



**RESETTLEMENT ACTION PLAN FOR KERUGOYA –KUTUS LAST MILE
CONNECTIVITY (LMC) SEWERAGE PROJECT IN KIRINYAGA COUNTY
BY
TANA WATER WORKS DEVELOPMENT AGENCY**



JUNE 2024



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CERTIFICATION

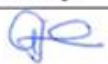

For and on behalf of:

Tana Water Works Development Agency

This Resettlement Action Plan (RAP) Report was prepared in accordance to the requirements of national laws and policies governing Valuation and Resettlement and the African Development Bank's Integrated Safeguards System (ISS) of 2013 particularly the Operational Safeguard 2 on Involuntary Resettlement, Land Acquisition, Population Displacement and Compensation. We, the undersigned, confirm that the contents of this report are a true representation of the RAP process for the Proposed Last Mile Connectivity of the Kerugoya-Kutus town Sewerage Project.

KEY EXPERTS

NAME	POSITION
Wamuyu Gathinji Reg. No. 3007	Lead Expert- Team Coordinator
Anne Njagi Reg No. 3036	Lead Expert
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Mercy Maina	Sociologist
Doughlas Muraya	Sociologist
Reuben Nzivo	Valuer

Signed by Consultant	Signed by Client
Wamuyu Gathinji	Eng. Philip Gichuki
Signature: 	Signature: 
Date: 21/06/2024	Date: 21/06/2024

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EXECUTIVE SUMMARY

E1. Compensation Summary

Compensation Summary Sheet		
	Variables	Data
A. General		
1	Region Province/County	Kirinyaga
2	Sub Counties	Kerugoya, Mwea, Inoi
3	Village	Kutus town, Keruguya, Kerugoya town, Kiaritha, and Mjini
4	Activity(ies) that trigger resettlement	Construction of the sewerline-Last Mile Connectivity (LMC)
5	Project overall cost	269,348,436
6	Overall resettlement cost	12,507,901.78
7	Applied cut-off date(s)	31.03.2024
8	Dates of consultation with the people affected by the project (PAP)	22.2.2024 10.4.2024
9	Dates of the negotiations of the compensation rates /prices	16 th April 2024
B. Specific information		
10	Number of people affected by the project (PAP)	166
11	Number of Physically displaced	0
12	Number of economically displaced	71
13	Number of affected households	166
14	Number of females affected	92
15	Number of vulnerable affected	23
16	Number of major PAP	30
17	Number of minor PAP	136
18	Number of total right-owners and beneficiaries	None
19	Number of households losing their shelters	0
20	Total area of lost arable/productive lands (ha)	0.65
21	Number of households losing their crops and/or revenues	105
22	Total areas of farmlands lost (ha)	0.64
23	Estimation of agricultural revenue lost (USD)	4400USD
24	Number of buildings to demolish totally	0
25	Number of buildings to demolish totally at 50%	0
26	Number of buildings to demolish totally at 25%	0
27	Number of tree-crops lost	124
28	Number of commercial kiosks to demolish	29

29	Number of ambulant street sailors affected	3
30	Number of community-level service infrastructures disrupted or dismantled	0
31	Number of households whose livelihood restoration is at risk	26

E2. Project Background

The Government of Kenya’s Constitution Bill of Rights guarantees the citizen a clean and healthy environment for all. It’s Vision 2030 and the Big Four Agenda, envision plans of liquid waste management and improving sanitation. The Government of Kenya in partnership with the African Development Bank (AfDB), under the National Urban Water Supply and Sanitation Program (NUWaSSaP) through the Tana Water Works Development Agency (TWWDA) intends to implement the Proposed Kerugoya-Kutus Sewerage Last Mile Connectivity (LCM) Project. This project aims to improve sanitation of Keruyoga and Kutus Towns and their environs with proper liquid waste disposal, Improve living conditions due to safe hygiene, Employment opportunities, Improved living standards and household incomes, Creation of a market for construction materials, Increased money supply into the local economy and Creation of wealth and employment among other positive impacts.

Tana Water Works Development Agency(TWWDA), herein referred to as the proponent has proposed to implement the Kerugoya-Kutus Sewerage Last Mile Connectivity Project under the National Urban Water Supply and Sanitation Program to increase the Sanitation coverage to the residents of Kerugoya, Kutus and its environs to improve hygiene, sewage and faecal sludge management services. In complying with the Kenyan development regulations and AfDB Integrated safeguards systems (ISS) operational safeguards (OS1), the proponent commissioned Aqua Green consultant to prepare the Resettlement Action Plan (RAP) report prepared in April 2024 to incorporate the project components.

The Project is situated in Kirinyaga County in the Central part of Kenya. The total area of the county is approximately 1,478.1 km² and lies between latitudes 0⁰ 1’ and 0⁰ 40’ south and 37⁰ and 38⁰ East. The county lies between 1,158 metres and 5,380 metres above sea level. Kerugoya Town lies between latitude 0⁰ 30’ South and 37⁰ 16’ East and is located about 124km Northwest of Nairobi,10 kilometres east of Karatina and 40 kilometres west of Embu towns. The town of Kutus is the Headquarters of Kirinyaga County and is located about 10.5 km Southwest of Kerugoya town. Sagana town is on the South-Eastern part of the Kirinyaga county and about 20 km from Kutus while Kagio Town is 18 km south of Kerugoya town and about 12 km from Kutus town.

Notwithstanding the positive benefits of the project, the proposed Project is expected to affect people’s assets and livelihoods specifically those operating within and along the route alignment for the reticulation sewers. To address this concern, a Resettlement Action Plan (RAP) has been prepared as required by Kenyan Policies as well as by the African Development Bank’s Operational Safeguard 2 (OS2) on involuntary resettlement addressing situation involving land acquisition, population and livelihood displacement and compensation. The overall goal of the

project is to improve the health and quality of life of inhabitants and promote cleaner urban environment by providing sewerage services through collection and treatment of wastewater.

E3. Project description

The proposed project aims to significantly improve the quality of life and health standards in Kerugoya and Kutus towns, along with their surrounding communities, by enhancing sewerage systems and sanitation services. The project is designed to address waterborne diseases and promote sustainable development, aligning with Kenya's sector goals of improving health outcomes and reducing poverty. It focuses on extending sewerage coverage to mitigate health risks associated with poor sanitation infrastructure, thus catalyzing socio-economic transformation. Comprehensive stakeholder engagement is crucial to the project's success, involving consultations with affected communities and collaboration with governmental bodies, NGOs, and community leaders to ensure the project's objectives are met sustainably.

Located in Kirinyaga County, the project covers urban and peri-urban areas and aims to enhance water supply and sanitation services in Kerugoya, Kutus, Kagio, and Sagana. The region's climate is tropical with significant annual rainfall, and its topography ranges from mountainous to gently undulating. The design team's objective includes constructing new sewerage infrastructure and improving existing systems to address deficiencies, with projected wastewater flows and designs for a 50-year horizon. The project will implement waste stabilization ponds for ecological and cost-effective wastewater treatment, aligning with sustainable development goals, the Kenyan Constitution's right to clean water, and the Vision 2030 agenda. The project's design process includes data collection, preliminary layout, sewer sizing, cost estimation, and revision, ensuring robust and efficient wastewater management.

E3. Legal Frameworks

The Constitution of Kenya 2010 under Article 40 (Chapter Four, Part 2 on Rights, and fundamental freedoms) has provisions for protection of right to property. of the National Land Commission (NLC) Act 2012 is to provide for the management and administration of land in accordance with the principles of land policy set out in Article 60 of the Constitution and the national land policy; provide for the operations, powers, responsibilities, and additional functions of the Commission pursuant to Article 67(3) of the Constitution.

The Matrimonial Property Act, 2013. The Physical Planning Act of 1996 (286) grants county governments the authority to reserve and maintain land for various purposes, such as open spaces, parks, and public amenities.

Sessional Paper No. 1 of 2017 on National Land Policy aims to establish a comprehensive framework for the sustainable and efficient utilization of land resources at various levels—national, county, and community.

Sessional Paper No. 2 of 2019 on National Policy on Gender and Development. This policy emphasizes on Kenya's commitment to gender equality by advocating for the inclusion of diverse perspectives in development agendas.

The Occupational Health and Safety Act (OSHA 2007) is designed to safeguard workers' well-being throughout the construction and operational phases.

The Data Protection Act, 2019- This law provides ensure that personal data is, processed in a manner that respects the data subject's right to privacy., Personal data is processed lawfully, fairly, and in a transparent manner in relation to the data subject, Personal data is collected for explicit, specified, and legitimate purposes and should not be further processed in a manner incompatible with those purposes., data collected is be adequate, relevant, and limited to what is necessary in relation to the purposes for which it is processed, data relating to family or private affairs if a valid explanation is provided, personal data collected is accurate, and where necessary, steps should be taken to keep it up to date. Inaccurate data should be corrected or erased promptly.

Africa Development Bank Policies Operational Safeguard 1: Environmental and Social Assessments which involves categorizing projects based on their environmental and social impact and conducting assessments accordingly.

Africa Development Bank Policies Operational Safeguard 2 Involuntary Resettlement, Land Acquisition, Population Displacement, and Compensation. This safeguard focuses on policies and procedures related to situations where people are involuntarily displaced or experience land acquisition due to development projects. It emphasizes fair compensation and adequate support for affected populations.

E4. The stakeholder engagement and grievance redress mechanism (GRM)

The stakeholder engagement and grievance redress mechanism (GRM) implemented for the project aimed at ensuring the active participation of project affected persons (PAPs) and other stakeholders in the resettlement planning process. Extensive consultation activities were conducted between February and April 2024 to gather stakeholder views, needs, and expectations, with detailed minutes and participant lists provided in the appendices. A Stakeholder Engagement Plan (SEP) was developed to guide future interactions, outlining objectives such as systematic engagement, identifying key stakeholders, promoting inclusivity, and providing accessible channels for grievances. Various methods including key informant interviews, focus group discussions, and public barazas were employed to engage stakeholders throughout the project lifecycle.

The GRM structure was designed to address grievances effectively at three levels: community, county, and national. At each level, clear procedures were established for receiving, assessing, and resolving grievances, ensuring accessibility, fairness, and transparency. The GRM also incorporated safeguards for addressing social issues such as Gender-Based Violence (GBV), Violence against Children (VAC), and Sexual Exploitation, Abuse, and Harassment (SEAH), with preventative measures, community awareness campaigns, collaboration with specialized organizations, and survivor-centered response strategies outlined. A dedicated budget was allocated for implementing the GRM and stakeholder engagement activities, with the overall objective of fostering meaningful partnerships, enhancing project outcomes, and ensuring fairness and accountability throughout the project lifecycle.

E5. Socio-Economic Baseline

The socio-economic baseline study conducted by the RAP study team focused on assessing the demographics and livelihoods of Project Affected Persons (PAPs) and understanding the potential impacts of the Project on their quality of life. A total of 166 PAPs were identified, with the majority being female (58.88%) and aged between 36 and 60 years (60.6%). Education levels varied, with the majority having attained secondary education (44%). Access to healthcare facilities was reported, with most respondents able to reach health centers within 21 to 45 minutes. The survey also highlighted awareness of HIV/AIDS among PAPs. Agriculture was the primary source of income for most households (67.4%), followed by business (20%). Household income levels varied, with 30% reporting incomes between 10,001 to 20,000 Kenyan Shillings per month. Sanitation facilities mainly comprised septic tanks and pit latrines, with no recent cases of waterborne diseases reported. The main water sources were from the local Water Service Provider (45.7%) and boreholes (36.3%), with the majority of respondents able to access water sources within 15 minutes. Cash payment was the preferred mode of compensation among respondents. Additionally, the survey recorded 1.40% of households having members with disabilities, including dumb, lame, and physical disabilities.

E6. The Project Displacement Impacts and Mitigation Measures

The Project Displacement Impacts and Mitigation Measures, as outlined in the Resettlement Action Plan (RAP), detail both the anticipated positive and negative outcomes of the proposed Kerugoya-Kutus towns Water Last Mile Connectivity Project. Among the 166 Project Affected Persons (PAPs) identified, strategies are delineated to address the diverse needs and concerns of these individuals. Positive impacts encompass improved hygiene standards, cost savings, access to safe drinking water, enhanced living conditions, and employment opportunities, among others. However, the project also entails negative impacts, particularly affecting assets such as businesses, structures, trees, and crops. Mitigation measures include compensating affected businesses and structures, relocating graves with cultural and legal considerations, and minimizing disruption during project implementation. Comprehensive plans are outlined to mitigate adverse effects while maximizing the project's positive contributions to community development and well-being.

E7. Eligibility and Entitlements

The eligibility and entitlements for project-affected persons (PAPs) in the Kerugoya-Kutus towns Water Last Mile Connectivity Project are determined by various factors including legal regulations, socio-economic surveys, and assessment of project displacement impacts. Eligibility criteria are established to govern compensation options available to PAPs, ensuring alignment with both national laws in Kenya and safeguard policies of international financial institutions such as the African Development Bank (AfDB) and the World Bank. The cut-off date, set on 31st March 2024, marks the completion of surveys, with individuals or entities entering the project area after this date deemed ineligible for compensation or resettlement assistance. The entitlement matrix defines compensation categories and types of assistance, ranging from land compensation to

livelihood loss compensation for affected businesses, and outlines statutory payments and taxation obligations in accordance with national laws and banking standards.

The criteria for eligibility encompass various scenarios, including displaced persons with formal legal land rights, individuals with recognized customary ownership or occupancy rights, and tenants without ownership but holding occupancy agreements. Compensation is also extended to vulnerable individuals or groups disproportionately impacted by the project, such as those with disabilities or the elderly, ensuring equitable treatment and assistance. Valuation and compensation methodologies are detailed, employing approaches such as the income, cost, and market approaches to determine compensation rates for affected assets such as structures, trees, crops, and cemetery sites. These methods aim to ensure fair compensation to PAPs and adherence to international good practice standards while facilitating the project's implementation within legal and regulatory frameworks.

Table 1: Entitlement Matrix

Impact Category	Type of Impact (Permanent/ Temporary)	Entitled Persons	Entitlements	
			Compensation	Allowances and non-cash interventions
Impact on Land	Public wayleave (road reserves)	Road Agencies (KENHA, KURA, KeRRA)	<ul style="list-style-type: none"> Pay prescribed fees as may be determined by the agencies under the Roads Act, 2007 and relevant regulations 	N/A
Impact on Structures	Loss of Permanent structures (houses, shops, kiosks, grocery shops, butcheries, salon and boutique businesses among others) - Modern structures characterised by	Private owners	<ul style="list-style-type: none"> Cash compensation based on the full replacement value of the affected structure Provide compensation rate within range of KES 1,500 – 3000 per square feet depending on finishes used 	<ul style="list-style-type: none"> Disturbance allowance of 15% of the total compensation amount Materials from the affected structure may be salvaged at the owner's expense within the three-month notice period given to vacate and prior to demolition. Training on financial management and livelihood restoration

	<p>modern finishes including concrete, natural stone, bricks and treated sawn timber materials structures</p>			
	<p>Loss of semi-permanent structures (houses, shops, kiosks, grocery shops, butcheries, salon and boutique businesses among others) - Structures made from sawn timber, timber-off cuts, GCI walling, sundried</p>	<p>Private owners</p>	<ul style="list-style-type: none"> • Cash compensation based on the full replacement value of the affected structure • Provide compensation rates of within range of KES 1000-2500 per square foot depending on finishes used 	<ul style="list-style-type: none"> • Disturbance allowance of 15% of the total compensation amount • Materials from the affected structure may be salvaged at the owner's expense within the three-month notice period given to vacate and prior to demolition • Training on financial management and livelihood restoration

	bricks or cemented floors			
	Loss of structures (houses, shops, kiosks, grocery shops, butcheries, salon and boutique businesses among others) characterised by thatched roofs, rammed or earthen floors and Adobe blocks and wattle, thatch walls, tents, tarpaulins and manyattas	Private owners	<ul style="list-style-type: none"> • Cash compensation based on the full replacement value of the affected structure • Provide compensation rate within range of KES 500-1500 per square feet depending on finishes used 	<ul style="list-style-type: none"> • Disturbance allowance of 15% of the total compensation amount • Materials from the affected structure may be salvaged at the owner's expense within the notice period given to vacate and prior to demolition. • Training on financial management and livelihood restoration

	Loss of pavements	Business owners	N/A	<ul style="list-style-type: none"> Restoration of destroyed pavements by the contractor immediately after completion of pipeline installation in affected areas. These costs have been catered for under the project ESMP
	Loss of public structures such as motorbike shades (<i>bodaboda</i> shades) and market stalls	Business owners	N/A	<ul style="list-style-type: none"> Reinstatement by TWWDA immediately after sectional completion of the project
Impact on Trees		On public land/ No known owner	N/A	<ul style="list-style-type: none"> Support to counties and CSOs involved in conservation matters
Loss of Livelihoods	Permanent and temporally businesses at close proximity to the wayleave	Business owners	<ul style="list-style-type: none"> Cash compensation for 5 days based on the magnitude of the business 	<ul style="list-style-type: none"> Disturbance allowance of 15% of the total compensation amount Training on financial management, livelihood restoration, project GRM for reporting grievances etc.
Temporary impacts	Temporary loss of access to	Business owners	<ul style="list-style-type: none"> Cash compensation for 5 days based on the magnitude of the business 	<ul style="list-style-type: none"> Provision of alternative access routes during the period the affected sections are under construction

	business facilities			<ul style="list-style-type: none"> • Adequate notice on the construction schedule • Training on financial management and livelihood restoration
Impact on Vulnerable Individuals and groups	Households that may be disproportionately impacted	PAPs with disabled family members, the elderly, widows	<ul style="list-style-type: none"> • Cash compensation in accordance with criteria set out in the relevant section of the entitlement matrix 	<ul style="list-style-type: none"> • Disturbance allowance of 50% of the total compensation amount • Designated assistance to be assessed on a case-by-case basis to ensure that vulnerable people/groups have access to participation, compensation, assistance and livelihood restoration • Training on financial management and livelihood restoration • Linkage to the Government of Kenya (GoK) social protection programmes

E8. The Livelihood Restoration Plan

The Livelihood Restoration Plan aims to uplift the quality of life for project-affected persons (PAPs) by providing equitable compensation for structural losses and business disruptions, offering employment opportunities during the construction phase, and implementing capacity-building initiatives. Training sessions will cover financial management, agricultural practices, and small business development, targeting both men and women, with special emphasis on youth. The plan outlines specific input and output indicators, such as the number of PAPs compensated and trained, to measure the success of the initiatives. With a budget of 1,000,000 Kenyan Shillings allocated, the plan seeks to ensure the sustained well-being and socio-economic stability of PAPs amidst project developments, with progress monitored through monthly reports.

E9. The Monitoring and Evaluation (M&E)

The Monitoring and Evaluation (M&E) framework serves as a crucial tool for assessing the success and effectiveness of the resettlement and compensation processes, aiming to measure progress, identify deviations from objectives, and implement corrective measures. By adopting a strategic approach outlined in the UNDP handbook on M&E, the plan aims to track progress internally through input and output indicators and externally through outcome and impact indicators. This includes assessing the satisfaction of project-affected persons (PAPs) with compensation received, the effectiveness of livelihood restoration training, and the restoration of public structures. Additionally, a completion audit at the end of RAP implementation will verify compliance with legal frameworks, evaluate resettlement procedures, and provide policy recommendations for future projects, with a budget allocation of 1,000,000 Kenyan Shillings for M&E activities, including the completion audit.

The M&E plan includes comprehensive monitoring and evaluation objectives, methodologies, and a budget breakdown. It aims to ensure transparency, accountability, and effectiveness in the implementation of resettlement processes, with a particular focus on the well-being and socio-economic stability of PAPs. Monthly progress reports will be provided by the Socio Safeguard Specialist, and the RAP Completion Audit, conducted externally by a consultant, will assess compliance with legal frameworks, the effectiveness of resettlement procedures, and key challenges encountered, providing valuable insights and recommendations for future projects.

E10. Institutional Arrangements

Institutional arrangements for effective implementation of the Resettlement Action Plan (RAP) include the establishment of a Project Implementation Unit (PIU) at Tana Water Works Development Agency (TWWDA), which will oversee RAP management, coordinate team activities, compile disclosure materials, facilitate stakeholder engagement, manage compensation packages, address grievances, and plan monitoring and evaluation. A specific RAP Implementation Team (RIT) will be formed, consisting of experts such as a Social Safeguard Specialist, Land Surveyor, Land Valuer, and Finance Officer, responsible for verifying and compensating Project Affected Persons (PAPs), resolving grievances, issuing notices to vacate, and reporting progress on RAP implementation. The AfDB, Ministry of Finance and National Treasury, Ministry of Water,

Irrigation and Sanitation, County Government, Road Agencies, and National Land Commission will play supportive roles in RAP implementation, providing project financing, oversight, technical support, and facilitating compensation processes. Additionally, community-level structures like Community Resettlement Committees (CRCs) and Community Liaison Officers (CLOs) will ensure effective communication, grievance redressal, and local stakeholder engagement throughout the RAP process.

E11. RAP Budget and Implementation Schedule

The overall RAP implementation budget constitutes the Valuation and Compensation costs, the Livelihood Restoration budget, the RIT operational budget and the Monitoring and Evaluation budget. The GRM Budget and Stakeholder Engagement Costs have been provided for in the project Stakeholder Engagement Plan (SEP) prepared separately.

Table 2: Total RAP Implementation Budget

Description of costs	Cost in KES
PAPs compensation	5,173,251.48
Provisional for Road Agencies	1,500,000.00
Capacity Building and in-kind support	1,000,000.00
RAP implementation monitoring and completion audit	1,000,000.00
Livelihood Restoration Activities	1,000,000.00
RAP Implementation Team (RIT) Budget	750,000.00
Sub-Total	10,423,251.48
Add 20% Contingency	2,084,650.30
Total	12,507,901.78

The RAP implementation schedule shall be synchronized with the contractor’s work program. The estimated project implementation period is 15 months with planning activities taking first seven (7) months.

E12. Conclusion and Commitments

The conclusion of the Resettlement Action Plan (RAP) emphasizes its structured approach to compensation and resettlement processes, acknowledging the significant impact on livelihoods, structures, vegetation, and cemetery sites for 166 Project Affected Persons (PAPs). With assets valued at Ksh. **5173251.48**, the plan commits to thorough monitoring and evaluation mechanisms to ensure transparency, accountability, and effectiveness. These mechanisms aim to measure progress, identify deviations, implement corrective measures, and assess project performance. The RAP Completion Audit is highlighted as a tool for verifying compliance with commitments and providing recommendations for future projects. With allocated budgets and institutional arrangements in place, the RAP is positioned to facilitate fair and equitable compensation while mitigating adverse impacts on affected communities.

In terms of commitments, the proponent, TWWDA, pledges adherence to African Development Bank (AfDB) policies and national regulations. Specific measures include timely compensation of all identified PAPs, provision of adequate notice prior to demolition, sharing project schedules with stakeholders, and aligning with AfDB policies and national regulations. Stakeholder engagement is prioritized, ensuring transparency and feedback incorporation throughout implementation. Capacity building initiatives will enhance the knowledge and skills of project staff and stakeholders, while a robust Grievance Redress Mechanism (GRM) aims to address any complaints transparently. Monitoring and evaluation frameworks, coupled with external audits, underscore the commitment to accountability, compliance, and continuous improvement in RAP implementation

DEFINITION OF KEY TERMS

The following terms used in this Resettlement Action Plan (RAP) shall have the following meanings unless stated otherwise. Other important concepts as used have been defined inside the text where they apply.

Census: A field assessment /survey carried out to identify and determine the number of project affected persons and households (PAPs/Hs), their assets, and potential impacts; in accordance with the procedures satisfactory to the relevant government authorities, and the African development bank policies.

Compensation: The payment in kind, cash or other assets given in exchange for the taking of land, or loss of other assets, including fixed assets thereon, in part or whole. Includes:

- **Cash Compensation:** Monetary payment to which the Project Affected Persons are entitled in order to replace land or other assets taken for project use at full replacement cost. Include cash for land, cash for assets, cash for lost income.

- **In-Kind Compensation:** Non-monetary payment to which the Project Affected Persons are entitled in order to replace land or other assets taken for project use at Gross replacement cost. For losses that cannot easily be valued or compensated for in monetary terms, in-kind compensation may be appropriate. However, this compensation should be made in goods or resources that are of equivalent or greater value and that are culturally appropriate. In-kind compensation may entail agricultural land for agricultural land, commercial land for commercial land, grazing land for grazing land etc, as well as asset for asset compensation, e.g., public infrastructure, community facilities, and immovable assets such as various kinds of trees, crops etc.

- **Disturbance allowance:** Part of compensation for structures given to PAHs whether they relocate or not. It is provided for under the Kenyan government legislation and has been considered under this RAP at 15 per cent.

