii. Chathanda – Kenol Water Supply System

In this component, the existing system comprises an intake weir, DN 250 mm raw water mains, and a distribution tank of 150 m³. The assessed capacity of the system is 4,000 m³/day; however, the current operating capacity is 1,500 m³/day or less due to malfunctioning pipeline appurtenances. The proposed upgrading works for the Chathanda – Kenol Water System are intended to improve the hydraulic efficiency so that the system can operate at design capacity. The proposed interventions for this system include:

a) **Water Source:** The water source for this system is the Chathanda River, which is a perennial river. Water quality deteriorates during the rainy season due to high turbidity caused by increased human activities upstream. A water treatment plant has been proposed to resolve this challenge.

b) **Intake Works:** The proposed works include rehabilitation/upgrading of the intake, raising the weir height to 4 meters, constructing a proper draw-off chamber with screens, and desilting the reservoir.

c) **Raw Water Mains:** The existing raw water main is a 7 km long, OD 280 mm, uPVC pipeline. The pipeline will be extended by 4 km to the Mareira Treatment Plant.

d) **Water Treatment Works**: The water treatment plant is designed for a capacity of 4,000 m³/day.

e) **Transmission Mains**: The existing DN 200 mm transmission main runs from the Mariira tank to Kariguini (Makuta no water and sewerage project). This pipeline will be adequate to transmit the 4,000 m³/day flow.

f) **Storage Tank**: Construction of a 1,000 m³ reinforced concrete tank at Mariira.

g) **Masonry Break Pressure Tank**: Construction of a 250 m³ masonry break pressure tank at Mutheru.

h) **Last Mile Connectivity**: To increase water coverage, 107 km of water distribution lines will be installed under the MUSWASCO area.

Figure 2-4: Layout of Chathanda - Kenol Water Treatment Plant

iv. **Thithi Githingiri Water Supply System**

This involves the construction of a new system with a design capacity of 4,000 m³/day targeted to serve Githingiri and its environs. The system will comprise the following:

a) **Intake Works:** The Thithi intake works will source water from River Thithi, a perennial tributary of River Kiama. The intake is designed for a capacity of 4,000 m³/day.

b) **Raw Water Main** The raw water main will draw water from the intake to a treatment works 400 m downstream.

c) **Treatment Works** The water treatment plant is designed for a capacity of 4,000 m³/day. The design parameters are similar to those of the Chathanda system mentioned above.

d) **Transmission Mains** The 23 km pipeline will transport water from the Thithi Treatment Works to the 2,500 m³ Kiawahiga tank. The water will then gravitate to the Githingiri and Thika Green areas.

e) **Storage Tank** A 2,500 m³ reinforced concrete (RC) storage tank is proposed at Kiawahiga.

f) **Last Mile Connectivity** To increase water coverage, 75 km of water distribution lines will be constructed under the GATAWASCO area.

v. **Rwathia Water Supply System**

Improvement works for the Rwathia system involve the following:

a) **Storage Tank** A 2,500 m³ RC water storage tank at Weithaga for the Rwathia system.

b) **Last Mile Connectivity** To increase water coverage, 180 km of water distribution lines will be constructed under the MWEWASCO area.

2.2.2 Sewer Interventions

i. Kabati Sewerage System

The proposed sewers will collect waste water from Kabati town and environs and drain to trunk Sewer 2 constructed under the Makutano Sewerage Project.

The figure below illustrates the layout of the sewers for Kabati alongside the constructed works under the Makutano sewerage project

Figure 2-5: Proposed Sewer Network for Kabati and Environs

Table 2-2: Summary of Kabati Sewers details

Sewer	**Design Summary**
a) Trunk Sewer	• Total Length = 3,800 m • 300 mm Dia = 3100m • 400 mm Dia = 700 m
b) Lateral Sewers	• Total Length = 21,000 m • 250 mm Dia = 21,000 m
***c)* House Hold Connections**	• 500 household connections

ii. Maragua Sewerage System

The designed wastewater system comprises secondary and tertiary sewers which will collect waste water from the Maragua township and surrounding areas and discharge into Trunk 1 and Trunk 2. These trunks are mainly planned along the riparian and road reserves and merge to a main interceptor trunk which will convey the sewage for treatment at the new Maragua sewage treatment plant. The layout below presents the new sewerage system.

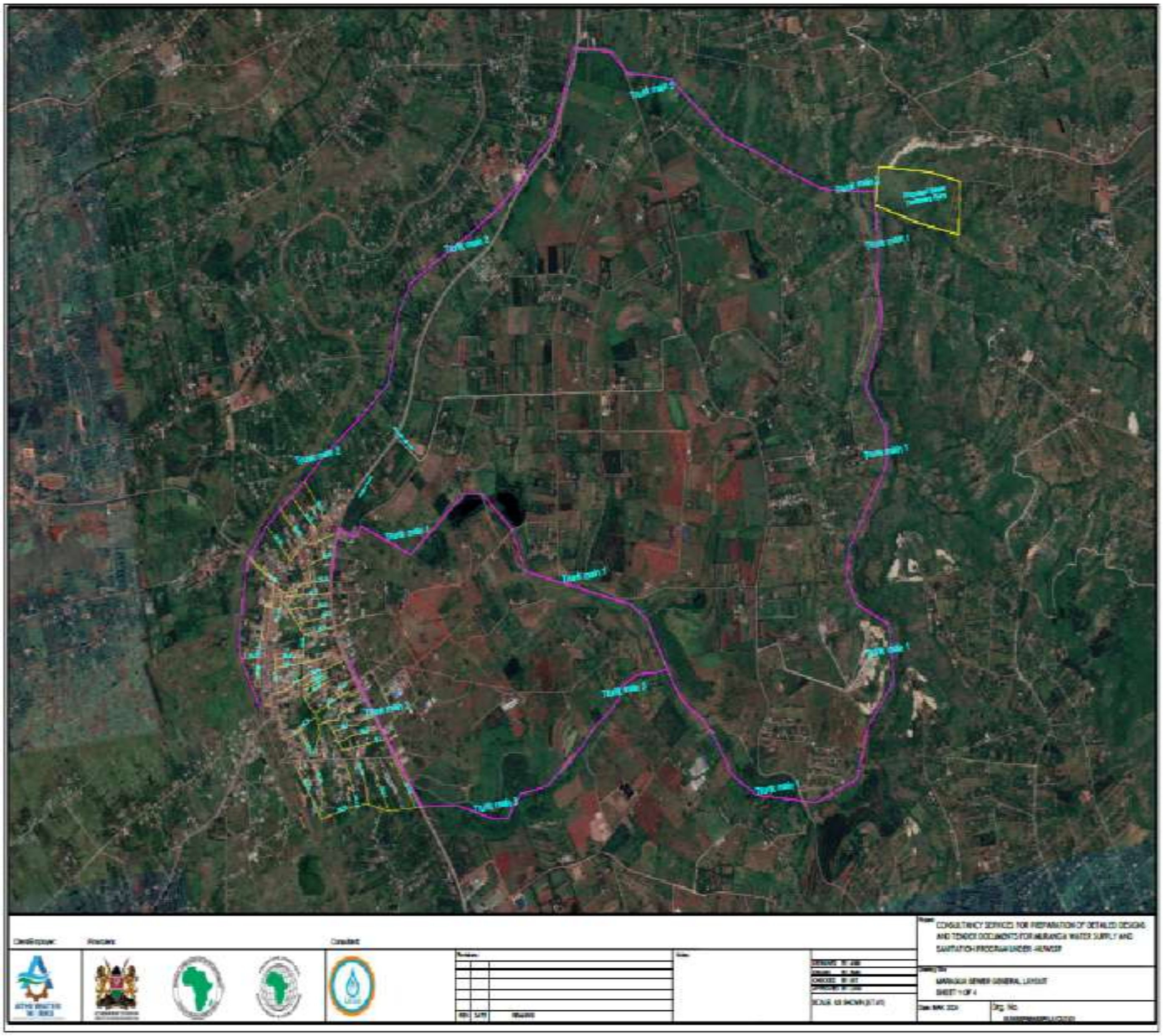


Figure 2-6: Layout Map of new Maragua Sewerage System

The table below presents a summary of the designed sewers

Table 2-3: Summarized design details for Proposed Sewers

Sewer	Design Summary
Trunk Sewer	● Total Length = 13,530 m ● 300 mm Dia = 3660m ● 400 mm Dia = 9870m
Lateral Sewers	● Total Length = 9,097 m ● 200 mm Dia = 9,097m

- Maragua Sewage Treatment Plant

This comprises the following components:

A waste stabilization pond treatment system which has following components:

- Inlet works
- Anaerobic ponds
- Facultative ponds
- Maturation ponds
- Sludge drying bed
- Utility buildings and site works (access roads, drains, fence, water supply etc).
- House Hold Connections – there are 500 new plot connections under the Maragua sewerage works.

iii. Murang'a Sewer Extensions

The new sewers are extensions of the existing public sewer system. Therefore, they will collect wastewater and discharge into the existing Murang'a Wastewater Treatment Plant (WWTP).

The layout below presents the new sewer extensions.

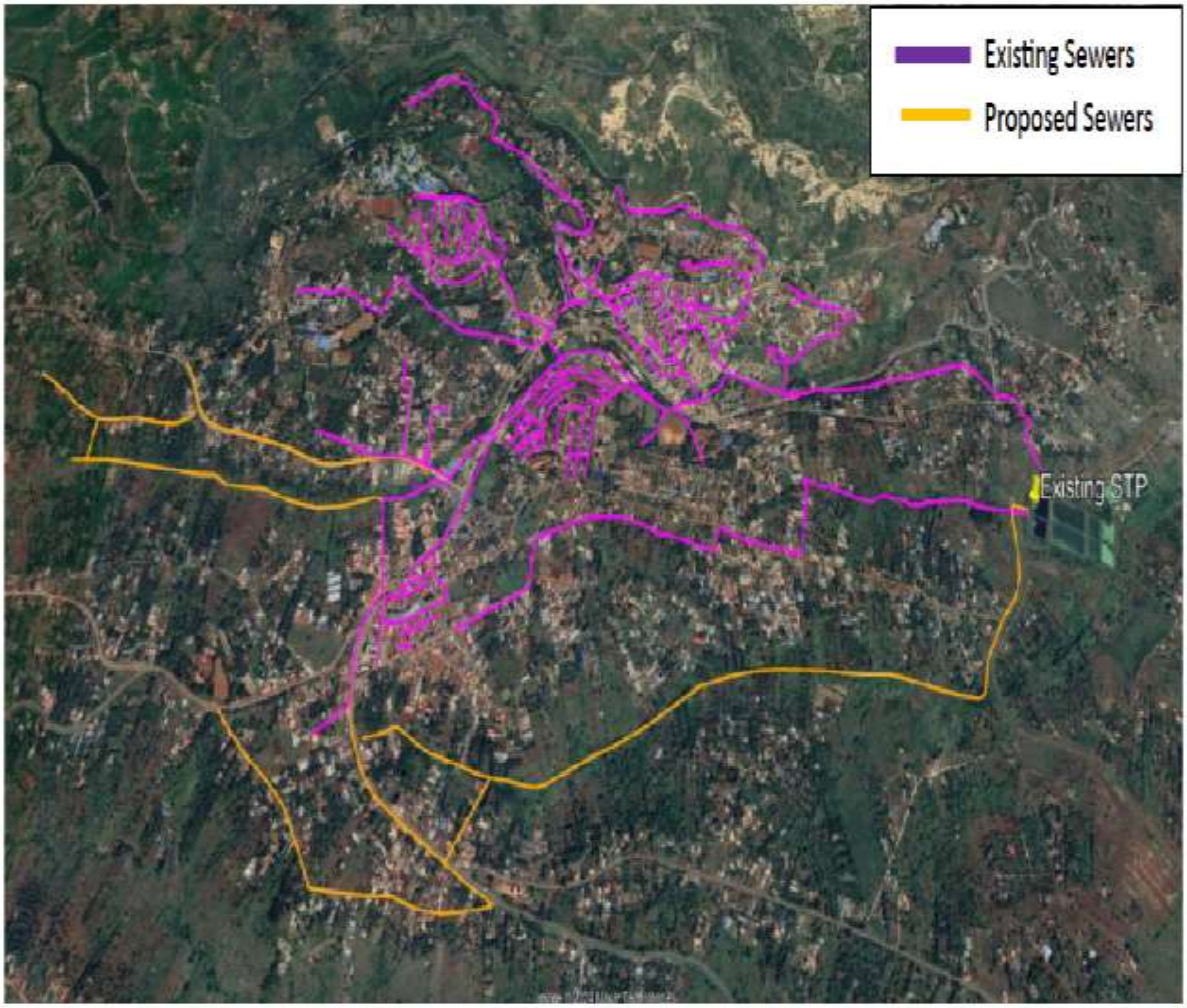


Figure 2-7: Layout of proposed Sewer extensions for Murang; a Town

iv. Trunk Sewer -

Table 2-4: Summary of Murang'a Sewers details

Sewer	Design Summary
Trunk Sewer	• Total Length = 9,922 m • 200 mm Dia =726m • 250 mm Dia =3282m • 300 mm Dia = 2455m • 400 mm Dia = 3459 m

Table 2-5: Summary of Land Requirement for the proposed works

Location	**Land Affected in hectares (ha)**
Muranga	0
Maragua	19.06
Gatanga	0.1716
Kangari-Kangema	0.727
Total	**19.9586**

Figure 2-8: Pictures for the proposed project area

		
Proposed site for Gatanga Water Pipeline	Proposed site for Maragua STP	Proposed Rehabilitation site at the existing Chathanda Intake (Kangari water supply project Component)

2.3 Water project cost

The total cost for the proposed upgrading works is **Ksh. 1,318,797,127 (Kenyan Shillings One billion three hundred eighteen million seven hundred ninety-seven thousand one hundred twenty-seven).**

2.4 Sanitation Project Cost

The total cost for the proposed upgrading works **is Ksh. 1,069,315,710 (Kenyan Shillings One billion sixty-nine million three hundred fifteen thousand seven hundred ten).**

3. OBJECTIVES AND PRINICIPLES OF RAP

3.1. The problem and need for RAP

Displacement impacts are anticipated to be small in scale occasioned by, reclamation of encroached riparian reserve along Thithi River, Chathanda River, and Chomo River, acquisition of private land for the construction of intake, weir and treatment plant, a tank at Githingiri, Construction of water treatment plant at Kiwahiga, pipeline land for Kayahwe- Kambiti pipeline, tank site for Machegecha, wayleave for chathanda intake, Obtaining consent for construction of water treatment works at Rwegetha and Mariria from the County Government, consents from Board of Management (BOM) Kanyenyaini Secondary School, and engagements with Kenya Forest Service for way leave for Tuthu T-works and rehabilitation intakes on Aberdare Forest and Reclamation of encroached road reserve along pipeline for Kabati sewerage.

The AfDB environmental and social operation safeguard OS2 on land acquisition, restrictions on access to land and land use, and involuntary resettlement, outlines the following objectives:

(i) Avoid involuntary resettlement where feasible, or minimize resettlement impacts where involuntary resettlement is deemed unavoidable after all alternative project designs have been explored;

(ii) To avoid forced eviction.

(iii) To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at full replacement cost and (b) providing sufficient resettlement assistance under the project to support displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

(iv) To improve living conditions of poor or vulnerable persons who are physically displaced by the project, through provision of adequate housing, access to services and facilities, security of tenure and safety.

(v) To establish a mechanism for monitoring the performance and effectiveness of involuntary resettlement activities which result from project activities, and for remedying problems as they arise.

(vi) To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.

(vii) To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

The applicability of OS2 is established during the RAP preparation and for ESIA described in Assessment and Management of Environmental and Social Risks and Impacts (OS1). Further, the Environmental Management and Coordination Act, 2015 amendments, provides for a RAP whenever displacement is identified as an impact during Environmental and Social Impact Assessment (ESIA) studies.

3.2. Objectives of the Resettlement Action Plan

The main objective of the RAP is to ensure compliance with AfDB the safeguards policies and Kenya's national laws regarding involuntary resettlement. The goal is to mitigate the adverse economic and social consequences of Involuntary Resettlement or the loss of property/livelihood due to the Project activities. These consequences include relocation or loss of shelter, loss of assets or access to assets, and livelihoods.

This RAP, outlines procedures for compensating PAPs and restoring their livelihoods even beyond the project's completion phase. All restoration and resettlement activities leading to compensation will be incompliance with the mandates of the Kenyan Constitution, AfDB's standards, and international best practices.

The specific objectives of this RAP include:

(i) Raising awareness to affected communities regarding the project and its impacts

(ii) Conducting surveys of sewers, water pipelines, water treatment facilities, tanks, and defining the PAPs. This includes determining their eligibility for compensation, categorizing assets to be compensated, and establishing the cut-off date for eligibility.

(iii) Providing a socio-economic survey for identifying entitlements and development of strategies to minimize impacts on PAPs.

(iv) Establishment of a comprehensive land acquisition and compensation process with a Grievance Resolution Mechanism to address any grievances stemming from displacement.

(v) Determination of compensation rates for loss of assets and outlining the methodology for assessing the values.

(vi) Outlining the most preferred resettlement options for PAPs, with consideration to vulnerable categories among them.

Throughout these RAP, compliance with AfDB Operational Standards is maintained to ensure the just and ethical treatment of all persons affected by the project.

3.3. Principles of this Resettlement Action Plan

In developing this RAP, the following "best practice" principles were adopted:

(i) Where involuntary resettlement is unavoidable, all persons affected by the project will be compensated fully and fairly for loss of assets including both permanent and temporary structures.

(ii) Involuntary resettlement is an opportunity for improving the livelihoods of the affected people and undertaken accordingly.

(iii) All persons affected through resettlement will be consulted and involved in resettlement planning to ensure that the mitigation of adverse effects as well as enhancing the benefits of resettlement is appropriate and sustainable.

(iv) PAPs who have formal legal rights to land or other affected assets (including customary and traditional rights to the use of land or other assets); and those who do not have formal legal rights to land or other assets at the time of the Resettlement planning process and census (but who have claim to such legal rights by virtue of occupation or use of those assets) are considered eligible for resettlement action. Therefore, the absence of legal title to land or other assets is not, in itself, a bar to compensation for lost assets or to other resettlement assistance.

3.4. Scope of the Resettlement Action Plan

The RAP's scope has integrated the social safeguards guidelines outlined in the African Development Bank's Involuntary Resettlement Policy (2003). The following activities have been conducted:

(i) Reviewing and analyzing secondary data from secondary sources.

(ii) Identifying PAPs along the water and sewer pipeline routes, tank sites, intake, weir, water treatment works, and compiling inventories of affected assets for all identified PAPs, including land, structures, trees, crops, livelihoods, and cultural assets.

(iii) Reviewing Kenyan legal provisions and comparing them with AfDB operation safeguards to identify any gaps and harmonize recommendations into resettlement planning.

(iv) Developing a land acquisition schedule and resettlement plan within the overall RAP budget to facilitate implementation.

(v) Holding public consultations with PAPs, affected communities, stakeholders, and civil society members, facilitated by local government administrative representatives.

(vi) Conducting surveys using questionnaires, interviews, and public meetings to assess the socio-economic status of the PAPs.

(vii) Making observations along the proposed pipeline to gather empirical evidence on the characteristics of communities affected by the project.

3.5. RAP Approach and Methodology

The RAP was prepared based on the survey plans and detailed designs of the Project. The methodology adopted in preparation of this RAP included various steps:

(i) Review of relevant documents

(ii) Field work

(iii) Community and stakeholder consultation

(iv) Socio-economic survey and census of the PAPs and assets

(v) Valuation of assets and livelihood losses

(vi) Preparation of PAPs registers

4. LEGAL INSTITUTIONAL FRAMEWORK

Overview

This chapter outlines the legal framework for land acquisition as anticipated in the implementation of the Project. It highlights key issues related to Kenyan land legislation concerning involuntary resettlement within this RAP. The chapter provides an overview of Kenya's land policy and constitutional provisions related to land use, planning, acquisition, management, and tenure. It specifically addresses legislation related to land expropriation or acquisition, land valuation, and land replacement. Additionally, the chapter compares Kenyan legislation with the African Development Bank Operation Safeguard Policy (AfDB OS2) on resettlement, identifying gaps and making recommendations to address them.

4.1. NATIONAL RELEVANT LAWS

4.1.1. National Land Policy

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.

4.1.2. The Constitution of Kenya (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 40 of the Constitution provides that the state may deprive owners of property only if the deprivation is "for a public purpose or in the public interest," which includes public buildings, roads, way leaves, drainage, irrigation canals among others. The state's exercise of this power is left at the discretion of NLC, and requires the state to make full and prompt payment of "just compensation" and an opportunity for appeal to court.

Article 40(3) (a) refers to acquisition and conversion of all kinds of land in Kenya (private, public, community land and foreign interests in land). The Constitution further provides that payment of compensation shall be made to "occupants in good faith" of land acquired by the state who do not hold title for such land. An occupant in good faith is a "bona fide" occupant. On the other hand, under the Constitution, those who have acquired land illegally are not regarded as deserving any compensation.

In addition to Article 40, Chapter Five of the Constitution is relevant to compulsory acquisition. This chapter, entitled "Land and Environment," is divided into two parts. Part 1 deals with land, and Part 2 deals with environment and natural resources. Part 1 of Chapter 5, articles 60 – 68, describes the principles of land policy. Land should be held, used and managed in a manner that is equitable, efficient, productive and sustainable and in accordance with security of land rights, sound conservation and protection of ecologically sensitive areas. These principles must be implemented through a national land policy reviewed regularly by the national government and through legislation.

4.1.3. Land Act, No.6 of 2012

The enactment of the Land Act (No. 6 of 2012) repealed the substantive law that has been the basis for compulsory land acquisition (Land Acquisition Act –Cap 295) (Repealed). The provisions of the repealed Act have however been incorporated in the Land Act, No. 6 of 2012 and gives the power of compulsory acquisition of land to the National Land Commission. It specifies the manner for determination and the award for compulsory acquisition to be served on the persons determined to have interest in the affected land.

According to Section 128 of the Act, any dispute arising out of any matter under the Act, which involves compulsory acquisition process, should be referred to the Land and Environmental Court for determination. Sections 107-133 of the Land Act specify the procedure to be followed in the process of compulsory land acquisition. Section 134 of the Act creates a Settlement Fund for land acquisition to provide shelter and livelihoods to people who are involuntarily displaced. Part II section 8 provides guidelines on management of public land by the National Land Commission on behalf of both national and county governments. This law, in section 8(b) stipulates that the Commission shall evaluate all parcels of public land based on land capability, classification, land resources mapping consideration, overall potential for the land use, and resource evaluation for land use planning. Section 8(d) stipulates that the Commission may require the land to be used for a specified purpose subject to such conditions, covenants, encumbrances or reservations as are specified in the relevant order.

Section 107 of the Act requires the national or county government after satisfying that it is necessary to acquire land for public development to apply to the Land Commission for the necessary land acquisition. Upon approval, the land earmarked for compulsory acquisition will be geo-referenced and authenticated at the national and county level (Section 110). According to Section 111 of the Act, just compensation shall be paid promptly to all persons whose interests have been affected by the land acquisition.

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.

As a result, NLC will compensate all affected PAPs, since legally they are the constitutional body charged with this responsibility.

HIV/AIDS Prevention and control Act (Act No. 14 of 2006)

Part 11, Section 7 of the Act requires that HIV and AIDs education be carried out at the work-place. The government is expected to ensure the provision of basic information and instruction on HIV and AIDS prevention and control to: -

i. Employees of all government ministries, departments, Authorities, and other agencies and employees of private and informal sectors.
ii. The information on HIV/AIDS is expected to be treated with confidentiality at the work place and positive attitude towards infected employees and workers.

Urban Areas and Cities Act, 2011

Section 5 of the Act states that a Municipality is eligible for a City status if it can satisfy that it has infrastructural facilities including but not limited to road, street lights, market and fire station, an adequate capacity for disaster management and has infrastructure that provide national and regional connectivity.

Section 26 (b) gives power to the Council of the City or a big Municipality to formulate and implement a master plan for urban and physical planning. This plan framework would form the basis for infrastructure development and provision of essential services including provision of water, sanitation, health care, education, housing, transport, disaster management system and facility for safe environment.

According to section 26 (c) the Council is expected to exercise control over land use, land sub- division , land development and zoning of public and private land for any purpose including agriculture, industry , commerce, market, employment centres, residential areas, recreation parks, entertainment, passage transport freight and the transit stations within the framework of spatial and master plans of City and Municipality.

Section 44 provides that for the Council to form partnership of social infrastructural services with companies within and outside the County. This includes the construction of roads, environmental conservation and preservation, construction of health centers and promotion of tourist and cultural events.

Physical Planning Act Cap 286

The Act provides for preparation of land use plans with a view to improving the affected land, securing suitable provision for transport, public purposes, utilities and services, commercial, industrial, residential uses among others. This is defined in the Section 16 of the Act. The process for plan preparation are included in the main Act whereby all plans have to be presented to the public and published in the local newspaper prior to approval by the Minister.

Stakeholders have to be involved in the planning process and their views have to be incorporated in the land use plan. Once the land use category has been incorporated in a land use plan and it has gone through the approval stage, the dedicated land use vests in the authority responsible for the activity or service for the benefit of the public as a whole. Section 30 of the Act states that any person who carries out development within an area of a local authority without development permission shall be guilty of an offense and the development shall be invalid. The Act also gives the local authority power to compel the developer to rectify or comply with any condition within ninety days. If no action is taken, then the Council will restore the land and recover the cost incurred thereto from the developer. In addition, the same Section also states that no person shall carry development within the area of local authority without development permission granted by the local government.