Cut-off date: This is the date of completion of the census and assets inventory of persons affected by a project. The date after which anyone who moves into the project area is no longer entitled to compensation and/or other resettlement benefits. Persons occupying the project area after the cutoff date are not eligible for compensation or resettlement assistance. A cut-off date established for this RAP is 31/3/2024 but in case of any delay of implementation of 2 years and above it would be ratified by the gazette notice.

Economic displacement: Loss of income streams or means of livelihood resulting from land acquisition or obstructed access to resources (land, water, or forest) resulting from the construction or operation of a project or its associated facilities.

Encroachers: mean those people who move into the project area after the cut-off date and are therefore not eligible for compensation or other rehabilitation measures provided by the project. The term also refers to those extending attached private land into public land or constructed structure on public land for only renting out.

Entitlement: Range of measures comprising cash compensation, income rehabilitation assistance, transfer assistance, income substitution, and relocation which are owing to business restoration

and/ or PAPs, depending on the type, degree and nature of their losses, to restore their social and economic base.

Household: A household includes all persons living and eating together (sharing the same kitchen and cooking food together as a single-family unit).

Host population: People living in or around areas to which people are physically displaced by a project will be resettled who, in turn, may be affected by the resettlement.

Income Restoration: Measures required ensuring that PAPs have the resources to at least restore, if not improve, their livelihoods.

Inventory of losses means the pre-appraisal inventory of assets as a preliminary record of affected or lost assets.

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

- Loss of benefits from use of such land;
- Relocation or loss of shelter;
- Loss of assets or access to assets; or
- Loss of income sources or means of livelihood, whether or not the project-affected person has moved to another location.

Involuntary land acquisition: The taking of land by the government or other government agencies for compensation, for the purposes of a public project/interest against the will of the landowner.

Land: The physical surface and anything growing on or underneath the surface extending to the airspace above the surface and the soil below the surface. It includes any structures thereon whether temporary or permanent which may be required for the project. Land can be put to different uses such as agricultural, residential, commercial and industrial.

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

Livelihood Restoration:

Open Market Value: An opinion of the best price at which the sale of an interest in an asset would have been completed unconditionally for cash consideration on the date of valuation, assuming: a willing seller; that, prior to the date of valuation, there had been a reasonable period (having regard to the nature of the asset and state of the market) for the proper marketing of the interest, for the agreement of price and terms and for the completion of the sale; that the state of the market, level of values and other circumstances were, on any earlier assumed date of exchange of contracts, the same as on the date of valuation; that no account is taken of any additional bid by a purchaser with a special interest; and that both parties to the transaction had acted knowledgeably, prudently and without compulsion.

Physical displacement—Loss of shelter and assets resulting from the acquisition of land associated with a project that requires the affected person(s) to move to another location.

Project-Affected Persons (PAPs): Persons who, for reasons of the involuntary taking or voluntary contribution of their land and other assets under the project, result in direct economic and/or social adverse impacts, regardless of whether or not the PAPs physically relocate.

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

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

Relocation: Physical moving of PAPs from their pre-project place or residence, place for work or business premises, to an area that is not affected by the project. In some cases PAPs are moved away from the project corridor but within the same parcel of land or to other parcels.

Resettlement Action Plan (RAP): Also known as a Resettlement and Compensation Plan, a resettlement instrument (document) prepared when sub-project locations are identified and involves land acquisition which leads to or involves the physical displacement of persons, and/or loss of shelter, and/or loss of livelihoods and/or loss, denial or restriction of access to economic resources.

RAPs are prepared by the project owners (managers or their appointed representative) impacting on the PAHs and their livelihoods and contain specific and legally binding requirements for compensation of the PAHs before the implementation of such project activities.

The Resettlement Policy Framework (RPF): The RPF sets out the policy statement for development of a resettlement procedural framework manual for all its transmission infrastructure that involve involuntary resettlement. It sets out the resettlement objectives and principles, organizational arrangements and funding mechanisms for any resettlement that may be necessary during investments implementation. It guides the preparation of Resettlement Action Plans of individual investments to meet the needs of the Project Affected Persons (PAPs).

Replacement cost: The replacement of assets with an amount sufficient to cover full replacement cost of lost assets and related disturbance and transaction costs including applicable taxes. In terms of land, this may be categorized as follows:

- Replacement cost for agricultural land
- Replacement cost for houses and structures
- Full replacement cost.

- **Replacement cost for agricultural land:** The pre-project or pre-displacement, whichever is higher, value of land of equal productive potential or use located in the vicinity of the affected land, plus the costs of:

- Preparing the land to levels similar to those of the affected land;
- Any registration, transfer taxes and other associated fees.

- **Full Replacement cost for houses and other structures:** The prevailing cost of replacing affected structures of the quality similar to or better than that of the affected structures in an area. Such costs shall include:

- Building materials;

- Transporting building materials to the construction site;
 - Any labor and contractors' fees; and
 - Any registration costs.
- **Replacement costs for land in urban areas:** the market value of land of equal size and use, with similar or improved public infrastructure facilities and services preferably located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.
- **Full replacement cost:** The current market value of the asset plus transaction costs (e.g. taxes, stamp duties, legal and notarization fees, registration fees, travel costs and any other such costs as may be incurred as a result of the transaction or transfer of property). In applying this method of valuation, depreciation of structures and assets is not considered. With regard to land and structures, replacement costs are defined as follows:
- Agricultural land**—the market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of preparation to levels similar to or better than those of the affected land, and transaction costs such as registration and transfer taxes.
- Residential land**—the current market value of land of equivalent area and use, with similar or improved infrastructure and services preferably located in the vicinity of the affected land, plus transaction costs such as registration and transfer taxes. Houses and other structures— the cost of purchasing or building a new structure, with an area and quality similar to or better than those of the affected structure, or of repairing a partially affected structure, including labor and contractors' fees and transaction costs such as registration and transfer taxes.
- Resettlement assistance:** The measures to ensure that project-affected persons who may require to be physically relocated are provided with assistance such as moving allowances, residential housing or rentals, whichever is feasible and as required, for ease of resettlement during relocation.
- Squatters:** are persons without legal claims to the land occupied/used by and may/or may not have legal claim to the structures. The term 'squatters' in this report is typically used for those occupying structures for residential/commercial purposes without legal claim to the land in which the structures are located in.
- Transition Assistance:** in addition to the Disturbance Allowance for structures and crops, the RPT's provision to vulnerable PDPs and eligible Pap's assistance in the form of a management resource; or an allowance will be paid for this person to oversee the process. The specific assistance will be developed and agreed with the PDP/ PAP as part of their individual compensation package.
- Vulnerable PAPs:** Socially and economically disadvantaged groups of persons such as widows, the disabled, very old persons or household heads who are likely to be more affected by project implementation or are likely to be generally constrained to access or seek out their entitlements promptly. Vulnerable is any person or groups who might suffer disproportionately or face the risk of being marginalized from the effects of resettlement as they are less able to cope with change. Vulnerable households by implication also include incapacitated households with no one fit to work owing to advanced/old age-associated incapacities, disabilities etc.; and child-headed households and street children, poor households, natural resource dependent communities and ethnic/social group minorities.

Vulnerable status can be determined by identifying a group's likelihood of facing harder conditions as a result of the resettlement because of such specific factors as a group's gender, economic status, ethnicity, religion, language or health condition. Depending on the specific context of the resettlement operation, vulnerable groups may thus include, for example, female-headed households, those below the poverty line, the landless, indigenous peoples, those without legal title to assets, those with physical handicaps, or ethnic, religious and linguistic minorities. Identifying vulnerable groups should be the result of careful analysis of the social and economic context, the presence of factors that may cause vulnerability and the capacity of the group to cope or adapt.

Wayleave: A RoW over the land of another. This RoW is for carrying sewer, drain, power line or pipeline into, through, over or under any lands but in so doing may interfere with the existing building.

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LIST OF ACRONYMS

AfDB	African Development Bank
AfDB ISS	(African Development Bank) Integrated Safeguards System Policy statement and operational safeguards
AIDS	Acquired Immune Deficiency Syndrome
BP	Bank Procedures
CBO	Community Based Organizations
CIDP	County Integrated Development Plan
CRC	Community Resettlement Committee
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act
ESAP	Environmental & Social Assessment Procedures
ESIA	Environmental and Social Impact Assessment
FDGs	Focus Group Discussions
GBV	Gender Based Violence
GoK	Government of Kenya
GRM	Grievance Redress Mechanism
HHs	Household Heads
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
IFC	International Finance Corporation
IP	Indigenous People
KFS	Kenya Forest Service
KICOWASCO	Kirinyaga County Water and Sanitation Company
KII	Key Informant Interviews
KM	Kilometer
KPLC	Kenya Power and Lighting Company
KWS	Kenya Wildlife Service
M&E	Monitoring and Evaluation
NEMA	National Environment Management Authority
NLC	National Land Commission
OP	(African Development Bank's) Operational Policy
PAPs	Project Affected People
PDP	Project Displaced Persons
PIT	Project Implementation Team
PWDs	Persons Living with Disability
RAP	Resettlement Action Plan
RLA	Registered Land Act
RPF	Resettlement Policy Framework
RoW	Right of Way

SA	Social Assessment
SEP	Stakeholder Engagement Plan
SP	Social Protection
ToRs	Terms of Reference
TWWDA	Tana Water Works Development Agency
WaSSIP	Water and Sanitation Service Improvement Project

1. INTRODUCTION

1.1. Project Background

The National Urban Water Supply and Sanitation Program stands as a beacon of hope, conceptualized to provide not just water and sanitation services, but to do so sustainably, with the overarching goal of enhancing health, improving quality of life, and alleviating poverty. At its core, this initiative is a testament to the collective will to foster progress and well-being across communities.

Driving the implementation of this noble endeavor in the project region is the Tana Water Works Development Agency (TWWDA). Empowered by its mandate under the Water Act of 2002, TWWDA is tasked with the efficient and economical provision of water and sanitation services within its jurisdiction. With meticulous attention to detail, the agency navigates the complexities of infrastructure development, ensuring that every project aligns with the overarching vision of sustainability and service excellence.

The canvas of this endeavor spans across six counties, namely Kirinyaga, Meru, Nyeri, and Tharaka-Nithi. Within this vast expanse, the current focus lies on Kirinyaga County—a region pulsating with life, boasting a population of 610,411 souls as per the 2019 census. Nestled within 1,478.1 square kilometers of land, Kirinyaga County rises and falls between altitudes ranging from 1,158 meters to 5,380 meters above sea level, painting a vivid picture of its diverse terrain and vibrant communities.

The urgency of the project in Kirinyaga County cannot be overstated. Against the backdrop of rapid population growth, the strain on existing water and sanitation infrastructure is palpable. The need for expansion and enhancement looms large, beckoning forth the implementation of robust systems that can not only meet the current demand but also accommodate future growth sustainably.

In this symphony of progress, each stakeholder plays a pivotal role. The African Development Bank (AfDB) emerges as a key partner, providing crucial financial support and expertise to bolster the project's momentum. Their strategic investments pave the way for innovation and resilience, ensuring that the fruits of development reach every corner of the community.

Working hand in hand with the AfDB and TWWDA, the National Government lends its unwavering support and stewardship. Through policy frameworks, regulatory oversight, and resource allocation, it lays the foundation for sustainable development, anchoring the aspirations of the program firmly in reality.

At the county level, the government is the linchpin, bridging the gap between national mandates and local needs. The County Government of Kirinyaga, in particular, emerges as a beacon of leadership, spearheading grassroots engagement, and facilitating seamless project implementation. Their intimate understanding of local dynamics and challenges ensures that solutions are not just effective but also culturally sensitive and community-driven.

Amidst this tapestry of stakeholders, consultants emerge as catalysts of innovation and efficiency. Armed with expertise and experience, they navigate the intricacies of planning and execution, offering invaluable insights and guidance every step of the way. Their collaborative spirit fosters synergy, propelling the project towards success even in the face of daunting challenges.

In the grand scheme of things, the National Urban Water Supply and Sanitation Program transcends mere infrastructure development—it embodies a collective vision for a brighter, healthier future.

As bulldozers break ground and pipelines stretch towards the horizon, they pave not just the pathways for water and sanitation but also the road to progress, prosperity, and dignity for all.

The map below offers a comprehensive view of Kirinyaga County's landscape, highlighting the spatial distribution of key features vital to its development and connectivity. It delineates the locations of educational institutions, major rivers, and road networks across the county, providing valuable insights into its infrastructure and resource allocation.

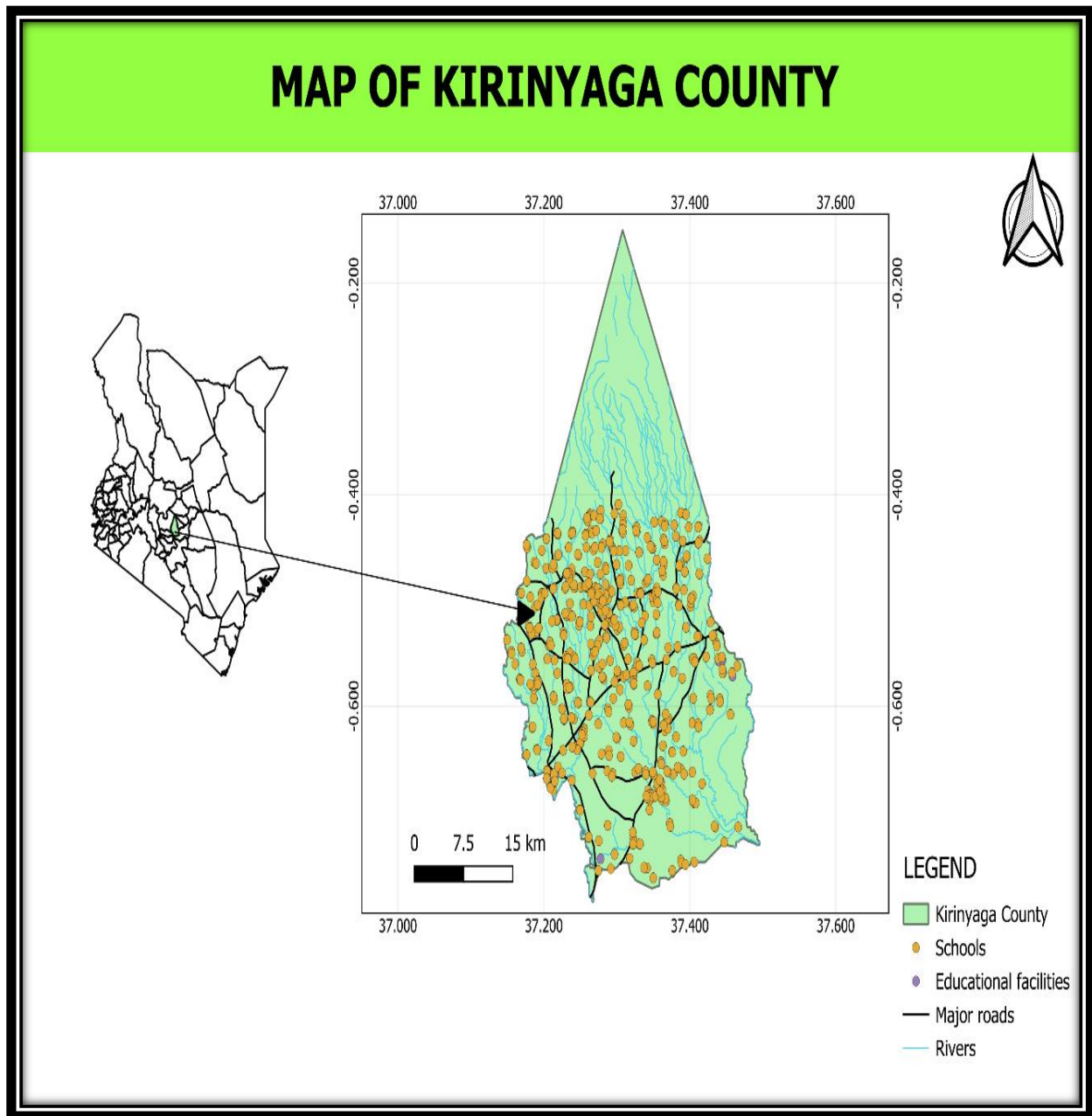


Figure 1: Map of Kirinyaga

1.2. Objectives of the RAP

The objectives of the Resettlement Action Plan (RAP) are crucial for ensuring the smooth implementation of development projects while minimizing the adverse effects on affected communities. As outlined by the African Development Bank, involuntary resettlement can result from various projects such as dams, bridges, national parks, and roads, impacting people's livelihoods, cultural sites, and assets.

The primary goal of this RAP is to establish a structured framework for resettlement planning, with the overarching aim of mitigating the impacts on businesses, households, and other affected assets. To achieve this overarching objective, the specific aims of the RAP include:

- i. Identification of Project Affected Persons (PAPs): This involves identifying individuals and communities who will be directly impacted by the project's implementation.
- ii. Mapping of individual and public land parcels essential for the project: This step entails delineating the land areas required for the project and assessing their ownership status.
- iii. Identification of gender-responsive socioeconomic characteristics of displaced households: Recognizing the diverse impacts of resettlement on different genders, this objective focuses on understanding and addressing the specific needs of affected households, particularly concerning gender dynamics.
- iv. Development of an inventory of potential impacts on displaced persons: This involves cataloging the potential social, economic, and environmental impacts that displaced persons may experience as a result of the project.
- v. Provision of feasible and appropriate mitigation measures: This objective aims to identify and implement measures to minimize adverse impacts on affected communities, including compensation, livelihood restoration, and social support programs.
- vi. Guidance on the conduct of resettlement activities in accordance with legal and institutional arrangements: This objective ensures that all resettlement activities adhere to relevant laws, regulations, and institutional frameworks, promoting transparency, fairness, and accountability throughout the process.
- vii. Estimation of the cost and budget for full reinstatement, including livelihood restoration: This objective involves calculating the financial resources required to facilitate the successful resettlement and rehabilitation of affected communities, encompassing both physical relocation and socioeconomic support measures.

By addressing these specific objectives, the RAP aims to facilitate the implementation of development projects in a manner that respects the rights, dignity, and well-being of affected communities, ultimately contributing to sustainable and inclusive development.

1.3. Need for RAP

The necessity for the Resettlement Action Plan (RAP) stemmed from the findings of the Environmental and Social Impact Assessment (ESIA) conducted for this project. Through thorough screening, scoping, and impact identification during the ESIA process, it became evident that the project would entail both physical and economic displacement, primarily due to the acquisition of land for the right-of-way (ROW). Consequently, the formulation of a RAP was deemed imperative as a mitigation strategy, emerging as a pivotal recommendation to address these anticipated challenges effectively.

1.4. Resettlement Action Plan (RAP) Scope

The Resettlement Action Plan report will provide a comprehensive overview of the existing land ownership, household arrangements, livelihoods, and physical developments as they stand at the designated cut-off date. This entails an exhaustive inventory detailing the Project Affected Persons

(PAPs), including their demographics and socio-economic profiles, alongside a schedule outlining land acquisition and displacement processes, coupled with appropriate compensation measures, including relocation arrangements.

Moreover, the report will encapsulate the sentiments and perspectives expressed by the PAPs during consultation forums conducted throughout the RAP process. These insights will serve to highlight key concerns and considerations essential for informing the implementation phase effectively.

In addition to these core components, the report will address several ancillary aspects crucial for RAP execution and monitoring. These include:

- (i) RAP guiding principles, outlining the ethical and procedural foundations governing the resettlement process.
- (ii) Detailed breakdown of RAP activities, delineating each step involved in implementation.
- (iii) Cost estimates associated with the entire resettlement process, ensuring financial transparency and accountability.
- (iv) Institutional arrangements for RAP implementation, delineating roles, responsibilities, and coordination mechanisms among stakeholders.
- (v) Assessment of the project's impact on human settlements, encompassing considerations of historical and cultural sites to mitigate adverse effects.
- (vi) RAP Implementation schedule, providing a timeline for task completion and milestone achievement.
- (vii) Internal and external monitoring and evaluation mechanisms, facilitating ongoing assessment of RAP effectiveness and compliance with established standards and regulations.

By addressing these multifaceted dimensions comprehensively, the RAP report lays the groundwork for a systematic and equitable resettlement process, fostering transparency, accountability, and stakeholder participation at every stage of implementation.

1.5. Project Justification

The justification for the proposed wastewater treatment project in Kirinyaga County is deeply rooted in both national development strategies and global sustainability objectives. Kenya's Vision 2030 serves as the overarching framework, guiding the nation towards becoming a globally competitive and prosperous entity with a high quality of life for all citizens by 2030. At the heart of this vision lies the aspiration to transform Kenya into a newly industrializing middle-income country while ensuring a clean and secure environment, in alignment with the Sustainable Development Goals (SDGs).

Central to this transformation is the imperative to address environmental challenges, particularly in the realm of wastewater management. As outlined in SDG 6 (Target 6.3), improving wastewater collection, treatment, and disposal systems is essential for safeguarding public health, preserving natural resources, and fostering sustainable development. By investing in the establishment of a modern wastewater treatment facility, the proposed project aligns squarely with this global agenda,

contributing to Kenya's commitment to achieving a clean, secure, and sustainable environment by 2023.

The urgency of addressing wastewater management in Kirinyaga County is underscored by the inadequacy of the existing sewer system to cope with the burgeoning population growth. The current infrastructure is not only overwhelmed by the volume of liquid waste generated but also suffers from inefficiencies and high operational costs. These shortcomings not only compromise public health but also hinder economic development and environmental sustainability.

By implementing an advanced sewer system and wastewater treatment plant, the proposed project seeks to mitigate the adverse impacts of improper wastewater disposal. By ensuring that effluents consistently meet national standards, it will significantly reduce the prevalence of waterborne diseases, enhance the aesthetic appeal of the town, and alleviate the burden of wastewater management on local businesses and communities. Moreover, by enhancing environmental stewardship and public health, the project will create an enabling environment for investment and economic growth, unlocking the area's full potential.

Importantly, the project's justification is reinforced by its robust environmental and social impact assessment, as outlined in the Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (EMMP). These documents delineate comprehensive mitigation measures to address any potential negative impacts, ensuring that the project proceeds in a responsible and sustainable manner, with due consideration for environmental conservation and social welfare.

Therefore, the proposed wastewater treatment project in Kirinyaga County is not only a pragmatic response to pressing infrastructure needs but also a strategic imperative aligned with national development priorities and global sustainability goals. By investing in modern wastewater management infrastructure, Kenya takes a significant step towards realizing its vision of a clean, secure, and prosperous future for all its citizens.

1.6. Rationale for RAP Update

This is the first RAP for the Kutus Last Mile Connectivity (LMC) Sewerline project formulated in 2024. The RAP will be implemented based on the information gathered, Kenyan laws and AfDB policies. The RAP report can be updated in a continuous basis in consultation all the stakeholders, PAPs included. The update should be based on the key objectives and aimed at betterment of the project and PAPs interest.

Overall objectives of the RAP are to:

- Avoid or minimize adverse resettlement impacts including physical and economic displacement. Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits.
- Provide additional assistance and opportunities (e.g., credit facilities, training, or job opportunities) and improve or at least restore the income-earning capacity, production

levels and standards of living of economically displaced persons whose livelihoods or income levels are adversely affected.

- Assist displaced persons in efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
- Mitigate adverse social and economic impacts from land acquisition by: a) providing compensation for loss of assets at full cost; b) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected; and c) improve or at least restore the livelihoods and standards of living of affected people.
- Ensure displaced persons are meaningfully consulted and have opportunities to participate in planning and implementing resettlement programs in accordance with the principles outlined in the AfDB Operational Safeguard 2: Involuntary Resettlement, Land Acquisition, Population Displacement, and Compensation.
- Provide transitional support to affected people, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living.

1.7. Methodology for conducting the RAP Study

The RAP study was conducted using the following methods:

1. Literature Review of relevant Kenyan legal, policy and institutional framework pertaining land management, tenure, acquisition and valuation; the applicable international standards and AfDB Integrated Safeguard System, 2013 particularly the Operational Safeguard 2 on involuntary resettlement, land acquisition, population displacement and compensation which outlines the Bank's requirements for projects that may cause involuntary resettlement.
2. Community sensitization meetings in the form of *barazas*: Community sensitization meetings were first held jointly with the ESIA team to enlighten the community on the proposed project and E&S impacts. During the meeting, the community was sensitized on the RAP process and the AfDB requirements on compensation for project affected persons (PAPs).
3. Identification of PAPs: A transect along the pipeline route was done and PAPs with businesses along the road reserves were all identified.
4. Socio-economic survey: Socio-economic data of identified PAPs was collected electronically using a designed questionnaire in KoBo collect tool. Individual interviews for PAPs were conducted to assess the income loss based on their daily revenues and a compensation amount for five (5) days was agreed upon and a disturbance allowance of 15% and consent forms signed.