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:

a) Environmental planning and protection, climate issues, land use planning, title, tenure, boundaries, rates, rents, valuations, mining, minerals and other natural resources;
b) Compulsory acquisition of land;
c) Land administration and management;
d) Public, private and community land and contracts, choses in action or other instruments granting any enforceable interests in land; and
e) 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.

Matrimonial Property Act No. 49 of 2013

The Matrimonial Property Act No. 49 of 2013 outlines the legal framework for the ownership of matrimonial property in Kenya. Matrimonial property includes the matrimonial home or homes, household goods and effects, and any other property jointly owned and acquired during the marriage. Key provisions include:

i. Both spouses have equal rights and responsibilities in the ownership of matrimonial property. Property acquired during the marriage is presumed to be jointly owned unless proven otherwise.
ii. The Act recognizes both monetary and non-monetary contributions by spouses towards the acquisition and improvement of matrimonial property. Non-monetary contributions include domestic work and management of the matrimonial home, childcare, companionship, and farm work.
iii. The Act provides that matrimonial property cannot be sold, leased, or mortgaged without the consent of both spouses.
iv. Upon the dissolution of a marriage, the matrimonial property shall be divided equitably between the spouses. The court considers each spouse's contribution to the property's acquisition and improvement.
v. Property held in the name of one spouse is presumed to be held in trust for the other spouse, taking into account each spouse's contribution.
vi. Any property acquired by a spouse before the marriage or through inheritance or gift during the marriage is considered the separate property of that spouse and not subject to division.
vii. The Act allows for the resolution of disputes regarding matrimonial property through the court system.

This RAP has incorporated the Matrimonial Property Act No. 49 of 2013, ensuring the protection of both spouses' rights to property acquired during the marriage, ensuring fairness and equity in the ownership and division of matrimonial property.

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

The Prevention, Protection, and Assistance to Internally Displaced Persons and Affected Communities Act, 2012, provides a framework for addressing internal displacement in Kenya. It outlines government responsibilities in preventing displacement, protecting IDP rights, and providing necessary assistance. Key provisions include:

- Preventing displacement through risk reduction and sustainable practices.
- Protecting IDP rights to safety, basic services, and non-discrimination.

- Providing timely humanitarian assistance respecting cultural practices.
- Registering IDPs for access to services and legal rights.
- Promoting durable solutions like voluntary return, integration, or resettlement.
- Involving affected communities in decision-making processes.
- Coordinating efforts among government agencies and humanitarian organizations.
- Monitoring and ensuring accountability for IDP rights.

This RAP does not have any IDPs in the project area but aligns with the Act's mandates to protect IDP rights.

The Valuers Act (1985) Revised 2010

The Valuers Act establishes the Valuers Registration Board, which regulates the activities and practice of registered valuers. All valuers must be registered with the Board to practice in Kenya. The Board shall keep and maintain the names of registered valuers, which shall include the date of entry in the register, the address of the person registered, the qualification of the person, and any other relevant particulars that the Board may find necessary.

The valuer's Act does not provide a description of the valuation procedures and methods. The preparation of this RAP included the services of registered valuer who is approved by the Valuers Registration Board.

Under the Valuers Act, professional misconduct of a registered valuer includes:

- False or incorrect entry in the register;
- False or misleading statements caused by omission or suppression of a material fact; and
- The acceptance of any professional valuation work which involves the giving or receiving of discounts or commissions.

In case of professional misconduct, the registered valuer is guilty of an offense punishable by:

- Caution or censure of the valuer;
- Suspension of the valuer's registration for a specified period;
- Removal of the valuer's name from the register;
- Imposition of a fine not exceeding ten thousand shillings and/or imprisonment for three years.

Fees for land valuation in case of compulsory acquisition are established based on the value of the property: "the first Kshs 400,000 at 1 percent, and the residue at 0.5 percent".

The Land Laws (Amendment) Act 2016, Including Evictions Guidelines (April).

The Land Laws (Amendment) Act 2016 introduced several key provisions, including guidelines for evictions, to ensure fair and humane treatment of individuals facing eviction. These guidelines aim to align with constitutional protections and international human rights standards.

Key elements of the eviction guidelines include:

i. The Act mandates that all affected persons receive adequate notice of eviction, detailing the reasons for eviction and the date and time of the planned eviction.
ii. Affected individuals and communities must be consulted, and their views considered before any eviction is carried out.
iii. Where evictions result in displacement, the Act requires that suitable alternative accommodation or resettlement be provided to the affected persons.
iv. The Act stipulates that fair compensation must be provided for any loss of property or livelihood as a result of the eviction.
v. Affected persons have the right to access legal remedies and challenge the eviction in a court of law.
vi. Special consideration must be given to the needs and rights of vulnerable groups, including women, children, the elderly, and persons with disabilities.
vii. Evictions must be carried out in a manner that respects the dignity and rights of the affected individuals, minimizing the use of force and avoiding unnecessary harm.

This RAP has been prepared in accordance to the eviction guidelines stipulated in this act: elements (I - vii).

4.2. INSTITUTIONAL FRAMEWORKS

The Government of Kenya has established a number of institutional and administrative entities to ensure adequate management of associated concerns and eventualities. The following are the main institutions that perform the regulatory role and are relevant to the project.

The frameworks play a role of providing the necessary structure and support for effective Resettlement process. They provide clear guidelines, policies and procedures that ensure compliance with legal and regulatory requirements thus protecting the rights and interests of all Project Affected Persons and communities. The frameworks help in facilitating coordination among stakeholders including government agencies and affected populations by ensuring transparency and inclusivity in project implementation. They also help in mobilizing for the necessary resources, grievance redress and monitoring RAP progress thus ensuring accountability and the process conducted efficiently and fairly.

4.2.1.1. MINISTRY OF WATER & SANITATION AND IRRIGATION

The mandate of the Ministry is to protect, conserve and manage water resources and ensure sustainable use of water in Kenya. The Ministry has a responsibility of improving the sustainable management of water resources to support socio-economic development, reduce poverty, improve living standards, and ensure a clean environment.

The MoWSI will play the following roles in this RAP beyond their mandated responsibilities:

- It is the Executing body for this project hence will be mandated to ensure RAP implementation is successful.
- The Ministry will also coordinate with national treasury and AfDB to ensure availability of funds for RAP implementation.
- The Ministry will oversee the RAP implementation to ensure it complies the AfDB ISS, legal frameworks and international best practices.

4.2.1.2. MINISTRY OF INTERIOR & COORDINATION OF NATIONAL GOVERNMENT

The Ministry of Interior and National Administration was created vide Executive order No.2 of 2023. It is responsible for ensuring a secure, cohesive and crime free country for socio-economic development. The Ministry comprises State Department for Internal Security and National Administration; State Department for Immigration and Citizen Services; State Department for Correctional Services; and the National Police Service.

Ministry of Interior & Coordination of National Government will play the following Role in this the RAP:

- The Ministry will be responsible for ensuring public safety, security, and law enforcement, maintaining order during the resettlement process.
- They will facilitate the coordination between national and local government agencies, ensuring that the resettlement activities are carried out smoothly.
- The ministry will ensure a smooth RAP implementation process by facilitating activities such as

community mobilization, sensitization, community engagement, and grievance redress through the National Government Administrative Office (NGAO).

- The ministry will address any security concerns that may arise, safeguarding the interests of the PAPs and ensuring that the resettlement process is conducted in a fair and orderly manner.

4.2.2. The National Treasury

Operating under the Constitution 2010, the Public Management Act 2012, and Executive Order No.2/2013, the National Treasury holds several core functions such as:

- Formulate, implement, and monitor policies involving expenditure and revenue.
- Oversee national public debt, guarantees, and other financial obligations.
- Develop policies that promote social and economic development.
- Secure domestic and external resources for national and county budgets.
- Design systems for transparent financial management and reporting.
- Ensure uniform accounting standards in collaboration with the Accounting Standards Board.
- Develop policies for public fund operations.
- Prepare the Division of Revenue Bill and the County Allocation of Revenue Bill.
- Strengthen financial relations between national and county governments.
- Support county governments in financial management.
- Prepare, execute, and control the national budget.

The Ministry of Finance will be crucial to the RAP and its implementation;

- The Ministry will allocate and manage the budget for PAPs compensation and land acquisition.
- The Ministry will ensure that the RAP is implemented in compliance with national laws AfDB guidelines.
- The Ministry will monitor and evaluate the progress of the RAP implementation.
- The Ministry will serve as contract guarantors in the loan agreement for the project with AfDB.
- The Ministry will ensure that the project is implemented on time, with the specified quality, and within the stipulated cost as per the loan agreement.

- The Ministry will ensure that the loan is repaid upon project completion and manage revenue generation from assets derived from the project.

4.2.3. NATIONAL LAND COMMISSION

The National Land Commission (NLC) will play a significant role in the RAP by ensuring that land acquisition and resettlement processes are conducted fairly and transparently. Its functions in this RAP include:

- The NLC will facilitate the acquisition of land required for the project, ensuring that the process adheres to legal and regulatory frameworks. This includes verifying land ownership and conducting due diligence to prevent disputes.
- The NLC will be responsible for the valuation of land and other assets affected by the project. It will ensure that PAPs receive fair compensation based on market values and statutory guidelines.
- In collaboration with the RAP team and local administration, the NLC will organize and facilitate public participation forums where PAPs can voice their concerns and provide input on the resettlement process. It will also manage grievance mechanisms, ensuring that any disputes or complaints related to land acquisition and compensation are addressed promptly.
- The NLC and AWWDA will maintain records of all land acquisition and resettlement activities. All transactions and compensations will be documented and regular reports provided to AWWDA for submission to the Bank.
- The NLC will aid in the coordination with other government agencies, local authorities, and stakeholders to facilitate a smooth resettlement process.

4.2.4. NATIONAL ENVIRONMENT AND MANAGEMENT AUTHORITY

National Environment and Management Authority (NEMA) is established under section 7 of the Environmental Management and Coordination Act, no 8 of 1999 as the principal institution which exercises general supervision and coordination over all matters relating to the environment. It is also the principal instrument of Government in the implementation of all policies relating to the environment. NEMA is charged with the responsibility to:

- Co-ordinate the various environmental management activities being undertaken by the lead agencies and promote the integration of environmental considerations into development policies, plans, programs, and projects with a view to ensuring the proper management and rational utilization of environmental resources on a sustainable yield basis for the improvement of the quality of human life in Kenya;

- Identify projects and programs or types of projects and programs, plans, and policies for which environmental audit or environmental monitoring must be conducted under this Act;
- Monitor and assess activities, including activities being carried out by relevant lead agencies, in order to ensure that the environment is not degraded by such activities, the environment is not degraded by such activities, environmental management objectives are adhered to and adequate early warning on impending environmental emergencies is given;
- Publish and disseminate manuals, codes, or guidelines relating to environmental management and prevention or abatement of environmental degradation.

Some of the NEMA functions are performed through committees established by EMCA as follows.

i. Standards and Enforcement Review Committee (SERC)

EMCA provides for the establishment and enforcement of environmental quality standards to be set by a technical committee of NEMA known as the Standards and Enforcement Review Committee (SERC).

ii. Public Complaints Committee

EMCA has also established a Public Complaints Committee, which provides the administrative mechanism for addressing environmental harm. The Committee has the mandate to investigate complaints relating to environmental damage and degradation. The members of the Public Complaints Committee include representatives from the Law Society of Kenya, Nongovernmental organizations (NGOs), and the business community.

NEMA has played a crucial role in the RAP in several ways:

- Provided oversight to ensure that all aspects of the project complied with Kenya's environmental regulations and standards. This involved monitoring environmental impacts throughout the project lifecycle, from planning to implementation.
- Ensured that the project adhered to environmental laws and regulations. This included assessing potential environmental impacts, recommending mitigation measures, and overseeing their effective implementation to minimize environmental degradation.
- Facilitated public participation processes related to environmental aspects of the project. This ensured that affected communities and stakeholders had opportunities to provide input, express

concerns, and participate in decision-making regarding environmental management.

- Aided in the addressing of grievances related to environmental impacts or concerns arising from the project. It provided mechanisms for affected persons to lodge complaints and ensured that these grievances were addressed transparently and fairly through established committees like the Public Complaints Committee.

4.2.5. DEPARTMENT OF OCCUPATIONAL HEALTH AND SAFETY (DOSHS)

It oversees provisions of health, safety, and welfare of all workers in all workplaces, trains and does awareness on occupational safety and health, investigates occupational accidents at workplaces, and does regular inspection and auditing of workplaces to promote best practices and ensure compliance with safety and health standards as set out in OSHA, 2007 and its subsidiary legislations and undertakes examination and testing of equipment such as hoists and cranes. The contractor will comply with the safety and health standards as set out in OSHA, 2007.

Their role in this RAP and as outlined in the Environmental and Social Impact Assessment (ESIA), DOSHS's role will be outlined comprehensively in the and Environmental and Social Management Plan (ESMP)before the commencement of project works. This documentation will highlight DOSHS's role in safeguarding the well-being of workers, ensuring compliance with safety regulations, and promoting a culture of occupational health and safety throughout the project lifecycle

4.2.6. COUNTY GOVERNMENT OF MURANG’A

The function of the County government is in the implementation of specific national government policies on natural resources and environmental conservation. This is achieved through the Department of the Ministry of Environment, Water and Natural Resources established in the County. The county government of Muranga is thus expected to help in coordinating various project-related activities as far as general environmental conservation and public participation are concerned.

The County Government of Murang'a has played a critical role in this RAP, fulfilling several vital responsibilities:

- They coordinated with the RAP team and other stakeholders to ensure compliance with local regulations and policies, especially focusing on environmental and community welfare. This role will continue into the project implementation phase.
- They played a role in identification of suitable sites for the various project components.
- Their understanding of local environmental conditions, land use patterns, and community dynamics informed the development of the RAP, ensuring it addresses pertinent local factors.
- They facilitated public participation, enabling community members and stakeholders to provide input, express concerns, and participate in decision-making processes.
- County Government will play a critical role in this RAP including grievance redress.

4.2.8. WATER RESOURCE AUTHORITY

The Water Resource Authority (WRA) is a national organization with the mandate of regulating water resources issues such as water allocation, source protection and conservation, water quality management and pollution control, and international waters.

Technical Input and Assessment: The WRA provides technical expertise and assessments related to water resources management. This includes evaluating the potential impacts of the project on water sources, allocation needs, and water quality standards within the project area.

WRA will not play a direct role in the implementation of this RAP however, during project licencing, the RAP report is a mandatory document for WRA's Assessment of the site before NEMA issues the EIA licence.

4.2.9. ATHI WATER WORK DEVELOPMENT AGENCY

Athi Water Work Development Agency (AWWDA) is the project implementing agency. AWWDA is one of the nine (9) Water Works Development Agencies (WWDA) established under the Ministry of Water, Sanitation and Irrigation. It was established under the Water Act, 2016 vide Legal Notice No. 28 of 26th April, 2019. The Agency is responsible for the development, maintenance, and management of water and sewerage infrastructure in the counties of Nairobi, Kiambu, and Murang'a Counties.

Core mandates of AWWDA include:

- Plans and develops National Public Water Works for bulk water supply
- Formulates Development and Investment Plans in liaison with county governments

- Provides input to the national development and financing plan
- Provides technical assistance to Water Service Providers for county asset development.

AWWDA plays a crucial role in ensuring that the RAP is effectively implemented, mitigating impacts on affected communities, and promoting sustainability in the project area.

- Coordinate with stakeholders to ensure effective implementation of the RAP, ensuring alignment with project objectives and regulatory standards.
- Leveraging its technical expertise, AWWDA will contribute to planning and executing infrastructure projects outlined in the RAP.
- Engage continuously with affected communities, fostering dialogue, addressing concerns transparently, and ensuring that resettlement processes adhere to legal and ethical standards
- Monitor the implementation of resettlement activities to ensure compliance with agreed plans and regulations, addressing any challenges that arise during project execution.
- Will prepare and submit regular reports (monthly, quarterly, semi-annually) on RAP implementation to be submitted to the Bank
- Will ensure prompt compensation of PAPs before commencing works, providing adequate notice to affected parties.
- Will coordinate with other agencies and key stakeholders before, during, and after project completion to streamline efforts and ensure project success.
- Will conduct livelihood restoration training for all PAPs to support their economic recovery and sustainability post-resettlement.
- AWWDA will ensure that the project is implemented on time, with the specified quality, and within the stipulated cost as per the loan agreement.

4.2.10. WATER SERVICES REGULATORY BOARD

The Water Services Regulatory Board (WASREB) oversees the implementation of policies and strategies relating to the provision of water and sewerage services. This institution is responsible for licensing Water Services Providers (WSP) and monitors the compliance of WSPs. The sewer infrastructure project spearheaded by Athi Water Work Development Agency (the Proponent in this project) will later be handed over to the Water Service Providers; Murang'a South, Murang'a Urban and Gatanga Water and Sewerage Companies for operation and management and must comply with WASREB regulations.

The WASREB's direct role focuses on compliance and oversight during implementation, its involvement will continue into the operational phase of the project. This will ensure that the benefits of the project development is sustained, and communities receive reliable and quality water and sewerage services in the long run.

4.2.11. WATER AND SEWERAGE SERVICE PROVIDERS;

Murang'a South, Murang'a Urban and Gatanga Water and Sewerage Companies for operation and management and must comply with WASREB regulations.

Their role include:

- Responsible for the operation and management of the water and sewerage infrastructure.
- They must adhere to regulations set by the Water Services Regulatory Board (WASREB), ensuring that their operations meet national standards for water and sewerage service delivery.
- Facilitated the Engagement with local communities to address service delivery issues, gather feedback, and ensure community needs are met.
- They played a role in identification of suitable sites for the various project components.
- Their understanding of local environmental conditions, land use patterns, and community dynamics informed the development of the RAP, ensuring it addresses pertinent local factors.
- They facilitated public participation, enabling community members and stakeholders to provide input, express concerns, and participate in decision-making processes.

4.2.12. ROAD AGENCIES

Road agencies, specifically the Kenya Rural Roads Authority (KeRRA) and the Kenya Urban Roads Authority (KURA), play essential supportive roles in the development of water and sewerage projects. Their contributions ensure that these projects are accessible, sustainable, and efficiently.

Their roles include:

- Provide support in the development of the projects by ensuring that associated road infrastructure is accessible, and efficiently integrated.

- Collaborate with other stakeholders to integrate road and water/sewerage infrastructure development plans, optimizing project efficiency.
- Provide approvals for utilisation of their way leaves.

4.3. AFRICAN DEVELOPMENT BANK'S SAFEGUARD POLICY AND GUIDELINES

4.3.1. Involuntary Resettlement Policy

The African Development Bank (AfDB) environmental and social policy framework is strongly anchored in the concept of sustainable development. This concept defines sustainability as "development that meets the needs of the present without compromising the needs of the future".

AfDB safeguards aim to avoid adverse impacts of projects on the environment and affected people while maximizing potential development benefits to the extent possible; minimize, mitigate, and/or compensate for adverse impacts on the environment and affected people when avoidance is not possible; and help the clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risk. The AfDB Operational Safeguards (OS) triggered include:

OS 1: Environmental and Social Assessment

This OS governs the process of determining a project 's environmental and social category and the resulting Environmental and Social Assessment requirements. The requirements cover the scope of application, categorization, use of Environmental and Social Impact Assessment, Environmental and Social Management Plans, public consultation, community impacts, treatment of vulnerable groups, including indigenous peoples, and grievance procedures.

OS 2: Involuntary Resettlement: Land Acquisition, Population Displacement, and Compensation

This operational safeguard embraces comprehensive and forward-looking notions of livelihood and assets, to account for social and cultural dimensions, as well as economic aspects. It also adopts a progressive understanding of community and common property that emphasizes the crucial need to maintain social cohesion, community structures, and the social inter-linkages that common property provides.

OS 3: Biodiversity and Ecosystem Services

This OS 3 translates the policy commitments in the Bank 's policy on integrated water resources management into operational requirements and also reflects the objectives of the Convention on Biological Diversity to preserve biological diversity and promote the sustainable use of natural resources. It reflects the importance of biodiversity in the African continent and its value to the population of key ecosystems. This OS aim at conserving biological diversity and ecosystem integrity by avoiding or, if avoidance is not possible, minimizing potentially harmful impacts on biodiversity through the implementation of mitigation measures. It endeavors to reinstate or restore biodiversity, including, where some impacts are unavoidable to achieve "not a net loss but net gain" of biodiversity.

OS 4: Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials, and Resource Efficiency

This OS aim at managing and reducing pollutants resulting from the project— including hazardous and non-hazardous waste—so that they do not pose harmful risks to human health and the environment. AfDB requires the borrower or client to apply pollution prevention and control measures consistent with national legislation and standards, applicable international conventions, and internationally recognized standards and good practices, particularly the EHS Guidelines. Implementation of resource efficiency and pollution-prevention techniques, taking into consideration their technical and financial feasibility and cost-effectiveness throughout the project cycle- planning and design, construction, commission, operation, and decommissioning phase- are key criteria in assessing and evaluating the borrower or client treatment measures and environmentally sound disposal practice.

OS 5: Labour Conditions, Health, and Safety

This OS outlines the rights of workers; protects the workforce from inequality, social exclusion, child labour, and forced labour; and establishes requirements to provide safe and healthy working conditions.

It also institutes health, safety, and environmental program that includes plans or procedures to prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work as a requirement. A grievance and redress mechanism for the workforce should also be in place as a necessity.

The overall goal of the Bank's Policy on Involuntary Resettlement is to ensure that when people must be displaced, they are treated equitably, and that they share in the benefits of the project that involve their resettlement. The Policy has the following key objectives:

i. To avoid involuntary resettlement where feasible, or minimize resettlement impacts where population displacement is unavoidable, exploring all viable project designs. Particular attention must be given to socio-cultural considerations such as culture or religious significance of land, the vulnerability of affected populations, or the availability of in-kind replacement for assets, especially when they have important intangible implications. When a large number of people or a significant portion of the affected population would be subject to relocate or would suffer from the impacts that are difficult to quantify and to compensate, the alternative of not going ahead with the project should be given serious consideration;

ii. To ensure that the displaced people receive resettlement assistance, preferably under the project, so that their standards of living, income earning capacity, and production levels are improved;

iii. To provide explicit guidance to Bank staff and to the borrowers on the conditions that need to be met regarding involuntary resettlement issues in Bank operations in order to mitigate the negative impacts of displacement and resettlement and establish sustainable economy and society; and

iv. To set up a mechanism for monitoring the performance of involuntary resettlement programs in Bank operations and remedying problems as they arise so as to safeguard against ill-prepared and poorly implemented resettlement plans.

4.3.2. AfDB Gender Policy

The policy is based on the premise that Africa has pronounced, region-specific gender characteristics that are of direct relevance to its economic and social development. It takes into account the international agenda, which calls for transformation, aimed at achieving full and equal partnership between men and women. Gender has become an issue for development intervention. First, inequalities continue to exist between women and men despite significant improvement in the absolute status of women and gender equality in most African countries. The following guiding principles form the basis of Bank's assistance in the area of gender/women empowerment: -

Gender analysis will be an integral part of all Banks' policies, programs and projects.

Gender analysis will be conducted for all Bank intervention in order to design interventions that respond to the needs and priorities of both men and women. Experience has shown that women and men differ in the way they respond to and/or benefit from development and in the absence of specific attention to differences between women and men, planning for "the people" can result in the exclusion of women or men as participants or beneficiaries of planned change.

This policy codifies the Banks' formal commitment to the gender mainstreaming approach. It seeks to define a more systematic approach to planning of development interventions so that they can address the priorities of women as well as men for greater efficiency, effectiveness and sustainability unlike the former Women in

Development (WID) policy. The focus of this policy is gender relations, which shape outcomes for both men and women. With introduction of the gender analytical framework, the fundamentally social nature and gender differences that result in inequalities between women and men gain greater visibility. The policy adopts the concept of "gender mainstreaming" as a key strategy for overcoming women's exclusion from decision making and from access to any control over development resources and benefits.

4.3.3. Bank Group Policy on Poverty Reduction

The goal of the Bank's poverty policy is to ensure that poverty in Africa is reduced. This involves development of strategies that facilitate national ownership, participation and an orientation towards improvements in the welfare of the poor, especially in the achievement of Sustainable Development Goals (SDGs).

The objectives of the policy are to bring poverty reduction to the forefront of the Bank's lending and non-lending activities and to support its Regional Member Countries (RMCs) in their efforts towards poverty reduction.

4.3.4. Disclosure and Access to Information

This revised policy supersedes the AfDB Policy on disclosure of information dated October 2005.The Policy provides the Bank group with an improved framework within which to disclose information on policies and strategies and key decisions made during project development and implementation.

Maximum disclosure and access to information will increase public support for the Bank Groups Mission and enhance the effectiveness of its operations. The policy contains the following new elements:

a. A strengthened presumption of disclosure, eliminating the positive list and emphasizing a limited negative list;

b. Introduction of an appeals mechanism;

c. Provision of simultaneous disclosure; and

d. Increased access to the broad range of stakeholders.

4.3.5. Differences between Kenyan Laws and the African Development Bank Policy

Table 0-1: Differences Between Kenyan Laws and The African Development Bank Policy

AFDB POLICY	KENYAN LEGISLATION	GAP FILLING MEASURES

<table>
<tr><td colspan="3">GENERAL REQUIREMENTS</td></tr>
<tr>
<td>AfDB OS2 has overall policy objectives, requiring that:
• To avoid Involuntary Resettlement where Feasible, Or Minimize Resettlement Impacts Where Population Displacement Is Unavoidable, Exploring All Viable Project Designs.
• To ensure that displaced people receive resettlement assistance, preferably under the project, so that their standards of living, income earning capacity, and production levels are improved;
• To provide explicit guidance to Bank staff and to the borrowers on the conditions that need to be met regarding involuntary resettlement issues in Bank operations in order to mitigate the negative impacts of displacement and resettlement and establish sustainable economy and society; and
• To set up a mechanism for monitoring the performance of involuntary resettlement programs in Bank operations and remedying problems as they arise so as to safeguard against ill-prepared and poorly implemented resettlement plans. To conceive and execute resettlement activities as sustainable development</td>
<td>• The Land Act, 2012 outlines procedures for sensitizing the affected population to the project and for consultation on implications and grievance procedures.
• The Land Act 2012 guarantees the right to fair and just compensation in case of relocation.
• The Land Act does not stipulate that resettlement should be avoided wherever possible; on the contrary, as long as a project is for public interest, involuntary resettlement is considered to be inevitable.
• Just and fair compensation as outlined in the Land Act 2012 is not clear and can only be determined by NLC, which can be subjective. It does not talk about improving livelihood or restoring them to pre-project status.</td>
<td>• Ensure that resettlement issues are considered at the design stage of the project to avoid/ minimize resettlement.
• Implement OS2 provisions – affected persons should be compensated and assisted in improving their livelihood to pre-project status.</td>
</tr>
</table>

programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.		
PROCESS REQUIREMENTS		
OS 2 - Open, inclusive and effective consultation with local communities includes the following elements: • Appropriate notice to all potentially affected persons that resettlement is being considered and that there will be public hearings on the proposed plans and alternatives; • Effective advance dissemination by the authorities of relevant information, including land records and proposed comprehensive resettlement plans specifically addressing efforts to protect vulnerable groups; • A reasonable time period for public review of, comments on, and/or objection to any options of the proposed plan; and • Public hearings that provide affected persons and/or their legally designated representatives with opportunities to challenge the resettlement design and process, and/or to present and discuss alternative proposals and articulate their views and development priorities.	The Land Act outlines procedures for consultation with affected population by the NLC and grievance management procedures.	Implement consultation procedures as outlined in both Kenyan legislation and AfDB. For involvement of vulnerable and women, the OS2 will be applicable.
Grievance and redress mechanism: The client establishes a credible, independent and empowered local grievance and redress mechanism to receive, facilitate and follow up on the resolution of affected people's	Land Act 2012 clearly outline the steps and process for grievance redress that includes alternative dispute resolution, re-negotiation with NLC and is backed by the	Adopt both by providing for alternative grievance mechanism that are project based. Affected persons also

grievances and concerns about the environmental and social performance of the project. The local grievance mechanism needs to be accessible to the stakeholders at all times during the project cycle, and all responses to grievances are recorded and included in project supervision formats and reports	judicial system through Environmental and Land Court Kenyan legislation meets ESS5 requirements.	free to seek legal redress if not satisfied.
Eligibility and entitlements: AfDB OS2 outlines three groups of displaced people are entitled to compensation or resettlement assistance for loss of land or other assets taken for project purposes: • Those who have formal legal rights to land or other assets recognized under the laws of the country concerned. This category generally includes people who are physically residing at the project site and those who will be displaced or may lose access or suffer a loss in their livelihood as a result of project activities. • Those who may not have formal legal rights to land or other assets at the time of the census/ evaluation but can prove that they have a claim that would be recognised under the customary laws of the country. This category may include people who may not be physically residing at the project site or persons who may not have any assets or direct sources of livelihood derived from the project site, but who have spiritual and/or ancestral ties with the land and are locally recognised by communities as customary inheritors. Depending on the country's customary land use rights, they may also be considered to have a claim if they are sharecroppers, tenant farmers, and seasonal migrants or nomadic families losing user rights. • Those who have no recognizable legal right or claim to the land they are occupying in the	The Land Act 2012 provides that written and unwritten official or customary land rights are recognized as valid land rights. The Law provides that people eligible for compensation are those holding land tenure rights. Land Act also recognizes those who have interest or some claim in the land such as pastoralist or who use the land for their livelihood. The constitution recognizes 'occupants of land even if they do not have titles and payment made in good faith to those occupants of land. However, this does not include those who illegally acquired land. Land Act 2012 provides for census through NLC inspection and valuation process but is not clear on cut-off date.	Ensure these categories of the PAPs (including squatters, laborers, rights of access) of affected lands are included in the census survey and are paid or given assistance other than compensation for land to improve their former living standards (compensation for loss of livelihood activities, common property resources, structures and crops, etc.). Implement cut-off procedures as outlined in the AfDB policy.

project area of influence and who do not fall into either of the two categories described above, if they themselves or witnesses can demonstrate that they occupied the project area of influence for at least six months prior to a cut-off date established by the borrower or client and acceptable to the Bank. These groups may be entitled to resettlement assistance other than compensation for land to improve their former living standards (compensation for loss of livelihood activities, common property resources, structures and crops, etc.).		
Compensation procedures AFDB OS2 outlines the following in summary: ● Compensation is determined through consultation with those affected, aiming to provide full replacement costs before displacement. ● Preference is given to land-based compensation, with cash compensation explained to lead to potential impoverishment. ● The project's total cost includes all resettlement activities, considering social, health, and environmental impacts. ● Assistance aims to improve standards of living and livelihoods beyond pre-project levels, with a focus on gender and social inclusivity. ● Procedures ensure transparency and community involvement in site selection and compensation allocation.	Land Act 2012 appears to prefer cash for cash as the mode of compensation by the Government to the affected population. Land Act talks of prompt, just compensation before the acquisition of land. However, interpretation of just compensation is yet to be clearly outlined through a specific schedule. Attorney's fees, cost of obtaining advice or cost incurred in preparing and making written claim not in the Land Act. The Act does not out rightly stipulate assistance for relocation but rather that is left subject to interpretation.	Ensure that all alternative options are considered before providing cash compensation. OS2 Prevails - Implement prompt and effective compensation at full replacement cost for the losses of the assets. Ensure that ALL resettlement options are agreed on with PAPs and put in place BEFORE displacement of affected persons.

• Non-land-based options are considered for those preferring alternatives to land compensation. • Housing security, support services, and benefit sharing are prioritized, alongside measures to prevent community conflict. • Cultural and psychological aspects are addressed, preserving sites and community networks. • Support and advice are made available to help the affected persons cope with, and benefit from, the resettlement process.		
Valuation: With regard to houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure.	Valuation is covered by the Land Act 2012 and stipulates, as already mentioned, that the affected person receive just compensation but it is not specific of the exact amount or procedures on the same.	Apply the OS2 compensation measures.

5. SOCIO-ECONOMIC BASELINE CONDITION

5.1. SOCIO-ECONOMIC CONTEXT

The socio-economic data collection for the potential project involved the administration of structured questionnaires in the field by enumeration clerks. Interviews were conducted with all individuals within the road reserve to establish their income levels and household characteristics.

A census and assets inventory were conducted to collect data for compiling a register of potential project-affected persons. Wayleaves for the assets inventory were selected based on the design of the water supply and sewer line, as well as the areas earmarked for acquisition. The survey included the categorization of human activities along the wayleaves and all economic features that would be displaced by the proposed project.

This section provides an overview of the social characteristics of the Project Affected Persons, focusing on their demographic and socio-economic characteristics. It aims to establish a baseline socio-economic situation to anticipate potential socio-economic impacts. The data used for evaluating the socio-economic status of the project area is primary data obtained from the socio-economic survey conducted by the RAP Study team during February and March 2024.

5.2. METHODOLOGY

The data used to establish socio-economic baseline conditions was derived from field surveys conducted in the project area during the preparation of the RAP. Two broad data objectives for the socio-economic baseline assessment were established against which future changes could be measured. These objectives included assessing socio-economic characteristics, education, water and sanitation, health, sources of livelihood, and housing. The team employed the following methods:

- Public and stakeholder consultations
- Census survey
- Socio-economic survey
- Land and Asset Valuation
- Key Informant Interviews

By applying these methodologies, the team ensured the provision of varied viewpoints on the socio-economic conditions within the proposed project areas, while also generating a mix of qualitative and quantitative results. Data entry and analysis were conducted using the Statistical Package for the Social Sciences (SPSS). Household survey data was cross-referenced and validated with information gathered from site surveys, sociologist and technical team observations, as well as key informant interviews.

The necessary data for this endeavor was acquired through the analysis of official records from various government offices, consultative meetings with both national and county government officials, stakeholder engagements, and public forums held along the proposed outfall, trunks, and sewage treatment plant (STP) sites.

5.3. OBJECTIVE OF THE SOCIAL ECONOMIC SURVEY

The primary goal of the Socio-Economic Baseline survey was to gather information on the socio-economic characteristics of the Project Affected Persons (PAPs) residing within the project areas. This included:

- Examining socio-economic aspects and issues such as opportunities, risks, and livelihood vulnerability within the project area.
- Investigating the regime, status, and constraints of land in the project area.
- Profiling actors located or depending on the project area, vicinity, and buffer zone.

Data for establishing socio-economic baseline conditions was collected from field surveys conducted during the preparation of the Environmental and Social Impact Assessment (ESIA) and the Resettlement Action Plan (RAP). The survey had two main objectives:

- To establish a robust characterization of pre-project socio-economic conditions for future comparison.
- To address key issues during project implementation, such as economic displacement, loss of cultivation areas, effects of migrant influx, social tensions, increased risk of STDs, economic marginalization, and others.

Additional objectives included identifying current occupants for potential resettlement, describing affected households, determining asset loss and displacement, identifying vulnerable groups, understanding land tenure systems, analyzing social interactions, and providing baseline data for monitoring and evaluating livelihood restoration and sustainable development efforts.

5.4. SOCIAL ECONOMIC PROFILE FOR THE PROJECT AFFECTED PERSONS

This Assessment of Resettlement Action Plan (RAP) examines the socio-economic characteristics of the Project Affected Persons (PAPs) within the areas of the proposed water lines, sewer lines, tanks, and intake works. A comprehensive census survey was conducted in the project area, with 192 PAPs participating, comprising 134 males and 58 females.

5.4.1. Gatanga Location

(i) Number of Female and Male

In Gatanga, a total of 115 Project-Affected Persons (PAPs) were identified. Among these PAPs, 85PAPs are male, making up 74% of the total, while 24 are female, comprising 21% of the total, 5 Unknown PAPs comprising 4% of the total and 1 public Institution constituting comprising 1% of the total. The distribution is illustrated in the figure below:

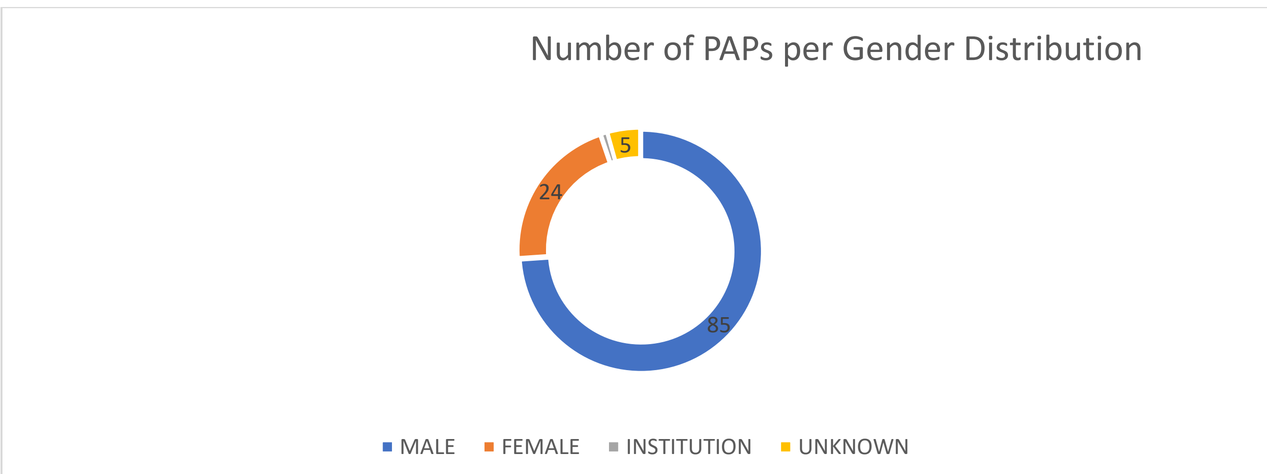


Figure 0-1: Gender aspect of the PAPs within Gatanga

(ii) Gender of the Household Head

The survey established that 73% of the households were headed by male, whereas 27% were headed by female. The distribution is depicted in the figure below:

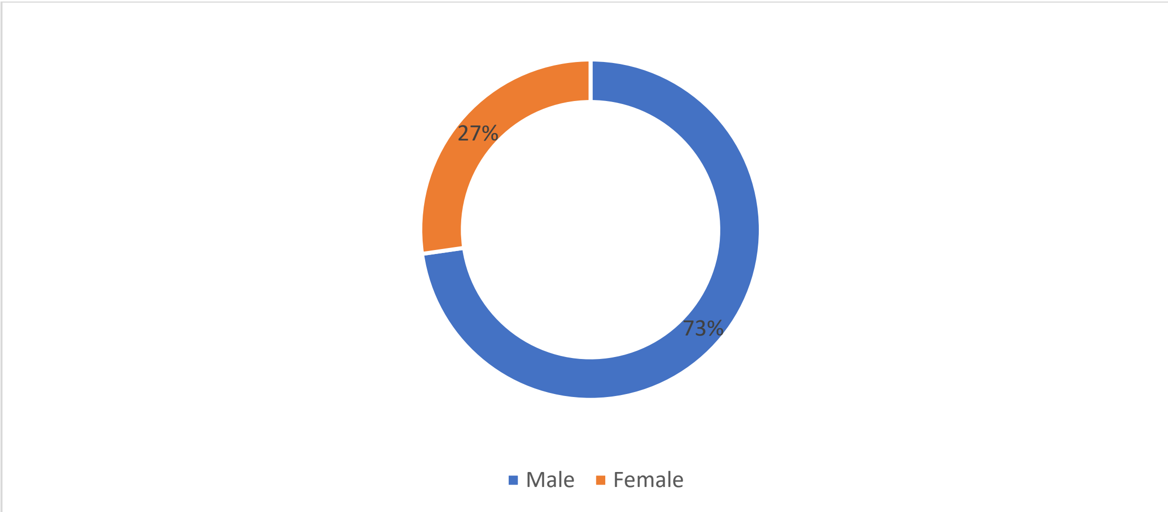


Figure 0-2: Gender of the household head of PAPs within Gatanga

(iii) PAPs belonging to the Vulnerable Group

In the socioeconomic analysis, it was identified that among the 107 PAPs, 9 individuals belonged to the Vulnerable group category, accounting for eight percent (8%) of the population. The persons identified were the elderly (above 65 years) as illustrated in the table below:

Table 0-1: Vulnerable and Marginalized Groups

S/No.	CATEGORY	NUMBER
1.	Elderly (Above 65 years)	9
	Total	9

The distribution is shown in the figure below;

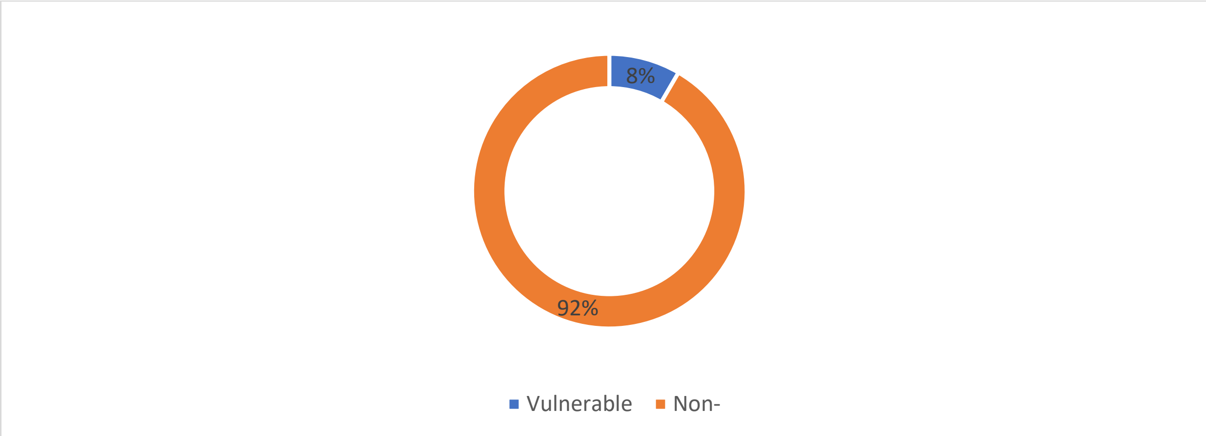


Figure 0-3: Vulnerable and Marginalized Groups identified PAPs within Gatanga

(iv) Level of Education

The survey indicated that fifty-one percent (51%) of the PAPs completed their education up to the secondary school level, while twenty-nine percent (29%) reached primary school. Eighteen percent (18%) attained a university or tertiary education, and a small minority (2%) did not have any formal schooling. The distribution is shown in the figure below:

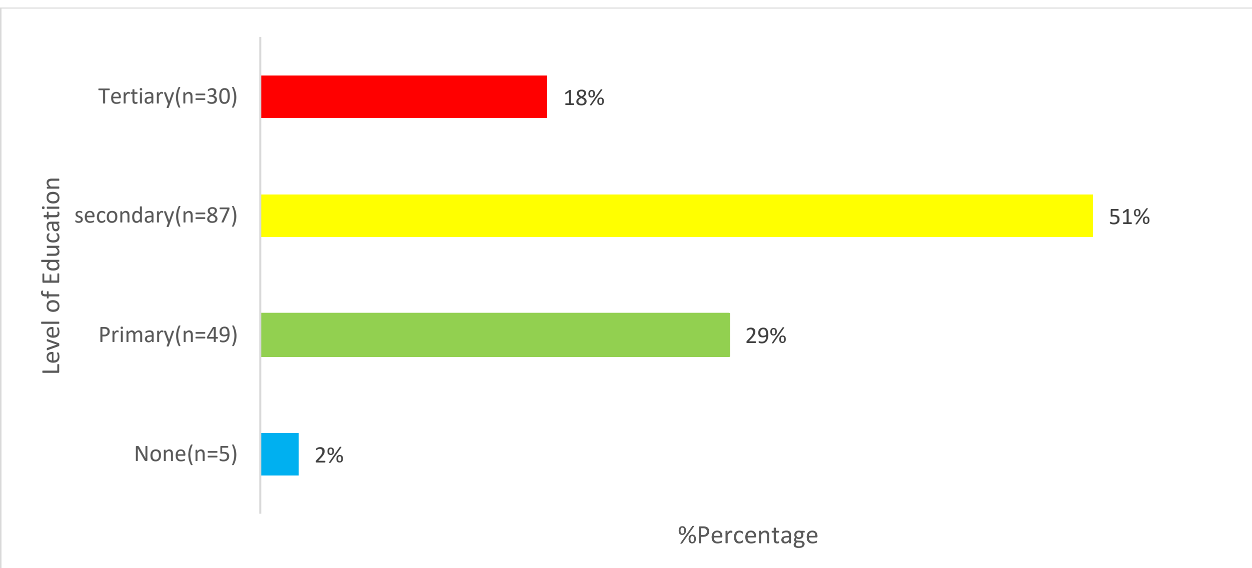


Figure 0-4: Level of Education of PAPs within Gatanga

(v) Source of Income for the PAPs.

The data collected from the survey, as depicted in the figure below, shows the distribution among the PAPs in the area:

i. Seventy-nine percent (79%) of the PAPs, who form the majority, are farmers, cultivating along the Riparian of River Thithi.

ii. Sixteen percent (16%) of the PAPs are engaged in trading and operate small business enterprises.

iii. Three percent (3%) of the PAPs are civil servants. In contrast, a small minority two percent (2%) are unemployed.

The distribution is shown in the figure below;

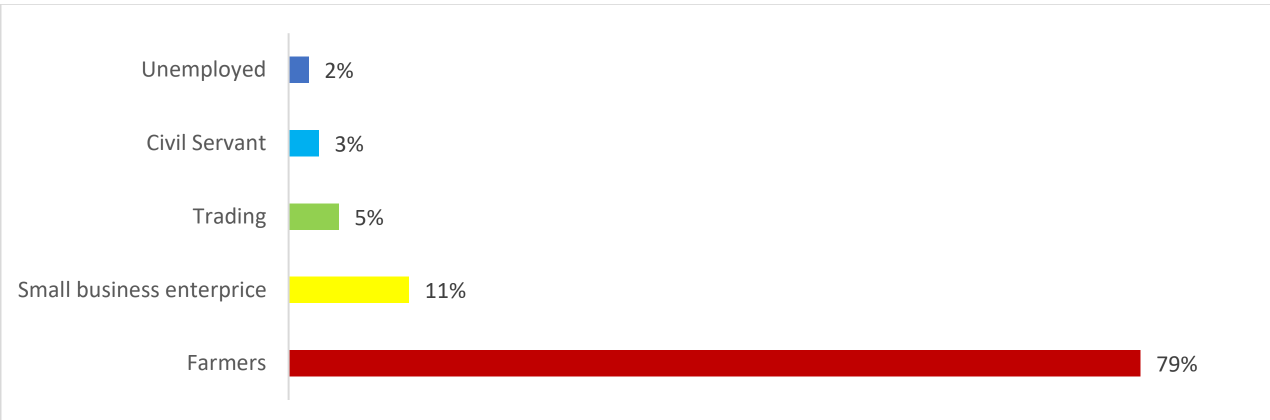


Figure 0-5: PAPs source of income within Gatanga

(vi) Affected Assets

The majority, comprising fifty-three percent (53%) of the properties that will be impacted, consists of crops. Thirty-one percent (31%) are trees located along the riparian of River Thithi and along the road reserve. Seven percent (7%) of the affected assets are land, and the minority are structures. The distribution is summarized in the table below:

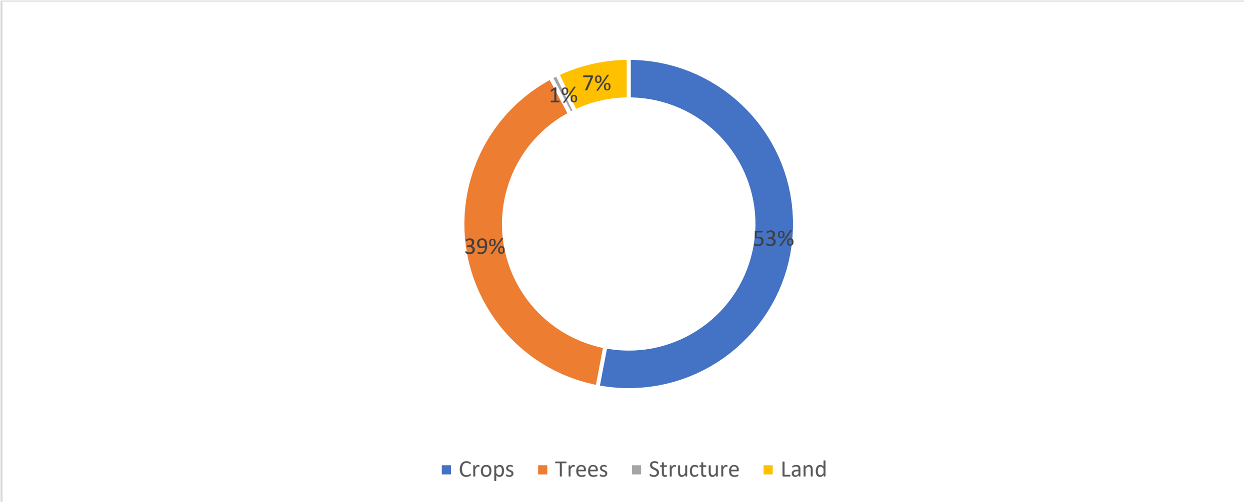


Figure 0-6: Affected assets of PAPs within Gatanga

v. PAPs Monthly Income

The survey indicated the following income distribution among the PAPs:

- Fifty-five percent (55%) earn below 10,000 Kshs.
- Twenty-four percent (24%) earn between 10,000-15,000 Kshs.
- Eight percent (8%) earn between 40,000 Kshs to 50,000 Kshs.
- Six percent (6%) earn above 50,000 Kshs.
- Four percent (4%) earn between 30,000-40,000 Kshs.
- The minority, comprising three percent (3%) of the PAPs, earn between 15,000-30,000 Kshs.