5. Data Analysis: The socio-economic survey data was analysed using the Statistical Package for Social Sciences (SPSS) while the asset inventory data base was analysed in Microsoft excel.
6. Reporting: This RAP study report is informed by the results of the socio-economic survey of PAPs, public sensitization meetings (*barazas*) and key informant interviews. Preparation of the RAP report has also been informed by the Kenyan legal, policy and institutional framework and AfDB ISS, 2013.

1.8. The RAP Report Structure

The structure of this RAP Report is as follows:

Chapter 1: Introduction: This chapter provides a brief background of the project implementer and the proposed project activities necessitating a RAP. The objectives of the RAP and the methodology are also presented.

Chapter 2: Project Description: This chapter provides a detailed description of the project including project location, a description of the existing system, proposed project objectives, scope, project activities and raw materials and resources to be used.

Chapter 3: Legal, Policy and Institutional Framework: This chapter describes the relevant legal, policy and institutional framework context within which the proposed project shall operate. The chapter also covers institutional roles, including those that are typically involved in land access, compensation, displacement and resettlement as well as applicable AfDB Integrated Safeguard System (2013). A gap analysis is provided of Kenya legislation compared to international standards and proposed approaches for the Project to address these gaps.

Chapter 4: Stakeholder Engagement and Grievance This Chapter presents the stakeholder activities executed during the RAP study and the proposed Grievance Redress Management procedures. A stand-alone Stakeholder Engagement Plan (SEP) for the project has been developed to guide future stakeholder engagement activities.

Chapter 5: Socio Economic Profile of PAPs: This chapter provides the analysis of socio-economic survey for all project affected persons (PAPs).

Chapter 6: Displacement Impacts and Mitigation Measures: This chapter describes the extent of impacts on land, livelihoods, structures, crops and trees and pavements. The chapter also discusses the mitigation measures to be employed to minimize the displacement impacts.

Chapter 7: Vulnerable Groups: the chapter outlines the project vulnerable groups and mitigation measures.

Chapter 8: Eligibility and Entitlements: This chapter defines the categories of persons who are eligible for compensation as well as the relevant processes including the eligibility cut-off date. It also sets out the compensation options and packages to be provided for various types of displacement impacts. It concludes with an entitlement matrix and valuation summary which provides the compensation that accrue for each category of eligible persons in accordance with the entitlements.

Chapter 9: Livelihood Restoration Plan: This chapter outlines livelihood restoration measures to restore and improve the quality of life and standards of living of project affected persons (PAPs) and a budget.

Chapter 10: Monitoring and Evaluation: This chapter presents the M&E plan aimed at tracking the resettlement progress. Key performance indicators for monitoring and evaluation have been identified.

Chapter 11: Institutional and Implementation Arrangements: This chapter presents the structures/institutions for RAP implementation and their roles and responsibilities.

Chapter 12: Overall Budget and RAP Implementation Schedule: This chapter presents the overall RAP budget which includes the valuation and compensation budget, livelihood restoration budget and the M&E budget. The chapter also provides an indicative schedule for RAP related activities.

Chapter 13: Conclusion and Commitments: This chapter presents the overall conclusion of the RAP study and the commitments to be adhered to by the proponent, TWWDA during RAP implementation.

Annexes: This section presents the minutes of the stakeholder engagement meetings, the questionnaire used for socio economic survey, the GRM tools, the valuation matrix and the PAP consent forms.

2. PROJECT DESCRIPTION

2.1. Introduction

The proposed project embodies a multifaceted endeavor aimed at elevating the quality of life and health standards within Kerugoya and Kutus towns, encompassing both urban, peri-urban, and rural communities. At its core lies the imperative to enhance sewerage systems and sanitation services, addressing pressing issues such as waterborne diseases while fostering sustainable development.

Aligned with the overarching sector goal of improving health outcomes and reducing poverty levels in Kenya, the project seeks to extend enhanced sewerage system coverage to the target areas, thereby mitigating health risks associated with inadequate sanitation infrastructure. By prioritizing the well-being and livelihoods of the local populace, the project endeavors to catalyze positive socio-economic transformation, empowering communities and safeguarding public health.

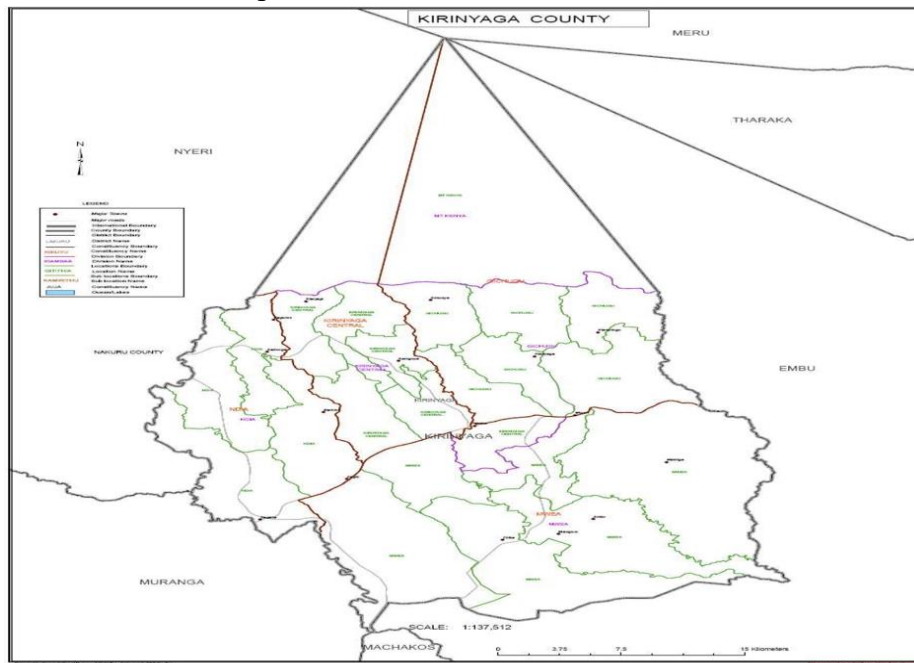
Integral to the project's success is the comprehensive engagement of stakeholders, encompassing both those directly impacted by the initiative and those wielding influence over its implementation. Through inclusive consultation processes, the project aims to solicit input from affected individuals and communities, ensuring their voices are heard and their needs addressed. Additionally, it endeavors to foster collaboration with relevant stakeholders, including governmental bodies, non-governmental organizations, and community leaders, recognizing their pivotal role in shaping the project's outcomes and sustainability.

Moreover, the project underscores the importance of participatory decision-making and transparent governance mechanisms, facilitating informed dialogue and consensus-building among stakeholders. By fostering a sense of ownership and accountability, it aims to engender long-term commitment and support for the project's objectives, fostering a conducive environment for its successful implementation and impact.

2.2. Location

The Project is situated in Kirinyaga County in the Central part of Kenya. The total area of the county is approximately 1,478.1 km² and lies between latitudes 0° 1' and 0° 40' south and 37° 0' and 38° East. The county lies between 1,158 metres and 5,380 metres above sea level. Kerugoya Town lies between latitude 0° 30' South and 37° 16' East and is located about 124km Northwest of Nairobi, 10 kilometres east of Karatina and 40 kilometres west of Embu towns. The town of Kutus is the capital Town of Kirinyaga County and is located about 10.5 km South West of Kerugoya town. Sagana town is on the South-Eastern part of the Kirinyaga county and about 20 km from Kutus while Kagio Town is 18 km south of Kerugoya town and about 12 km from Kutus town. Kirinyaga Water and Sanitation Company (KIRIWASCO) is the only Licensed Water Service Provider (WSP) in Kirinyaga County incorporated on 6th April, 2006 under the Companies Act, Cap 486 and operates as an agent of County government of Kerugoya as per water Act 2016 (Section 77a). Currently the company is licensed by WASREB as per Water Act 2016 (Section 72(1)) unlike previous Service Provision Agreement (SPA) of November 2012. KIRIWASCO being an agent of Kirinyaga County is mandated to provide water and sanitation services to residents of Kirinyaga East, Kirinyaga West, Mwea East, Mwea West, Kirinyaga Central.

According to WASREB Impact Report No 15, the Existing water infrastructure for Kirinyaga Water and Sanitation Company supplies water to a total of 284,967 people out of the total population of 492,554 people within the supply area as compared to the total population of 610,411 people in Kirinyaga County according to KNBS census report 2019. The deficit is clear that the demand outweighs the supply. This however is no longer the situation in Kirinyaga and its environs since the Kerugoya Kutus Water Supply Project that was under construction is complete and has been commissioned for operations.



2.3. Climate and Topography

Kirinyaga has a Tropical wet and dry or savanna climate. The area's yearly temperature is 20 °C (68°F) and it is 0.07% higher than Kenya's averages. Kirinyaga typically receives about 159.32 millimeters (5.97 inches) of precipitation and has 198.8 rainy days (52.55% of the time) annually. The annual mean temperature ranges from 12 °C to 27 °C. Rainfall distribution is bimodal with long rains commencing from mid-March to May while short rains occur between October and December, with the average annual rainfall ranging between 1,000–2,000 mm. The landscape of the county is greatly affected by Mt. Kenya and other topographical features. Thus, the topography can be characterized into three major zones namely; lowland areas that fall between 1,158metres to 2,000 meters above sea level, the midland areas which lie between 2,000 meters to 3,400metres above sea level and the highland comprising areas of falling between 3,400 meters to 5,380 metres above sea level. Specifically, the topography of the upper reaches of Kiringa and Thiba Rivers, which are the source-rivers for the proposed project, comprise mountainous topography that is replaced by undulating topography - steep ridges and valleys- in the lower settled areas. However, at an altitude of about 1500m, the topography changes into gently undulating and level topography.

2.4. Objectives and scope of the Design team

The objective of the proposed project is to improve water supply, sanitation/ sewerage services in the target urban, peri-urban and rural communities covering Kerugoya, Kutus, Kagio and Sagana. According to the Terms of Reference, the objective of this project is to improve the provision water borne sewerage services for Kerugoya and Kutus Towns.

2.5. Existing Sewerage System

The town previously had no planned system for treating the entirety of the wastewater generated by the residents; commercial hotels and public areas. Majority of these properties were served by pit latrines, soakage pits and septic systems. The properties generally dispose of their sullage water to the surface drains and their human waste to pit latrines, soakage pits and septic tanks. The soakage pits and septic tank overflows are generally disposed through porous drains into the permeable subsoil. The first phase of the project included Construction of Waste stabilization ponds including;

- Inlet chamber
- Coarse screen chamber
- Grit chamber
- Sullage channel with Parshall flume
- Distribution chamber
- 2 No. Anaerobic ponds of 46m x 46 m
- 2 No Facultative ponds of 243m x 86m
- 4 No Maturation ponds of 69m x 113m
- Constructed wetland
- 2No. Sludge drying beds of 24mx18m

Sewer Mains: Varying in diameter from 200mm to 675mm in concrete pipe 32km lengths and a provision of 20km 150mm uPVC condominium sewer. Associated works include construction of man holes and inspection chambers, etc.

2.6. Proposed Sewage Conveyance SYSTEM

2.6.1. Sewage Conveyance System

The scope of the proposed last mile connectivity system includes Sewer Sub Mains: Varying in diameter from 250 mm to 300 mm SN8 HDPE DWC pipe 7.94 km lengths. Associated works include construction of man holes and inspection chambers, etc.



Figure 2 : Kutus Town Proposed Sewer Lines



Figure 3 : Kerugoya Town Proposed Sewer Lines

2.6.2. Project Impact

Implementation of the project will result in:

- Realization of the 2030 for sustainable development goals of achieving universal and equitable access to safe and affordable drinking water for all, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation.
- Realization of the requirement of the Kenyan Constitution (2010) in article 42 and 43 that provide the right to clean and safe water in adequate quantities and to a clean and healthy environment.
- The realization of the Vision 2030 goal to achieve universal water supply and sanitation for all.

- Realisation of the Bottom-up Economic Transformation Agenda (BETA) under vision 2030 and National Water Sanitation Strategy, Ministry of Water, Sanitation and Irrigation Water Strategic Plan aim to improve service delivery in the water and sanitation sector.

2.7. Estimation and Characterization of Wastewater Generation

2.7.1. Wastewater Quantity

The sewage collected from the urban area consists of wastewater generated from the residences, commercial centres, recreational activities, institutions and industrial wastewaters discharge into sewer network from the permissible industries located within the town limits. Before designing the sewer, it is necessary to know the discharge i.e., quantity of sewage, which will flow in it after completion of the project.

Accurate estimation of sewage discharge is necessary for hydraulic design of the sewers. Far lower estimation than reality will soon lead to inadequate sewer size after commissioning of the scheme or the sewers may not remain adequate for the entire design period. Similarly, very high discharge estimated will lead to larger sewer size affecting economy of the sewerage scheme, and the lower discharge flowing in the sewer may not meet the criteria of the self-cleansing velocity and hence leading to deposition in the sewers.

This section of the report details design considerations that were adopted in estimating the quantity of wastewater flow generated in Kerugoya and Kutus towns.

2.7.2. Sources of Sanitary Sewage in Kerugoya and Kutus Town

The following sources of sewerage were identified and analysed and used to determine the wastewater discharge for Kerugoya and Kutus Town:

- Water supplied by water authority for domestic usage, after desired use it is discharged in to sewers as sewage. The water demands updated above relate to the whole of Kerugoya and Kutus Towns. However, only part of the project area will be severed due to topographical condition constraints.
- Water supplied to the various industries for various industrial processes by local authority. Some quantity of this water after use in different industrial applications is discharged as wastewater.
- The water supplied to the various public places such as, schools, hotels, hospitals, and commercial complexes. Part of this water after desired use joins the sewers as wastewater.
- Water drawn from wells by individuals to fulfil domestic demand. After uses this water is discharged in to sewers.
- The water drawn for various purposes by industries, from individual water sources such as, wells, tube wells, river, etc. Fraction of this water is converted into wastewater in different industrial processes or used for public utilities within the industry generating wastewater. This is discharged in to sewers.
- Infiltration of groundwater into sewers through leaky joints.
- Entrance of rainwater in sewers during rainy season through faulty joints or cracks in sewers.

2.7.3. Evaluation of Kerugoya and Kutus Sewage Design Discharge

Correct estimation of sewage discharge is necessary; otherwise, sewers may prove inadequate resulting in overflow or may prove too large in diameter, which may make the system uneconomical and hydraulically inefficient. Hence, before designing the sewerage system it is important to know the discharge / quantity of the sewage, which will flow in it after completion of the project and at the end of design period.

2.7.4. Project Area Mapping

The project area was determined using a combination of urban development plans for the towns, observations and inferences of satellite images from Google Earth as well as discussions with local Administrators and WSP Personnel. Whereas population data is given in terms of administrative areas; namely sub-locations and districts/sub counties, information on the urban development plans is devoid of these demarcations. The delineations of these two sets of data do not coincide and it was therefore found necessary to superimpose a map of administrative boundaries on the urban development plan map to determine the administrative areas/populations contributing to demand in the project area. This was done by use of Map Info GIS application. From the resulting map, the administrative locations falling within the boundary of Kerugoya and Kutus town as well as the peri-urban fringes were determined. The population of these areas obtained from the Kenya National Bureau of Statistics Database for 2009. The area was divided into the following sub areas;

Towns	Sub-Location	Area in Sq. Km.	Area Covered	% area covered	Connection Factor	Base Population	Growth rate	Population Covered
						2009		2009
Kerugoya	Kaguyu	18	10.20	58%	80%	17,551	1.5	8,126.80
	Kimandi	8.0	0.90	11%	80%	5,272	1.5	474.48
	Nduini	15.2	6.10	40%	80%	5448	1.5	1,749.09
	Kaitheri	3.5	2.40	69%	80%	3996	1.5	2,192.09
Kutus	Kithiriti	8.8	0.68	8%	80%	6,209	4.5	381.01
	Kamigua	9.7	2.03	21%	80%	5,571	4.5	930.41
	Mikarara	8.7	1.00	11%	80%	4,377	4.5	402.48
		44	20			32,267		12,542

2.7.5. Sewage Generation

Existing practices relates generated waste water to the per capita water consumption. The amount of wastewater generation is estimated as a factor of water consumption. The guidelines developed by WHO (1973) and presented in the “Sectoral Study and National Programming for Community and Rural Water Supply, Sewerage and Water Pollution Control, Report 9, Selection and Design Criteria for Sewerage Projects for Government of Kenya” gives the following sewage generation factors.

Table 3 : Sewage Generation Factors

Category of consumer	Units	Water consumption	Sewage factor
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			rate	
Urban Housing	Low-Class	l/h/d	75	0.80
	High Class	l/h/d	250	0.8
	Medium Class	l/h/d	150	0.8
	Schools/Institutions	l/h/d	50 and 25	0.80
	Hospitals	l/d	5000	0.80
	Commercial (basis Hotels)	l/b/d	300	0.80

The Kerugoya and Kutus Project adopted a uniform sewerage factor of 0.8 a sewer peak factor 2.5 Apart from accounted water supplied by water authority that will be converted to wastewater, following quantities were considered while estimating the sewage quantity:

Addition due to unaccounted private water supplies

People using water supply from private wells, tube wells, etc. contribute to the wastewater generation more than the water supplied by local water company. Similarly, certain industries utilize their own source of water. Part of this water, after desired uses, is converted into wastewater and ultimately discharged into sewers. This quantity was estimated from the current and projected total domestic and industrial water demand in Kerugoya and Kutus Town based actual population data and field observations.

Addition due to infiltration

This is additional quantity due to groundwater seepage in to sewers through faulty joints or cracks formed in the pipes. The quantity of the water depends upon the height of the water table above the sewer invert level. If water table is well below the sewer invert level, the infiltration can occur only after rain when water is moving down through soil. Quantity of the water entering in sewers depends upon the permeability of the ground soil and it is very difficult to estimate. While estimating the design discharge, 15% infiltration allowance was provided for. It should be noted that the Water table in Kerugoya and Kutus does not rise to typical depths of the proposed sewer lines.

Storm water drainage may also infiltrate into sewers. This inflow is difficult to calculate. Generally, no extra provision is made for this quantity. This extra quantity can be taken care of by extra empty space left at the top in the sewers, which are designed for running $\frac{3}{4}$ full at maximum design discharge.

Subtraction due to water losses

The water loss, through leakage in water distribution system and house connections, does not reach consumers and hence, not appear as sewage. Water Practice Manual in Kenya provides for 20% as the unaccounted-for water in the systems.

Subtraction due to water not entering the sewerage system

Certain amount of water is used for such purposes, which may not generate sewage, e.g. boiler feed water, water sprinkled over the roads, streets, lawns, and gardens, water consumed in industrial product, water used in air coolers, etc. the Design for Kerugoya and Kutus Wastewater

Treatment has ignored the water not entering the sewerage system because water which may not generate sewage is negligible. On this basis, the sewage generation is obtained as: -

Net quantity of sewage:

The net quantity of sewage production was estimated by considering the addition and subtraction as discussed above over the accounted quantity of water supplied by water authority as below:

Net quantity of sewage = 80% x (Total Water Demand for Kerugoya and Kutus Town less 20% NRW + 15% Addition due to infiltration.) Generally, 75 to 80% of accounted water supplied is considered as quantity of sewage produced.

The Table 4 below show summary of Maximum and Minimum Average Daily Wastewater Flow (ADWF) and Peak Daily Wastewater Flow (PDWF) adopted for adopted for the Kerugoya and Kutus Sewer Trunks and Mains design. It should be noted that the design period of 50year has been adopted for the design of the trunk and Sewer mains. The detailed calculations are included in a separate report.

Table 4 : Summary of Design ADWF for the Sewer Treatment Plant

Projected Wastewater Discharge Computation and Distribution Per Sub-Location in Kerugoya and KutusTowns					
YEAR	SUB-LOCATION	AREA - M²	Water Demand (m³/day)	Average Weather Dry Flow (m³/day)	ADWF Distribution for Each Sub-Location(m³/day/m²)
2020	Kaguyu	10.2	1,538	1,231	121
	Kimandi	0.9	191	153	170
	Nduini	6.1	366	293	48
	Kaitheri	2.4	432	345	144
	Kithiriti	0.7	231	185	274
	Kamigua	2.0	318	254	126
	Mikarara	1.0	229	183	183
2040	Kaguyu	10.2	2,012	1,610	158
	Kimandi	0.9	241	193	215
	Nduini	6.1	478	382	63
	Kaitheri	2.4	563	450	188
	Kithiriti	0.7	508	407	603
	Kamigua	2.0	718	574	284
	Mikarara	1.0	477	382	382
2070	Kaguyu	10.2	3,060	2,907	285
	Kimandi	0.9	352	334	371
	Nduini	6.1	721	685	112
	Kaitheri	2.4	837	796	331
	Kithiriti	0.7	1,833	1,741	2,580

Projected Wastewater Discharge Computation and Distribution Per Sub-Location in Kerugoya and Kutus Towns						
YEAR	SUB-LOCATION	AREA - M ²	Water Demand (m ³ /day)	Average Weather Flow (m ³ /day)	Dry Flow	ADWF Distribution for Each Sub-Location (m ³ /day/m ²)
	Kamigua	2.0	2,617	2,486		1,228
	Mikarara	1.0	1,651	1,569		1,569

Table 5 : Summary of Maximum PDWF and Minimum ADWF for Each Drainage Area and Corresponding Trunk and Main Sewer

FLOW PER TRUNK				
TRUNK	FROM CHAINAGE	TO CHAINAGE	Maximum PDWF per pipe (m ³ /day)	Minimum ADWF per pipe (m ³ /day)
MAIN LINE	0+000	1+200	998	169
	1+200	2+400	1995	338
	2+400	3+500	2222	379
	3+500	4+100	6471	1102
	4+100	5+800	6821	1166
	5+800	6+250	6910	1182
	6+250	7+625	10726	2752
	7+625	9+450	11086	2814
	9+450	11+275	11445	2875
	11+275	13+100	11804	2937
	13+100	13+300	12228	2955
	13+300	16+447	22820	3696
KIARITHI SCH LINE	0+000	1+524	1330	225
	1+524	3+048	2660	450
	3+048	4+572	3990	676
	4+572	5+194	4125	700
EFFORT BOYS LINE	0+000	2+925	1182	203
	2+925	3+440	2364	406
	3+440	4+313	3546	610
BUS STATION LINE	0+000	1+506	3922	183
GAKUO LINE	0+000	1+533	2456	100
MARKET LINE	0+000	1+750	1437	75
		1+750	2+513	3892

2.8. Design Process

The following 5 stage design process was followed in the design of Kerugoya - Kutus wastewater.

Stage 1 - Data collection and analysis

- Identification the area(s) to be served
- Setting system design criteria
- Collection topographic map, geologic and geographic data
- Adding locations and level of existing or proposed details
- Field investigations
- Identification the natural drainages, streets, wastewater inflow points at the boundaries of the area to be served.
- Location of sources of wastewater

Stage 2 - Preliminary horizontal layout

- Design the horizontal layout of the sewer, including manholes and possible pumping station locations.
- Preparation of alternate layouts to avoid pumping

Stage 3 - Preliminary sewer sizing

- Divided the total area into logical sub-areas and develop design flow rates for each section in the system
- Select pipe sizes, slopes, and inverts
 - Perform the hydraulic design of the system
 - Revise selections until the design criteria are met
- Draw preliminary longitudinal profiles (vertical alignment):
 - ensure pipes are deep enough so all users can connect into the system
 - try to locate pipes parallel to the ground surface
 - ensure pipes arrive above outfall level
 - avoid pumping if possible

Stage 3 - Waste stabilization ponds design

Stage 5 – Cost estimate

- Completed cost estimate(s) for the design and alternate designs

Stage 6 - Revise design

- Reviewed all designs, along with assumptions, alternates, and costs
- Complete the plan and profile drawings and prepare specification and other bid documents

2.8.1. Sewer Designs

Sewer hydraulic calculations are summarized in Table 6 of this report.

Waste stabilization ponds design

Waste stabilization ponds (WSP) are well-established methods for sewage treatment in tropical climates. This is a natural biological process that provides ecologically-sustainable wastewater treatment system and has the capability of meeting the demand for a high percentage removal of pathogenic organisms, compared to conventional technologies.

In the WSPs, raw sewage is treated entirely by natural processes involving both algae and bacteria. This process is very effective in the removal of faecal coliform bacteria and does not require

mechanical mixing, and only sunlight energy is required in the oxygenation process. Minimum supervision for daily operation which involves simple cleaning of outlets and inlet works is required. The main advantages of WSPs therefore include: simplicity, low cost, low maintenance, low energy consumption, robustness, and sustainability. The anaerobic and facultative ponds are designed for removal of Biochemical Oxygen Demand (BOD) and maturation ponds for pathogen removal. Some BOD removal however also occurs in maturation ponds and some pathogen removal in anaerobic and facultative ponds. In most cases, only anaerobic and facultative ponds are sufficient for BOD removal when the effluent is to be used for restricted crop irrigation and fish pond fertilization, as well as when weak sewage is to be treated prior to its discharge to surface waters. Construction of the wastewater stabilization ponds is simple and relatively cheaper than the conventional methods of wastewater treatment. In addition, they require low operational and maintenance cost. In view of the above wastewater stabilization ponds have been proposed for Kerugoya and Kutus Towns.

General

The wastewater stabilization ponds for Kerugoya and Kutus town have been designed to treat wastewater generated in the projected ultimate year (2040). The stabilization ponds have been designed to be constructed located about 5km south of Kutus Town just outside of AHITI Ndomba College.

Table 6 : Waste stabilization ponds design capacity

	Phase (2040)
Projected waste water generated (m ³ /day)	4085
Infiltration (15%)	15%
Treatment capacity (m ³ /day)	4698

The expected characteristic of raw sewage from the town council is illustrated in the table below:

Table 7 : Expected characteristics of the raw sewage

Parameters	Values	Units
pH	6.5 to 7.5	Mg/l
COD	400-600	Mg/l
BOD	480	Mg/l
TSS	150-300	Mg/l
Faecal Coliform(Ni)	50,000,000	

Physical treatment

In the proposed WSPs, the sewage generated from Kerugoya and Kutus town will initially be passed through the coarse screens where screen-able material shall be separated from the sewage before flowing through the grit chamber where grit material shall be removed. After the primary

treatment, the sewage will be transmitted to WSPs through the sullage channel equipped with Parshall flume for flow measurement.

(i) Inlet chamber

The inlet chamber has been designed for a detention time of 10 sec.

One large inlet chamber with size 1.7m x 1.7m x1.0m and a liquid depth of 0.5m has been proposed.

(ii) Coarse screen chamber

The coarse screen chamber has been designed for a flow through velocity of 0.45m/sec. One coarse screen chamber with size 3.0m x 1.0 m x0.8m and a liquid depth of 0.30m has been proposed.

(iii) Coarse screens

The coarse screens have been designed for a flow velocity (velocity a head of screen) of 0.6m/sec. The proposed coarse screen details are as shown in the Table below:

Table 8 : Proposed screen details

Year	No. screens	Coarse screens			
		Bar spacing	Liquid depth	Screen dimensions	Free board
2040	2No	25(mm)	0.4(m)	1.0x0.9(m)	0.50(m)

The bar thickness for the coarse screens shall be 15mm.

(iv) Grit chamber

Minimum Size of Grit particle 0.2

Specific Gravity of Grit 2.65

Size of Grit Chamber 7.81mx1.0mx1.2m

(v) Sullage channel with Parshall flume

The sullage channel has been designed for a flow through velocity of 0.6m/sec.

One sullage channel with size 9m x 1.0m x1.2m and a liquid depth of 0.3m has been proposed.

(vi) Distribution chamber

The distribution chamber has been designed for a detention time of 30 sec.

The distribution chamber with size 2.1m x 2.1mx1.5m has been proposed.

Anaerobic ponds

The anaerobic ponds have been designed to meet the following parameters;

- Minimum temperature 20⁰C;
- Evaporation rate 5.00 mm/day;
- Design organic load (inlet) 480g BOD/ m³.day;
- Design retention time 1.6 days;
- Liquid depth in pond 3 m;
- BOD removal 60%.

The proposed size for the design of the anaerobic ponds for the drainage area is given in the table below:

Table 9 : Proposed anaerobic pond size

Year	No. Ponds	Liquid depth (m)	Pond top size (m)	Free board (m)
2040	2	3	46x 46	0.5

The above sizes have been obtained by computing dimensions of the equivalent trapezoidal shape anaerobic ponds with side slopes 1 in 3. Treated sewage from anaerobic ponds will be transmitted to the facultative ponds for further treatment.

Facultative ponds

The facultative ponds have been designed to meet for the following;

- Minimum temperature 20⁰C;
- Evaporation rate 5.00mm/day;
- Design organic load (inlet) 311 g BOD/ m³.day or kg/Ha-day;
- Design retention time 11.6 days;
- Liquid depth in pond 1.5 m;
- BOD removal 80 %.

The proposed sizes for the design of the facultative ponds are given in the table below:

Table 10 : Proposed facultative pond size

Year	No. Ponds	Liquid depth (m)	Pond top size (m)	Free board (m)
2040	3	1.5	243x83	0.5

The tabulated sizes are for trapezoidal shape facultative ponds with side slopes 1 in 3 proposed with required stability measures.

Treated sewage from facultative ponds will be transmitted to the maturation ponds for further treatment.

Maturation ponds

The maturation ponds have been designed to meet for the following criteria;

- Minimum temperature 20⁰C;
- Evaporation rate 5.00mm/day;
- Minimum design retention time 3 days;
- Designed retention time 3 days;
- Liquid depth in pond 1.2 m;
- BOD removal 90%.

The proposed size for the design of the facultative ponds for the drainage area is given in the table below:

Table 11 : Proposed maturation pond size

Year	No. Ponds	Liquid depth (m)	Pond top size (m)	Free board (m)
2040	2	1.2	114mx59m (2No).	0.5

The tabulated sizes are for trapezoidal shape maturation ponds with side slopes 1 in 3 proposed with required stability measures. Treated sewage from maturation ponds will be transmitted to the constructed wetlands for further polishing/treatment.

Constructed wetland design

The constructed wetlands have been designed based on the following approaches;

- a. Horizontal flow CW Design (Reed et al, 1988)
 - The plug flow formulas have been adopted, $Le = Li e^{-k_1 \Phi}$
 - Rearranging the above formula, the expression $A_{cw} = [-2Q_i \ln(L_e/L_i)] / [2k_1 \epsilon D_{cw} - (0.001 e \ln[L_e/L_i])]$ is used to calculate the area of each cell
 - 8No cells have been designed each receiving 505 m³/day
 - Area of each cell was designed to be 25m by 100m.
- b. Suspended solids removals (Reed and brown, 1995)
 - Using the expression $(SS)_e = (SS)_i [0.106 + 0.11(AHLR)]$ and $AHLR = Q_i/A_{cw}$, the suspended solids in the final effluent was found to be 43mg/l.
- c. Ammonia - N removal (Huang et al, 2000)
 - Using the expression $A_{me} = A_{mi} \exp[-0.126(1.008) T - 20\theta]$, the ammonia in the final effluent was found to be 70.8mg/l.
- d. Helminth eggs removal (Scott et al, 1999)
 - Helminth egg removed sufficiently in 100m long reed bed in Egypt with most being removed in first 25m. 80m was therefore deemed sufficient to remove all remaining helminth eggs discharged from maturation ponds.
- e. Helminth eggs removal (Ayres et al, 1992)
 - Using the expression $R = 100(1 - 0.14 \exp(-0.38\theta))$, with a total retention time in waste stabilization ponds being 17.41 days, the remaining helminth eggs leaving the wetlands was calculated to be less than 1No/Litre.
- f. Pathogen removal (Reeds et al, 1995)
 - Using the expression $P_{ae} = P_{ai} / (1 + tKT)^n$, the number of coliforms leaving the wetlands was calculated to be less than 1FC/ml.
- g. Phosphorous removal (Reeds et al, 1995)
 - Using phosphorous contribution rate of 1.6g/ca/day, and the expression $P_e = P_i \exp(-k_p/HLR)$, the amount of phosphorous leaving the wetlands was calculated to be less than 1mg/l

Effluent quality

The expected effluent quality is as shown in the table below.

Table 12: Expected standard treated sewage characteristics from waste stabilization ponds

Raw Sullage Characteristics	Values	Units
pH	6.5 to 7.5	Mg/l
COD	<100	Mg/l
BOD	<15	Mg/l
TSS	<20	Mg/l
Faecal Coliform (Ni)	100 - 1000	FC/ml

Regular monitoring of the quality of the treated sewage from maturation ponds through the constructed wetlands will be done before the effluent discharge to nearby drainage system, used for irrigation and or other preferred approved purposes.

Sludge drying beds

All sludge from the waste stabilization ponds, together with any additional sludge that will be delivered directly to the treatment plant, will undergo treatment by drying in sludge drying beds before disposal. The table below shows the computations of the size of the proposed sludge drying beds.

Sewer Network

Reticulation Sewerage Network within Kerugoya and Kutus Towns and Construction of 13 Secondary sewers as summarized below:

Table 13: The sewerage networks

No.	Sewer Line Ref.	Length	Designed Sewer Pipe Diameter.	No of Manholes.	Nominal Diameter
1	Prison Line	1600	DWC	40	300
2	Roswam Line	900	DWC	20	250
3	Kimuri	1303	DWC	28	300
4	Kimuri Sub 1	1240	DWC	31	250
5	Kimuri Sub 2	240	DWC	7	250
6	ACK Mt	780	DWC	16	250
7	Mjini 1-MH99	400	DWC	11	250
8	Mjini 2—MH99	300	DWC	6	250
9	Fireline	280	DWC	6	250
10	Sahara	227	DWC	6	300
11	Sahara Sub 1	170	DWC	4	250
12	Tamani	400	DWC	8	250
13	Kirinyaga University	100	DWC	5	300
		7940			

3. LEGAL, POLICY AND LEGISLATIVE FRAMEWORK

3.1. Introduction

This chapter discusses the legal and regulatory framework relating to land acquisition in Kenya and the land use highlighting major issues related to Kenyan land legislation with regards to involuntary resettlement in this Resettlement Action Plan (RAP). It provides a brief overview of the Kenya land policy, and the Kenya's constitutional provisions related to land use, planning, acquisition, management and tenure, and more specifically the legislation related with land expropriation or way leave creation, land valuation and land replacement.

The chapter also compares the Kenyan legislation with the African development Bank provisions on resettlement, highlighting gaps and making recommendations to fill up gaps.

3.2. National Legal Framework

3.1.1 Constitution of Kenya, 2010

Article 40(1) of the Constitution of Kenya protects the right of individuals to own property anywhere in Kenya and states in part; ***Subject to Article 65, every person has the right, either individually or in association with others, to acquire and own property (a) of any description; and (b) in any part of Kenya.*** Article 40(2) offers specific protection for property ownership and provides for circumstances under which the state may possess property legally owned by an individual. It states:

- (2) *Parliament shall not enact a law that permits the State or any person—
 - (a) to arbitrarily deprive a person of property of any description or of any interest in, or right over, any property of any description; or
 - (b) to limit, or in any way restrict the enjoyment of any right under this Article on the basis of any of the grounds specified or contemplated in Article 27 (4).*
- (3) *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—
 - (a) 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
 - (b) 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.*
- (4) ***Provision may be made for compensation to be paid to occupants in good faith of land acquired under clause (3) who may not hold title to the land.***
- (5) *The State shall support, promote and protect the intellectual property rights of the people of Kenya.*
- (6) *The rights under this Article do not extend to any property that has been found to have been unlawfully acquired*

It is in the above context that the current Abbreviated Resettlement Action Plan has been undertaken.

3.1.2 Water Act, 2016

The Water Act, 2016 provides for the regulation, management and development of water resources, water and sewerage services; and for other connected purposes in Kenya. The Act establishes several institutions necessary for the management of the sector. Such institutions include the Water Resources Authority (Art. 11), National Water Harvesting and Storage Authority (Art. 30), Water Services Regulatory Board (Art. 70), Water Sector Trust Fund (Art. 113), Water Works Development Agencies (Art. 65), Water Service Providers (Art.77) and the Water Tribunal (Art. 113). Some of sector institutions will have important roles to play within their legal mandates during various stages in the implementation of the current project as highlighted under 3.4.

3.1.3 The Lands Act 2012

The Land Act of 2012 provides for the sustainable administration and management of land and land-based resources, and for connected purposes. The Act defines the forms of land tenure as freehold, leasehold, customary and easements; it recognizes and enforces land rights arising under all tenure systems and non-discrimination in ownership and access to land under all tenure systems. Article 7 clause (c) provides for the compulsory acquisition of land for public good.

3.1.4 The Land Registration Act, 2012

The Act provides that any person may acquire ownership to any land once he or she has been registered as the owner. On registration, such a person acquires freehold interests on the land and is issued with a certificate title under Article 26 of the Act. All wayleaves are registered under this act and an easement issued under Article 98 of the Act.

3.1.5 The National Land Commission Act, 2012

The National Land Commission is tasked with establishing county land management boards for purposes of managing public land. Article 5 of the Act narrates the functions of the commission. In section 5(1) (c), the Commission is tasked with provision of advice to the national government on a comprehensive program for the registration of title in land throughout Kenya. The Commission is further mandated to monitor the registration of all rights and interests in land, ensuring that public land and land under the management of designated state agencies are sustainably managed for their intended purpose and for future generations and to develop and maintain an effective land information management system at national and county levels. Project implementing agency will therefore be required, where acquisition or registration of interests (wayleaves or outright acquisition) is anticipated, to seek the final consent and registration with the National Land Commission. This is however, an administrative process to be effected by the relevant departments of the implementing agency.

3.1.6 The Environment and Land Court Act, 2011

This Act establishes a superior court to hear and determine disputes relating to the environment and the use and occupation of, and title to, land, and to make provision for its jurisdiction functions and powers, and for connected purposes. The Court was established to hear and determine disputes relating to environment and land, including disputes:

- i). relating to environmental planning and protection, trade, climate issues, land use planning, title, tenure, boundaries, rates, rents, valuations, mining, minerals and other natural resources;
- ii). relating to compulsory acquisition of land;
- iii). relating to land administration and management;
- iv). relating to public, private and community land and contracts, choses in action or other instruments granting any enforceable interests in land

Any project stakeholder who feels disenfranchised by the project planning, implementation or operations, and who may have exhausted the procedures spelled out in the project-specific grievance redress mechanisms may approach the Court for adjudication.

3.1.7 Land Value (Amendment) Act, 2019

The Act amends the Land Act, the Land Registration Act and the Prevention, Protection and Assistance to Internally Displaced Persons and Affected Communities Act; to provide for the assessment of land value index in respect of compulsory acquisition of land; and for connected purposes. The Act, under Part VIII creates the Land Acquisition Tribunal as an appellate tribunal for appeals related to compulsory land acquisition emanating from persons dissatisfied with the determination of the NLC.

3.1.8 The Physical and Land Use Planning Act, 2019

The Physical and Land Use Planning Act, 2019 is a robust and comprehensive framework for the planning, use, regulation and development of land. The Act:

- Sets out the principles, procedures and standards for the preparation and implementation of physical and land use development plans at the national, county, urban, rural and cities level
- Provides for the administration and management of physical and land use planning in Kenya
- Outlines the procedures and standards for development control and the regulation of physical planning and land use
- Provides for the coordination of physical and land use planning by county governments
- Provides a mechanism for dispute resolution with respect to physical and land use planning
- Provides for equitable and sustainable use, planning and management of land

- Gives the functions of and the relationship between planning authorities
- Provides a framework to ensure that investments in property benefit local communities and their economies

The project design team has taken into consideration the requirements of this Act by designing the proposed project to utilize the road reserve.

3.1.9 Valuers Act (CAP 532)

The Valuers Act (CAP 532) provides for the registration of Valuers and regulates the practice of valuation by establishing The Valuers Registration Board to oversee the operations of the discipline. Under this Act, the conditions and qualifications for registration as a Valuer are set out; the Act also details the circumstances under which the name of a Registered Valuer may be struck out of the register.

3.1.10 Valuation for Rating Act (CAP 266)

The Valuation for Rating Act empowers local government authorities (read County Governments) to value land for the purpose of rates and for related purposes and applies to any area of a local authority in respect of which any rate on the valuation of land, other than a rate on the annual value of agricultural land, in the area has been imposed by or under any law. The Act permits a Valuer appointed by the local authority to enter any property for the purposes of valuation and to enter the valuation details into a valuation roll; the valuation roll or any supplementary valuation roll contains:

- i). the description, situation and area of the land valued;
- ii). the name and address of the rateable owner;
- iii). the value of the land;
- iv). the value of the unimproved land;
- v). the assessment for improvement rate

The value of land, according to Valuation for Rating Act CAP 266, is the sum which the freehold, free from encumbrances (including easements) might be expected to realize at the time of valuation if offered for sale on such reasonable terms and conditions as a bona fide seller might be expected to impose taking into consideration other land of similar class, character or position, and to other comparative factors, and to any restrictions imposed on the land, and on the use of the land.

3.1.11 Rating Act (CAP 267)

This is an Act of Parliament that provides for the imposition of rates on land and buildings in Kenya. This Act allows local authorities to levy rates on properties to meet their expenses and to provide basic services such as water and sewerage within their areas of jurisdiction.

The Rating Act requires every rateable owner, joint registered owners and any person collecting rent from the piece of property to pay land rates and any interests accrued before the first day of January in the financial year.

This Act exempts from land rates the pieces of land exempted by the Valuation for Rating Act from valuation. The Valuation for Rating Act frees any land with encumbrances from valuation. For the purposes of this RAP, easements will be provided by the PAPs for their land acquired for the wayleave and thus no land rates will apply for such portions.

3.1.12 Persons with Disability Act, 2003

The Act provides for the rights and rehabilitation of persons with disabilities, the achievement of equalization of opportunities for persons with disabilities and the establishment of the National Council for Persons with Disabilities as well as connected purposes. Under Article 7(1) (c), the National Council for Persons with Disabilities maintains a register of all persons with disabilities in Kenya. Under Article 12(3), all persons with disability are exempted from payment of income tax on their employment income. Similar provisions are extended to employers of PWDs under Article 16(1).

It is therefore, encouraged, under this RAP, that project implementing agency puts in place similar measures for the inclusion of PWDs. whereas many of such measures are already spelled out in the Act, administrative decisions that facilitate the inclusion of PWDs are continually encouraged as part of GoK policy. Article 15(1) of the Act highlights some of such decisions. For compensation purposes, however, the report has enhanced the disturbance allowance payable for PWDs to 50% as opposed to 15% for other PAPs. A certificate from the Commission would be required as proof of disability and government recognition.

3.1.13 Occupational Health and Safety Act, 2007 (Revision 2010)

The Project shall comply with the provisions of the Occupational, Health and Safety Act (OSHA), 2007 in all its activities. The OSHA aims to secure the safety, health and welfare of persons at work; and protect persons other than persons at work against risks to safety and health arising out of, or in connection with, the activities of the persons at work.

3.1.14 Kenya Labour Laws

a. Employment Act, 2007

This Act deals with the conditions of employment and the rights of workers. All workers, including those employed during the construction phase of the project, should be employed under conditions of this Act which includes provision with respect to minimum wage, working conditions and time, and adequate measures in the resolution of disputes. The contractor for this project shall be expected to adhere to these requirements.

b. Work Injury Benefits Act, 2007

This law governs the rights of employees and employers at the workplace. The act sets out obligations of employers and employees rights in cases of accidents, occupational diseases, rights to medical aid, among other pertinent issues.

Section 8(1) requires that every employer operating in the country is duly registered by the Director of Occupational Safety and Health Services. Section 7(1) of the act makes it mandatory for an employer to obtain insurance policy in respect of any liability that the employer may incur to any of his employees. This requirement shall be mandatory to all contractors engaged in the project.

c. NSSF Act and NHIF Act

The National Social Security Fund Act makes it mandatory for all employers and employees to register and submit to the fund prescribed monthly payments with respect to social security. Registration with the NSSF and NHIF and regular remittances to the funds by both employers and employees are legal requirements.

3.1.15 The Access to Information Act, 2016

The purpose of the Access to Information Act of 2016 is to:

- Provide the right of access to information by citizens as provided under Article 35 of the Constitution
- Provide a framework for public entities and private bodies to proactively disclose information that they hold and to provide information on request in line with the constitutional principles
- Provide a framework to facilitate access to information held by private bodies in compliance with any right protected by the Constitution and any other law
- Promote routine and systematic information disclosure by public entities and private bodies on constitutional principles relating to accountability, transparency and public participation and access to information
- Provide for the protection of persons who disclose information of public interest in good faith; and
- Provide a framework to facilitate public education on the right to access information.

Part II of the Act provides for the right to information, including the requirement of providing information expeditiously at a reasonable cost. Section 5 (2) of the Act provides that information shall be disseminated taking into consideration the need to reach persons with disabilities, the cost, local language, the most effective method of communication in that local area, and the information shall be easily accessible and available free or at cost considering the medium used. Relevant elements of the Act that considered in the formulation of the RAP are elaborated in Table 14 below.

Table 14: Sections of Access to Information Act, 2016 relevant to the RAP Process

Relevant Article/ Sections	Provisions/ Requirements	Relevance to RAP
Section 4,6 and 12	Every citizen has the right of access to information held by the State and another person and where that information is required for the exercise or protection of any right or fundamental freedom; access to information shall be provided expeditiously at a reasonable cost.	<ul style="list-style-type: none"> • Disclosure of information has been done through RAP meetings • RAP report to be disclosed by the Bank
Section 8 & 9	An application to access information shall be made in writing in English or Kiswahili and the applicant shall provide details and sufficient particulars for the public officer or any other official to understand the information requested. Where an applicant is unable to make a written request for access to information because of illiteracy or disability, the information officer shall take the necessary steps to ensure that the applicant makes a request in a manner that meets their needs. The decision about an application for access to information should be as soon as possible i.e., within 21 days of receipt of the application. It can be extended for a further 14 days.	An application to access information by stakeholders will be submitted when required. This will be done timeously.

3.1.16 the County Government Act, 2012 (Revision 2017)

The County Government Act No. 17 of 2012 provides for county governments’ powers, functions and responsibilities to deliver services. Section 6 (2) gives the counties the powers to acquire, purchase or lease land. Section 114 determines that the development of nationally significant development projects within counties shall be preceded by mandatory public hearings in each of the affected counties. Projects shall subsequently be approved or rejected by the county assembly. Methods of facilitating public participation are provided in Part VIII of the Act, and include, but are not limited to the following:

- Timely access to information, data, documents, and other information relevant or related to policy formulation and implementation

- Reasonable access to the process of formulating and implementing policies, laws, and regulations, including the approval of development proposals, projects and budgets, the granting of permits and the establishment of specific performance standards
- Protection and promotion of the interest and rights of minorities, marginalised groups and communities and their access to relevant information
- Legal standing to interested or affected persons, organisations, and where pertinent, communities, to appeal from or, review decisions, or redress grievances, with particular emphasis on persons and traditionally marginalised communities, including women, the youth, and disadvantaged communities
- Reasonable balance in the roles and obligations of county governments and non-state actors in decision-making processes to promote shared responsibility and partnership, and to provide complementary authority and oversight
- Promotion of public-private partnerships, such as joint committees, technical teams, and citizen commissions, to encourage direct dialogue and concerted action on sustainable development
- Recognition and promotion of the reciprocal roles of non-state actors' participation and governmental facilitation and oversight; and 19 Polluter-pays principle means that the cost of cleaning up any element of the environment damaged by pollution, compensating victims of pollution, cost of beneficial uses lost because of an act of pollution and other costs that relate to or incidental to the foregoing, is to be paid or borne by the person causing the pollution. 20 Precautionary principle means that where there are threats of damage to the environment, whether serious or irreversible, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. Volume A Resettlement Planning
- Provision to the public of clear and unambiguous information on any matter, including clear environmental impact assessment reports, expected development outcomes and development options and their cost implications.

Section 97 of the Act requires that special consideration be given to vulnerable and marginalised groups through the principles of inclusion and integration, protection from discrimination based on language, religion, culture, national or social origin, sex, caste, birth, descent or other status; non-discrimination and equality of treatment in all areas of economic, educational, social, religious, political and cultural life of the marginalised and minority groups; special protection to vulnerable persons who may be subject to threats or acts of discrimination, hostility, violence and abuse as a result of their ethnic, cultural, linguistic, religious or other identity; special measures of affirmative action for marginalised and minority groups to ensure their enjoyment of equal rights with the rest of the population; respect and promotion of the identity and characteristics of minorities; promotion of diversity and intercultural education; and promotion of effective participation of marginalised and minority groups. Vulnerable and marginalised groups have been engaged with and considered during the development of the RAP.

3.3. National Policy Framework: Steering Kenya's Socioeconomic Development

Kenya Vision 2030 stands as a monumental macroeconomic and social blueprint, enacted in 2008, with the ambitious aim of propelling the nation towards middle-income status, thereby ushering in an era of enhanced livelihoods and elevated standards of living for its populace. At its core, Vision 2030 envisions a Kenya where citizens benefit from improved sanitation and meticulous environmental management. This comprehensive agenda is designed to uplift Kenyan society across multiple dimensions: politically, economically, socially, and environmentally. Politically, it strives for enhanced citizen engagement in governance processes; economically, it seeks to empower individuals and livelihoods; socially, it endeavours to foster national cohesion; and environmentally, it champions the fundamental right of every citizen to inhabit and enjoy a safe and sustainable environment. Recognizing the imperative of improved sanitation in Kerugoya and Kutus, this initiative aligns seamlessly with the overarching objectives of Vision 2030, promising a brighter future for all Kenyan citizens.