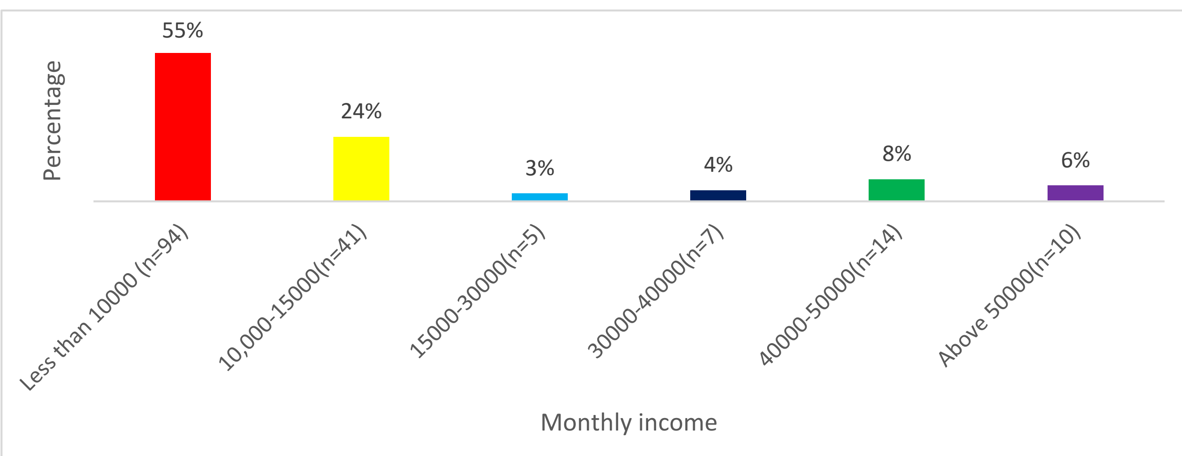


Figure 0-7: Income amount for PAPs within Gatanga

(vii) Loss of livelihood

The social-economic findings indicate that 97% of the PAPs will face economic displacement as they solely rely on farming for their livelihoods, while 3% will experience physical displacement. However, this RAP includes provisions for compensating them for the loss of their livelihoods during the disruption period.

(viii) Sources of water

The survey indicated that seventy percent (70%) of the PAPs source their water from Gatanga Water and Sanitation Company, nineteen percent (19%) rely on rainwater harvesting, six percent (6%) use boreholes, while the minority (5%) obtain their water from River Thithi. The distribution is illustrated in the figure below:

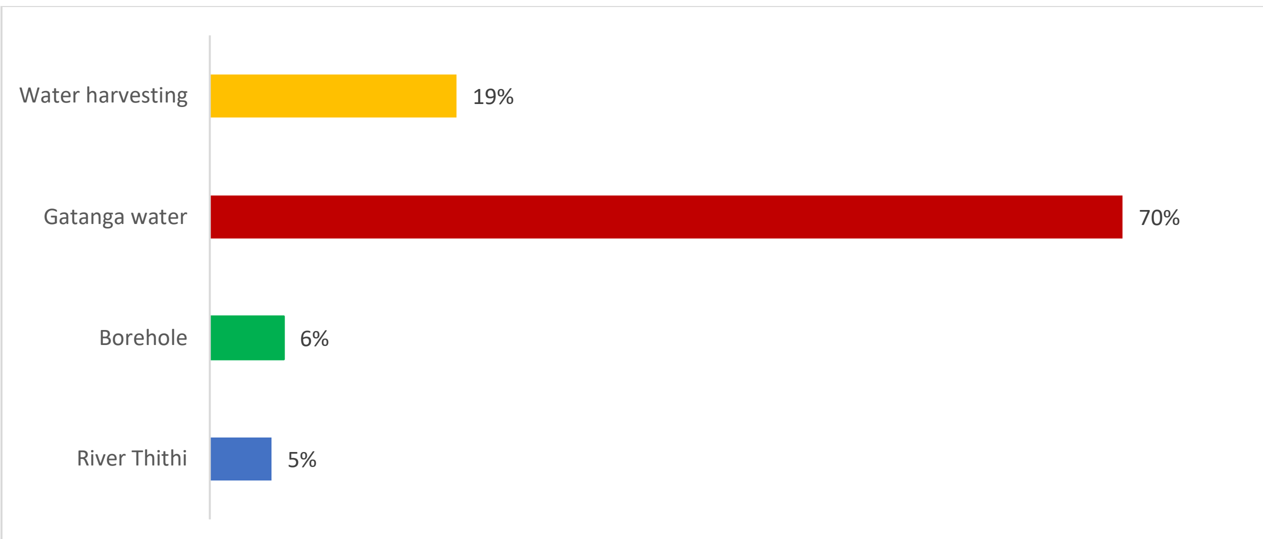


Figure 0-8: Source of water for PAPs within Gatanga

(ix) Type of Sanitation Facility

The findings of the survey revealed that the majority, comprising ninety-three percent (93%) of the PAPs, use pit latrines, while the minority, consisting of seven percent (7%), use flush toilets. The distribution is shown in the figure below:

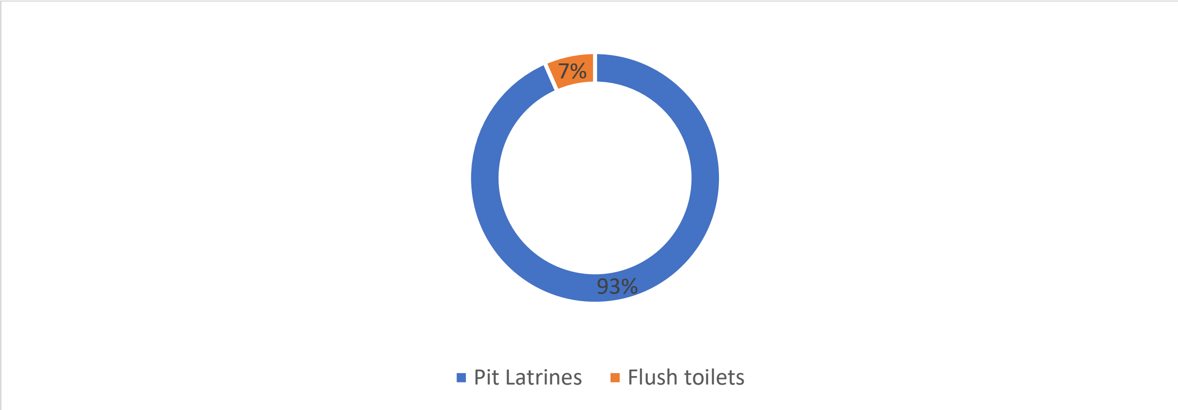


Figure 0-9: Sanitation facilities used by PAPs within Gatanga

5.4.2. Maragua Location

(i) Number of Female and Male

The socio-economic survey recoded 52 PAPs in Maragua. Among these PAPs, thirty-three (33) are male, accounting for 64% of the total, while 18 females constitute 36% of the total. The distribution is shown in the figure below:

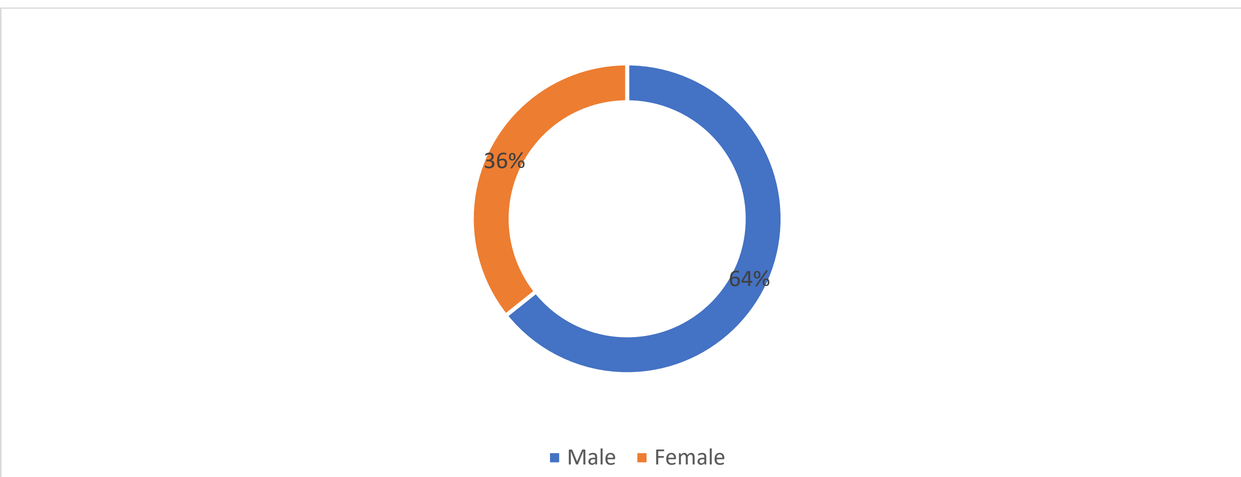


Figure 0-10: Gender aspect for the PAPs within Maragua

(ii) Gender of the Household Head

The survey revealed that seventy-three percent (73%) of the households are headed by males, while twenty-seven percent (27%) are headed by females. The distribution is shown in the figure below:

Figure 0-11: Gender of the household head for the PAPs within Maragu

(iii) PAPs belonging to the Vulnerable and Marginalized Group

It was recorded that among the 51 PAPs, 2 were Vulnerable PAPs, constituting four percent (4%) of the population. The members identified were grouped as the elderly (above65years), as shown in the table below:

Table 0-2: Vulnerable Groups

S/No.	CATEGORY	NUMBER
1.	Elderly (Above 65 years)	2
	Total	**2**

The distribution is shown in the figure below;

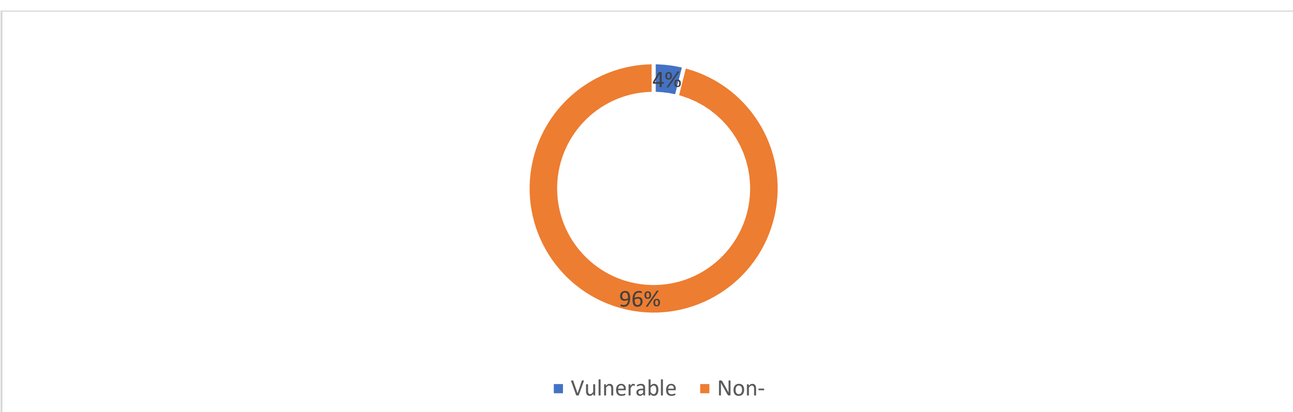


Figure 0-12: Vulnerable and Marginalized Groups identified for PAPs within Maragua

(iv) Level of Education

The survey stated that the majority of the PAPs, fifty-seven percent (57%), completed their education up to the primary school level, while twenty-nine percent (29%) reached secondary school. Ten percent (10%) attained a university or tertiary education, and the minority, four percent (4%), did not have any formal schooling. The distribution is shown in the figure below:

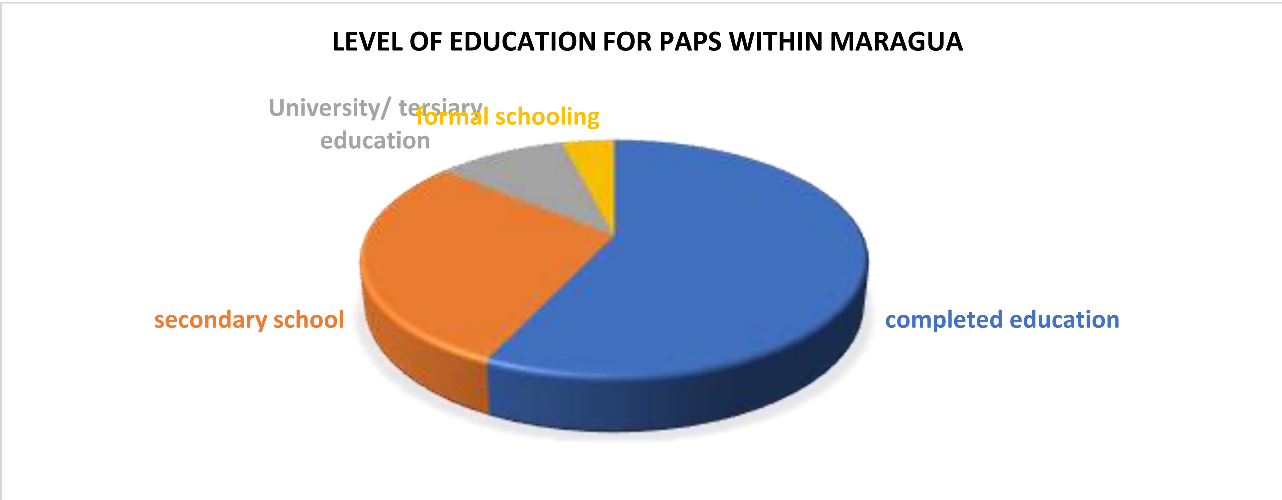


Figure 0-13: Level of Education for PAPs within Maragua

(v) Source of Income for the PAPs

The survey data depicted in the figure below reveals the following distribution among the PAPs in the area:

i. Majority of the PAPs have small business enterprises, constituting forty-four percent (44%).
ii. Twenty-one percent (21%) are farmers.
iii. Nineteen percent (19%) are traders.
iv. Nine percent (9%) are civil servants in various institutions.
v. The minority, comprising seven percent (7%), are unemployed.

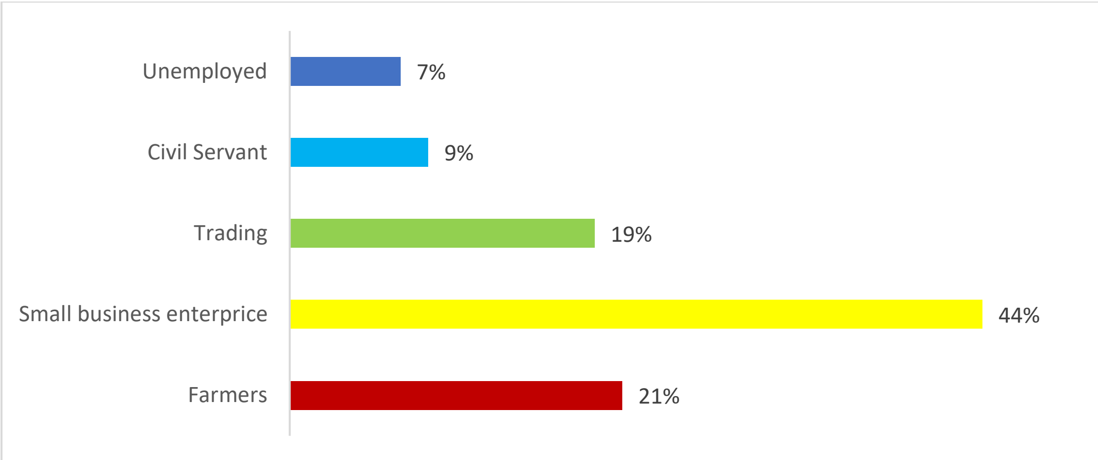


Figure 0-14: PAPs source of income within Maragua

(vi) Affected Assets

The survey outlined that the majority (42%) of the properties that will be impacted consist of Private land, thirty-three percent (33%) are crops along the riparian of River and along the road reserve, and twenty percent (20%) of the affected assets are trees. The distribution is captured in the table below:

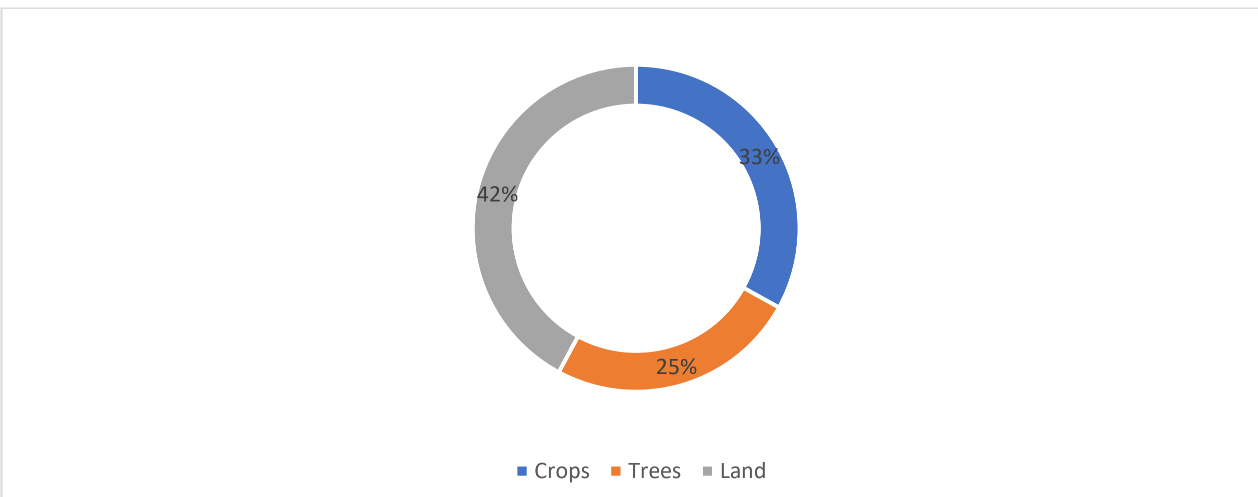


Figure 0-15: Affected assets for PAPs within Maragua

(vii) PAPs Monthly Income

The indication of the survey is as follows:

- Majority (55%) of the PAPs earn below Ksh. 10,000.
- Twenty-four percent (24%) of the PAPs earn between Ksh. 10,000-15,000.

- Eight percent (8%) of the PAPs earn between Ksh. 40,000 to Ksh. 50,000.
- Six percent (6%) of the PAPs earn above Ksh. 50,000.
- Four percent (4%) of the PAPs earn between Ksh. 30,000 to Ksh. 40,000.
- The minority (3%) of the PAPs earn between Ksh. 15,000 to Ksh. 30,000.

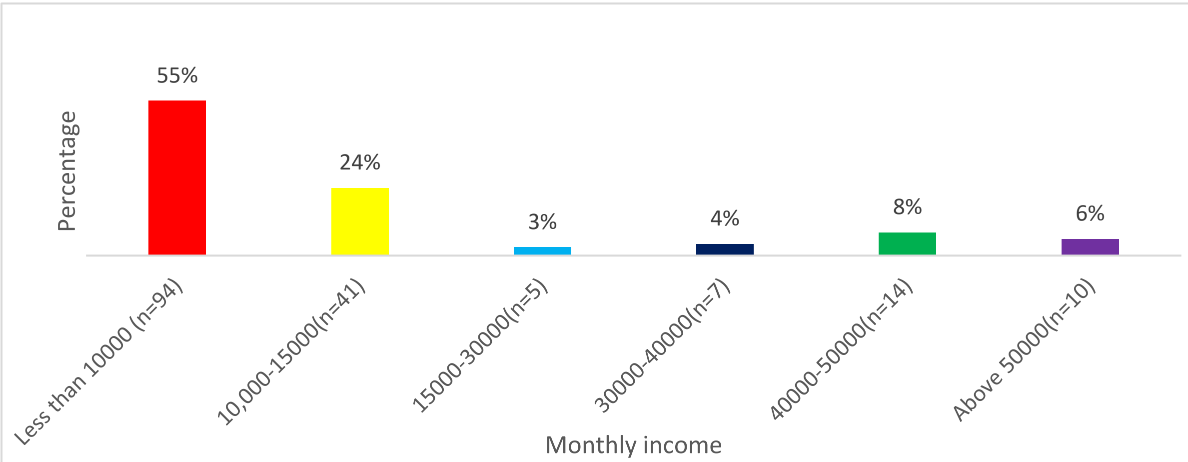


Figure 0-16: PAPs Income amount for PAPs within Maragua

Loss of livelihood

The survey indicated that twenty-one percent (21%) of the PAPs' livelihoods will be affected as they solely depend on farming. However, after the completion of the project construction within their farming areas, the PAPs will be allowed to continue farming perennial crops only, with restrictions on planting deep-rooted trees and plants.

Sources of water

The majority (59%) of the PAPs get their water from Murang'a Water and Sanitation Company (MUWASCO), twenty percent (20%) rely on rainwater harvesting, twelve percent (12%) obtain their water from boreholes, while the minority, ten percent (10%), get their water from the river. The distribution is shown in the figure below:

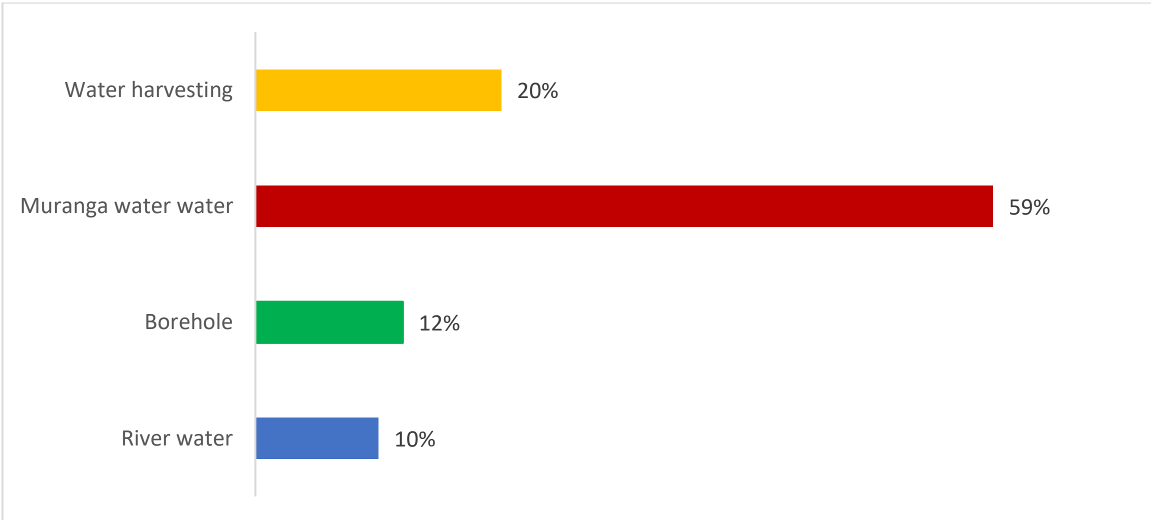


Figure 0-17: Source of water for PAPs within Maragua

Type of Sanitation Facility

The majority (94%) of the PAPs use pit latrines, while the minority (6%) use flush toilets. The distribution is shown in the figure below:

Figure 0-18: Sanitation facilities for PAPs within Maragua

5.4.3. Kangema – Kangari Locations

(i) Gender of Household head

The survey suggested that in the two areas, a total of 5 Project Affected Persons (PAPs) were identified. Among them, 40% were male, 20% were female, and 40% were represented by institutions. The distribution is shown in the figure below:

Figure 0-19: Gender of Household head for PAPs within Kangema – Kangari

(ii) Vulnerability of Household

The indication was that among the 5 identified PAPs, only 2 can be identified as vulnerable persons, accounting for 40%. This is because they are elderly individuals aged above 65 years. The distribution is shown in the figure below:

Figure 0-20: Vulnerability of PAPS within Kangema – Kangari

(iii) Level of Education of Household head

The survey outlined that the majority of the PAPs, seventy-five percent (75%), completed their education up to the secondary school level, while twenty-five percent (25%) did not have any formal schooling. The distribution is shown in the figure below:

Figure 0-21: Level of Education of Household Heads for PAPs within Kangema – Kangari

(iv) Source of Income for the PAPs

The survey indicated that among the 5 PAPs, 75% were in self-employed businesses, while 25% were un employed.

Figure 0-22: Household head Source of Income within Kangema – Kangari

(v) Affected Assets

The assessment was that the land parcels that will be impacted consists of Sixty percent (60%) are Private land, while 40% are public land. The distribution is captured in the table below:

Figure 0-23: Affected assets for PAPs within Kangema – Kangari

(vi) Household head monthly Income

The survey stated that the majority 33% of the PAPs earn below Ksh. 10,000 while sixty seven percent (67%) of the PAPs earn between Ksh. 10,000 to Ksh. 30,000. The distribution is shown in the figure below;

Figure 0-24: Household head income level for PAPs within Kangema – Kangari

(vii) Main Sources of water

An indication of the survey was that the majority (60%) of the PAPs get their water from the Water Service providers (WSP) that is: MUSWASCO& MWEWASCO. Forty Percent (40%) get their water from rain water harvesting. The distribution is shown in the figure below;

Figure 0-25: Main Source of water for PAPs within Kangema – Kangari

(viii) Type of Sanitation Facility

Depiction of the survey was that ninety three percent (93%) of the PAPs use pit latrines, while the minority seven percent (7%) use the septic connected flush toilets.

The distribution is shown in the figure below;

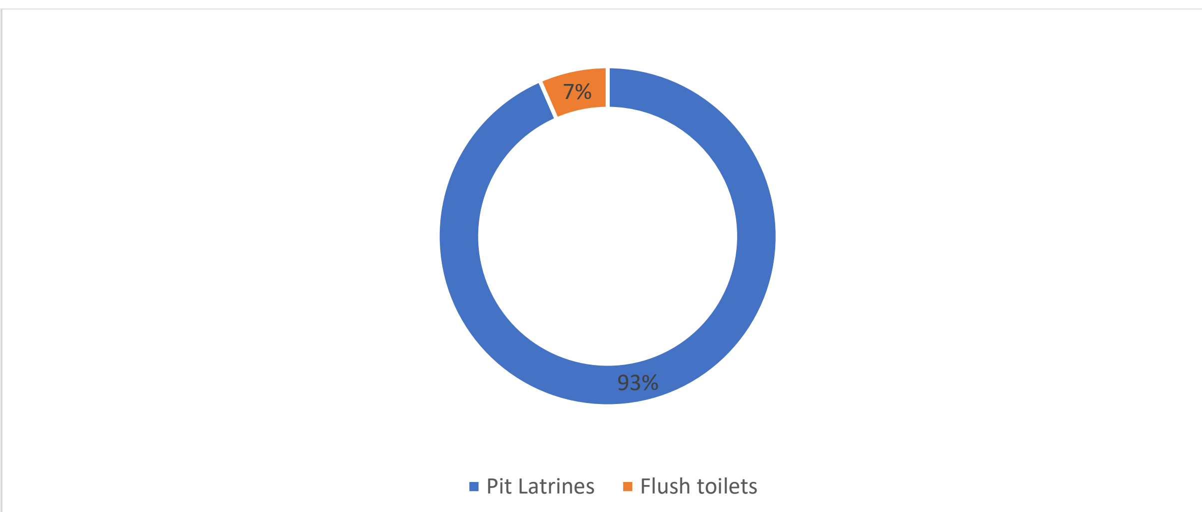


Figure 0-26: Type of Sanitation facilities for PAPs within Kangema – Kangari

5.4.4. Murang'a Location

(i) Gender of Household head

The indications for Murang'a were, a combined total of 28 Project-Affected Persons (PAPs) were recorded. Nine (9) presented by thirty one percent (31%) were male, twenty one percent (21%) were female and forty eight percent (48%) were un identified since they were absent during the survey. The distribution is shown in the figure below;

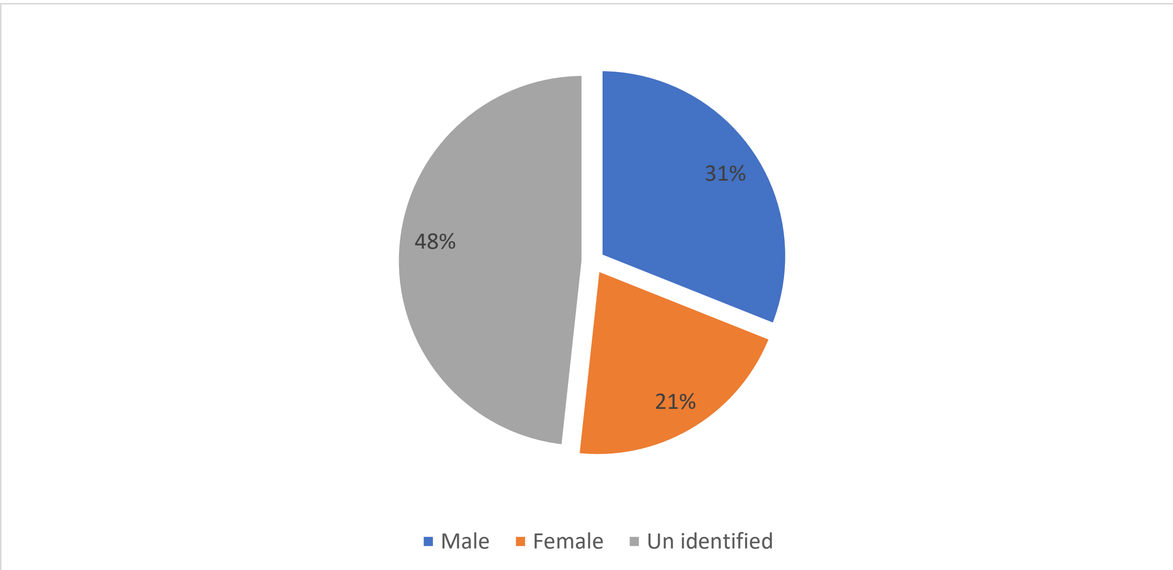


Figure 0-27: Gender of Household heads for PAPs within Murang'a

(ii) Vulnerable Household head

It was outlined that among the 28 PAPs, 2 PAPs contributing to seven percent (7%) were recorded as Vulnerable, in the elderly category; above 65 years of age, three percent (3%), the businesses had collapsed in recent months and (90%) were not vulnerable. The data is as shown in the table and figure below:

Table 0-3: Vulnerable of The Household head

S/No.	CATEGORY	NUMBER
2.	Elderly (Above 65 years)	2
3.	Business collapsed in recent months	1
4.	Not Vulnerable	26
	Total	29

The distribution is shown in the figure below;

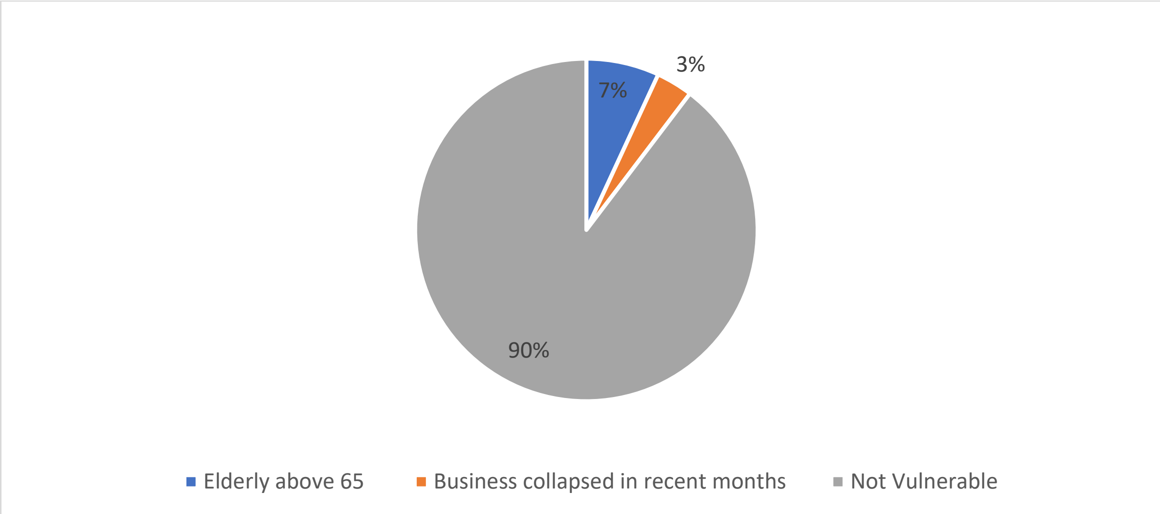


Figure 0-28: Vulnerable and Marginalized Groups identified for PAPs within Murang'a

(iii) Level of Education

From the survey, it was noted that the majority of the PAPs fifty percent (50%) completed their education up to the secondary school level, while thirty eight percent (38%) reached primary school. Thirteen percent (13%) never attended school. The distribution is shown in the figure below;

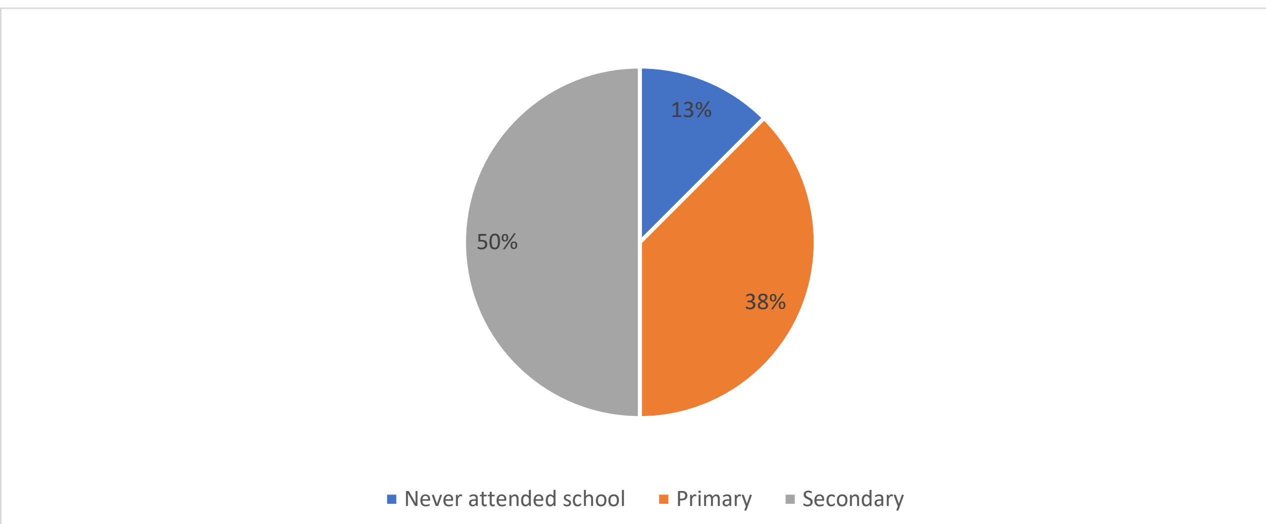


Figure 0-29: Level of Education of Household Head for PAPs within Murang'a

(iv) Household head Source of Income for the PAPs

The data in the figure below shows the following distribution among the PAPs in the area: Twenty-seven percent (27%) of the PAPs have small businesses; and Seventy-three percent (73%) of the PAPs are farmers.

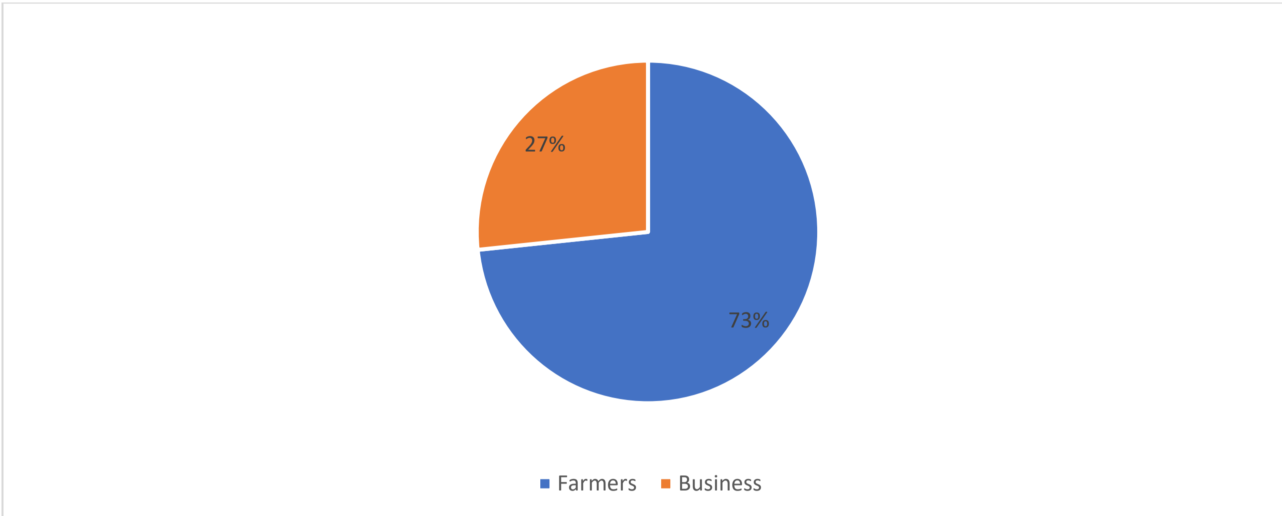


Figure 0-30: Household head source of income within Murang'a

v. Affected Assets

Indications were, the Majority ninety-three percent (93%) of the properties that will be affected consists of trees and crops planted along the riparian, while seven percent (7%) are structures. The distribution is captured in the table below:

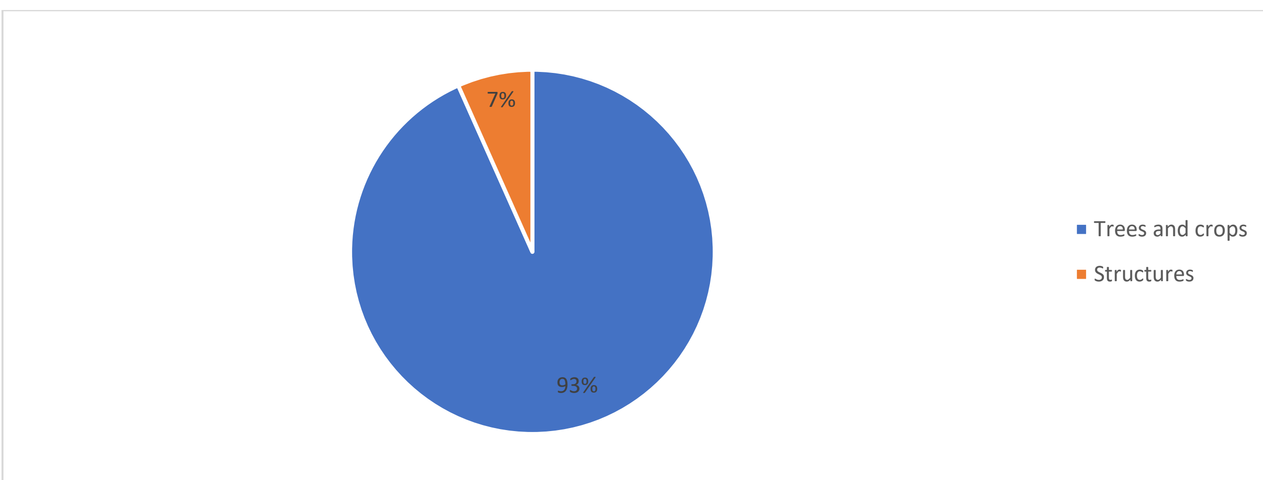


Figure 0-31: Affected assets for PAPs within Murang'a

Household head Monthly Income

The survey stated that majority (71%) of the PAPs earn below Ksh. 10,000 that is fourteen percent (14%) of the PAPs earn between Ksh. 20,000 to Ksh. 30,000, while seven (7%) of the PAPs earn between Ksh. 30,000 to Ksh. 40,000 and another seven percent (7%) earn between Ksh. 10,000 to Ksh. 20,000. The distribution is shown in the figure below:

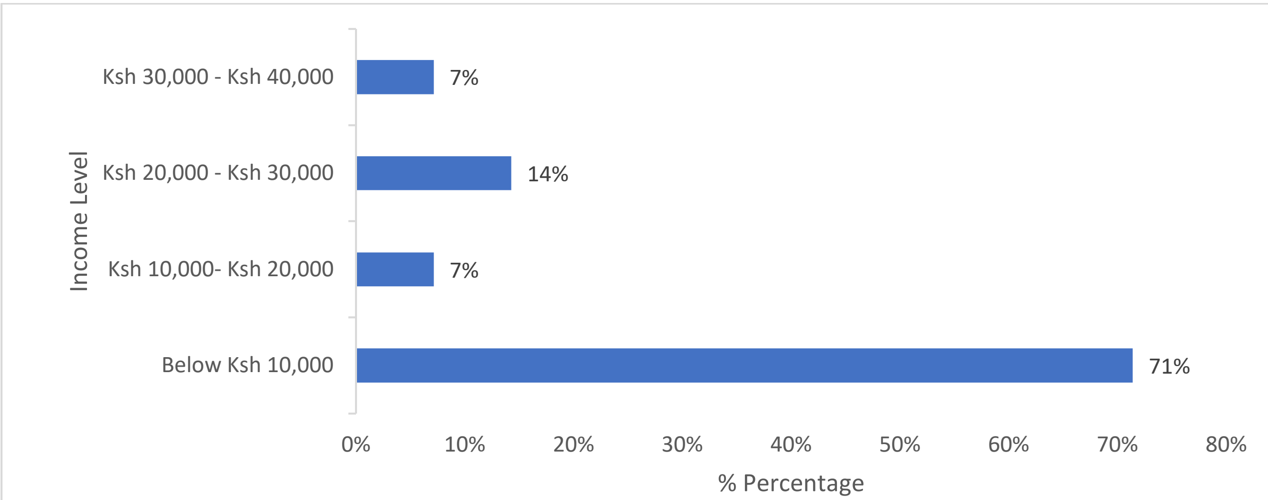


Figure 0-32: Household head monthly Income level for PAPs within Murang'a

Main Sources of water

The survey outlined majority of the PAPs representing eighty five percent (85%) get their water from MUWASCO, while fifteen percent (15%) of the PAPs get their water from rain water harvesting. The distribution is shown in the figure below;

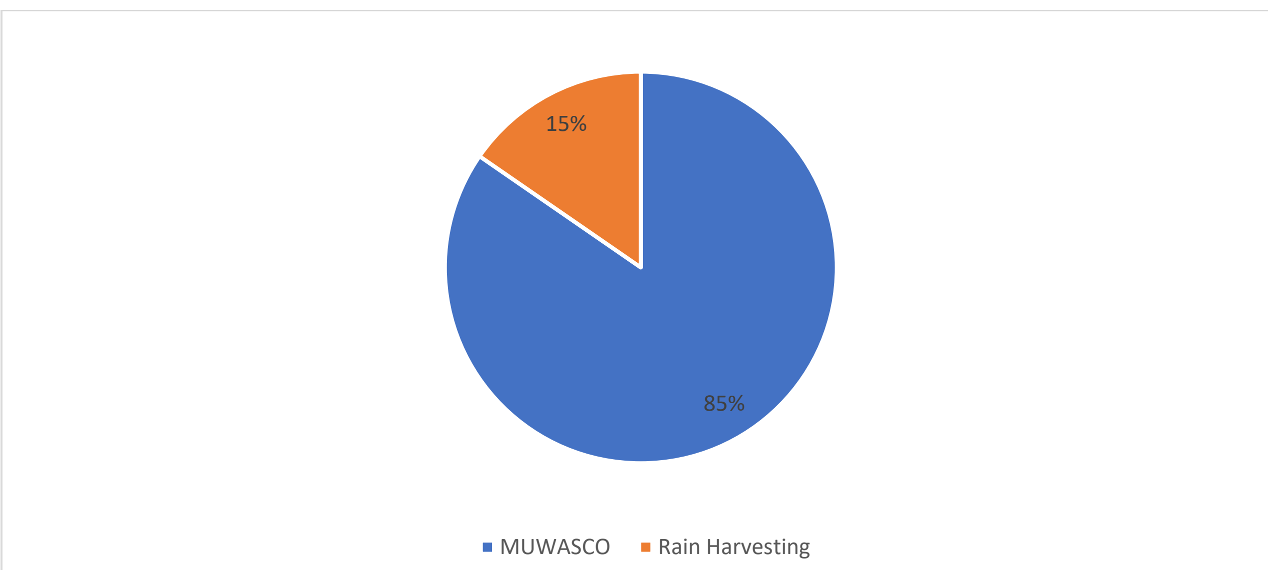


Figure 0-33: Main Source of water for PAPs within Murang'a

Type of Sanitation Facility

It was noted that majority of the PAPs, eighty percent (80%) use pit latrines, while the minority twenty percent (20%) use toilets connected to septic tanks.

The distribution is shown in the figure below;

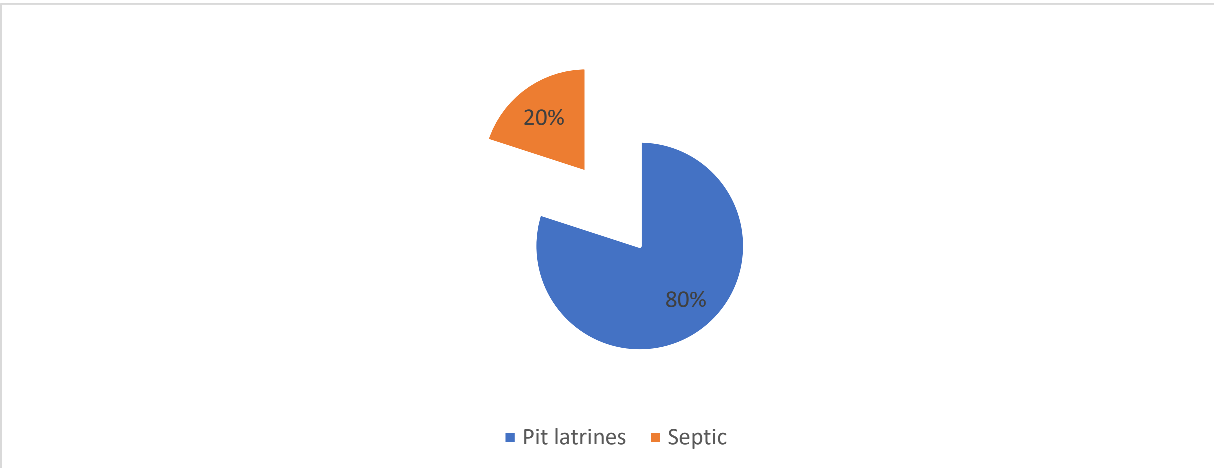


Figure 0-34: Main Sanitation facilities for PAPs within Murang'a

6. PROJECT IMPACTS ON PROJECT AFFECTED PERSONS AND PROPOSED MITIGATION MEASURE

6.1. Introduction

This chapter provides an assessment of the potential socio-economic impacts that the Project will have on those subjects to economic displacement. Understanding these likely impacts enables the formulation of appropriately targeted compensation and livelihood restoration plans to support affected people in re-establishing their structures and means of livelihood.

The chapter draws on:

- The Socio-economic Surveys and subsequent Baseline produced for the Project.
- The affected Asset Valuation Work, conducted to inform the entitlement requirements and compensation parameters of each eligible group.
- Stakeholder engagement activities undertaken with affected Project Affected Persons (PAPs) regarding the effects of the Project and development opportunities.

6.2. Impacts on Project Affected Persons

The impact of the implementation of Murang'a Water and Sewerage project will trigger economic displacement to 200 who include 59 Female PAPs and 137 Male PAPs. Further, 4 public institutions in Maragua. Detailed breakdown of resettlement impacts is presented in sub sections below.

Table 6-1: Summary of PAPs

NO	Type of PAPs	Number of PAPs
1	Male PAPs	137
2	Female PAPs	59
3	Institutions	4
TOTAL		**200**

6.3. Impact on Institutions

There are four institutions being impacted by the Project:

i. **Gituamba Primary School:** A 2,500 m³ reinforced concrete storage tank is proposed for the Thithi-Githingiri Water Supply project component.

ii. **Mariira University:** A water treatment plant with a capacity of 4,000 m^3/day is planned, along with the construction of a 1,000 m^3 reinforced concrete tank at Mariira.

iii. **Kanyanyaini Primary School:** A 2,500 m^3 reinforced concrete water storage tank is designated for Weithaga as part of the Rwathia system.

iv. **Mutheru Primary School:** Construction of a 250 m^3 masonry break pressure tank is proposed for the Chathanda-Kenol Water Supply Project component.

6.4. Impact on Land

In this project, the majority of water and sewer pipelines will be laid on road and riparian reserves, with land acquisition required only for treatment works and proposed water tanks. During compensation, private landowners will provide legal documents such as title deeds. The total number of Project Affected Persons losing land is 64.

Table 6-2: Size of Land affected per location

Location	**Land Affected in hectares (ha)**
Muranga	0
Maragua	19.06
Gatanga	0.1716
Kangari-Kangema	0.727
Total	**19.9586**

6.5. Impact on Structures

The project activities within Gatanga and Maragua will impact a temporary business kiosk, fences, gates as well as 2 Permanent structures.

Table 6-3: Affected structures

Type of structure Affected	**Number of structures Affected**				
	Murang'a	**Gatanga**	**Kangema-kangari**	**Maragua**	**TOTAL**
Temporary Business Kiosk	0	0	0	1	1
Permanent structure	0	0	0	2	2

Others structures (Fence and gate)	0	2	0	3	5
TOTAL	**0**	**2**	**0**	**6**	**8**

6.6. Impact on Crops and Trees

The water and sewer lines will impact trees and crops for PAPs along road reserves, riparian reserves, and private land. A total of 30,959 crops and **2769** trees will be affected as shown in the table below;

Table 6-4: Affected structures

Description of Affected Assets	**Number of crops and Trees**				
	Muranga	Gatanga	Kangema	Maragua	**Total**
Crops	194	2183	0	392	**2,769**
Trees	3082	23162	0	4,715	**30,962**

6.7. Impact on Businesses

The Project will result to economic displacement of 193 PAPS who are farmers and 1 owns and engage in business. The PAPs with a business shop structures which is made of temporary iron wall shop. Table 5-5 presents detailed breakdown of the PAPs numbers:

Table 6-5: Summary of the Affected Business and Livelihood Assets

Description of Business Livelihood Affected	**Number of businesses affected**				
	Muranga	Gatanga	Kangema	Maragua	Total
Temporary Shop	0		0	1	1
Farming	27	114	1	51	193
Public Institution	0	1	3	0	4

Figure 6-1: PAPs alongside there affected crops

6.8. Mitigation Measures

Compensation and livelihood restoration plans are formulated to support affected individuals. Measures include:

- Cash compensation at full replacement value for land and structures.
- Statutory disturbance allowance of 15% of the compensation amount.
- Adequate time for PAPs to harvest crops or salvage materials.
- Livelihood restoration training and additional support for vulnerable households.

This assessment ensure that all PAPs receive fair compensation and support to restore their livelihoods and minimize the adverse impacts of the project.

7. ELIGIBILITY FOR COMPENSATION AND CUT-OFF DATE

The impact of the implementation of Muranga Cluster Water and Sewerage Project will trigger economic displacement to 196 PAPs, who include 59 Female PAPs and 137Male PAPs and 4 Public Institutions. All affected persons are eligible for compensation and resettlement assistance under the AfDB OS2 on Involuntary Resettlement.