The Kenya Environmental Sanitation and Hygiene Policy (2016-2030) represents a pivotal national strategy dedicated specifically to addressing sanitation and hygiene challenges. With a sweeping goal of ensuring universal access to improved sanitation and fostering a clean, healthy environment by 2030, this policy delineates a clear pathway for action. It defines improved sanitation not merely as the provision of hygienic facilities, but also as the safe and environmentally responsible collection and treatment of faecal sludge. Shedding light on the stark reality of national sewerage coverage, with a mere 12% of the population covered and a paltry 5% effectively treated, this policy underscores the urgent need for interventions in water and sanitation service provision to meet its ambitious targets. Indeed, concerted efforts in this domain hold the key to realizing the transformative goals set forth in the Kenya Environmental Sanitation and Hygiene Policy.

The National Water Policy emerges as a strategic compass guiding the development and management of water resources throughout Kenya. Emphasizing principles of equitable access, sustainability, and community participation, this policy serves as a cornerstone for ensuring the efficient and inclusive management of water resources. By championing access to safe and clean water for all citizens, the National Water Policy synergizes with initiatives aimed at enhancing sanitation and hygiene practices, thereby contributing to broader objectives of societal development and environmental preservation.

3.4. Africa Development Bank Policies

The AfDB's Integrated Safeguards System (ISS), 2013, Operational Safeguard 2 on Involuntary Resettlement, Land Acquisition, Population Displacement and Compensation is the key OS used in the RAP preparation. It outlines the Bank's requirements for projects that may cause involuntary resettlement. The policy aims to ensure that people affected by projects are treated fairly and receive adequate compensation and support to rebuild their lives. The safeguard seeks to ensure that when project affected people must be displaced, they are treated fairly, equitably, and in a

socially and culturally acceptable manner, that they receive compensation and resettlement assistance so that their standards of living, income-earning capacity, production levels and general livelihood are improved and they share in the benefits of the project that involves their resettlement.

The Safeguard highlights five objectives that target to (i) avoid involuntary resettlement where feasible, or minimize resettlement impacts where involuntary resettlement is deemed unavoidable after all alternative project designs have been considered, project implementers must, (ii) ensure that displaced people are meaningfully consulted and given opportunities to participate in the planning and implementation of resettlement programmes, (iii) ensure that displaced people receive significant resettlement assistance under the project, so that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels, (iv) provide explicit guidance to borrowers on the conditions that need to be met regarding involuntary resettlement issues in Bank operations to mitigate the negative impacts of displacement and resettlement, actively facilitate social development and establish a sustainable economy and society and (v) guard against poorly prepared and implemented resettlement plans by setting up a mechanism for monitoring the performance of involuntary resettlement programmes in Bank operations and remedying problems as they arise.

The safeguard system applies to the whole range of losses that project affected persons including:

- Loss of shelter (living environment)
- Loss of assets (loss of structures and assets including cultural, spiritual, and other socially important sites such as parks and recreational facilities, among others)
- Loss of livelihoods/income sources due to project activities at any of the project phases (planning, construction, operations and maintenance or decommissioning)
- Disturbances caused by movement occasioned by the need for relocation or to readjust as a result of project activities

Entitlements under the AfDB ISS, OS 2 cover all project affected persons with legal rights as well as those who may not have legal rights to land or property but can show that they have been benefiting from the resources prior to the project interventions. It is important to note that an important aspect of the OS 2 is its recognition of the right of not only formal legal owners to property within the project area, but also the recognition of those PAPs who may not have any legal entitlements under local laws. It also recognizes cultural and customary considerations to the broader definition of PAPs under the Bank's policy.

Other OS helpful in the projects include:

Operational Safeguard 1: Environmental and Social Assessment: This safeguard involves categorizing projects based on their environmental and social impact and conducting assessments

accordingly. It sets out the requirements for evaluating and mitigating potential risks to ensure projects align with environmental and social standards.

Operational Safeguard 5: Labour Conditions, Health, and Safety: This safeguard focuses on ensuring decent working conditions, health, and safety standards for workers involved in projects funded by the institution. It aims to prevent exploitation and promote worker rights in line with international standards and practices.

3.5. Institutional Roles in RAP Implementation and Capacity Assessment

Table 15: Institutional Roles in RAP Implementation and Capacity Assessment

Institution	Roles	Capacity Assessment
African Development Bank (AfDB)	- Project financing - General oversight and monitoring of RAP implementation	The AfDB has ample capacity to finance the project and monitor its implementation.
Ministry of Finance and National Treasury	- Formulation of national budget - Public debt management - Government accounting standards - Financial governance oversight	The Ministry of Finance and National Treasury possesses sufficient capacity for financial management on behalf of the borrower.
Ministry of Water, Sanitation and Irrigation	- Development of water resources management policy - Water and sewerage services management policy - Water quality control	The Ministry has experts in key areas such as water and sanitation system design, physical planning, and resettlement planning, offering necessary technical support.
Ministry of Labour and Social Protection	- Protection of workers' rights - Handling labour-related complaints - Ensuring safe working conditions	The Ministry has the required personnel to address any labour-related grievances during project implementation.
Ministry of Interior and National Administration	- Coordination of national government functions - Support and coordination of national projects	Public administration has adequate capacity to fulfill its role in RAP implementation.
Ministry of Cooperatives and Micro, Small and Medium Enterprises (MSMEs)	- Support for MSME growth and development - Skills development collaboration	The Ministry possesses adequate capacity to support MSMEs and collaborate with the project implementer in skills development.
Water Services Regulatory Board (WASREB)	- Regulation of water service providers - Oversight of water tariffs - Consumer protection	WASREB has sufficient capacity to regulate water services and ensure consumer protection.

Tana Water Works Development Agency (TWWDA)	- RAP preparation and implementation - Development, maintenance, and management of waterworks	TWWDA has the capacity to carry out RAP preparation and implementation, with potential enhancement through private sector partnerships.
County Government	- Supervision of county projects - Conflict resolution	The County Government possesses adequate capacity for project supervision and conflict resolution.
National Land Commission	- Management of public land - Land policy recommendation	The NLC has the necessary capacity for RAP preparation and implementation, with potential enhancement through private sector collaboration.
Land Acquisition Tribunal	- Resolution of land acquisition disputes	The tribunal is equipped to handle disputes related to land acquisition effectively.
Environment and Land Court	- Resolution of environmental and land disputes	The Environment and Land Court has the capacity to resolve grievances relating to the environment and land, though such cases may be time-consuming.
National Environment Management Authority (NEMA)	- Licensing of development initiatives - Environmental oversight	NEMA has sufficient capacity to investigate and arbitrate concerns related to project licensing.
Water Resources Authority (WRA)	- Formulation and enforcement of water management standards - Water abstraction regulation	WRA is adequately equipped to address issues related to water abstraction and catchment protection.
County Environment Committee	- County environmental management - Project oversight	The committee has the capacity to support RAP implementation, with opportunities for capacity enhancement through private sector partnerships.
Nithi Water and Sanitation Company (NIWASCO)	- Provision and management of water services	NIWASCO will need to increase its human capacity upon project handover to manage and maintain the new system effectively.

3.6. The Gaps Analysis of Kenyan Laws and the AfDB Policy

There are some differences between the African development Bank policy and the laws of Kenya on resettlement and compensation. AfDB Integrated Safeguards System Policy statement and operational safeguards (ISS) more so OS2 and compares it to the Kenyan legislation on the same. Recommendations are made on the existing gaps of the Kenyan laws. In general, where there is a difference between Kenyan law and OS2, the latter shall prevail

Table 16: Gap Analysis-Legal Frameworks

Issue	AfDB policy requirements	Provisions of Kenya law	Gap/comment	Proposed response
Involuntary Resettlement, Physical and Economic Displacement	According to 2.1.1, the AfDB policy requirement states that the resettlement issues in Bank’s projects have been addressed through the basic guiding principles and operational procedures outlined in the 2003 “Guidelines on Involuntary Displacement and Resettlement”. According to 2.1.3, the provision of Kenya Law states that the majority of the Regional Member Countries’ governments have adopted laws, regulations, and procedures for expropriating	The Lands Act 2012 (Amended 2019) is the substantive law governing land in Kenya, providing a legal regime over the administration of public and private lands. It also provides for the acquisition of land for public benefit and way leave creation. The government has the powers under this Act to acquire land for projects, which are intended to benefit the general public. The projects requiring resettlement are under the provision of this Act.	Both AfDB policy and Kenyan law address involuntary resettlement and land acquisition, yet there may be discrepancies in specific procedures and requirements. Aligning AfDB guidelines with Kenyan legal provisions is crucial to avoid gaps in implementation and compliance.	The client will implement both AfDB policy and Lands Act 2012 to ensure consistency and clarity in addressing involuntary resettlement and land acquisition issues.

	land needed for public use and development.			
Land Acquisition and Restrictions on Land Use	According to 2.1.3, it's stated that the majority of the Regional Member Countries governments have adopted laws, regulations, and procedures for expropriating land needed for public use and development. According to 2.2.6, the policy states that legal compensation requirements have generally been applied to property owners rather than those occupying the land.	Chapter 2 of The National Lands Commission Act of 2012 is linked to constitutional reforms; regulation of property rights is vested in the government by the Constitution with powers to regulate how private land is used in order to protect the public interest. The Government exercises these powers through compulsory acquisition and development control. Compulsory acquisition is the power of the State to take over land owned privately for a public purpose. However, the Government	Both AfDB policy and Kenyan law provide for land acquisition and compensation, yet ensuring equitable treatment of all affected parties is essential. Aligning these frameworks to address compensation for both property owners and occupants affected by land acquisition is crucial.	Ensure alignment between AfDB policy and Kenyan law regarding compensation requirements for both property owners and occupants affected by land acquisition for public projects.

		must make prompt payment of compensation.		
Negotiated Settlements	According to (a), the guiding policies state that any necessary displacement is done in the context of negotiated settlements with affected communities. (b) States that the displaced persons should be informed about their options and rights pertaining to resettlement.	The Land Act outlines procedures for consultation with the affected population and grievance management procedures. This includes gazettement of the land and serving notices to the PAPs, asking for their opinion on compensation value in the inquiry process, etc. The IDP act requires free and informed consent of the affected persons.	While AfDB policy emphasizes negotiated settlements and informing displaced persons about their rights, specific provisions in Kenyan law regarding these aspects may be limited. Establishing clear guidelines and procedures for negotiated settlements and ensuring adequate information dissemination to affected communities is essential.	The proponent shall ensure negotiated settlements between project proponents and affected communities, ensuring transparency and equitable outcomes.
Resettlement Planning	AfDB policy emphasizes comprehensive resettlement planning, including the development of a Resettlement Policy	The Land Act outlines procedures for consultation with affected population and grievance management procedures. This includes	Clear procedures and standards for resettlement planning may be lacking in both AfDB policy and Kenyan law. Establishing	The client shall incorporate the resettlement planning process, including stages, responsibilities, and

	Framework (RPF) to ensure the RAP is undertaken effectively and adequate compensation and support.	gazettement of the land and serving notices to the PAPs, asking for their opinion on compensation value in the inquiry process, etc. The IDP act requires free and informed consent of the affected persons.	structured processes and timelines for resettlement planning is crucial for effective implementation.	timelines, ensuring transparency and accountability throughout implementation of the project.
Stakeholder Consultation Process	According to point 4.1.3, all stakeholders, particularly the affected population, host communities, and their representatives, should be fully informed, consulted, and effectively involved at all stages of the project cycle. 2.3.3 States that the plan should be supported by a comprehensive socio-economic survey to determine all the relevant	The Land Act outlines procedures for consultation with the affected population and grievance management procedures. This includes gazettement of the land and serving notices to the PAPs, asking for their opinion on compensation value in the inquiry process, etc. The IDP act requires free and informed consent of the affected persons.	While AfDB policy emphasizes stakeholder consultation and participation, specific provisions in Kenyan law regarding stakeholder engagement may be limited. Enhancing stakeholder participation and ensuring inclusive decision-making processes is critical for successful project implementation.	Stakeholder consultation and participation in project decision-making processes was carried out, aligning with the principles outlined in AfDB policy.

	characteristics of the affected population, various options, and required resources to resettle and/or compensate them.			
Cut-off Dates	The cut-off dates are established by the borrower, with only displaced persons occupying the affected land before the cut-off date eligible for compensation. The cut-off date must be clearly communicated to the project-affected population. Persons encroaching on the project area after the cut-off date are not entitled to any form of resettlement assistance.	According to Kenyan law, the cut-off date for eligibility is established after the gazette of the intention to create a wayleave. After the cut-off date, any circumstance initiated by the affected person is not considered, and therefore, not eligible for compensation. If there is a significant time lag between the cut-off date and actual implementation (i.e., more than two years), it becomes the responsibility of the	Establishing transparent communication of cut-off dates and updating timelines in case of delays is crucial to ensure fairness in compensation processes. Implementing mechanisms within both AfDB policy and Kenyan law to address these aspects is essential.	The client has ensured transparent communication of cut-off dates, with provisions for updating timelines and addressing any policy changes that may affect compensation eligibility.

		proponent to update the inventory list and include any policy changes that may have occurred during the duration of time.		
Eligibility Criteria	The AfDB policy categorizes eligibility into three groups: (i) those who have formal legal rights to land; (ii) those who do not have formal legal rights to land but have a claim to such land or assets; and (iii) those who have no recognizable legal right or claim to the land they are occupying.	Kenyan law recognizes only two groups for compensation: (i) those who have formal legal rights to land; and (ii) those who do not have formal legal rights to land but have a claim to such land or assets. The law does not explicitly recognize those who have no legal right or claim to the land they are occupying.	The major gap between AfDB policy and Kenyan law is the eligibility criteria. Kenyan law does not recognize the third group (those who have no recognizable legal right or claim to the land they are occupying), which is acknowledged by the AfDB policy. This gap needs to be addressed to ensure all affected persons are adequately compensated.	The client will ensure that the eligibility criteria include all three categories recognized by the AfDB policy. This includes formal legal rights, claims to land, and those without legal rights. This approach will ensure comprehensive coverage and equitable treatment of all affected persons.

3.7. Comparison of Kenyan Laws and AfDB Policy

Table 17: Comparison between Kenyan Law and AfDB's Involuntary and Resettlement Policy - regarding Compensation

Category of PAPs/Type of Lost Assets	Kenyan Law	AfDB Involuntary and Resettlement Policy	Proposed mitigation measures
Land Owners	Cash compensation based upon market value. Under statute. Land for Land under Customary Law	Recommend land-for-land compensation. Other compensation is at replacement cost	PAPs consultation towards preference for land-for-land and cash as the last option
Land Tenants	Entitled to compensation based upon the amount of rights they hold upon land under relevant laws	Are entitled to some form of compensation whatever the legal recognition of their occupancy	AfDB resettlement policy takes precedence here
Land Users	In some cases, land users have some form of secure tenure extended to them under law regarding easement rights where if a person uses land for 7 consecutive years without a dispute entitles him to a right equivalent to ownership. In other cases, land users not entitled to compensation for land, entitled to compensation for crops and other economic assets	Entitled to compensation for crops, may be entitle to replacement land and income must be restored to pre-project level at least	AfDB resettlement policy takes precedence here
Owners of "Non-permanent Buildings"	Cash compensation based on market value or entitled to new housing on authorized land under government (state or local) housing programs	Entitled to in-kind compensation or cash compensation at full replacement cost including the labour and relocation expense, prior to displacement	AfDB resettlement policy takes precedence here

Category of PAPs/Type of Lost Assets	Kenyan Law	AfDB Involuntary and Resettlement Policy	Proposed mitigation measures
Owners of “Permanent” buildings	Cash compensation is based on market value	Entitled to in kind compensation or cash compensation at full replacement cost without depreciation including labour and relocation expense, prior to displacement	AfDB resettlement policy takes precedence here
Perennial Crops	Cash compensation based upon market rates calculated as an average net market income	As per the evaluation section of this RAP once approved by the Bank and disclosed in Kenya and at the Bank external website	AfDB resettlement policy takes precedence here

4. STAKEHOLDER ENGAGEMENT AND GRIEVANCE REDRESS MECHANISM

4.1. Introduction

The primary goal of stakeholder engagement is to ensure the active participation of project-affected persons (PAPs) and other relevant stakeholders in the resettlement planning process. This involves informing, educating, consulting, and facilitating their involvement. Effective stakeholder engagement is essential for comprehensive and inclusive resettlement planning.

From February to April 2024, the RAP study team conducted extensive stakeholder consultations in the project areas to integrate stakeholder views, needs, and expectations into the RAP report. The minutes from these consultation meetings and the list of participants are included in the appendices.

This chapter details the stakeholder engagement activities carried out by the RAP study team, summarizing the issues raised and the responses provided by the project proponents and the RAP team. It also outlines a Stakeholder Engagement Plan (SEP) and establishes a Grievance Redress Management (GRM) structure to guide future interactions with project stakeholders. The GRM framework is designed to effectively address most grievances arising from the project.

4.2. Stakeholder Engagement

4.2.1. Stakeholder Engagement Plan

A comprehensive Stakeholder Engagement Plan (SEP) has been developed to provide clear guidelines for TWWDA to engage with stakeholders in a structured, informed, inclusive, and consistent manner. The primary objectives of the SEP are as follows:

- Establishing a systematic approach for stakeholder engagement throughout all project phases.
- Identifying key stakeholders affected by the proposed projects, along with their interests, concerns, and level of influence regarding project activities.
- Promoting and facilitating effective and inclusive engagement with project affected persons (PAPs) throughout the project lifecycle, addressing issues that may impact them.
- Identifying effective methods to disseminate project information tailored to the needs of stakeholders.
- Ensuring timely and comprehensive disclosure of project information, including environmental and social risks and impacts, in an accessible and understandable manner.
- Providing accessible and inclusive channels for project-affected parties to raise grievances, and enabling project implementers to respond to and manage these grievances effectively.

In accordance with the SEP, the RAP study team engaged relevant stakeholders through various methods, including key informant interviews, focus group discussions, phone interviews, public barazas, and questionnaires. Stakeholder engagement and public consultation will remain ongoing activities throughout all project phases, guided by the Stakeholder Engagement Plan.

The following project activities will necessitate stakeholder engagement:

- Disclosure of the RAP Report
- Compensation of Project Affected Persons (PAPs)
- Grievance management at various levels
- Project implementation activities
- Monitoring and Evaluation

By adhering to the Stakeholder Engagement Plan, TWWDA aims to ensure transparent communication, meaningful participation, and effective management of stakeholder concerns throughout the project lifecycle.

4.2.2. Key Stakeholders Consulted

- Community members: Participated in stakeholder consultation meetings held at various venues, including Catholic Rosary Church Kutus, Kerugoya Chief's Camp, Effort Schools Stadium, and Roswam Hotel grounds.
- Local administration: Consulted as key informants to provide insights and facilitate coordination for project implementation.
- Kenya National Highway Authority (KeNHA): Engaged in key informant consultations to gather input and coordinate efforts related to the project.
- Kenya Rural Roads Authority (KeRRA): Consulted to gather insights and facilitate coordination for project implementation, particularly concerning road infrastructure.
- Water Service Providers (WSPs): Consulted to gather input and coordinate efforts related to water supply infrastructure.
- Environmental agencies: Engaged in key informant consultations to gather insights and coordinate efforts related to environmental considerations and regulations.
- County governments: Consulted as key informants to provide insights and facilitate coordination for project implementation at the local level.

The primary goals of the public participation meetings were to effectively communicate information regarding the proposed project to stakeholders, including details about project components and location. Additionally, these meetings aimed to facilitate discussions on project impacts and identify suitable enhancement and mitigation measures. Stakeholders had the opportunity to voice their concerns about the project, and responses were provided by TWWDA and the consultant team, as documented in Table 18. Detailed minutes from these meetings, along with a list of participants, have been included in the appendices of this report for reference.

Table 18: Stakeholders Engagement Schedule

DATES	VENUE	NO. OF PARTICIPANTS			CONCERNS RAISED	RESPONSES
		M	F	TOTAL		
10/4/2024	Western Hotel Maya	45	31	76	The participants wanted to know who is funding the project	AfDB is funding for the project as a loan to The Kenyan Government through the Ministry of Water, Irrigation and Sanitation.
					The participants wanted to know redress mechanisms to be followed if the PAPs were not compensated by the government and how people's rights would be upheld.	TWWDA has hired a consultant – Aqua green Enterprises Ltd to map out all the project-affected persons (PAP, s) along the water supply line. Therefore, they will ensure their recommendations are followed.
					Will AfDB come to monitor the project especially the issue of disbursement of funds?	Before and during project implementation AfDB will conduct its due diligence and monitor various aspects of the project
					How will contractor handle permanent structure?	The contractor will avoid permanent structures but if it's unavoidable the owner will be compensated.
					Will the affected persons be considered for free connection as a way of compensation	TWWDA role is to lay the Main pipeline then the residents apply for connections with KICOWASO.
12/4/2024	Kadongu Primary School	56	39	95	The participants wanted to know who will be compensated, whether the plot or landowner or businessperson.	Businesses are being compensated for business loss for 5 days. The structure will be compensated if only it's affected. The owner of the building is the one being compensated
					What will happen to some members who don't want their data taken	For those who will refuse completely for their data to be taken the matter will be referred to the GRM Committee chaired by the chief for Arbitration.

23/02/2024	Catholic Rosary Church Kutus	22	13	35	The participants wanted to know if there will be any compensation if the project leads to closure of business and loss of assets	The proponent was to prepare Resettlement Action Plan for all those affected
					The participants wanted the projects areas clarified well since some were not sure whether they were to be affected.	The surveyor KIRIWASCO explained to the participant the project areas and plans were available for further clarification.
					Some members expressed fear of losing business space.	The contractor will mitigate against some impacts like dust during construction.
					Air pollution during construction especially in town areas. Who was to be in charge of 'maintenance of the waterlines in case of damage	KICOWASCO will be in charge of repair and maintenance during operation phase
23/02/2024	Kerugoya Chief's Camp	30	10	40	Queries on some of the residents far away from the main sewer line who may not be connected to the sewer line and especially where the connection of their premises to the main sewer line involved pipeline traversing through private land.	The TWWDA representative responded that the aim of the Last Mile Connectivity Project was to establish secondary lines from the main sewer trunk to estates in such a way as to enable direct connections to the users. In situations where is far away from the secondary line, then KICOWASCO PLC will liaise with the customer and guide accordingly.

					<p>Mr. Abraham Mwai was concerned about the limited space on some of the roads reserves and wondered how in such situation the sewer line will be installed. He also expressed fears of water shortage during construction</p>	<p>It was clarified that with the help of the road Agencies, road demarcation will be done and in case there of encroachment of the road by land owners, then an amicable solution will be arrived at with the involvement of the local administration. During construction, the Contractor will ensure minimum interference with the existing water pipeline and will work closely with KICOWASCO PLC to promptly restore water supply</p>
					<p>Ms. Jane Gachoki enquired on where compensation related complaints will be channeled in case someone was dissatisfied with the compensation matters.</p>	<p>The participants were informed that grievance forms will be available at the chief's office or at KICOWASCO PLC, and members of the public would be free to fill the forms in case of any grievance. It was also clarified that frequent public Barraza's shall be conducted during project implementation period where such complaints will be addressed.</p>
					<p>Mr. Justus Mugo enquired whether there shall be compensation for structures erected along the road reserve</p>	<p>The participants were informed that compensation for livelihood losses will be done in accordance to AfDB guidelines.</p>
22/02/2024	Effort schools stadium	12	16	28	<p>The participants wanted the projects areas reviewed to cover other areas that has water challenges.</p>	<p>The proponent was to prepare Resettlement Action Plan for all those affected for proper compensation</p>

					<ul style="list-style-type: none"> Some members were concerned that for them to be connected to the project, several road crossings need to be established. 	<p>The surveyor KIRIWASCO PLC explained that major road crossings had been included in the design to connect the secondary line to the mainlines and that the users shall be connected to the secondary lines and therefore only a few road crossings will be required and not individual customer crossings.</p>
					<ul style="list-style-type: none"> Participants requested that employment of locals be prioritized during project Implementation. 	<p>KICOWASCO PLC will guide and will be involved at the point of customer connection.</p> <ul style="list-style-type: none"> The Contractor will recruit locals for employment but can source for skilled labour if not available locally.
22/02/2024	Roswa m Hotel grounds	17	24	41	<ul style="list-style-type: none"> The participants wanted to know the project areas coverage 	<p>The surveyor explained to the participant the project areas and noted that designs and plans were available for further clarification.</p>
					<ul style="list-style-type: none"> Interference with the existing social amenities systems in the area. Some members felt that sewer lines may affect their farms, fences etc. Members requested that charges be friendly 	<p>During construction, the Contractor will ensure minimum interference with the existing water pipeline and will work closely with KICOWASCO PLC to promptly restore water supply</p>



Figure 4: Public participation at Kandongu Mutithi line on 12-04-2024



Figure 5: Public meeting at the CDF office

4.2.3. Future Stakeholder Engagement Initiatives

The commitment to stakeholder engagement and public consultation remains unwavering throughout every stage of the project's progression. This commitment is underscored by the meticulous guidance provided within the Stakeholder Engagement Plan, which serves as a blueprint for fostering structured, well-informed, and inclusive interactions with stakeholders. Recognizing the dynamic nature of stakeholder needs and concerns, the following project milestones have been identified as pivotal junctures requiring continued engagement:

- **Disclosure of Resettlement Action Plan (RAP) Reports:** Transparency and clarity are paramount during the disclosure of RAP Reports. Stakeholders will be informed of pertinent project details, including potential impacts and mitigation measures outlined in the RAP. Feedback from stakeholders will be actively sought and incorporated into the decision-making process.
- **Compensation of Project Affected Persons (PAPs):** The fair and equitable compensation of PAPs is essential to mitigate adverse impacts and ensure their well-being. Stakeholder engagement will be instrumental in facilitating open dialogue and addressing any concerns related to compensation processes, ensuring that the needs and rights of PAPs are upheld.
- **Grievance Management at Various Levels:** Establishing effective mechanisms for grievance management is crucial to address concerns and resolve disputes in a timely and responsive manner. Continuous stakeholder engagement will enable the identification and resolution of grievances at various levels, fostering trust and accountability within the project framework.