Under OS2, three groups are recognized as eligible for compensation and assistance:

7.1. Those with Formal Legal Rights to Land:

This group includes individuals or entities that possess legal documentation confirming their ownership or use rights to the land or property being acquired.

They are entitled to compensation for the land they lose, as well as other assistance and support to help them resettle and restore their livelihoods.

7.2. Those without Formal Legal Rights to Land, but with a Claim to Such Land or Assets:

This includes individuals or communities who do not possess formal legal titles but have recognizable claims to the land or assets. These claims might be based on customary or traditional tenure systems, or other forms of possession that are recognized under national law or proven through long-term occupancy.

They are also entitled to compensation for their losses and assistance in resettlement, even though they lack formal legal titles.

7.3. Those with No Recognizable Legal Right or Claim to the Land They Are Occupying:

This group consists of individuals who occupy land without any recognizable legal right or claim (e.g., squatters). They do not have formal or informal claims to the land they are occupying.

While they might not receive compensation for the land itself, they are entitled to resettlement assistance and support to improve or restore their livelihoods. This might include compensation for any structures or improvements they have made on the land, and assistance to relocate to a new site.

The cut-off date for the Project was agreed by the PAPs during the census activities in their respective areas. This implies that assets present in the Project area at the date of the commencement of census of PAPs will be eligible for compensation.

Table 7-1: Cut-off Date Disclosure

Location	CUT-OFF DATE DISCLOSED
Maragua - Water and Sewer Components	March 22, 2024
Murang'a - Water and Sewer Components	March 20, 2024
Kangema – Kangari ----Water Component	March 20, 2024
Gatanga - Water Component	March 22, 2024

No person is eligible to entitlements if moving into the designated sewer and water project area after the Cut-Off-Date.

7.4. Entitlement Matrix

The entitlement matrix ensures all eligible PAPs are compensated appropriately depending on the loss incurred. All persons affected by the Project and meeting the cut-off date requirements will be entitled to resettlement and assistance depending on the nature of ownership rights on lost assets and scope of the impacts. The entitlement matrix developed for this assessment is presented in the table below.

Table 6-2: Entitlement Matrix

Category of Affected Person	Type of property	Proposed entitlement/Mitigation-Resettlement, Compensation and Moving (Disturbance allowances)	Other Assistance
Registered Landowner (Those who have formal legal rights to land recognized under the laws of Kenya)	Land	Cash Compensation at Full Replacement Value: Affected landowners will receive cash compensation equivalent to the full replacement value of their affected land. This ensures that landowners are adequately	Households with vulnerable persons will also receive an additional 15% disturbance allowance to supplement the land compensation provided for the affected land.

Category of Affected Person	Type of property	Proposed entitlement/Mitigation- Resettlement, Compensation and Moving (Disturbance allowances)	Other Assistance
		compensated for the loss of their property. compensation will be provided at 100% of the market value in cases where small plots are acquired, defined as plots beyond 50% of the total land (none in this Project). All Project Affected Persons (PAPs) are entitled to a statutory disturbance allowance equivalent to 15% of the value of the land compensation amount.	They will receive restoration support, including livelihood restoration training. Restoration support: training as described in Chapterf aims to supplement the asset compensation for the affected land. This includes skills training programs designed to help Project-Affected Persons (PAPs) acquire new skills or enhance existing ones to improve employability and restore their livelihoods, particularly in local skills. All PAPs are eligible for livelihood restoration training.
Structure and Business Owners	Movable and other Structures - residential or business within the project area including road reserves.	Cash compensation for all structures, and business at replacement cost, All the PAPs are eligible for a statutory disturbance allowance of 15% of the compensation amount. All PAPs are eligible for; Livelihood restoration training Provision of adequate time given to all the PAPs to salvage building materials	Households with vulnerable persons will receive livelihood restoration training and a 15% disturbance allowance, in addition to the asset compensation provided for the affected residential or business structure. Vulnerable PAPs - Assistance in salvaging the materials where they need be and as per the PAPs preference. All PAPs are eligible for; Livelihood restoration training

Category of Affected Person	Type of property	Proposed entitlement/Mitigation-Resettlement, Compensation and Moving (Disturbance allowances)	Other Assistance
Owners of the affected crops and Trees	Crops and Trees	Compensation for damaged crops, trees, etc. at market value All the PAPs are eligible for a Statutory disturbance allowance of 15% of the compensation amount. Provision of adequate time given to all the PAPs to harvest	Households with vulnerable persons, restoration support; Livelihood restoration training and additional 15% disturbance allowance will be provided to supplement the compensation provided for the affected crops and trees. All PAPs are eligible for; Livelihood restoration training
Squatter/encroacher	Land	N/A	N/A
Squatter/encroacher	Crops, Trees, business and Structures on Road reserve, Riparian land etc.	Cash compensation for all affected crops, trees structures, and business at replacement cost, All the PAPs are eligible for a statutory disturbance allowance of 15% of the compensation amount. Provision of adequate time given to all the PAPs to harvest, or salvage building material	i. All PAPs are eligible for; Livelihood restoration training

8. CONSULTATION AND COMMUNITY PARTICIPATION

An effective resettlement planning requires regular and thorough consultation with a wide range of project stakeholders in the general areas of the project. This wide consultation will include individuals and groups who will be positively or negatively affected by the project including potential host communities.

Comprehensive consultations have been held with various stakeholders from the reconnaissance stage through public consultations for baseline socio-economic household surveys. At this stage for household survey, the data was cited for determination of the potential project affected persons within the road corridor. The consultations were aimed at seeking the views from the public along the project area on various aspects of design. Secondly, the public consultation forums served to create awareness to the local community on how the project would impact on their daily lives during and after implementation. Prior to the conduct of socio-economic survey, meetings were held with the government officials and other opinion leaders among the community to sensitize the on the project and its effect on social-economic aspect of the community. The issue of the project affected persons as a result of the project was highlighted and participants appraised on the mitigation measures available by the project.

The process of carrying out the assessment for the PAPs and their assets was also explained to create awareness and form a basis for subsequent discussions. Public consultations were held at various locations as determined by administrative boundaries for ease of administration and management of the stakeholder's composition and record keeping for future reference and analysis. The list of public officials and civil society to be involved in the process was exhaustively compiled to be representative of their intervention on development matters in the project where they serve as a bridge of empowerment of local communities. A special forum was arranged for the civil society groups and also the vulnerable groups including youth, women and people with disability.

The main objective for the consultation was to involve the community at the preliminary stage so as to identify likely negative impacts and find ways to minimize negative impacts and enhance positive impacts of the project.

8.1. Aims and Objectives of Stakeholders Consultation and Public Participation (CPP)

The aims and objectives of public involvement and consultation include:

- To identify and map all relevant stakeholders, their context, interests and concerns
- To establish a two-way dialogue to understand concerns, management options and external perspectives
- To manage stakeholders' expectations
- To facilitate the collection of quality primary and secondary information relevant; to the project processes including monitoring
- To triangulate data collected and analysis done to inform decision making
- To document information disclosed and public consultation efforts
- To comply with regulations and requirements on disclosure and consultation
- To provide information about the project and its potential impacts to those interested in or affected by the project and solicit their opinion in this regard
- To identify additional impacts/issues and possible mitigation measures
- To inform the process of developing appropriate mitigation measures and facilitate consideration of alternatives and trade-offs (if any)
- To reduce chances of conflict through early identification of contentious issues
- To ensure transparency and accountability of decision-making
- To increase public confidence in the project.

8.2. Stakeholder Categories

The Key informants that were targeted in the consultation meeting were PAPs, Government and private Institutions operating within the project area and residents of the project area.

Stakeholder concerns and feedback constituted valuable source of information that was useful in project designing, as well as the identification of any potential impacts. The stakeholders were categorized into Primary and Secondary groups, as outlined in Table 6-1 below:

Table 8-1: Stakeholder Categories

No.	Name	Category
Primary Stakeholders		
1.	GATAWSCO, MUSWASCO & MWEWASCO	Water Service Provider

2.	Kenya Forest Service-County Forest Conservator	Kenya Forest Service
3.	National Government Administrative Office Deputy County Commissioners (DCC), Chiefs/ Assistant chiefs	National Government
4.	Murang'a County Government, Ward Administrator	County Government
5.	Kigumo Sub- County Officials	Sub- County
6.	Water Resources Authority (WRA) officers	Water Regulatory Body
7.	Water Resource Users Association (WRUA) Officials	Water Regulatory Body
8.	Public Health Officer	National Government
9.	Village Elders	Community Representatives
10	Area Residents	Community
11	Host Community Groups	Community
Secondary Stakeholders		
12	Physical Planning Officer	National/County Government Agencies and Ministries
13	Sub-county Lands Registrar	

The key stakeholders, including Chiefs, DCCs, and ACCS, participated in public sensitization meetings held within the project area from 13th February, 2024, to 14th May, 2024. These meetings were facilitated by the respective local administration; the area chiefs and assistant chiefs. A total of 12 meetings were conducted, as detailed in Table 6-1 below. Attendance lists and meeting minutes have been attached in Annex 3. In addition, interviews were conducted using standard questionnaires (Filled KII questionnaires - Annex 1, Sample Household Questionnaires - Annex 2, and Signed consents - Annex 5). A Grievance Redress Mechanism was developed and is attached in Annex 4 of this report.

Table 8-2: Summary of Public Meetings Held

Water Component				
No.	**Meeting Dates**	**Venue**	**Location**	**No. of Participants (M-Male, F-female)**
1.	13/02/2024	Kiriani-Ndunyu Chege	Gatanga- Thithi	20 (16M and 4F)
2.	14/02/2024	Kiawahiga Grounds	Gatanga -Kiawahiga	17 (14M and 3F)
3.	26/02/2024	Mariira Farm	Kigumo-Mariira Farm & Gwa Kibugi	19 (12M and 7F)
4.	04/03/2024	Gwa Kibugi	Mariira- Kigumo	40 (29M and 11F)
5.	11/03/2024	Kiriani-Ndunyu Chege	Gatanga- Thithi	22 (18M and 4F)
6.	15/03/2024	Gathanji Grounds	Gathanji	17 (14M and 3F)
7.	8th May 2024	Gakoigo (Chiefs Office)	Maragua	30(17M and 13F)
Sewer Component				
No	**Date**	**Venue**	**Location**	**No. of Participants**
1.	14./03/2024	Kiawamburi open area	Kiawamburi	23 (18M and 5F)
2.	14/03/2024	Majoice Open Ground	Majoice-Mbiri	34 (14M and 20F)
3.	14/03/2024	St Mary's Njoguini	St Mary's Njoguini	30 (18M and 12 F)
4	23rd April 2024	Maragua Ridge (Chiefs Office)	Maragua	23 (10M and 13F)
5	14th May 2024	Kiawamburi - Majoyce	Muranga	26(17m and 8F)

Table 8-3: Summary of PAPs that have signed the Consent Forms

DESCRIPTION	Total Number of Project Affected Persons (PAPs)	No. of Absentee PAPs	No. of consents signed	REMARKS
GATANGA	115	5	109	**Gatanga** - 1 public Institution - - 5 Absentee PAP in Gatanga under priority 2 chief has written a letter confirming their tracing during or before commencement of Priority 2

KANGEMA TO KANGARI	6	0	2	**Kangema to Kangari** 4(Public Institutions)
MARAGUA	52	27	25	27 PAPs under under priority 2, the chief has written a letter confirming tracing them during or before commencement of Priority 2
MURANGA	27	16	11	16 PAPs under under priority 2, the chief has written a letter confirming tracing them during or before commencement of Priority 2
TOTAL	200	48	147	- 147 PAPs and 5 Public Institutions (consent signed under Priority 1). -16 PAPs under priority 2 in Muranga -27 under priority 2 (Gakoigo) in Maragua

Minutes of this meeting have been attached as annexes of this document;

Table 8-4: Stakeholder Concerns/Comments and Responses

Location	Comments	Response
Water Component		
Kiriani-Ndunyu Chege	The community members inquired whether the community members affected will be compensated	Consultant representative, emphasized to the participants that PAPs' (Project Affected Persons) whose land parcels are affected by the construction works of the Intake and treatment works will be duly compensated. Nevertheless, he specified that individuals situated within riparian areas and engaged in farming activities would solely be eligible for compensation of crops affected, with no provision for land compensation.
	The Community members inquired about how the riparian will be established from the river.	The Consultant representative responded to the community members' query regarding the establishment of riparian boundaries from the river. He explained that the Water Resources Authority (WRA) oversees all matters concerning river riparian marking. According to WRA protocols, riparian zones are determined based

Location	Comments	Response
Water Component		
		on the size of the river, with assistance from hydrologists who assess various factors to establish the boundaries.
	The community members wanted to know whether they will still draw water from the river.	The consultant conveyed to the attendees that they will still be permitted to draw water from the area, albeit from a distance away from the newly constructed Intake.
	The community inquired on when the Project will commence	The consultant stated that the commencement date of the project will be communicated once all the necessary documentation and approvals have been cleared, and a no objection has been obtained for the implementation of the RAP and commencement of works.
	The community inquired on how much they will be paid and the compensation channels that will be used	The consultant stated that the valuation of the affected land parcels will be carried out by NLC, aligning with current market prices. Subsequently, negotiations and agreements regarding compensation will be reached with the PAPs.
Kiawahiga	The community members enquired whether the Project will supply sufficient water to the Residents of Kiawahiga	The consultant articulated that the project's objective is to enhance water supply in the area by building a Water storage tank and increasing the water intake, thereby ensuring sufficient water supply.
	The community members enquired about the water charges	Gatanga Water and Sanitation officials communicated that, residents are encouraged to visit the Gatanga Water and Sanitation Company to gain information about the applicable charges. However, the process for application and the charges for connection will be communicated in detail. He further clarified that these charges constitute a percentage that has been set by WASREB that's relative to the amount of water consumed.

Location	Comments	Response
Water Component		
	The community members wanted to know whether the Project will affect private land	The consultant stated that the water lines will be constructed within existing road wayleaves, and all PAPs will be eligible for compensation. In addition, some private land/property will be affected, and compensation will be provided accordingly, this will mainly affect land parcels at the intakes and water treatment works.
Mariira Farm & Wa Kibugi	The Community requested for an explanation on rehabilitation and what it entails	The Consultant explained to the meeting that rehabilitation is majorly replacing damaged water infrastructure. This includes water pipes.
	The Community was in agreement that they are the main causes of pipes damage.	The Consultant further stated that people take precaution when it comes to protecting the existing underground infrastructure. This entails refraining from construction of permanent structures and no planting of trees above the water lines. Residents must adhere to these measures to ensure continued access to water and to safeguard the infrastructure.
	The Community inquired on quality of water pipes to be laid. The existing water pipes block easily due to waste collected from the intake works at Chathanda.	The Assistant Engineer responded by assuring the residents that the quality of the pipes is assured and that the intake works will be well protected and maintained to prevent dumping of wastes.
	The Community requested for prioritization of employment opportunity to the locals	The Sociologist informed the residents that employment opportunities will be prioritized for locals, especially for unskilled labor. This will be communicated through the local chief's office, with unskilled labor being recruited from this group.
Location	**Comments**	**Response**

Location	Comments	Response
Water Component		
Sewer Component		
Kiawamburi	Macharia Waweru requested for more consideration in his area of residence.	The MUWASCO official took note of the area and pledged to assess its viability for consideration. He stated that if found viable, it will be taken into consideration
	Peter Mucheke enquired on whether the project will install the lateral lines.	The MUWASCO officials explained the scope of the project to the residents, stating that it will entail components for the installation of the main trunk and lateral sewer lines.
Majoice-Mbiri	Susan Wanja complained that people of Majoice area have not been considered for sewer yet they were the ones who had requested the County for the services.	The MUWASCO official explained the scope in detail, outlining that the main trunk would be constructed first, followed by the construction of the lateral sewers. He clarified to the community that the trunk sewer precedes the laterals lines which serve the consumers/community.
	Alex Wambugu asked if the project can take a whole piece of private land.	It was explained that the land requirement for the project component will vary depending on the affected portion. This will also be thoroughly explained during the valuation and inventory collection exercise. The project primarily occupies a small area of land, mostly underground. The RAP will focus on minimizing disruption and resettlement.
	Murathi stated that the quorum in the meeting was a bit small. He expressed it as a small representation of the community	It was stated that this was an initial meeting. More public engagements will follow and more people will get engaged along the way. Those present at the meeting were also encouraged to pass the message and to be showing up in public forums.

8.3. Future Stakeholder Plan

After the RAP has been disclosed to the public to create further awareness and confirm that the recommendations to address their plight has been incorporated, it will be necessary to maintain consultations with them to address any emerging issues. AWWDA should prepare suitable materials explaining the processes entailed at every stage of compensation, redress mechanism, rights of the PAPs and any pertinent issues that would enhance smooth implementation of the RAP.

The preparation of the RAP, the land acquisition or project implementation processes are not seamless activities. Therefore, the process of land acquisition will also provide another opportunity for the community and the PAPs to engage with the project proponent during the land acquisition process. The details of the parcels affected will be published in public areas for them to review prior to land acquisition. The National Land Commission, if necessary, will be given guidelines on the process from request by the acquiring authority to the taking of possession of affected land by the project. The community will be engaged in regular up-dates on the project progress as part of the monitoring and evaluation and to sustain their ownership of the project. Several meetings will be held as part of the RAP implementation process by the Grievance Redress Committee.

This RAP has provided a lump sum budget of **Ksh. 14,275,489.00(Kenya Shillings Fourteen Million, seven hundred twenty-five thousand four hundred and eighty-nine shillings)** to enable AWWDA undertake Stakeholder Consultation and Public Participation activities.

A detailed proposal will be contained in the overall stakeholder engagement plan.

8.4. RAP IMPLEMENTATION PROCESS

AWWDA as the project proponent and will set-up the Resettlement Committee to oversee the implementation of the RAP. This will entail verifying the details of the PAPs and facilitating the payment of any compensation or assistance benefits. The Committee will mobilize the PAPs and keep them informed of the various stages of the project implementation. The Committee will also create awareness among the communities living along the project wayleaves. Among the responsibilities of the Committee are:

(i) To ensure that appropriate agencies that are mandated to plan and implement compensation, income restoration, and rehabilitation programs are identified as early as possible in Project preparation;

(ii) To ensure compliance with the Resettlement Plan and Environmental Management Plan; and

(iii) To acquire the required land and payment of compensation to the PAPs during the pre- construction period, and monitoring the completed water and sewerage facilities and ensure that the objectives of the resettlement plan have been achieved.

The following four components will form part of Implementation of the RAP:

(i) Notification;

(ii) Verification of properties of affected persons and estimation of their type and level of losses;

(iii) Preparation of entitlements for affected persons by Land Acquisition; and

(iv) Relocation and resettlement of the PAPs where necessary.

8.5. LIVELIHOOD RESTORATION PROGRAM

8.5.1. Livelihood Restoration Principles

The following are the principles of livelihood restoration for this RAP:

- Livelihoods are multi-faceted strategies and a combination of approaches is therefore required to support restoration of income and the reestablishment of community support networks.
- PAPs will be provided with choices so that they can self-determine how their household will best benefit from the livelihood restoration options provided in this RAP.
- PAPs will actively participate in planning and decision making to ensure proposed support reflects local realities / priorities and have PAHs active buy-in.
- Vulnerable households are by definition less able to adapt to changes and therefore require targeted support through the planning and implementation of livelihood restoration as provided in this RAP.
- Transition allowances are necessary but require clear eligibility and end points. Background of Livelihood Restoration (in this case the RAP proposes a training program in establishment of a new business, or restoration of agricultural production).

The main types of livelihoods / income streams encountered in the Project affected area of influence is farming business of a range of crop and Trees and a business shop. This assessment therefore provides for livelihoods restoration activities which include:

i. Training on Adopting Sustainable Agriculture Practices
ii. Literacy training on utilisation of compensation funds to avoid misuse
iii. Linkages to Micro-Credit enterprises for credit advance where required.
iv. Prioritization of the affected PAPs in employment opportunities arising from the Project with priority given to Women and vulnerable groups.

This RAP has provided a lump sum budget of **KSH.9,5 16,993. (Kenya Shillings Nine Million Five Hundred and sixteen Thousand Nine Hundred and Ninety-Three)** to enable AWWDA undertake Livelihood restoration activities listed above.

Sub Sections below provide a detailed description of suggested livelihood activities.

8.5.2. Financial Management

All PAPs who will receive cash compensation for loss of structure, crops and trees will be eligible for financial management training as per the entitlement matrix. This is in recognition that the absence of financial training could lead to misuse of the compensation funds leading to increased vulnerability of the PAPs. Financial training will commence as soon as possible but before households get paid their cash compensation. The aim of the training is to ensure adequate money management skills and use of cash to enable livelihood restoration. The financial management training will be based on assessment of existing income-generating patterns which is mainly related to business streams.

8.5.3. Adopting sustainable agriculture practices

All PAPs will be trained on Adopting sustainable agriculture practices such as conservation tillage, organic farming, crop rotation, agroforestry, and water management to enhance soil health, improve crop yields, and promote the conservation of natural resources.

8.5.4. Linking to Micro-Credit Facilities

PAPs will also be linked to micro-credit facilities in the area. This is to encourage savings and enable households to invest and restore their livelihoods.

8.5.5. Employment During Construction

PAPs will be offered priority in employment as part of transitional allowance especially with respect to unskilled and semi-skilled employment. The Contractor will prepare a Labour Recruitment Plan (LRP) to oversee employment opportunities for PAPs and locals.

8.5.6. HIV/AIDS Awareness Training

Training will be conducted by AWWDA on HIV/AIDS as part of the livelihood restoration measures specifically in view of the high incidences of HIV/AIDS occurrences due to in-migration of workers.

8.5.7. Photo log

Photographs taken during the preceding of the meetings:

	
1. Photo of meeting in progress with the NGAO, Consultant, GATAWASCO, village elders and residents of Ndunyu-Chege.	2. Photo of meeting in progress with local Administration, Consultant, GATAWASCO, village elders and area residents of Chomo (Kiariani).

3. Photo (2) of meeting in progress with NGAO, Consultant, GATAWASCO, village elders, and residents of Chomo

4. Photo of meeting in progress with NGAO, Consultant, GATAWASCO, village elders and residents of Kiawahiga (Gatanga).

5. Photo (2) of meeting in progress with NGAO, Consultant, GATAWASCO, village elders and residents of Kiawahiga(Gatanga).

 Photo of a meeting in progress at Mariira Farm with NGAO, Consultant, MUSWASCO, Mariira School administration and residents	 Photo (2) of meeting in progress at Mariira Farm with Administration, Consultant, MUSWASCO, Mariira School administration and residents
 Photo of a meeting in progress at Gwa – Kibugi Mariira with local Administration, Consultant, MUSWASCO and residents	 Photo of a meeting in progress at Gwa – Kibugi Mariira with local Administration, Consultant, MUSWASCO and residents

 Photo of the consultations and engagements with PAP for Weithaga tank by Consultant and MWEWASCO	 Photo of a PAP at Kawariua tank by Consultant and MWEWASCO
 Photo of meeting in progress at St Mary's with administration, MUWASCO, residents and Consultant.	 Photo (2) of the meeting in progress at St Mary's with administration, MUWASCO, residents and Consultant.
	

Photo of area chief addressing the meeting at Majoice area Murang'a.	Photo (2) of area Chief addressing the meeting at Majoice area (Murang'a).
	
Photo in of meeting in progress at Kiawamburi Murang'a with NGAO, MUWASCO, residents and Consultant	Photo (2) of meeting in progress at Kiawamburi Murang'a with administration, MUWASCO, residents and Consultant.

Figure 8-1: Public participation meetings photo log (photo taken by the Consultant representative during meetings, dates from 13th February 2024 to 14th May 2024)

9. GRIEVANCE REDRESS MECHANISM

This section provides a formal avenue for affected groups and stakeholders to engage with the project implementers on issues of concern or unaddressed impacts. Grievances are any complaints or suggestions about the way a project is being implemented. They may take the form of specific complaint for damages/injury, concerns about routine project activities, or perceived incidents or impacts. Identifying and responding to grievances supports the development of positive relationships between projects and affected groups/persons/communities, and other stakeholders.

This grievance redress has provided mechanisms for receiving and facilitating resolution of the affected institutional or communities' concerns and grievances. AfDB Safeguard Policies states the concerns should be addressed promptly using an understandable and transparent process that is culturally appropriate and readily acceptable to all segments of affected communities, at no cost and without retribution. Mechanisms should be appropriate to the scale of impacts and risks presented by the project. Grievances can be an indication of growing stakeholder concerns (real and perceived) and can escalate if not identified and resolved. The management of grievances is therefore a vital component of stakeholder management and an important aspect of risk management for a project. Projects may have a range of potential adverse impacts to people and the environment in general, and identifying grievances and ensuring timely resolution is therefore very necessary.

AWWDA will inform the project-affected parties about the GRM on the different levels in the course of the continuous stakeholder engagement. The grievance mechanisms will address concerns promptly and effectively, in a transparent manner that is culturally appropriate and readily accessible to all project-affected parties, at no cost and without retribution. Handling of grievances will also be discreet, objective, sensitive and responsive to the needs and concerns of the project affected parties. The mechanisms will not prevent access to judicial or administrative remedies. The mechanism will also allow for anonymous complaints to be raised and addressed. Specific provisions will be established in order to cover any Gender based violence (GBV), Sexual exploitation, abuse and harassment (SEAH) related issues and complaints appropriately. This RAP presents a template for grievance registration and -management, covering key information, e.g. the mode of receiving the grievance, type of a grievance, actions taken to reach resolution and satisfaction of complainants.