- **Project Implementation Activities:** Engaging stakeholders throughout the project implementation phase ensures alignment with community needs and expectations. Collaboration with stakeholders will be integral to navigating challenges, optimizing project outcomes, and fostering local ownership and support.
- **Monitoring and Evaluation:** Regular monitoring and evaluation activities provide opportunities to assess project progress, identify emerging issues, and adapt strategies as needed. Stakeholder engagement will play a central role in this process, facilitating feedback loops and promoting accountability and transparency in project management.

By prioritizing sustained stakeholder engagement across these key activities, the project aims to foster meaningful partnerships, enhance project outcomes, and ultimately contribute to the overall success and sustainability of the endeavour.

4.3. Grievance Redress Mechanism: Ensuring Fairness and Accountability

The Grievance Redress Mechanism (GRM) serves as a vital instrument for addressing and resolving disputes that may arise from project activities, providing a structured framework for receiving, processing, and resolving grievances from affected individuals or groups. By proactively addressing grievances, the GRM aims to prevent potential disruptions to project implementation that could result from costly and time-consuming legal actions. This section outlines the procedures and principles governing the GRM during the implementation phase of the RAP.

4.3.1. Objectives of the Grievance Redress Mechanism

The GRM is designed to achieve the following objectives:

- Provide operational structures for receiving and addressing grievances arising from project activities, ensuring that affected stakeholders have a legitimate avenue for voicing their concerns.
- Sensitize stakeholders about the existing channels and processes available for registering and resolving grievances, promoting transparency and accessibility.
- Mitigate the negative impacts of grievances on project interventions, fostering a collaborative approach to conflict resolution.
- Foster positive relations between project implementers, stakeholders, and beneficiaries, promoting trust and cooperation throughout the project lifecycle.

4.3.2. Principles of the Grievance Redress Mechanism

The effectiveness of the GRM is underpinned by the following principles:

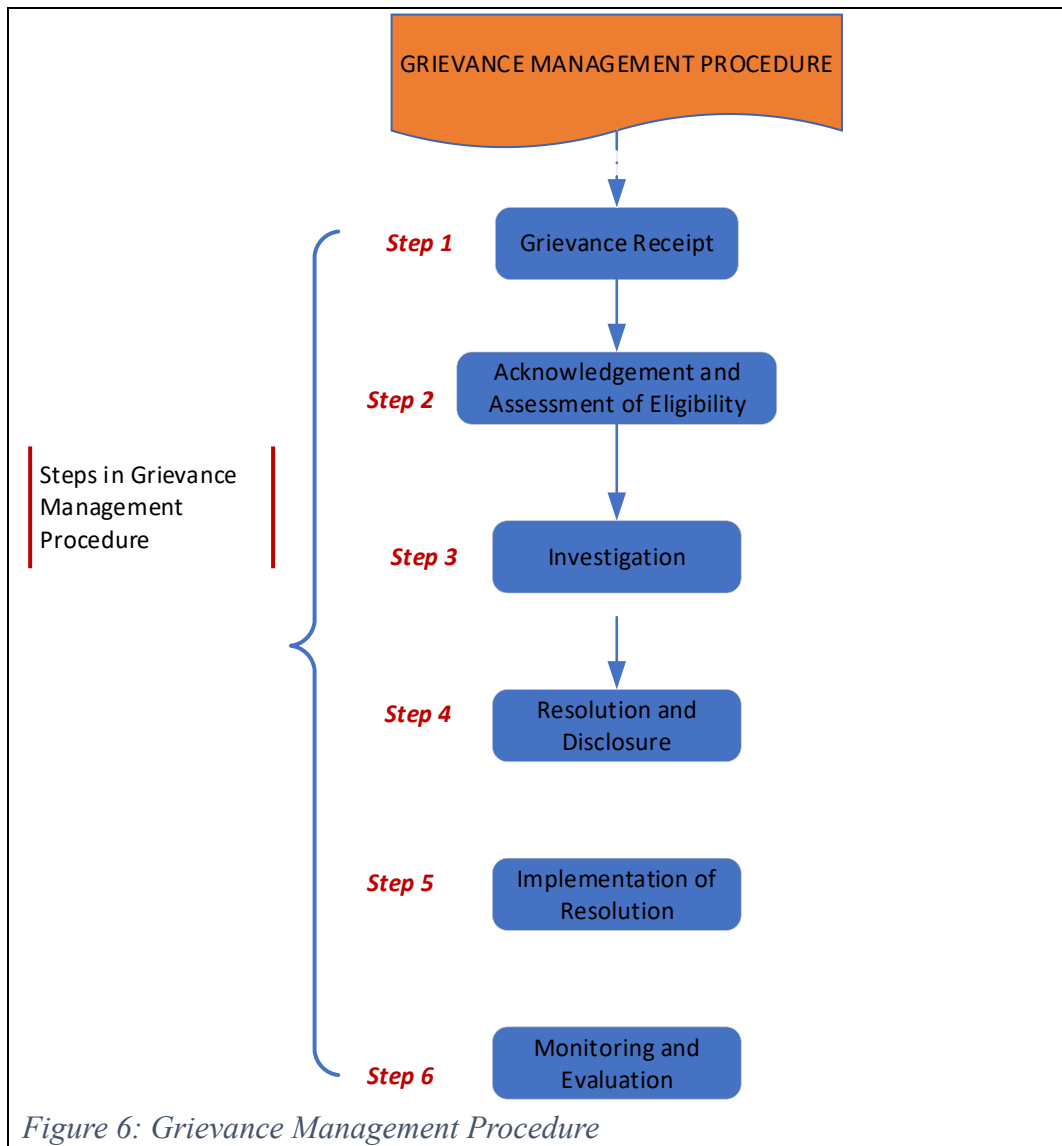
- **Accessibility:** The GRM must be accessible to all stakeholders, ensuring that individuals or groups can easily raise grievances at any time.
- **Predictability:** Clear and time-bound procedures are established for each stage of the GRM, with specified timeframes for responses to ensure timely resolution.

- **Fairness:** Procedures are perceived as unbiased, providing equal access to information and opportunities for meaningful public participation in grievance resolution.
- **Rights Compatibility:** The outcomes of the GRM align with both international standards and national regulations, ensuring that access to other redress mechanisms is not restricted.
- **Transparency and Accountability:** The GRM process is conducted openly and transparently, serving the public interest and holding project implementers accountable for their actions.
- **Cultural Sensitivity:** Solutions and procedures are culturally appropriate, respecting diverse perspectives on fairness, justice, and conflict resolution.
- **Feedback Mechanism:** The GRM serves as a feedback mechanism, allowing stakeholders to provide input and suggestions to improve project outcomes and address systemic issues.

By adhering to these principles, the GRM endeavours to uphold fairness, accountability, and transparency in addressing grievances, ultimately contributing to the success and sustainability of the project.

4.3.3. The Grievance Redress Mechanism Structure

The GRM structure presents procedures and timeframes for grievance redress at various levels. All grievances reported shall be managed using the procedure illustrated in figure 6 below.



A three-level redress mechanism targeting all stakeholders involved in project implementation will be adopted.

1. First Level of Redress: Community Level

The first level of grievance redress will be at the community level mainly targeting the local beneficiary communities and the project affected persons (PAPs). For every community at location level, a local grievance management committee shall be formed and trained to handle community grievances/ complaints emanating from the implementation of the proposed water supply and sanitation projects. The committee shall comprise of five members who shall include the local chief as the chair. The other members shall be nominated by the project beneficiaries ensuring gender balance and a representation of the vulnerable where applicable. The committee shall be

trained by the Social Safeguard Officer on conflict resolution, group dynamics, and project sustainability among other areas that shall be deemed necessary.

Step 1: Receipt of grievances

The mode of receipt of the complaints/ grievances may either be in writing, reported verbally, over the phone or emails. Once the local grievance management committee receives a grievance, the committee secretary shall be mandated to register the grievance. The received grievance and relevant information related to the grievance shall be recorded on a standardized grievance register form attached in the Appendix 4.

Step 2: Acknowledgement, assessment for eligibility and recording

The committee shall then determine the eligibility of the grievance received and if eligible, they shall notify the complainant and acknowledge receipt within three (3) days of receiving it. If not eligible, the complainant shall be informed of the reasons and advised on other existing GRMs to address his grievance. The complainant shall also be informed of the next steps and the timeframes including any further information/ documentation that maybe required to aid in investigation. The timeframes should not be later than twenty-one (21) days after the grievance is received.

Step 3: Investigation

The committee shall then set a day when all members are available and begin the investigation by assessing the seriousness/ severity of the grievance and classifying it either as high, medium, or low based on its impact to the complainant and the project. The assessment may necessitate the need for additional data collection through field visits to the sites, interviews with the relevant groups and follow up meetings with the affected groups to validate the information provided by the complainant. Minutes of such meetings shall be recorded and attached to the grievance report.

Step 4: Grievance Resolution and Disclosure

Depending on the findings and severity of the grievance, a resolution shall be decided immediately and the deliberations recorded in the grievance resolution form provided in the SEP. However, if the grievance cannot be resolved by the local grievance management committee it shall be escalated to the county level and to the national level if not resolved at the county level. In cases where the complainant shall not be satisfied with the resolution given by the concerned committee, they shall be advised to report to the next level of redress. Also, in cases where the project GRM levels are unable to resolve the grievance, the complainant will be referred to the existing legal and judicial mechanisms in Kenya. This process should take a maximum of twenty-one (21) days from the time the parties are informed of the acceptance of the grievance.

Step 5: Implementation of the Resolution Mechanism

Once a resolution has been determined and the same communicated to the affected parties, an agreement shall be drawn outlining the following among other strategies for settlement of the grievance:

- Requesting the relevant agencies/ contractors responsible for the grievance to take appropriate measures to address the root causes of the grievance
- Determining reasonable compensation for loss from the accused parties
- Signing agreements between the accused persons and the project for solutions mutually agreed upon

Step 6: Grievance monitoring

The local grievance management committee shall then monitor the implementation of the grievance resolution mechanisms given and assess any further impacts of the project related grievances. They shall also monitor to ensure that the redress is granted to complainant in a timely and efficient manner and give regular feedback to the complainants about the progress.

2. County Level – Second Level of Redress

The second level of redress will be at the county level where a county grievance management committee shall be established and chaired by a nominee of the proponent, TWWDA. The membership of the committee shall entail a social safeguard specialist, community liaison officers from the WSPs and the chairs of the various local grievance management committees in the County. The committee will also be trained in handling project grievances.

Just like the case with the first level of redress, once a complaint has been registered, the county grievance management committee will set a day to investigate the same and offer an action/ solution. If possible, a meeting will be held between the complainants and the concerned project officer to find a solution. Similarly, like in the first level of redress, a grievance resolution form shall be filled providing details of how the grievance was investigated and the recommended action provided. The resolution period shall be expected to take a maximum of fourteen (14) working days after which the complainant shall be notified through a grievance disclosure form. Grievances that shall not be resolved at this level shall be referred to the next level.

The county grievance management committees shall be obligated to submit a quarterly report using the standardized format provided in Appendix 4.

3. Third Level of Redress: National Level

At the National Level, a Grievance Handling Committee shall be appointed and equally trained to handle grievances. The committee shall be chaired by a nominee at the Ministry of Water, Sanitation and Irrigation, other membership shall include the project co-ordinators at TWWDA, the chairs of the county grievance management committees and a representation from TWWDA legal department. The ministry shall appoint a grievance handling officer who shall foresee

operations of the committee. As in other levels, the reporting tools for other levels shall equally apply at national level reporting.

The resolution period at national level shall be expected to take a maximum of twenty (21) working days and the concerned shall be notified through the GRM/003 form. Should the grievance not be solved within this period, the complainant shall be advised to seek recourse through the legal and judicial mechanisms in Kenya discussed below.

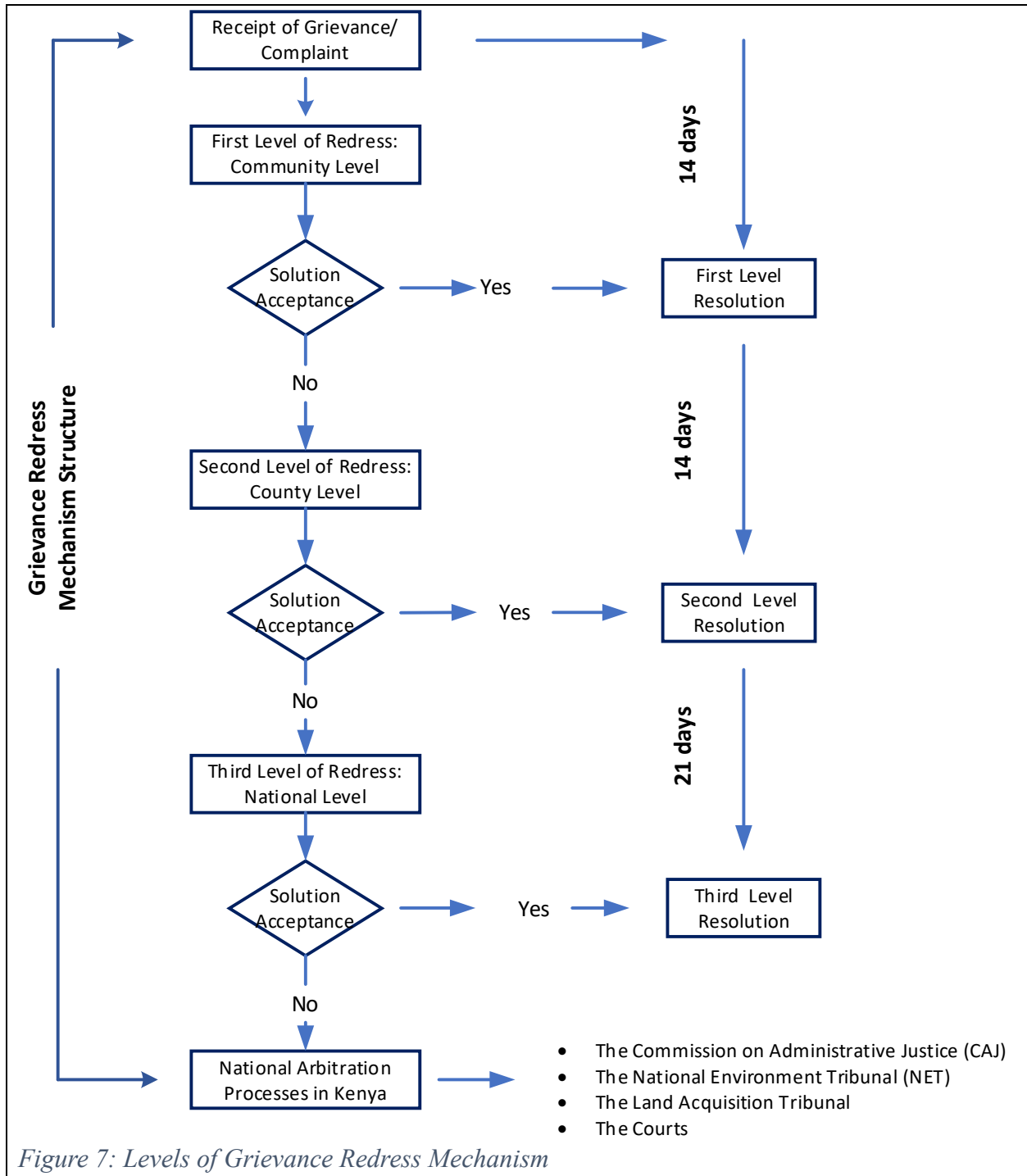
TWWDA shall maintain databases and reports on all grievances and regularly conduct an assessment of the overall effectiveness and the impact of the GRM. The results of the assessment shall be used to improve the performance of the GRM and provide valuable feedback to project management.

4. National Arbitration Processes in Kenya

In the event that the complainants are dissatisfied with the outcome of grievance resolution, they shall be advised to seek recourse through the following national arbitration processes:

- i. The Commission on Administrative Justice (CAJ)
- ii. The National Environment Tribunal (NET)
- iii. The Land Acquisition Tribunal
- iv. The Courts

Figure 7 presents a summary of the levels of grievance redress mechanism



The GRM reporting tools are provided in Appendix 4.

4.3.4. Safeguards Grievances Redress

Safeguard grievances will cut across PAPs as well as project workers and the surrounding communities. The project shall therefore proactively address the potential for increased Gender-

Based Violence (GBV), Violence against Children (VAC), and Sexual Exploitation, Abuse, and Harassment (SEAH) risks through preventative measures and community engagement through the following approaches:

a) Contractor to Develop a Policy Document on Social Safeguard Grievances

The contractor shall be required to prepare an explicit stand-alone policy document on social safeguard grievances integrating grievances related to GBV, VAC and SEAH. The policy document shall specify the protocols for addressing such grievances including separate confidential reporting channels, and strict measures for safeguarding the privacy and safety of victims. The contractor shall report all social safeguard grievances to the project Social Safeguard Specialist and consider sensitivity and confidentiality of such grievances.

b) Community Awareness and Sensitization

- Communication Campaign: Develop a targeted campaign to inform PAPs, project workers and surrounding communities about:
 - i. GBV, VAC, SEAH grievances
 - ii. How to safely and confidentially report incidents
 - iii. Zero-tolerance policy for any form of GBV, VAC, or SEAH
- Contractor and Worker Training: Mandatory training modules for all project personnel, including contractors, on prevention, identification, and appropriate response to GBV, VAC, and SEAH incidents.

c) Collaboration and Referral Pathways

- Partnership with Specialized Organizations: Establish partnerships with social service providers with expertise in addressing GBV, VAC, and SEAH. These organizations can play a crucial role in:
 - i. Providing support services and counselling to survivors
 - ii. Capacity building and training for project personnel
 - iii. Assisting with investigations and case management where necessary
- Clear Referral System: Develop clear protocols and referral mechanisms for handling reported cases. This includes establishing lines of communication between the project team and specialized support organizations.

d) Incident Reporting and Response

- **Designated Responsibility:** Appoint a dedicated point person from the project team, ideally a Social Safeguards Specialist, to oversee reporting, investigation, and response related to GBV, VAC, and SEAH incidents.
 - **Reporting Channels:** In addition to the general GRM, provide multiple reporting options (verbal, written, anonymous hotlines) accommodating the needs and safety concerns of potential survivors.
 - **Timely and Thorough Investigations:** Establish procedures for a prompt, sensitive, and thorough investigation of grievances.
 - **Survivor-Cantered Response:** Prioritize the well-being, safety, and expressed needs of survivors in all response actions. Ensure access to medical, psychological, and legal support as needed.
 - **Accountability and Corrective Actions:** Implement clear disciplinary measures for any project personnel found to have committed GBV, VAC, or SEAH violations. Take appropriate actions to prevent recurrence.
- e) Monitoring, Evaluation, and Learning:**
- **Incorporate into Existing Procedures:** Include GBV, VAC, and SEAH reporting and response metrics in the overall GRM's Monitoring and Evaluation (M&E) procedures.
 - **Qualitative Feedback:** Collect qualitative data through interviews and focus groups to capture the experiences of survivors and the effectiveness of the grievance and response mechanisms.
 - **Adaptive Management:** Use M&E findings to continuously improve policies, procedures, and preventative measures related to social safeguards.

4.3.5. GRM and Stakeholder Engagement Budget

Grievance redress at the project level encompasses a broad scope of issues within and outside RAP interventions. To effectively address the same, TWWDA has developed a programme-wide Stakeholder Engagement Plan (SEP) to help the Agency effectively address the broad scope of grievances anticipated. Among the activities covered under the SEP are the recruitment of a programme social safeguard specialist, establishment of GRM committees, common training for grievance redress committees, continuous stakeholder engagements intended to reduce project grievances, and grievance monitoring across projects. The SEP also provides an overall budget for addressing GRM across the projects. To avoid duplications therefore, the RAP herein adopts the GRM and Stakeholder Engagement budget provided under the SEP.

5. SOCIO-ECONOMIC BASELINE

5.1.Introduction

The information included within this section is from the socioeconomic survey targeting the Project Affected Households (PAHs). The Study Area has been defined to incorporate all the settlements totally or partially within proposed project system route. The socioeconomic conditions of the PAHs focuses on the key socioeconomic development parameters such as demography, literacy, income, employment, asset ownership (including land) among others. The data was collected between February and March 2024.

5.2.Number of PAPs Identified

A collective count of one hundred and sixty six (166) Project Affected Persons (PAPs) were identified throughout the course of the RAP study. Among these were individuals operating businesses along the road reserves slated for the installation of water distribution lines. Furthermore, certain structures belonging to these PAPs were situated along the designated route of the pipeline, consequently facing potential impact.

5.3.Sex and Age distribution

Overall, one hundred and sixty six (166) PAPs were identified, male were 45.65% while 54.35% of the PAPs were females. The Table 19 below shows the sex distribution of the PAPs.

Table 19: Sex distribution

Gender	Total Number of PAPs	Percentage
Male	74	44.58
Female	92	55.42
Total	166	100

The age distribution of the respondents was as follows: 18-35 years (37.35%), 36-60 years (45.78%), and over 60 years (16.87%).

This data is presented in Table 20 below.

Table 20: Distribution of PAPs by age

Age Group	No. of PAPs	Percentage
18-35 yrs.	62	37.35
36-60	76	45.78
Above 60 yrs.	28	16.87
Total	166	100.00

5.4.Education and Literacy Levels

From the data collected, 2.4% have never attended school, 2.9% have been through pre-primary education, 20.3% completed their primary education, 37.2% went to secondary school, 25.1% of the respondents have been to college, and 12.1% have been to university.

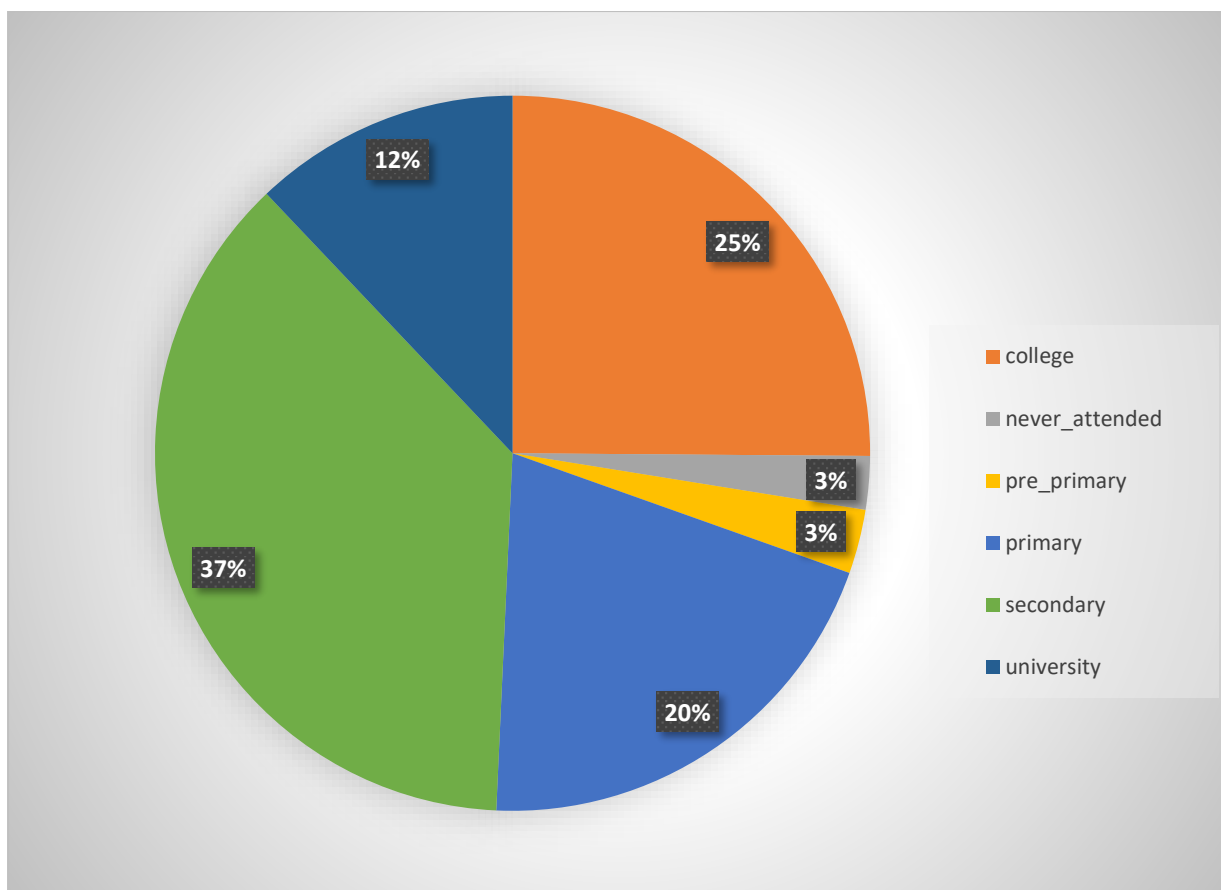


Figure 8: The PAPs Literacy levels

5.5. Economic and Livelihood Activities

According to the survey, agriculture/farming accounted for 53.01 per cent of the total household economic activity (Table 21). Business accounted for 33 per cent of the economic activities. Other income sources included casual employment and formal employment (5.9% and 3.7 %). The respondents represented a diverse range of agricultural activities such as livestock, poultry, and crops. Most of the respondents has more than one source of income, with crop farming being the main source of income. In order to effectively determine the vulnerability of the population under study, the participants were asked to state their sources of income. It is important to note that most vulnerable groups depend on only one source of income. It is important to note that, individuals who depend on casual work and livestock keeping would need adequate measures for relocation in order to reduce the impacts of the project on the community.

Table 21: Sources of the respondents' income

Main source of income	Frequency	Percent
Farming	88	53.01
Casual work	13	7.83
Trading/business	55	33.13
Formal employment	8	4.82
Others	2	1.20
Total	166	100

5.6. Levels of Income

Table 22 presents the household income levels of the PAPs. 12% of the respondents reported their household incomes were below KES 10,000 per month. Most of the PAPs (32.5%) has an income of 10001 to 20000 per month, followed by 19.42% with an income range of 30001 to 40000.

Table 22: Levels of income by PAPs

Household income ranges	Frequency	Percentage
Below 10,000	10	12.14
10,001 – 20,000	53	32.52
20,001 – 30,000	30	16.50
30,001 – 40,000	33	19.42
40,001 – 50,000	31	15.53
Above 50,000	9	3.88
Total	166	100

5.7.Housing characteristics

The data collected shows that persons affected by the project dwell in the following types of houses, permanent 61.8%, semi-permanent 33.3%, and temporary 4.8%. The materials used in construction are stones and cement 74.4%, wood poles 12.6% other 6.3% cement blocks 2.9%, stones and mud 1.4%, bricks 1.4% wood and mud 0.5%, wood poles, stones, and cement 0.5%. Of other, the frequency is Iron sheets 2, Metal 4, Metal sheets 1, Metal wall 1, Metallic 1, Pavement 1, Timber 1, Umbrella shed 1. The roofing material used by the PAPs are Iron sheet 93.2%, no roof 2.4%, Umbrella/umbrella shed 1.9% polythene 1.4%, iron sheet poles 0.5%, poles 0.5%.

5.8.Health and Vulnerability

For this study, various factors were considered for vulnerability mapping in order to ensure that a comprehensive report is prepared. The study was able to establish that 5 women were expectant as at the time of the survey and were at various stages of their pregnancy. This data is vital as planning can be done in order to ensure that resettlement considers special facilitation for such populations in case of need for relocation. 12 PAPs were mapped as disabled ranging from crippled, lame, deaf and mentally challenged. Also, age was considered, the study found 7 elderly persons-70 years above. However, 2 PAPs were both elderly and PWDs. In total, 26 PAPs were mapped as vulnerable.

5.9.Location of health facilities

Majority (91.3%) of the respondents take less than 40 minutes to walk the nearest health facilities. This is indicative that most health facilities are within a radius of less than 5km from the PAPs.

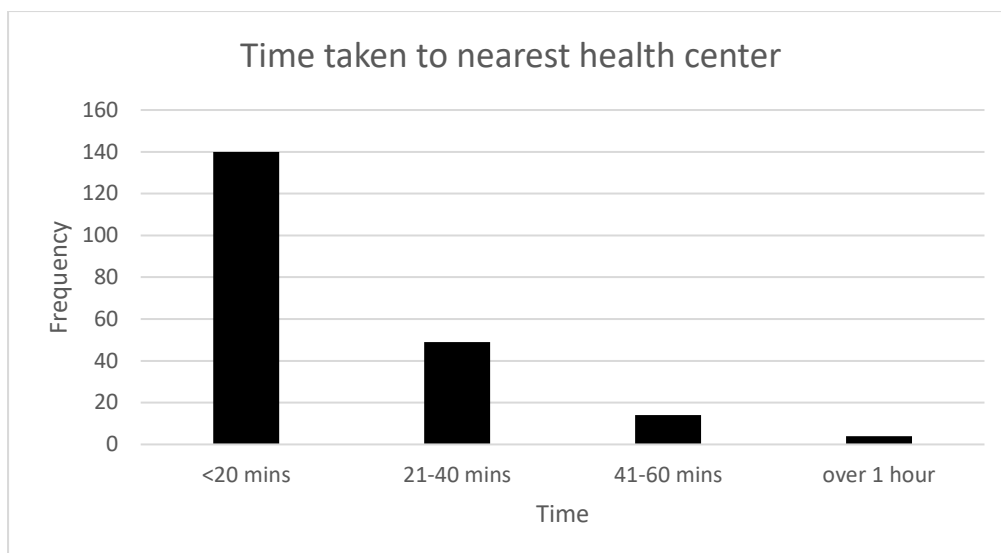


Figure 9: Time Taken to nearest health Facilities

5.10. Disability

91.8% of the households do not have people living with disabilities. For the rest of the population, crippled (2.9%), deaf 0.5%, lame (1.9%), mental illness 1.9%, and other illnesses-dumb (1%).

Table 23 PLWD in PAP households

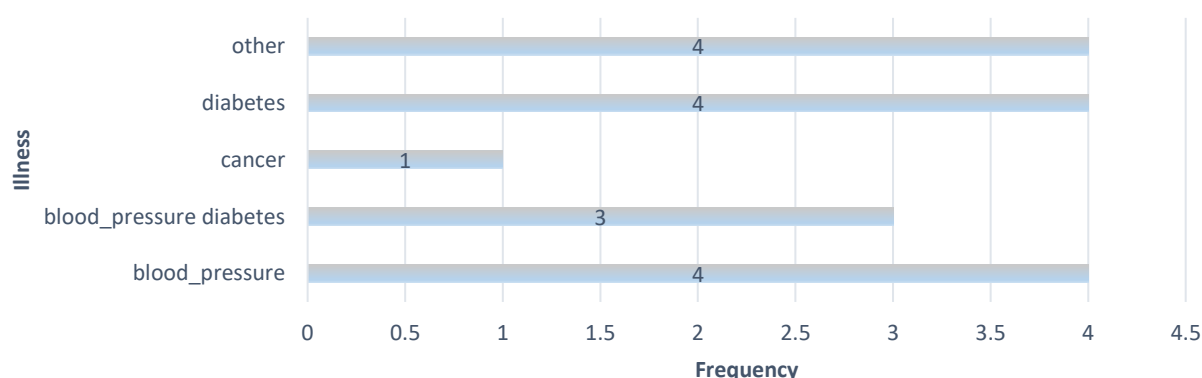
Disability Status	Frequency	Percent
Crippled	6	35.29
Deaf	1	5.88
Lame	4	23.53
Mental illness	4	23.53
Total	15	100.00

5.11. Chronic Illness

From the data, 16 members of households are chronically ill. 25% have blood pressure, 25% have diabetes, 19% have both diabetes and blood pressure, 6% have cancer and the rest have other diseases. For other diseases, they were identified as Asthma 25%, cerebral palsy 25%, liver problems 25%, and mental illness 25%.

In the last four months, 12.1% of the members of households has fallen ill from either as presented, chronic illness 32.0%, other 32.0%, flu cough 20.0%, malaria, flu/cough, cholera 4.0%, malaria and headaches 4.0%, malaria, flu/cough, headaches 4.0%, malaria, stomach disorders 4.0%. For other, the diseases identified were asthma, blood pressure, breast disease, depression, diabetes, liver, and stroke.

Chronic illness



5.12. Water facilities

The sources of water used in the area are, piped water system 68.48%, borehole 11.96%, river stream 12.50%, borehole 11.96%, project water 1.63%, shallow wells 1.09%, dam 0.54%, and rainfall harvesting 0.54%.

Table 24 Sources of Water for consumption

Sources of water	Frequency	Percent
Borehole	23	13.86
Piped water	104	62.65
Dam	1	0.53
Other water projects	4	2.41
Rainfall harvesting	1	0.53
River stream	24	14.46
Shallow wells	3	1.81
Total	166	100.00

5.13. Water treatment

The PAPs uses varied water treatment methods as follows.

Table 25: Water Treatment

Water treatment method	Frequency	Percent
Boiling	125	75.30
Boiling, filtering and use of chemicals	7	4.22
Boiling and use of chemicals	3	1.81
Decanting	2	1.2
Filtering	3	1.63
Filtering and use of chemicals	2	1.2
Others	1	0.60
Use of chemicals	22	13.25
Use of chemicals and boiling	1	0.60
Total	166	100

It was also noted that 1 PAP does not treat water for consumption at home.

5.14. Sanitation Facilities

Majority of the PAPs have toilet facilities within their compounds. However, a pap who does not have a toilet facility makes use of the neighbor's toilet. The nature of toilets are included in table 26 below.

Table 26: The toilet types

Types	Frequency	% by toilet types
None	1	0.60
simple latrine	71	42.77
flush toilet	62	37.35
VIP latrine	31	18.67
Total	166	100.0

6. PROJECT DISPLACEMENT IMPACTS AND MITIGATION MEASURES

6.1.Introduction

The execution of the proposed Kerugoya-Kutus towns Sewerline Last Mile Connectivity (LMC) Project is expected to produce both positive and negative outcomes, as detailed in the Environmental and Social Impact Assessment (ESIA) report. This Resettlement Action Plan (RAP) specifically focuses on the impacts on livelihoods, particularly in areas where commercial enterprises are located. The ESIA report has outlined strategies to enhance positive effects and mitigate adverse ones.

During the RAP assessment, 166 Project Affected Persons (PAPs) were identified, comprising 92 females and 74 males. This classification helps tailor targeted interventions and support mechanisms to address the diverse needs and concerns of the affected individuals, ensuring equitable treatment and assistance throughout the project implementation process.

6.2.The Potential Positive Impacts

The project's positive impacts are multifaceted, encompassing various aspects of community well-being and development. These identified benefits include:

- Enhanced Hygiene Standards: The project will improve hygiene practices in Kerugoya and Kutus, promoting better health outcomes and reducing waterborne diseases.
- Cost Savings for Communities: By eliminating the need for expensive exhausters and makeshift solutions, the community will save significantly on sanitation maintenance costs.
- Access to Safe Drinking Water: Households will gain access to safe and reliable drinking water, reducing the risk of waterborne illnesses and improving overall health.
- Improved Living Conditions: The provision of safe water and sanitation facilities will enhance living conditions, fostering a healthier and more comfortable environment for residents.
- Enhanced Access to Water and Sanitation: Residents will benefit from increased access to piped water and improved sanitation infrastructure, enhancing their quality of life and overall well-being.
- Mitigation of Water Conflicts: The project will alleviate tensions and conflicts related to water scarcity by ensuring equitable access to water resources for all community members.
- Creation of Employment Opportunities: The project will generate employment opportunities, both directly through project activities and indirectly through associated economic development.
- Elevated Living Standards and Incomes: Improved access to water and sanitation services will raise living standards and household incomes, empowering communities economically.
- Stimulus for Local Economies: The project will create a market for construction materials and services, stimulating economic activity and fostering entrepreneurship within the local economy.
- Increased Financial Circulation: The injection of funds into the local economy, along with increased economic activity, will boost the money supply, further supporting local businesses and livelihoods.

- Creation of Wealth and Employment: By facilitating economic growth and development, the project will contribute to wealth creation and employment opportunities, supporting long-term prosperity for the community.

6.3. Identification of assets affected/Negative Impacts

The potential assets to be affected, including land, business, structures, crops, trees, and graves. There are 219 assets in total to be affected. Most of the PAPs owns more than one asset on the project ROW. Most PAPs had more than one asset affected, therefore, the total numbers of PAPs compared to assets vary. The most affected property is the crops followed by trees and structures respectively.

Table 27: Potential Assets to be affected

Assets Affected	No. of PAPs	No./quantity of Assets	Percentage
Business	71	92	42.77
Structure	58	73	34.94
Crops	24	0.31 ha	14.46
Trees	12	353	7.23
Grand Total	166		100.00

6.3.1. Impacts on PAPs Livelihoods

Among the affected assets, 71 PAPs with 92 businesses are likely to experience a temporary disturbance. These businesses are the sources of livelihoods, during the construction phase of the project, their operations will be interfered with. In response, some may suspend their operations due to challenges in accessing their establishments, disturbances, or due to an unconducive environment during this period. Compensation for the loss of livelihood will be extended to business proprietors situated along the designated wayleave. The project will disrupt the businesses for 5 days, the project implementation will be done to ensure that only a maximum of 5 days will be taken at each and every point. Figure 10 and 11 provide sample of the identified businesses operating along the wayleave that qualify for compensation due to the likely disruption to be caused to their operations.



Figure 10: Mobile business on the wayleave



Figure 11: A metal workshop station

6.3.2. Impact on Structures

The study found 73 structures along the wayleave owned by 58 PAPs. Some of the structures are permanent while others are temporary. The structures include makeshift stalls, gates, fences, buildings, houses, pavements, sheds, among others. 73 structures (Table 28) were found on the wayleave which would necessitate demolition. The structure will be compensated at a fair market value rate. Adequate notice to vacate shall be issued to the owner.

Table 28: Structures to be affected

Structures Affected	No. of PAPs	No. of structures
Business stall	20	24
Shed	11	12
Workshop	2	2
Pavements and corridors	2	2
Latrine	2	2
Fence	14	24
Business premise	7	7
Total	58	73

6.3.3. Impact on Crops

The crops to be affected include food crops, pastures, and cash crops. 24 PAPs will be affected and their crops covers 0.34 hectares of land in total.

Table 29: Crops to be affected

Crops	No. of PAPs Affected	Quantity (ha)
Food crops	12	0.08
Pasture	8	0.19
Cash crops	4	0.07
	24	0.34

6.3.4. Impacts on Trees

The total number of 353 trees will be affected. The table 30 below shows the number of type's trees to be affected by the project with the respective PAPs. The trees to be affected are along the wayleave.

Table 30: Trees to be affected

Types of trees	No. of PAPs	No. of trees
Indigenous	6	213
Exotic	4	120
Fruit	2	22
Total	12	353

7. VULNERABLE GROUPS

7.1.Introduction

Vulnerable persons are often not able to make their voice heard effectively; they are often physically weaker and may need special help in the relocation/disturbance phase of the project. To ensure the effective incorporation of vulnerable persons, including those identified in the study (such as a child-headed household, individuals with disabilities, expectant mothers, and elderly above 70 years), into the Resettlement Action Plan (RAP).

7.2.Project Vulnerable Groups

Table 31: Vulnerable Groups Identified

Vulnerable Group	Number of PAPs	Discussion
Elderly (Above 70)	7	The elderly may face mobility issues, health complications, and limited capacity to adapt to changes. Special support is needed to ensure their well-being during and after resettlement.
Persons with Disabilities (PWDs)	12	Persons with disabilities often encounter barriers in accessing services and facilities. Adaptations and additional resources are necessary to accommodate their needs and ensure their inclusion in all aspects of the project.
Expectant Mothers	5	Expectant mothers have specific health and safety needs that must be addressed. Ensuring access to medical care and appropriate living conditions is crucial for their well-being and that of their unborn children.
Total	23	

7.3.Mitigation Measures

The following measures shall be implemented:

- Consultation and Participation- The proponent will provide accessible channels for these groups to voice their concerns, preferences, and needs during consultations. Although the data has been captured, more engagements will be carried out through the process of resettlement.
- Specialized Assistance- Physical assistance and special accommodations during the relocation phase, such as transportation support and accessible housing options will be provided where a vulnerable PAP has been affected.
- Communication and Information sharing- Information will be provided to the public in accessible formats and languages to ensure understanding and informed decision-making.
- Social Support and Integration- The project will not interfere with any community support networks that aid the vulnerable groups identified.
- Provide an additional 50% of the asset value to each vulnerable individual's valued property/asset to assist with any immediate needs or expenses arising from the project's impact.

- To incorporate these vulnerable groups effectively into the resettlement action plan, it's crucial to develop targeted measures that address their specific needs and ensure their participation throughout the process.

8. ELIGIBILITY AND ENTITLEMENTS

8.1.Introduction

The foundation for determining eligibility criteria for project-affected persons (PAPs) rests upon the legal context, socio-economic baseline survey, and assessment of project displacement impacts. These criteria dictate the compensation options available to PAPs. This chapter delineates the individuals eligible for compensation and assistance based on their anticipated losses, detailing the specific types of compensation and aid they are entitled to receive for each category of loss. Preparation of the RAP has taken into consideration all the relevant laws and by-laws in Kenya and is consistent with safeguard policies of the International Financial Institutions such as African Development Bank (AfDB) and the World Bank.

8.2.Cut-Off Date

According to AfDB Involuntary Resettlement Policy, Cut-off date is the completion date of the census of project-displaced persons. A cut-off date is normally established by the borrower government procedures that establishes the eligibility for receiving compensation and resettlement assistance by the project displaced persons. Persons (encroachers) entering and/or occupying land in the project area after this date and not included in the inventory of PAPs will not be considered eligible for compensation or resettlement assistance. Similarly, fixed assets such as structures, crops/tress established after the cut-off date will not be compensated. Notification of the cut-off date was carried out by issuing letters to the administrative authorities and through public consultation forums with PAPs.

The notice of the cut-off date was posted at appropriate locations within the footprint of the project. In accordance with the above good practices and the community engagement plan this notice must be published informing communities and PAPs of the cut-off date for compensation eligibility. Establishing this cut-off date is essential in the process, as new inhabitants coming to the project affected areas after the cut-off date will not be considered for compensation. The eligibility cut-off date should set immediately following the socio-economic survey (which is contemporaneous with valuation of assets). Therefore, the cut-off date for this RAP was on 31st March 2024.

8.3.Criteria for Eligibility

Individuals or entities whose assets or rights are impacted by economic or physical displacement due to the Project are eligible for compensation and assistance, referred to as 'entitlements'. Eligible Project Affected Persons (PAPs) were identified through comprehensive census and socio-economic surveys conducted concurrently to ensure alignment with the established cut-off date, marking the completion of these surveys.

The significance of the cut-off date lies in its implication that individuals or entities beginning to occupy or utilize the Project area after this date are ineligible for compensation or resettlement assistance. Similarly, assets such as built structures, crops, and trees established post-cut-off date are not subject to compensation. However, individuals not covered in the surveys but asserting eligibility for compensation must furnish evidence of asset ownership pre-dating the cut-off date, a consideration integrated within the budget's 20% contingency.

In accordance with banking standards and national laws, the following categories of landholders among PAPs qualify for compensation:

1. Displaced persons holding formal legal rights to land and/or occupied assets, including those with properties formally registered in cadastral land registers.
2. Individuals lacking formal legal land rights but possessing claims recognized or recognisable under national law, encompassing customary ownership or occupancy rights. This includes persons who, with approval or knowledge of landholders, have built structures or cultivated crops on others' land through formal or informal agreements.
3. Displaced persons lacking recognizable legal rights or claims to occupied land/assets, yet having constructed buildings or cultivated crops without approval or knowledge of landowners/custodians, are eligible for compensation for their owned assets.
4. Encroachers into road reserves are ineligible for land loss compensation due to illegal occupation, but are entitled to compensation for owned assets such as built structures, crops, and trees.

8.3.1. Land Compensation

The predominant land tenure system being private ownership, eligible PAPs for land compensation comprise:

1. Individuals with formal legal land rights, including those holding freehold title deeds.
2. Persons occupying or using land owned by others for less than six years, with approval or knowledge of the landowner, lacking legal land rights or a recognized tenure system.
3. Squatters without recognized legal rights or claims to land or assets they occupy, without approval or knowledge of landowners, in areas without a recognized tenure system.
4. Individuals lacking recognizable legal rights or claims to land/assets they occupy, yet holding registered leases and having built structures or cultivated crops with approval or knowledge of landowners through formal or informal agreements.

However, this Resettlement Action Plan (RAP) references land compensation, the project does not trigger the acquisition of any private land. The interventions under the Kerugoya-Kutus towns swerline Last Mile Connectivity (LMC) Project will occur within the existing road reserve. Consequently, the Project Affected Persons (PAPs) are being compensated for affected structures, businesses, crops, trees, and other non-land assets. A comprehensive review of the report and the asset register confirms that no private land acquisition is indicated. This approach ensures that the impacts are managed within the scope of the project area, focusing on the right of way and avoiding the complexities associated with private land compensation. The compensation strategy is designed to minimize disruptions

and provide adequate support to those affected by the project activities within the designated road reserve.

8.3.2. Livelihood Loss

Project Affected Persons (PAPs), either permanently or temporarily displaced, will receive compensation for livelihood loss during the project's construction phase. For businesses operating within the affected area, compensation will be calculated based on a proportional assessment of their monthly sales. Specifically, PAPs will be compensated for five days of lost income, which will be determined by evaluating their average monthly sales and translating this figure into a daily income rate. This approach ensures that the compensation is fair and reflective of the actual economic impact experienced by the PAPs due to the temporary disruption caused by the construction activities.

The calculation for this compensation involves a detailed assessment of each affected business's monthly sales records. By dividing the total monthly sales by the number of operational days in a month, an average daily income is established. The resultant daily income figure is then multiplied by five to provide a lump sum that approximates the financial impact of a five-day business disruption. This method allows for a standardized yet flexible approach to compensating livelihood losses, ensuring that each PAP receives an amount that accurately reflects their economic reality. This compensation mechanism is designed to provide immediate financial relief, thereby helping PAPs to sustain their livelihood during the construction period and facilitating a smoother transition back to normal business operations post-project.

8.3.3. Compensation for Displaced Persons

The Project anticipates only one permanent displacement of a dwelling house, it acknowledges that temporary displacement may occur, affecting businesses along the construction route. To address these impacts, comprehensive compensation measures will be implemented to ensure that both permanently and temporarily displaced Project Affected Persons (PAPs) receive adequate support and restitution. The one PAP facing permanent displacement will be entitled to full compensation for their lost assets, building, as per the established guidelines.

8.3.4. Compensation for Structures

Various categories are eligible for compensation, including owners of affected buildings, institutions, communities, tenants, informal occupiers, and encroachers into road reserves, for structures such as dwellings, agricultural buildings, public facilities, and business structures.

8.3.5. Compensation for Crops and Trees

Compensation applies to owners of affected perennial and seasonal agricultural crops, as well as trees within the affected areas, regardless of whether they are on their own land or on others' land.

8.4. Entitlement Matrix

The entitlement matrix outlined in Table 32 below defines categories of affected people, type of loss associated with the project and types of compensation and/or assistance to which each category shall be entitled to.