9.1. Grievance Handling Mechanism Structure

Grievance management will provide three tiers of amicable review and settlement comprising of the following.

i. Tier 1 – This will be grievances received at the community/village level. Grievances at this level can usually be solved through adequate mediation using customary rules or local community/administration at the lowest level.
ii. Tier 2 - The second level will be Project administration (through the Resident Engineer (RE)) where complains received can be resolved or agreed upon by the Complainant and the Project level GRM team comprising of the RE, Community Liaison officers, and other safeguards specialists on the Contractor and Supervising Consultant team.
iii. Tier 3 – This will be composed of the RAP implementation committee and Sub County representatives in case the grievance cannot be solved on the first and second level.

There will be the option for the complainant to resort to alternative dispute resolution mechanisms (ADRM), including seeking access to judicial or administrative remedies in court in case there is no solution within the Project's grievance redress mechanism set up for the project.

9.1.1. Members of the Grievance Redress Committee (GRC) at project Level

The GRC will elect the chairman and secretary of the GRC, with the DCC being a member and an ex-official of the committee or a person the RE might appoint as their representative. The Client social safeguards will be the grievance officer. The proposed members of the grievance committee are as follows:

Table 9-1: Proposed structure of the GRC

Organization	Representing
Administration (Dep. County Commissioner)	National Government Administration Office - Chairman

Local Area Administration (Area Chief)	National Government - Member
Community representative	Project Affected Community - Member
AWWDA	Client social safeguards-Grievance officer
Safeguard specialist	Consultant - Member
Contractor representative	Contractor - Member
Other Stakeholders	As may be determined during the implementation of the project

The main role of the committee will be arbitration through mediation and negotiation when complaints arise to ensure that cases are resolved quickly and fairly. The above committee shall meet regularly and may form special sub-committees or ad-hoc committee that shall meet on a weekly basis or more frequently as the nature of some grievances may demand. Such sub-committees or special ad-hoc committee will report their findings and recommendations to the main committee for ratification or approval.

9.1.2. Key staff coordinating Grievance Redress

The Client social safeguard/ grievance officer will be in charge of GRM, the following will be their responsibilities;

- Coordinate formation of Grievance Redress Committees (GRCs) before the commencement of construction to resolve issues.
- Act as the Focal Point for AWWDA on Grievance Redress issues and facilitate the grievance mechanisms.
- Create awareness of the Grievance Redress Mechanism (GRM) amongst all the stakeholders through public awareness campaigns.
- Assist in Redress of all Grievances by coordinating with the concerned parties.
- Maintain information of grievances and Redress.
- Monitor the activities on Redress of Grievances.
- Prepare the progress for monthly/quarterly reports.

- Provision of resources to cover the operational costs of the GRM

9.1.3. Receiving and addressing grievances related to GBV/SEA/SH

There will be a dedicated person and number for receiving such grievances which will be relayed to AWWDA directly for processing and resolution. Details of receiving and addressing grievances related to GBV/SEA/SH are included in the Main SEP report for the project.

9.1.4. Receiving Complaints

a) Points of receipt of complaints

The various points of receiving complaints would be as follows:

- National Government Administration Offices;
- Area Local chief's office;
- AWWDA's offices
- Contractor or RE office
- Ministry of Water, Sanitation and Irrigation
- Representative at the community level

b) Mode of receipt and recording of Complaints

The complaints can be made in writing, verbally, over the phone, emails or any other media. As soon as the officer receives a complaint, they should issue an acknowledgement of the complaint, including the details of the person bringing the grievance. The officer receiving the complaints should obtain relevant basic information regarding the grievance and the complainant and will immediately inform the safeguard specialist the receipt of the complaint.

The GO will maintain a Complaint / Grievance and Redress register or log book and the responsibility of keeping records collected from relevant bodies will be the responsibility of the supervising consultant's Safeguard specialist.

c) **Registry and Monitoring**

All complaints received will be registered at the Project Site office and monitored. The Grievance log will also present:

- No of complaints received.
- No and % of complaints that have reached agreement.
- No and % of complaints that have been resolved.
- No and % of complaints that have gone to mediation
- No and % of complaints that have not reached agreement.

The log will also show the issues and geographic areas most complaints circle around. The information provided by the log database is expected to help improve the Grievance Redress Mechanism and better understand and address the environmental and social impacts of the project.

Table 9-2: Grievance Redress Process

Process	**Description**	**Time frame (No. of Days)**	**Other information**
Identification of grievance	Face to face; phone; letter, e-mail; Recorded during public/community interaction;	1	
Grievance assessed and logged	Significance assessed and grievance recorded or logged (i.e. in the GRM log book)	4-7	Significance criteria: Level 1 – one off event; Level 2 – complaint is widespread or repeated; Level 3- any complaint (one off or repeated) that indicates breach of law or policy or provisions in other project documents
Grievance is acknowledged	Acknowledgement of grievance through appropriate medium	4-7	

Process	Description	Time frame (No. of Days)	Other information
Development of response	Grievance solved at Tier 1 Project level Response development with input from management/ complainant/relevant stakeholders.	4	GO and complainant to sign off
Response signed off	Grievance closed Redress action approved at appropriate levels	Within above timelines	RE to sign off
Grievance not solved, passed to GRC	Grievance passed to appropriate party for resolution (GRC) – Tier 2. Redress action approved at appropriate levels.	7	GRC and complainant to sign off
Implementation and communication of response	Redress action implemented and update of progress on resolution communicated to complainant.	Within 7 days	
Complaints Response	Redress action recorded in grievance log book. Confirm with complainant that grievance can be closed or determine what follow up is necessary.	4-7	

Process	Description	Time frame (No. of Days)	Other information
Grievance not solved	Grievance passed to appropriate party for resolution. Final decision communicated to complainant.	At Most 7 Days	Complainant to sign off
Close grievance	Record final sign off of grievance. If grievance cannot be closed, return to step 2 or refer to sector ministry or recommend third-party arbitration or resort to court of law.	4-7	Final sign off on by AWWDA

9.1.5. Grievance Redress Mechanism Process

The stakeholders are informed of various points of making complaints (if any) and the RE will collect the complaints from these points on a regular basis and record them. This is followed by coordinating with the concerned people to address the grievances. The RE will manage the grievance activities at the respective stakeholder's level to address the Grievances and would act as the focal point in this regard. The complaints are received at various points as described above. A 3- tier Redress structure is proposed to address all complaints for the proposed project effectively.

a) **First tier of Redress**

The first tier is divided into two parts where a complainant can register their grievances and are resolved quickly:

- Village redress led by local administration such as the Local Chief or Assistant chief, Nyumba Kumi leaders and
- Project level redress led by project GRC

- Village Level GRM

Some parties show preference for an alternative mechanism which utilizes the use of Village Level GRC. The village level GRC is categorized with the following recommended membership;

- Assistant/sub locational chief,
- Nyumba Kumi Leader
- Nyumba Kumi representatives
- One project affected youth,
- One project affected woman,
- One project affected male
- Persons with Disability
- Contractor representative

b) Second tier of Redress

The other resolution at this first tier will normally be at the project level. If the affected party / complainant does not want to use the Village level GRC, they are free to forward their grievances to the Project Resident Engineer's office directly.

Resolutions at Village GRC or the RE shall be done within 14 working days and notified to the concerned through a disclosure form. Should the Grievance not be resolved within this period, this would be referred to the next level of Grievance Redress. However, if any of the above two mechanisms feels that adequate solutions are worked out but it would require a few more days for actions to be taken, the leaders of these mechanisms can decide on retaining the issue at this level by informing the complainant accordingly. However, if the complainant requests for an immediate transfer of the issue to the next level, it would be accepted and the issue would be taken to the next tier, especially if the issue is not addressed within 21 days.

The Grievance Redress Committee (GRC) would be the one which would address the grievance in the next level in case the problem is not solved at the first tier. The RE will coordinate with the respective chairman of the GRC in getting this Committee to meet and get the necessary circulars issued in this regard so that they can be convened whenever required.

The RE will coordinate the convening of the meetings of the GRC and is also responsible for briefing the GRC on the grievances and deliberations of the first level of Redress, outcomes and on the views of both the parties (project and complainant).

The GRC will hold the necessary meetings with the affected party / complainant and attempt to find a solution acceptable at all levels. The GRC would record the minutes of the meeting and this will be filed by the RE. The decisions of the GRC will be communicated to the complainant formally and if he/she accepts the resolutions, the complainant's acceptance is obtained in writing and signing off is done between the complainant and the GRC.

If the complainant does not accept the solution offered by the GRC, then the complaint is passed on to the next level / or the complainant can reach the next level for redress. The Chairman of the GRC would be required to forward the issue to the Third Tier to facilitate in exploring a solution to the grievance. In any case, the grievance should be forwarded to the next level if no solution is reached within 14 days of the case reaching the second level. However, in cases nearing offering an amicable solution, it can be retained to an extent of 21 days.

c) Third tier of Redress

If the affected party / complainant does not agree with the resolution at the 2nd level, or there is a time delay of more than a month in solving the issue, the complainant can opt to consider taking it to the third level.

Where an agreement has not been reached, the complainant will be offered the option of an independent mediation process at an alternative arbitration body such as local arbitration arrangements, local administration, or other avenues as might be prescribed in the Kenya constitution before legal redress. The RE will collect all the details of the Grievance including the deliberations of first tier efforts and of the GRC and present it to the 3rd level tier. The 3rd tier structure will deliberate upon the issue and give suitable recommendations. The minutes of the meetings will be recorded and kept at the respective Water Works Development Agencies office.

The decisions of the 3rd tier structure would be final from the project side and will be communicated to the complainant formally and if he/she accepts the resolutions, the complainant's acceptance is obtained and signed off by the complainant and the 3rd tier structure, including the project GRC.

The Complainant may decide to take a legal or any other recourse if they are not satisfied with the resolutions of the deliberations of the three tiers of GRM. It should be encouraged that the 2 levels of handling the grievances should be exhausted extensively before one goes to courts as last resort.

9.1.6. GRM Jurisdiction

The proposed GRM framework is project specific and scaled to the risks and impacts of the project. It is meant to solve the various project concerns by the stakeholders or any complainant. The proposed GRM is however not intended to bypass any Governments' own existing redress process; rather is intended to address affected people's concerns and complaints promptly, making it readily accessible to all segments of the affected people. Any established Government Redress mechanisms take priority over the proposed GRM. The GRC's term shall have a Terms of Reference (ToR), tenure and timelines when the GRC will be closed.

The figure below shows a proposed Grievance Redress Mechanism flow process for the proposed project. This will be reviewed and customized to address any missing gaps before establishment as required in the project.

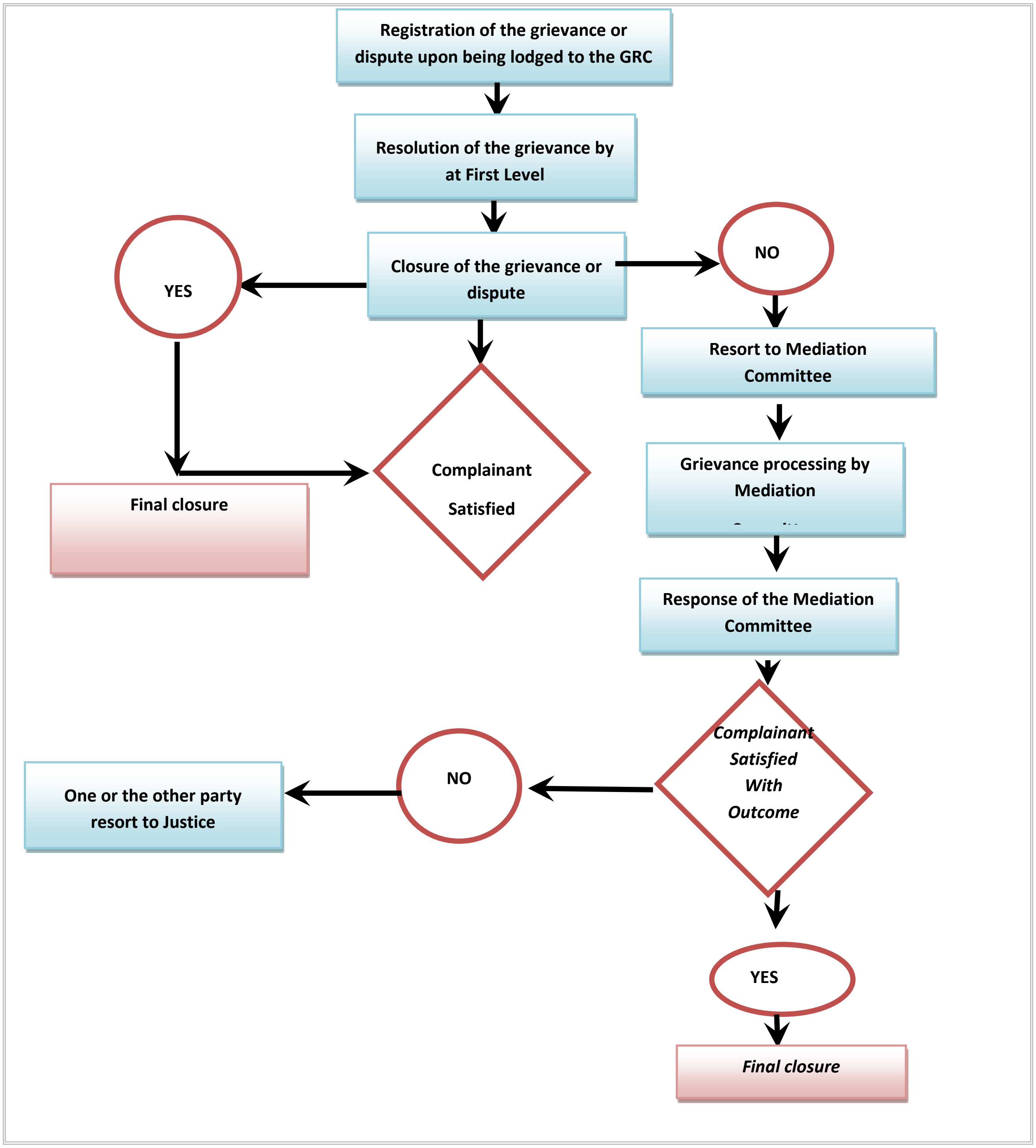


Figure 9-1: Figure Grievance Redress Flow Chart

9.1.7. Building Grievance Redress Mechanism Awareness and Training

The Environmental and Social Specialists will initially train all staff of the project office, AWWDA PIT, and Works Supervision consultant on the Grievance Redress Mechanism of the Project and explain to them the procedures and formats to be used including the reporting procedures. The project Social Specialist will brief all project stakeholders on the Grievance Redress Mechanism of the Project and explain the procedures and formats to be used including the reporting procedures.

Training and awareness will be conducted targeting project stakeholders to inform them of the availability of the mechanism. A project site notice will be displayed at the project sites indicating the existence of the mechanism and a phone number, email and address for further information. The GRM will be translated into the local language as appropriate where required, and information about the GRM distributed at all administration offices along the project area of influence.

9.1.8. Monitoring and Reporting of GRM

The Social Safeguards Specialists and/or Environmental Specialists for the project will prepare the Monthly Reports on the Grievance Redress issues of the project. The Grievance Redress Committee may review the nature of grievances that have been represented and if grievances are repeated, recommend suitable changes in implementation procedures and forward these to the Project team for implementation. The following indicators will be used for monitoring purposes:

- Number of active project complaints and appeals recorded and reported in different sites
- Percentage of grievance redressed claims settled within the specified/reporting period
- Percentage of unresolved complaints or disputes during the monitoring/reporting period

9.1.9. GRM Budget

The allocated budget for GRM in the Resettlement Action Plan **is Ksh.9,516,993.00 (**Kenya Shillings Nine million five hundred sixteen thousand nine hundred ninety-three) which constitute 10% of the total RAP cost.

10. RESETTLEMENT AND COMPENSATION STRATEGIES

10.1. Key Principles in Resettlement and Compensation Strategies

The main objective of resettlement and compensation is to ensure that the PAPs get fair and prompt compensation. In this way, it is expected that their 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 are as follows:

(i) Resettlement or relocation has been minimized by taking into consideration all possible alternative measures;

(ii) Compensation will be paid before project works start in a specific project area and in a manner that does not curtail the livelihoods of the PAPs in terms of access and utilization of such compensation;

(iii) The compensation values awarded will be fair enough to restore the livelihoods of PAPs;

(iv) The compensation awards will be paid out according to the preference of the PAPs;

(v) A statutory disturbance allowance of 15 per cent of the compensation value will also be included;

(vi) All other activities related to the RAP will be communicated in advance to the PAPs using the preferred channels of communication;

(vii) Where grievances arise, the respective PAPs will be given an opportunity to be heard, fairly and promptly;

(viii) 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. Resettlement Implementation Arrangements

A list of the organizations, which are part of this RAP implementation are indicated in Table 9-1 below. These organizations are crucial in the RAP implementation process and are mandated to perform their respective roles and have capacity to undertake their specific responsibilities. RAP implementation unit will be charged with the overall responsibilities of implementation of the RAP.

Table 10-1: Roles and Responsibilities for Planning and Execution of Resettlement

Activity	Purpose	Period	Responsible Authority
Preparation of the Resettlement Action Plan	To provide census of project affected households, socio-economic baseline data of PAPs, Asset inventory, notification and preliminary consultation with PAPs in line with international good practice & Donor requirements	Pre-construction	AWWDA
RAP approval and disclosure	AWWDA to review and submit the final RAP report to the Bank for Approval and plan for public disclosure	Pre-construction	AWWDA and AfDB
Communication and invitation of meetings with the stakeholders regarding the approved RAP containing information on disruption of structures and sources of livelihood and compensation.	To convey meetings with stakeholders on the approve RAP and inform next steps	Pre-construction	AWWDA/RAP consultant
Validation of assets and ownership	To ensure that rightful asset owners and interested persons are identified for compensation	Pre-construction	AWWDA/RAP consultant
Payments of compensation	To disburse cash compensation to all eligible affected property	Pre-construction	AWWDA

Activity	Purpose	Period	Responsible Authority
	owners and users after the approval of the RAP by the Bank		
Issue Notices to Vacate	To prepare PAPs compensated to relinquish the property compensated for	Pre-construction	AWWDA/RAP consultant
Livelihood restoration measures	To facilitate project affected persons to restore or enhance their livelihoods	Construction /pre-construction period	AWWDA/RAP consultant
Continuous consultation and engagements	To keep project affected communities informed about project activities	Throughout the project period	AWWDA/RAP consultant
Grievance management	To receive and promptly redress grievances	Throughout the project period	GRC
Monitoring and evaluation	To monitor RAP implementation	Construction /post construction period	AWWDA/ NUWSS/AFDB Implementing Unit

10.3. RAP Activities Implementation Process Flow

AWWDA as the implementing agency is responsible for the implementation of this RAP, and will also ensure affected households are fully compensated. The key institutions that were identified as critical to both preparation and implementation of the RAP are as indicated in Table 8-1 above through the Project Implementation Unit (PIU), local administrators, PAPs representatives, and RAP team as discussed below:

10.4. Valuation and related Legal Issues

Fair, just, and prompt compensation for project-affected persons is important in implementing social safeguard measures to mitigate impacts from the project. The valuation process served as the determining factor for compensation. In this RAP, the valuation process for compulsory land acquisition adhered to the provisions outlined in the Land Act. This included compensation accurate awarding which reflected the value of the land affected by the project, which followed the established legal frameworks and procedures. By adhering to the provisions of the Land Act, the RAP aimed to uphold transparency, equity, and accountability in the compensation process; safeguarding the rights and interests of project-affected persons.

10.5. Institutional Arrangement

- AWWDA PIU

The structure of the unit shall be as follows:

- Environmental and Social Safeguard Experts
- Environmental and Social Safeguard Officer
- Community Mobilisation and Engagement Expert
- Gender and Social Welfare Expert
- Monitoring and Evaluation Officer
- County Lands Officer

This unit shall be responsible for:

i. Overseeing the implementation of the RAP;
ii. Ensuring maximum participation of the affected people in the planning of their own resettlement and post resettlement circumstances;
iii. Financing the payment or compensation and other designated resettlement related costs;
iv. Reviewing detailed RAP that include valuation reports for the all-affected assets
v. Compensating all the project affected Persons and engaging NLC to take up land acquisitions;

vi. Undertake periodic monitoring and evaluation of the PAPs and the undertaking of appropriate remedial action for grievance redress and monitor and evaluate pre and post project on income restorations implementation;

- Project Management at Ministry level

The Ministry of Water, Sanitation, and Irrigation (MOWSI) will play a central role in interfacing with other sector ministries, agencies, and counties concerning project matters and policies, particularly issues related to the RAP. The roles will include:

i. Coordinate communication with other sector ministries, agencies, and counties regarding project-related policies and matters, with a specific focus on RAP issues.
ii. Engage with the National Treasury to address issues related to RAP budget financing, ensuring adequate funding for the project's implementation.
iii. Directly communicate with the Bank on technical matters concerning RAP preparation, approvals, disclosure, and implementation, among other relevant aspects.

Table 10-1 other institutions that will play a role in RAP implementation and monitoring

S/N	INSTITUTION	ROLE
1.	National Land Commission	• Valuation of land and assets affected by the project. NLC will conduct assessment of all assets that are being affected by the project and prepare a just total valuation for the affected persons • Land acquisition and compensation. NLC undertakes the valuation of land and assets to ensure that affected persons receive fair and prompt compensation. It also issues notices of intention to acquire land and engages with landowners and affected communities to explain the process and their rights. • Public participation and Grievance Redress

	The County Government	The county Government will assist in identification of PAPs and undertaking of community engagement meetings.
	The National Treasury	Provide fund for PAPs compensation
	Ministry of Interior and National Coordination	Through the local administration, they will facilitate public participation and support the implementation of the project GRM
	NEMA	Approval of ESIAs and issuance of NEMA licenses for the project
	CBOs	Community engagement and dissemination of project information to the PAPs
	Ministry of Water, Sanitation and Irrigation	Coordination and oversee entire RAP implementation

- RAP Implementation Schedule

The implementation schedule provides a set of activities from the 1st stage of planning to 2nd stage of implementation. The schedule is given in Table 9-2 below:

Table 10-2: RAP Implementation Schedule

			Period in Months															
S/No.	**TASK NAME**	**Responsibility**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
A.	RAP Preparation, Review and Update	Consultant AWWDA																
B.	Approve of RAP	AWWDA and Financier																

			Period in Months															
S/No.	**TASK NAME**	**Responsibility**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
	Updated Report																	
C.	Disclosure of Updated RAP	AWWDA and Consultant																
D.	Formation of Grievance management committees	AWWDA and Consultant																
E.	Capacity building of PAPs committee	AWWDA and Consultant																
F.	Validation of asset values	AWWDA, NLC and Consultant																
G.	Validation of ownership	AWWDA and Consultant																
H.	Issuance of Awards	AWWDA																

			Period in Months															
S/No.	**TASK NAME**	**Responsibility**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
I.	Payment of compensation	AWWDA, and NLC																
J.	Grievance Redress Mechanism	AWWDA and Consultant																
K.	Livelihood Restoration activities	AWWDA and Consultant																
L.	Monitoring activities	AWWDA and Consultant																

Do note that after approval of the RAP, it shall be disclosed for 120 days by both AWWDA & AfDB before implementation. Also, part of activities involves land appropriation by NLC and ensuring the titles are transferred to the state, ensure restricted access and no trespassing.

11. VALUATION METHODOLOGY AND BUDGET

11.1. Valuation Methodology

The valuation methodology employed in this RAP was based on the assessment of property value, considering the market factors. It entailed the collection and analysis of data, including social, economic, governmental, and environmental attributes.

The data collected included local market conditions and asset/property details such as location, physical and economic factors, and legal features. The value of the property was influenced by rights of enjoyment or compensation, particularly when such benefits are to be withdrawn.

In Kenya, compensation for land includes the incorporation of all expenses and injurious affection resulting from disturbances to affected persons. Thus, the compensation value may exceed normal market rates. Factors that affected the value included location, legal rights, and permitted land use.

The valuation exercise was conducted in conjunction with a household survey to ensure that project-affected persons physically identify all assets within the project boundaries.

In the valuation process for this RAP, five methods were utilized:

(i) Comparison Method: This method involved comparing similar properties to determine value. While acknowledging that no two properties are identical, adjustments were made to align comparable properties. This method relied on an active market but faced limitations due to insufficient or misleading data. To mitigate these challenges, valuers established standard values per square foot/meter for different regions, adjusting for various factors.

(ii) Investment Method: This method relied on an active investment market. Similar to the comparison method, it faced limitations due to a lack of diverse data.

(iii) Full Replacement Cost Approach Method: This approach assessed property value by considering the cost of purchasing the site and building, focusing on reproduction/replacement value.

(iv) Profit Method: This method was utilized in the absence of adequate rental or sales evidence, this method determined value based on the hypothetical purchaser's profit from conducting business on the property.

(v) Residual Method: This applied to properties with development potential, whether undeveloped or partially developed, this method calculated value by subtracting development costs from the estimated future value.

The valuation process, incorporated the above methods, eventually determining the value of the property. Notably, while these methods can be applied to the same property if data is available, they may give varied results. Therefore, experience and understanding of the existing property market are essential for the valuer to arrive at a suitable value, beyond quantification and method of calculation.

This RAP, the method that was selected as appropriate is **the Full Replacement Cost Approach**. This approach aimed at estimated property value based on the cost of acquiring the site and building, ensuring that PAPs are not physically or economically disadvantaged when the project is implemented.

By employing the Full Replacement Cost Approach, the valuation ensured to accurately assess the value of affected properties, protecting the interests of PAPs throughout the project implementation.

11.2. Factors considered during Valuation

11.2.1. Land Acquisition

The function of acquiring land compulsorily for public purposes is vested in the National Land Commission by the Constitution of Kenya (2010) and section 135 of the Land Act 2012.

Under the Land Act 2012 The Commission shall:

- 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.
- Undertake an inventory of all land based natural resources upon coming into force of the Land Act as stipulated in section 15(3) of the Land Act.

Therefore, the Commission will undertake the gazettement and issue the notices to the PAPs. It will arrange for valuation inspections of the affected properties and issue awards upon determining the claims submitted at the public inquiries. The National Land Commission will act on behalf of the project proponent (AWWDA) in land acquisition and taking possession of the affected land after making compensation payments to the landowners.

The valuation process will encompass compensation for the loss of land and developments, loss of incomes for landlords. In addition, ensure provisions of disturbance allowance of 15% to be payable to property owners above the compensation award to address any inconvenience caused due to the land acquisition and associated developments.

11.2.2. Basis for Valuation for Land

The RAP constitutes additional land needed for laying of the pipe and working space required for the construction of water or sewer components. This will need compulsory acquisition under the Land Act. The compensation awarded for this acquisition depends on the following factors:

(i) The size of the land affected by the proposed project, determined the compensation amount.

(ii) The value of interests in the land was influenced by presence of either the water or sewer component of the project. This includes considerations such as land use, zoning regulations, and impacts on property value.

(iii) Valuation was based on the principle of replacement cost.

The approach used was the land-market comparable approach, where recent sale prices of similar parcels of land or plots were analyzed to arrive at the open market value. This method ensured the compensation amounts are fair, just and considered current market conditions for similar properties in the vicinity.

11.2.3. Valuation of Structures, Crops and Trees

The RAP considered compensation for structures, crops, or trees is determined based on the gross market value of the lost asset, which fully accounts for the owner's investment in construction materials, labor, seeds, fertilizer, etc, already expended. This valuation has considered two main factors: the market value of the structure, crops, or tree, and the average annual yield for crops and trees. The compensation calculation has used the highest market price observed during the year.

Priority was given to harvesting crops and salvaging structure materials (where feasible), the affected crops or trees are counted, and compensation is calculated based on the market rates. Compensation for crops adhered to Kenyan laws under the Ministry of Agriculture, and landowners, leaseholders, tenants, and property owners will receive compensation at market value for their assets.

Compensation for crops and trees was determined based on market values in Murang'a County or local rates from the Department of Agriculture and Markets, for the acreage of each particular crop. This ensured that affected persons receive fair and just compensation for their losses, in accordance with established legal and regulatory frameworks.

11.3. RAP Budget

a. Gatanga

Table 11-1:Summary RAP Budget for Gatanga

No.	Property	Total No. of Affected Units	Total Amount (Ksh.)
1	Land (0.1716 Ha)	10	Ksh1,272,300.00
2	Trees	2183	Ksh14,998,500.00
3	Crops	23162	Ksh4,141,500.89
4	Structures	1	Ksh25,824.00
Total Cost of Land, Trees, Crops and Structures (Ksh.)			Ksh20,438,124.89
Add 15% Disturbance allowance (Ksh.)			Ksh3,065,718.73
Subtotal 1- Compensation Cost (Ksh.)			**Ksh23,503,843.62**
GRM implementation Add 10% of Subtotal 1 (Ksh.)			Ksh2,350,384.36
Monitoring and evaluation Add 15% of Subtotal 1 (Ksh.)			Ksh3,525,576.54
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh3,525,576.54
Trainings 10% of Subtotal 1(Ksh.)			Ksh2,350,384.36
Subtotal 2(Ksh.)			**Ksh11,751,921.81**
Contingency @ 10% of compensation cost of Subtotal 1(Ksh.)			**Ksh2,350,384.36**
Grand Total (Ksh.)			**Ksh37,606,149.79**

b. Maragua

Table 11-2:Summary RAP Budget for Maragua

No.	Property	Total No. of Affected Units	Total Amount (KShs)
1	Land (19.06ha)	52	Ksh51,769,876.00
2	Trees	392	Ksh3,324,000.00
3	Crops	4,715	Ksh1,744,020.00

4	Structures	4	Ksh1,392,075.00
Total Cost of Land, Trees, Crops and Structures			Ksh58,229,971.00
Add 15% Disturbance allowance (Ksh.)			Ksh8,734,495.65
Subtotal 1- Compensation cost (Ksh.)			**Ksh66,964,466.65**
GRM implementation Add 10% of Subtotal 1(Ksh.)			Ksh6,696,446.67
Monitoring and evaluation Add 15% of Subtotal 1(Ksh.)			Ksh10,044,670.00
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh10,044,670.00
Trainings 10% of Subtotal 1(Ksh.)			Ksh6,696,446.67
Subtotal 2(Ksh.)			**Ksh33,482,233.33**
Contingency @ 10% of compensation cost of Subtotal 1 (Ksh.)			**Ksh6,696,446.67**
Grand Total (Ksh.)			**Ksh107,143,146.64**

c. Murang'a

Table 11-3:Summary RAP Budget for Murang'a

No.	Property	Total No. of Affected Units	Total Amount (KShs)
1	Land	0	Ksh0.00
2	Trees	194	Ksh1,413,000.00
3	Crops	3082	Ksh364,980.00
4	Structures	0	Ksh0.00
Total Cost of Land, Trees, Crops and Structures			Ksh1,777,980.00
Add 15% Disturbance allowance (Ksh.)			Ksh266,697.00
Subtotal 1 compensation cost (Ksh.)			**Ksh2,044,677.00**
GRM implementation Add 10% of Subtotal 1(Ksh.)			Ksh204,467.70
Monitoring and evaluation Add 15% of Subtotal 1(Ksh.)			Ksh306,701.55
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh306,701.55
Trainings 10% of Subtotal 1(Ksh.)			Ksh204,467.70

Subtotal 2(Ksh.)	**Ksh1,022,338.50**
Contingency @ 10% of compensation cost of Subtotal 1(Ksh.)	**Ksh204,467.70**
Grand Total (Ksh.)	**Ksh3,271,483.20**

d. Kangema-Kangari

Table 11-4:Summary RAP Budget for Kangema/Kangari

No.	Property	Total No. of Affected Units	Total Amount (KShs)
1	Land (0.727Ha)	2	Ksh2,310,385.00
2	Trees	0	Ksh0.00
3	Crops	0	Ksh0.00
4	Structures	0	Ksh0.00
Total Cost of Land, Trees, Crops and Structures			Ksh2,310,385.00
Add 15% Disturbance allowance (Kshs.)			Ksh346,557.75
Subtotal 1- compensation cost (Ksh.)			**Ksh2,656,942.75**
GRM implementation Add 10% of Subtotal 1(Ksh.)			Ksh265,694.28
Monitoring and evaluation Add 15% of Subtotal 1(Ksh.)			Ksh398,541.41
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh398,541.41
Trainings 10% of Subtotal 1(Ksh.)			Ksh265,694.28
Subtotal 2(Ksh.)			**Ksh1,328,471.39**
Contingency @ 10% of compensation cost of Subtotal 1(Ksh.)			**Ksh265,694.28**
Grand Total (Ksh.)			**Ksh4,251,108.42**

Table 11-5: Overall RAP Budget (Gatanga, Maragua, Kangema/Kangari and Murang'a)

Overall Summary			
No.	**Property**	**Total No. of Affected Units**	**Total Amount (Ksh.)**

1	Land (19.9586 Ha)	64.00	Ksh55,352,561.00
2	Trees	2769	Ksh19,735,500.00
3	Crops	30,959	Ksh6,250,500.89
4	Structures	5	Ksh1,417,899.00
Total Cost of Land, Trees, Crops and Structures (Ksh.)			Ksh82,756,460.89
Add 15% Disturbance allowance (Ksh.)			Ksh12,413,469.13
Subtotal 1- Compensation Cost (Ksh.)			**Ksh95,169,930.02**
GRM implementation Add 10% of Subtotal 1(Ksh.)			Ksh9,516,993.00
Monitoring and evaluation Add 15%of Subtotal 1(Ksh.)			Ksh14,275,489.50
Stakeholders Consultation Add 15% of Subtotal 1(Ksh.)			Ksh14,275,489.50
Trainings Add 10% of Subtotal 1(Ksh.)			Ksh9,516,993.00
Subtotal 2(Ksh.)			**Ksh47,584,965.01**
Contingency @ 10% of compensation cost on subtotal 1 (Ksh.)			**Ksh9,516,993.00**
Grand Total (Ksh.)			**Ksh152,271,888.03**

12. MONITORING AND EVALUATION

The main objective of monitoring and evaluation in this RAP is to assess the overall effectiveness of implementation, report on progress, and address any emerging issues. This will ensure implementation aligns with the established plan, allocated budgets, and specified timelines. This will provide insights into implementation progress, identify potential challenges, and take corrective actions as necessary. The RAP monitoring plan consists of three main components:

i. *Performance Monitoring:* This component will entail continuous tracking and evaluation of project activities, outputs, and outcomes against indicators and targets. This will enable the assessment of the implementation processes, and identify areas for improvement.
ii. *Impact Monitoring:* Impact monitoring will focus on assessing the effects and implications of RAP implementation on affected stakeholders, communities, and the environment. This will enable the measurement of extent of the interventions have achieved their intended objectives and contributed to desired outcomes; livelihood restoration, and environmental sustainability.
iii. *Completion Audit:* The completion audit will be conducted at the conclusion of RAP implementation to evaluate the overall achievements, outcomes, and compliance with project objectives, standards, and regulations. This will include a review of RAP, financial records, and on-the-ground activities to ensure that all requirements have been met and that project deliverables have been successfully delivered.

12.1. Monitoring and Evaluation Components

12.1.1. Measuring & monitoring performance

This will be conducted as an internal management function by AWWDA Project Management Unit, and will involve measuring actual progress of the various activities against set targets.

12.1.2. Impact monitoring

Impact monitoring is carried out with the objective of assessing the impact or effectiveness of the RAP and its implementation in meeting the needs of the affected people. The impacts of resettlement on the PAPs should be tracked and measured against the baseline of census and socio-economic surveys. Indicators of such impacts should be set in advance, and should broadly include impacts of physical relocation, welfare changes, health related impacts, social-cultural impacts among others. Impact monitoring should start after resettlement has occurred, giving enough time to ensure that whatever impacts that may occur will have done so, and that they have been measured and assessed. The impact monitoring should continue for a number of years after resettlement. Direct consultation with the PAPs should be included in the various phases of impact monitoring as often as possible to ensure that what is captured is actually what is happening on the ground. Impact monitoring should be contracted out to an outside agency to impart transparency in the whole process. Table 11-1 presents M&E activities in two categories comprising internal and external monitoring.

In the case of this project where there will be loss of productive land but no displacement, AWWDA will be interested to know how the PAPs utilize the compensation money and how they manage productive capacities with the remaining parcels of land.

Table 12-1: Activities, data and responsibility for monitoring and evaluation of RAP implementation

Project Stage	Parameter	KPI Indicators	Verifier	Responsibility	Frequency
Land acquisition and resettlement planning	Public meetings held	Number of public meetings held	Minutes of meetings	AWWDA	During implementation reported to the Bank monthly through the monthly report
	Census report completion	Completion of assets, inventory taking	Census report	AWWDA	During implementation
	Permanent land acquisition progress	Issuance of awards, Disbursement of compensation payments, Grievance redress procedures	Copies of letters, payment vouchers, bank account records	AWWDA, NLC, National Security and Interior Coordination	reported to the Bank monthly through the monthly report
	Compensation for land	Loss of housing and other structures, House demolition	Copies of payment vouchers, verification of houses constructed	AWWDA, NLC, Ministry of Public Works, National Security and Interior Coordination	During implementation

	Relocation and construction	Partial impacts on houses and other structures, Acquisition and preparation of alternative land, Construction of housing, infrastructure, and social facilities	Compensation for demolition, new construction and re-organization of land, Voucher payment, Actual construction	AWWDA	Half-yearly
	Land sub-division and actual construction activities	Number of plots, Number of houses, Construction types	Records of issuance of land and compensation amount, verification of construction activities	AWWDA, National Lands Commission (NLC), Ministry of Public Works (MoPW)	Every month until completion of construction activities, or as per requirement by project sponsor
Project implementation and Defects Liability Period	Arising grievances	Compensation amount and payment, Rehabilitation of Infrastructures, Relocation, Handling conflicts	Payment audits, Records of grievances and resolutions	Task Force of Compensation & Resettlement Committee, contracted research or consulting agency, development NGO	Twice a year, One year after resettlement for the socio-economic survey

12.2. Internal Monitoring

1. Process Indicators	
Project input, stakeholder participation and monitoring	Adequacy of compensation budget
	Causes of administrative cost overruns and / or shortfalls
	Existence of an adequately staffed RAP Steering Committee
	Availability of resources for RAP Steering Committee
	Adequacy of compensation budget
	Identification of causes leading to administrative cost overruns or shortfalls
	Existence of a well-staffed RAP Steering Committee
	Availability of resources allocated to the RAP Steering Committee
	Presence of a grievance resolution mechanism
	Availability of resources allocated to the Grievance Mechanism
	Implementation of Monitoring and Evaluation Systems
	Generation of monthly monitoring and quarterly audit reports
2. Output indicators	
Delivery of entitlements, relocation, and rehabilitation	Amount of compensation disbursed.
	Progress of compensation payment and relocation of PAPs vis a vis construction program
	Impacts of deviation from resettlement program to the construction program
	Efficacy of inter-agency co-ordination mechanisms.
	Efficacy of the Grievance Resolution Mechanism.
	Perceptions of stakeholders toward the Grievance Resolution Mechanism
	Amount of compensation disbursed
	Progress of compensation payment and relocation of PAPs vis-a-vis construction program
	Impacts of deviation from the resettlement program on the construction program
3. Impact Indicators	
Long term impacts	Restoration of pre-displacement income levels
	Level of security of tenure on remaining land

Internal monitoring comprises the items referenced in Table 11-1 above, and should be conducted by AWWDA's project implementing unit. The unit should be provided with enough capacity to handle the various tasks, and with expertise in the resettlement area.

12.2.1. Internal M & E Reporting

Reports on the findings of internal monitoring should be compiled according to the frequency indicated in the Table 11-1 above. The reports will be submitted to the financier and should provide information on the findings of the census survey including the number of PAPs, eligibility, assets inventory, and all the various results of the census and socio-economic survey.

12.2.2. External M & E Reporting

The external monitor will compile reports of monitoring and evaluation every 6 months after the implementation of the RAP begins. The report will be submitted to AWWDA and subsequently to the potential donor. The reports should provide progress on RAP implementation and discuss problems encountered during RAP implementation and how they might be resolved. Discussions with AWWDA and the potential donor should follow and solutions sought.

12.3. Monitoring Indicators

12.3.1. Monitoring and Evaluation Indicators

The monitoring and evaluation of the Resettlement Action Plan (RAP) will be conducted using the indicators outlined in Table 11.2

Table 12-2: Monitoring and Evaluation Indicators

12.3.2. Evaluation Tools

Stakeholder participation, particularly from affected persons and vulnerable groups, will be ensured throughout the Monitoring and Evaluation (M&E) process. A collection of monitoring tools integrating both quantitative and qualitative methods will be employed:

i. Focused Group Discussions (FGD): These will involve consulting a range of stakeholder groups, including local government bodies, the Compensation Unit, NGOs, community leaders, and PAPs.
ii. Key Informant Interviews: Interviews with specialized persons who have knowledge or experience regarding relocation activities and implementation, such as local leaders, will be conducted to gather valuable insights.
iii. Stakeholder Meetings: Both open forums and one-on-one meetings will be organized to collect information on the performance of various project activities. This format allows for detailed discussions and feedback collection.

iv. Structured Direct Observations: Field observations will be conducted to assess the status of RAP report implementation. Additionally, individual or group interviews will be conducted for crosschecking purposes, ensuring the accuracy of gathered information.

v. Informal Surveys/Interviews: Informal surveys will be carried out among PAPs, workers, project staff, and personnel of the project. These surveys will employ non-sampled methods to gather insights efficiently.

From the monitoring and evaluation process, the expert will compile status reports, that will include findings and recommendations. These reports will then be forwarded to the appropriate authority, such as the AWWDA, for further action and decision-making. This will ensure that the insights gathered through M&E activities will aid informed decision-making and the continual improvement of project implementation.

In order to track progress, highlight bottlenecks, and redress the issues effectively and in a timely manner and project milestones are met as per schedule, it is proposed that AWWDA will undertake Internal Monitoring on a monthly and quarterly basis. The monitoring shall cover aspects such as the number of households compensated appropriately and timely compensated, planned versus actual compensation and reasons for the discrepancy, total funds disbursed for compensation, the assistance to vulnerable groups/people, and complaints logged and resolved. Monitoring reports will be prepared on a monthly and quarterly basis until payment of compensation is completed. At the end of the compensation, a resettlement completion report will be prepared to explain the process, achievements and lessons learnt. Key parameters, timelines and frequency of monitoring are summarized below.

In addition, AWWDA will engage an external audit firm annually to conduct annual RAP implementation audit. Furthermore, an exercise would be carried out at the end of RAP implementation period to ascertain if, indeed, the planned activities did enable achievement of the originally set objectives i.e., whether RAP objectives were met living standards of PAPs were restored to pre-project status or enhanced. For this purpose, AWWDA will contract an External agency to conduct an Implementation Completion Audit for the RAP.

A provision of 15% of the total compensation costs has been allocated for monitoring and evaluation exercises described above.

13. CONCLUSION AND COMMITMENTS

13.1. Conclusion

This RAP has revealed that improvement of water and sanitation in Murang'a County will bring a number of positive as well as detrimental impacts. The positive impacts of the project are related to improved water aces and sanitation. On the contrary, execution of the proposed water and sanitation project is expected to cause several adverse social impacts such as, loss of livelihood, However, these will be mitigated by ensuring fair compensation to the affected. Furthermore, a well-organized monitoring programme is recommended as an integral part of the RAP implementation in order to follow up the proper implementation of the recommended social mitigation measures and their effectiveness as well as to detect incidence of any unpredicted issues. A participatory approach to the RAP implementation is also detailed in this RAP, including key roles by the County Government of Murang'a, AWWDA, AfDB and PAPs, which will be very helpful in facilitating the planned activities as per the schedule.

13.2. Commitments

To ensure this RAP is fully implemented, AWWDA commits to the following:

i. AWWDA will facilitate all the affected persons according to provisions of this RAP in a timely manner so that the time used in livelihood restoration is minimized. In addition, they will ensure all grievances raised by the PAPs are timely resolved in a fair manner.

ii. AWWDA social safeguard/ implementation team will organize and carry out required sensitization exercises aimed at enhancing women land rights, ensuring proper use of compensation funds, avoidance of gender-based violence etc. as documented in this RAP.

iii. AWWDA will work with the relevant institutions towards timely implementation of this RAP. Particularly, the County Government of Murang'a plays a key role in grievance redress, additional assistance to PAPs thereafter maintaining the pipeline way leave.

iv. AWWDA will issue a three months' notice to PAPs to enable them salvage their assets.

v. AWWDA will undertake Monitoring and Evaluation of this RAP during and after implementation.

ANNEXES

Household survey questionnaire

RESETTLEMENT ACTION PLAN (RAP) Water Supply and Sanitation Improvement Works, Muranga Cluster.

Survey questionnaire- asset sheet

Household No …………………………………………………. Date: ……………………………………………………………………….

A) Location

Village	Location/ward	Sub County /division	County/district

B) Demographic Data

Name of the owner (HH	ID		Telephone	Gender	Age	
Spouse Details/Next of Kin	ID		Telephone	Gender	Age	
Family size		Gender	Male	•	Female	
Project component						

C) Education level of the HH

No		Answer
A	None	
B	Primary	
C	Secondary	
D	Tertiary /university	
E	Others	

D) Source of income

Income of household head (Monthly Income)

S/N	Monthly Income	Tick where appropriate
A.	Less than 10,000	
B.	10,001 – 15,000	
C.	40,001- 50,000	
D.	Above 50,000	

E) Vulnerability

No	Vulnerable Parameter	Answer	
A	Is the HH headed by child under 18yrs?		
B	Is the HH headed by a disabled Person?		
C	Is the HH headed a chronic ill person?		
D	Is the HH headed by elderly over 65yrs ?		
E	Is the HH enrolled to government social program that supports the aged?		
F	Did the HH business / loss of income collapse in the recent month?		

Yes (1) or No (2)

F) Affected Asset

No	Asset	Answer	
A.	Land		
B.	Business		
C.	Structure		
D.	Trees		
E.	Crops		
F.	Others (specify)		

Yes (1) or No (2)

G) Structure

Type of structure affected	**Nature of Material**			**Size in meters**	**GPS coordinates**	**Photo Number.**
	Wall	**Roof**	**Floor**			
A1. Main house						
A2. Kitchen						
A3. Store						
A4. Fixed Business shed						
A5. Mobile business shed						
A6. Goat shed						
A7. Poultry house						
A8. Latrine						
A9. Bathroom						
A10.Cow shed						
A11. Fence						
A11. Gate						
A13.Others indicate						

<u>**Codification Asset structure below**</u>

A2	A3	A4	A5	A6
Relationship to Household head	**Type of wall**	**Type of roof**	**Floor**	**Size in meters**
1.Head 2. Spouse 3.Son/Daughter	1.Stone not plastered. 2.stone and plastered 3.Bricks and plastered	1.Iron Sheets 2. Grass thatched. 3.Plastic paper	1.Plain concrete 2.Tiled 3.Mud	1. Length 2. Width 3. Radius

4.Brother/Sister 5. Parent. 6. other indicate	4.Bricks not plastered 5. Iron sheets. 6.Wooden 7. Mud 8.Mud +plastered 9. Other	4.Other	4.Red oxide 5.Other	

H) LOSS OF LIVELIHOOD

S/ NO	**Type of Business**	**Average Daily Income**	**Affected**	**ownership**	**Owner of the business**
		Ksh.	**Total/** **Partial**	**Type**	**Name** (ID and Tel no If not member of the household)

Codification Business type

☐ 1- Grocery / shop ☐ 2- Beauty shop/ salon / barber ☐ 3- retail shop kiosk ☐ 4- cereals kiosk ☐ 5- cloth stall ☐ 6- food kiosk / hotel ☐ 7- mpesa shed ☐ 8 shoe vendors stand ☐ 9- local chemist ☐ 10- hardware shop ☐ 11- domestic bakery ☐12- Movie shop ☐ 13- Other (s) (please specify) .

Type of ownership:

☐ 1- Head of household ☐ 2- Spouse ☐ 3- Other member of the household ☐ 4- Tenant ☐ 5- Other (please specify)

I) CROPS GROWN

Type of Crop	**Number**	**Age**	**Name** (ID and address if not member of the household)

See codes below

1. Spinach 2. Cow peas -Maize 4 Sweet potato 5- Sugarcane 6- Beans 7- Napier grass 8- onions 9- Cassava 10-cabbage 11- kales 12- Bananas 13- Irish potatoes 14-Pumpkins 15-Passion fruits 16. Carrots

17 Other (s) (please specify)

J) TREES GROWN

Type of Tree	**Age of Trees**			**Name** (ID and contact if not member of the household)
	Young	**Medium**	**Mature**	

See codes below

1. Mango 2 Guava 3 Avocado 4 Eucalyptus 5 Cyprus 6 Thika palm tree 7 Pawpaw 8. Pine 9 Gravellier 10 Croton Tree 11. Ficus tree 12 Fig tree 13. Accacia 14 Other(s)

(please specify) ,...............................

K) Tenants

List the Names and Telephone Numbers of Residents Tenants in the Structure

TENANT'S INFORMATION ON THE STRUCTURE

Name of Tenant	Gender	Rent Amount/Month	Telephone	ID Number

L) Compensation

Which income restoration arrangement do you prefer?

Asset	Cash	In kind compensation	Comments
Land			
Business			
House			
Structure			
Trees			
Crops			
Others (specify)			
Land			

Signature

Date...............................

Grievance Redress Register

Date	Name of Complainant	Complaint	Brief Description of Grievance	Contact address	Complaint resolution/action taken	Response Date	Status (cleared/ pending)	Remarks

Grievance Redress Form

Date: ________________________dd/mm/yyyy) ________________

Place of issuing complaint _____________

Complaint No.: _________________________

Mode of Receipt (please tick where applicable):

Writing		Verbal		Phone		Fax		Email	

Details of the complainant:

Name(optional): ____________________Gender: ______________________

Address: _________________Email address: _____________________________

Phone no.: ______________________

Location of complaint/concern:

Village/Town/City/Area: ____________________________________

Sub County: _______________________

Category of Complainant (please tick where applicable):

i. Project Beneficiaries
ii. Project Executers
iii. Project implementers
iv. Funding agencies
v. Other interested party (Please specify)

Category of Grievances (please tick where applicable):

i. Project implementation related
ii. Social
iii. Environment

Brief Description of the Grievance:

____
____
____
____

(Attach letter/petition/documents detailing grievance information as submitted)

Attachments: (1) ___________________ (2) ___________________ (3) _______________

Received/prepared by: ……………………................. Date: …………………………. (dd/mm/yyyy)

Signature: ……………………………………