Table 32: Entitlement Matrix

Impact Category	Type of Impact (Permanent/ Temporary)	Entitled Persons	Entitlements	
			Compensation	Allowances and non-cash interventions
Impact on Land	Public wayleave (road reserves)	Road Agencies (KENHA, KURA, KeRRA)	<ul style="list-style-type: none"> Pay prescribed fees as may be determined by the agencies under the Roads Act, 2007 and relevant regulations 	N/A
Impact on Structures	Loss of Permanent structures (houses, shops, kiosks, grocery shops, butcheries, salon and boutique businesses among others) - Modern structures characterised by modern finishes including concrete, natural stone, bricks and treated sawn timber materials structures	Private owners	<ul style="list-style-type: none"> Cash compensation based on the full replacement value of the affected structure Provide compensation rate within range of KES 1,500 – 3000 per square feet depending on finishes used 	<ul style="list-style-type: none"> Disturbance allowance of 15% of the total compensation amount Materials from the affected structure may be salvaged at the owner’s expense within the three-month notice period given to vacate and prior to demolition. Training on financial management and livelihood restoration
	Loss of semi-permanent structures (houses, shops,	Private owners	<ul style="list-style-type: none"> Cash compensation based on the full replacement value of the affected structure 	<ul style="list-style-type: none"> Disturbance allowance of 15% of the total compensation amount Materials from the affected structure may be salvaged at the owner’s expense within

Impact Category	Type of Impact (Permanent/ Temporary)	Entitled Persons	Entitlements	
			Compensation	Allowances and non-cash interventions
	kiosks, grocery shops, butcheries, salon and boutique businesses among others) - Structures made from sawn timber, timber-off cuts, GCI walling, sundried bricks or cemented floors		<ul style="list-style-type: none"> • Provide compensation rates of within range of KES 1000-2500 per square foot depending on finishes used 	<ul style="list-style-type: none"> • the three-month notice period given to vacate and prior to demolition • Training on financial management and livelihood restoration
	Loss of structures (houses, shops, kiosks, grocery shops, butcheries, salon and boutique businesses among others) characterised by thatched roofs, rammed or earthen floors and Adobe blocks and wattle, thatch walls, tents, tarpaulins and manyattas	Private owners	<ul style="list-style-type: none"> • Cash compensation based on the full replacement value of the affected structure • Provide compensation rate within range of KES 500-1500 per square feet depending on finishes used 	<ul style="list-style-type: none"> • Disturbance allowance of 15% of the total compensation amount • Materials from the affected structure may be salvaged at the owner's expense within the notice period given to vacate and prior to demolition. • Training on financial management and livelihood restoration
	Loss of pavements	Business owners	N/A	<ul style="list-style-type: none"> • Restoration of destroyed pavements by the contractor immediately after completion of pipeline installation in affected areas.

Impact Category	Type of Impact (Permanent/ Temporary)	Entitled Persons	Entitlements	
			Compensation	Allowances and non-cash interventions
				These costs have been catered for under the project ESMP
	Loss of public structures such as motorbike shades (<i>bodaboda</i> shades) and market stalls	Business owners	N/A	<ul style="list-style-type: none"> Reinstatement by TWWDA immediately after sectional completion of the project
Impact on Trees		On public land/ No known owner	N/A	<ul style="list-style-type: none"> Support to counties and CSOs involved in conservation matters
Loss of Livelihoods	Permanent and temporarily businesses at close proximity to the wayleave	Business owners	<ul style="list-style-type: none"> Cash compensation for 5 days based on the magnitude of the business 	<ul style="list-style-type: none"> Disturbance allowance of 15% of the total compensation amount Training on financial management, livelihood restoration, project GRM for reporting grievances etc.
Temporary impacts	Temporary loss of access to business facilities	Business owners	<ul style="list-style-type: none"> Cash compensation for 5 days based on the magnitude of the business 	<ul style="list-style-type: none"> Provision of alternative access routes during the period the affected sections are under construction Adequate notice on the construction schedule Training on financial management and livelihood restoration
Impact on Vulnerable	Households that may be disproportionately impacted	PAPs with disabled	<ul style="list-style-type: none"> Cash compensation in accordance with criteria set 	<ul style="list-style-type: none"> Disturbance allowance of 50% of the total compensation amount

Impact Category	Type of Impact (Permanent/ Temporary)	Entitled Persons	Entitlements	
			Compensation	Allowances and non-cash interventions
Individuals and groups		family members, the elderly, widows	out in the relevant section of the entitlement matrix	<ul style="list-style-type: none"> • Designated assistance to be assessed on a case-by-case basis to ensure that vulnerable people/groups have access to participation, compensation, assistance and livelihood restoration • Training on financial management and livelihood restoration • Linkage to the Government of Kenya (GoK) social protection programmes

8.5. Statutory Payments

Roads' agencies established under the Kenya Roads Act, 2007, are legally mandated to manage road surfaces as well as road reserves. These agencies in charge of the road reserves where the pipeline network will be installed are the Kenya Urban Roads Authority (KURA) and the Kenya Rural Roads Authority (KeRRA). In order to effectively perform their functions, roads agencies charge nominal fees for infrastructure that utilise road reserves. Such infrastructure includes water and sewer lines, telecommunication and internet cables, and electricity lines, among others. A provisional sum of KES 1,500,000 has been allocated in anticipation of these charges for the Kerugoya-Kutus town Water Supply LMC Project.

8.6. Taxes

The Constitution of Kenya 2010 and Public Finance Management Act, 2012, puts an obligation on every citizen and all other persons doing business in Kenya to honour their tax obligations and remit relevant taxes to the State. Exemptions from such obligations can be obtained from the Kenya Revenue Authority in accordance with the law, e.g. where a financing agreement negotiated by the Government of Kenya clearly spells out such exemptions.

We recommend that TWWDA, through the Ministry of Water, Sanitation and Irrigation, liaises with KRA so that payments made to PAPs in the implementation of this RAP be exempted from taxation. Such payments may include compensations for structures as well as for loss of livelihoods.

8.7. Valuation and Compensation

Right of Way Acquisition Project (RAP) valuation methods involve determining the fair compensation for property or assets affected by a project. The valuation methodology and determination of compensation rates for assets used by the consultant was found to be in line with what is used by proponent professional valuers. However, due to the review of proponent's RPF new property rates would be applied for this RAP.

These sections following provides an overview of the approach used to value assets and resources that will be lost due to the project. Each asset type is described, providing the Kenyan legislation approach and any adjustments or top-ups that are required to meet international good practice standards and ensure that the asset is adequately replaced or that compensation received is equivalent to the full replacement value of assets lost.

Assets that fall into the compensation category include:

- Permanent structures erected thereon including houses, fences, livestock sheds, , among many others
- Permanent crops planted thereon including trees, hedges, cash crops and perennial food crops,
- Sources of livelihood including business premises

Table 33: The Valuation methods used

Impact	Valuation Method	Consideration
Business (Livelihood)	<ul style="list-style-type: none"> - Income Approach: Estimate the net income generated by each affected business before the disruption caused by the project. - Cost Approach: Evaluate the cost of restarting or relocating the businesses after the disruption. - Market Approach: Assess the market value of similar businesses in the area. 	<ul style="list-style-type: none"> - Length of disruption (5 days as specified). - Potential loss of customers and revenue during the disruption period. - Costs associated with relocating or resuming business operations.
Impact on Structures	<ul style="list-style-type: none"> - Cost Approach: Determine the replacement cost of each affected structure. - Market Approach: Assess the market value of similar structures. - Income Approach: Estimate potential rental income lost. 	<ul style="list-style-type: none"> - Type and condition of structures. - Replacement value versus depreciated value. - Costs associated with relocation or demolition.
Impact on Trees	<ul style="list-style-type: none"> - Cost Approach: Estimate the cost of replacing each affected tree. - Market Approach: Assess the market value of timber or lumber. - Income Approach: Estimate lost income from timber sales or landscaping. 	<ul style="list-style-type: none"> - Species, size, and condition of trees. - Timber value versus aesthetic or environmental value. - Costs associated with replanting or restoration efforts.
Impact on Crops	<ul style="list-style-type: none"> - Market Approach: Determine market value of affected crops. - Income Approach: Estimate lost income from disrupted harvests. - Cost Approach: Assess replanting or restoration costs. 	<ul style="list-style-type: none"> - Crop type, yield, and market demand. - Timing of disruption in relation to crop cycle. - Costs associated with replanting, lost harvests, or reduced yields.
Impact on Cemetery Sites	<ul style="list-style-type: none"> - Cost Approach: Calculate relocation costs including legal fees, notification expenses, and cultural/religious rites. - Market Approach: Assess market value of similar cemetery relocation projects. 	<ul style="list-style-type: none"> - Sensitivity of matter and cultural/religious significance. - Legal requirements and associated costs. - Compensation for emotional distress or inconvenience to family members.

The RAP adopted these valuation techniques to value the affected asset:

- **Comparable Method:** This method relied on comparing the properties being appraised with comparable properties in the same market area. Adjustments were made to account for differences between the subject property and other comparable properties.

- **Replacement Cost Approach Method:** This method assessed the properties values based on the cost of acquiring the site and constructing the building.

The choice of method to be employed will depend on the property type, market conditions and availability of information.

9. LIVELIHOOD RESTORATION PLAN

The primary aim of the Livelihood Restoration Plan is to uplift the quality of life and standards of living for project-affected persons (PAPs). Through a comprehensive socio-economic survey conducted in the project area, it was revealed that the main sources of income for the affected parties stemmed from businesses and agricultural pursuits. To address these findings, the following measures have been devised to enhance the livelihoods of the PAPs:

9.1.Cash Compensation

Initiation of livelihood restoration for PAPs will commence with the provision of equitable compensation for structural losses and business disruptions incurred by those with establishments within the road reserve. Identified PAPs will be justly compensated in accordance with the entitlements outlined in Chapter 7 of this report.

9.2.Provision of Employment Opportunities

PAPs will have access to employment opportunities during the construction phase, where both skilled and unskilled labour will be required. In alignment with the project's Environmental and Social Management Plan (ESMP), contractors will prioritize local residents when offering job opportunities.

9.3.Capacity Building Initiatives

All PAPs will have the opportunity to partake in training sessions covering various thematic areas:

- **Financial Management:** Training sessions will encompass fundamental financial management skills, record-keeping, money management, savings, and other advisory services aimed at addressing identified challenges.
- **Agricultural Capacity Enhancement:** PAPs engaged in subsistence farming will receive training on improved farming practices to enhance productivity, increase incomes, and explore opportunities for value addition and market linkages.
- **Development of Small Businesses:** Special emphasis will be placed on youth and women, encouraging them to form groups for training in small business development as a means of livelihood diversification. Additionally, existing business owners will receive guidance on enhancing their capacity and operational effectiveness to achieve profitability.

Table 34: The Livelihood Restoration Plan

Key Livelihood Restoration Measures	Responsible	Input and Output Indicators	Outcome and Impact Indicators	Budget (KES)
Cash compensation for loss of structures and business income	TWWDA	- Number of PAPs compensated for loss of structures (M/F) - Number of PAPs compensated for loss of livelihoods	- Number of PAPs satisfied with compensation issued (M/F/vulnerable) - Number of PAPs reporting improved businesses (M/F/vulnerable) - Number of structures restored	Covered in valuation costs
Provision of employment opportunities during project construction	TWWDA/Contractor	Number of PAPs who have benefited from employment opportunities (M/F)	Number of PAPs reporting increased incomes (M/F)	Contractor budget
Capacity Building Initiatives: Financial Management Agricultural capacity enhancement Development of small businesses	TWWDA/Relevant County Government Departments	Number of PAPs trained on various thematic areas (M/F)	- Number of PAPs reporting increased incomes from businesses (M/F) - Number of PAPs reporting improvement in skill set including evidence of practical application via improved livelihoods (M/F) - Improved food security of PAPs	1,000,000
Total Budget				1,000,000

This refined plan outlines tangible steps to restore and enhance the livelihoods of PAPs, ensuring their sustained well-being and socio-economic stability amidst project developments. Progress on

livelihood restoration activities will be systematically monitored through monthly progress reports.

10. MONITORING AND EVALUATION

10.1. Monitoring and Evaluation Objectives

The primary objective of monitoring and evaluation is to provide a basis for assessing the overall success and effectiveness of the implementation of the resettlement and compensation processes and the outcome and impact of these processes.

The purpose of resettlement monitoring is to:

- Measure progress
- Identify digression from objectives
- Where digression occurs, identify and implement corrective measures
- Improve on future project activities
- Ensure accountability and transparency on progress made and issues encountered.

Evaluation on the other hand assesses the performance of a project based on the information gathered during monitoring. Monitoring and Evaluation therefore yields information about progress, delays, cost and efficiency and will guide the refining of policies and procedures of future projects by the agency.

10.2. Monitoring and Evaluation Methodology

The M&E methodology has been adopted from the UNDP handbook on Monitoring and Evaluation (2002) which details the methods of measuring the effectiveness and efficiency of development programmes/ projects. Figure 12 presents a Strategic Approach to Monitoring and Evaluation.

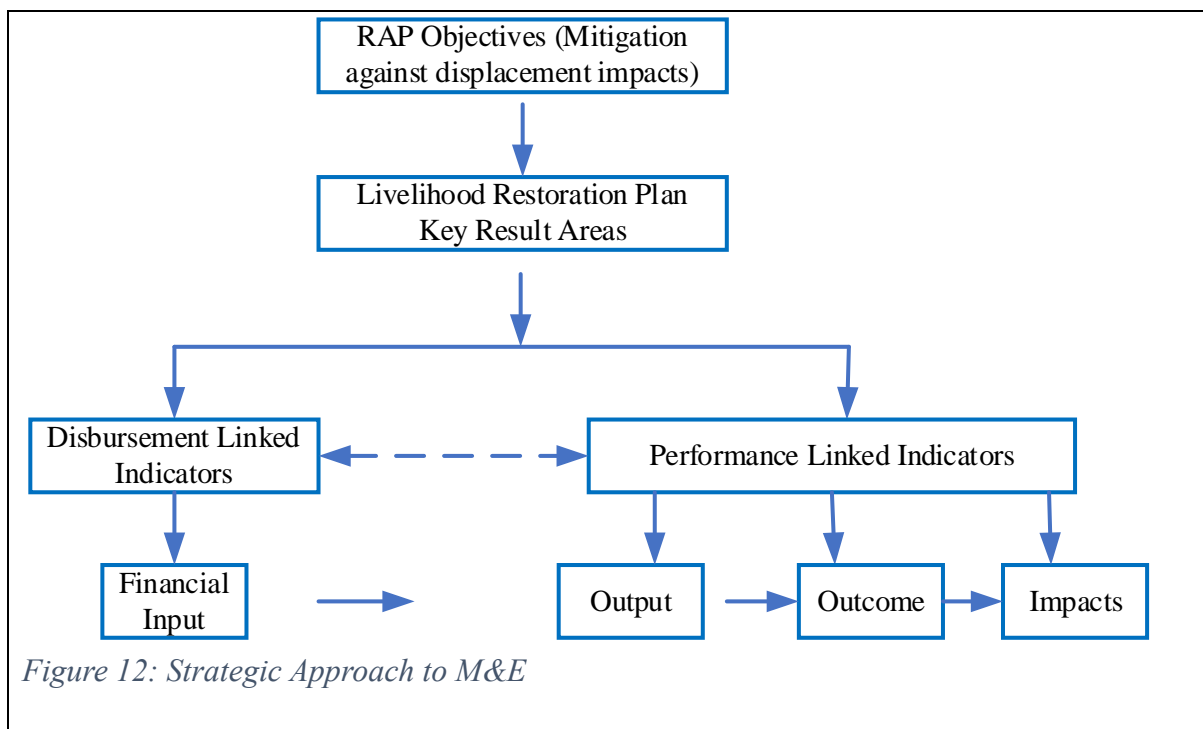


Figure 12: Strategic Approach to M&E

10.3. Monitoring and Evaluation Plan

Input and output monitoring aimed at tracking the resettlement progress will be done internally on a regular basis and reported on a monthly basis by the Social Safeguard Specialist. The outcome and impact indicators such as the level of satisfaction of PAPs by the compensation and impact of training received shall be done by an external evaluator.

Table 35 presents a monitoring and evaluation plan for RAP implementation. The indicators have been aligned to the entitlement matrix which forms the basis of all compensation to PAPs.

Table 35: Monitoring and Evaluation Plan for RAP Implementation

Impact	Category of Impact	Mitigation	Input and Output M&E Indicators (Internal Monitoring)	Outcome and Impact Monitoring Indicators (External Monitoring)	How the indicator will be measured/ Means of Verification	Frequency	Target
1. Impact on Land	Loss of land (total acquisition)	<ul style="list-style-type: none"> Cash compensation for the affected portion of land at open market value and 15% disturbance allowance Cash payment in tranches where compensation is more sizeable to serve as a risk mitigation to prevent PAPs 	<ul style="list-style-type: none"> Number of PAPs compensated for loss of land (M/F/vulnerable) Percentage of compensation issued to PAPs Number of PAPs trained on financial management, livelihood restoration etc. (M/F, vulnerable) Number of livelihood restoration training sessions per type and attendance per training. 	<ul style="list-style-type: none"> Number of PAPs satisfied with the compensation issued (M/F/Vulnerable) Number of PAPs reporting the usefulness of the training received (M/F/Vulnerable) Number of PAPs reporting increased incomes (M/F/Vulnerable) 	Support documentation such as PAPs compensation agreements signed	Monthly Reports	Number of PAPs compensated – Target 100% Training – 100% Increased incomes – 100%

		<p>squandering sudden 'windfalls'</p> <ul style="list-style-type: none"> • Training on financial management, livelihood restoration 	<ul style="list-style-type: none"> • No of vulnerable PAPs who have received additional support from the project e.g. linkages to GoK socio protection programmes 				
Loss of land use	<ul style="list-style-type: none"> • Cash compensation for the affected portion of land at 30% market value and a disturbance allowance of 15% • Training on financial management 	<ul style="list-style-type: none"> • Number of PAPs compensated for loss of land (M/F/vulnerable) • Number of PAPs trained on financial management, livelihood restoration etc. (M/F, vulnerable) 	<ul style="list-style-type: none"> • Number of PAPs satisfied with the compensation issued (M/F/vulnerable) • Number of PAPs reporting increased incomes (M/F/vulnerable) 	Support documentation such as compensation agreements signed	Monthly Reports	Number of PAPs compensated – Target 100% Training – 100%	
Public wayleave/ road reserve	<ul style="list-style-type: none"> • Cash compensation based on prescribed fees by the 	<ul style="list-style-type: none"> • Number of permits by road agencies authorizing the 	<ul style="list-style-type: none"> • Timely implementation of project without delays 	Evidence of permits issued Minutes of meetings/ MOUs	Monthly	100% compensation	

		road agencies	agency to use the road reserve				MOU with @ road agency
	Forest Land	<ul style="list-style-type: none"> • Payment of prescribed fees as determined by the Forest Regulations, 2016 	<ul style="list-style-type: none"> • Permit issued authorizing use of forest land 	<ul style="list-style-type: none"> • Timely implementation of project without delays 	Minutes of engagement meetings with KFS/ MOUs	Monthly	100% compensation MOU/ written agreements with KFS - 1
2. Impact on Structures	Loss of Permanent structures	<ul style="list-style-type: none"> • Cash compensation based on the full replacement value of the affected structure and 15% disturbance allowance 	<ul style="list-style-type: none"> • Number of PAPs compensated for loss of structures ((M/F/vulnerable) • Number of PAPs that were able to salvage (at their own expense) the materials, within the three months' notice period given to vacate and prior to demolition. • Number of PAPs trained on financial 	<ul style="list-style-type: none"> • Number of PAPs satisfied with the compensation issued (M/F/vulnerable) • Number of PAPs reporting improved businesses (M/F/vulnerable) • Number of structures restored 		Monthly	100% - phased out per month

			management, and livelihood restoration measures etc. ((M/F/vulnerable)				
	Loss of pavements	Restoration of pavements by the contractor upon completion of pipeline installation in affected areas	Sections of pavements restored by the contractor	Number of business owners and county departments satisfied with the restored pavements	<ul style="list-style-type: none"> Photographic proof 	Monthly	To be determined based on the contractors work schedule
	Loss of public structures such as motorbike shades (<i>bodaboda</i> shades) and market stalls	Restoration of public structures	Number of public structures reinstated by the project	<ul style="list-style-type: none"> Number of public structures restored by the project Number of users of public structures satisfied with the reinstated structures 	<ul style="list-style-type: none"> Photographic proof of reinstated public structures by TWWDA after sectional completion of the project 	Monthly	100% of the structures affected
3. Impact on crops and trees	Loss of Crops and Trees	Compensation on a basis of fair market value Support to county and	<ul style="list-style-type: none"> Number of PAPs compensated for loss of crops and trees 	CSOs/ county departments satisfied with the support provided on conservation matters	<ul style="list-style-type: none"> Evidence of signed compensation agreements 	Monthly	100% - PAPs compensated

		CSOs involved in conservation matters for trees cut on the road reserve	<p>((M/F/vulnerable)</p> <ul style="list-style-type: none"> • Number of PAPs trained on financial management and livelihood restoration measures ((M/F/vulnerable) • Resources used on conservation matters/ CSR activities by the agency 		<ul style="list-style-type: none"> • Minutes of planning meetings • Photos of tree planting activities 		
4. Loss of Income	Permanent and temporally businesses at close proximity to the wayleave	Compensation for loss of income to affected businesses	<ul style="list-style-type: none"> • Number of PAPs compensated for loss of income (M/F/vulnerable) • Number of PAPs trained on financial management, livelihood restoration etc. ((M/F/vulnerable) 	<ul style="list-style-type: none"> • Number of PAPs satisfied with compensation issued. (M/F/vulnerable) • Number of PAPs reporting improved incomes (M/F/vulnerable) 	Signed compensation agreements Interviews, business records	Monthly	100%

5. Temporary loss of access to business facilities	Contractor to provide alternative access routes	Contractor to provide alternative access routes	<ul style="list-style-type: none"> Resources used in provision of alternative access routes for affected businesses Number of alternative access routes provided to affected businesses 	<ul style="list-style-type: none"> Number of businesses satisfied by the provided alternative access routes during project activities 	<ul style="list-style-type: none"> Proof of involvement affected of business people during planning e.g. communication through shared construction schedule 	Monthly	100%
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Management Issue	Input and Output Monitoring Indicators	Outcome and Impact Monitoring Indicators (External Monitoring)	Frequency	Target
6. Stakeholder Participation	<ul style="list-style-type: none"> Number and type of stakeholder meetings per quarter Attendance of stakeholder meetings (M/F) <ul style="list-style-type: none"> Age of attendees Vulnerability of attendees 	<ul style="list-style-type: none"> Diversity of stakeholder meetings Inter-agency relationships established MOUs established with different stakeholders 	Monthly	To be determined
7. Grievance Management	<ul style="list-style-type: none"> Number of GRM Committees established at various levels 	<ul style="list-style-type: none"> Percentage of stakeholders satisfied with the project GRM in place 	Monthly	80%

	<ul style="list-style-type: none"> • Number of GRM Committees trained on grievance handling • Number of grievances reported per category including those related to GBV, VAC, SEAH • Number of grievances open beyond resolution period • Number of grievances resolved within the required timelines • Number of grievances referred to courts 	<ul style="list-style-type: none"> • Successful management and resolution of grievances • Percentage of grievances handled within the project GRM structures • Percentage of grievances referred to courts 		
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The Socio Safeguard Specialist shall provide monthly progress reports on findings from M&E and generally on progress of RAP implementation. The RAP Completion Audit shall be done twelve (12) months after relocation by PAPs.

10.4. RAP Completion Audit

A completion audit shall be done at the end of RAP implementation to verify and ascertain that the resettlement process complied with various commitments in the RAP Report and recommendations from the RAP monitoring reports. This audit shall be done externally by a consultant. The completion audit shall have the following objectives:

1. Assessment of RAP implementation in compliance with national legal & policy framework and AfDB's ISS
2. Assessment of resettlement procedures and their effectiveness
3. Evaluation of impacts of compensation on livelihood restoration through a socio-economic survey on project affected persons
4. Key challenges in RAP implementation
5. Key policy recommendations for future projects

10.5. Monitoring and Evaluation Budget

Table 36 presents the overall M&E budget for RAP implementation.

Table 36: Monitoring and Evaluation Budget

Item	Budget (KES)
Monitoring and Evaluation on RAP Implementation	750,000
RAP Completion Audit	250,000
Total	1000,000

11. INSTITUTIONAL ARRANGEMENTS

To ensure effective implementation of this RAP, these structures shall be established as follows:

11.1. Project Implementation Unit (PIU)

A Project Implementation Unit at TWWDA will have an oversight role in management of the RAP implementation. They shall nominate the members of the RAP Implementation Team and avail the resources required for RAP implementation. The PIU will report to the Ministry of Water, Sanitation and Irrigation on a monthly basis on the status of RAP implementation. The roles of the Project Implementation Unit in RAP implementation shall include:

1. Team coordination during planning and RAP implementation in compliance with the national laws and AfDB requirements
2. Compiling RAP disclosure materials
3. Facilitating all stakeholder engagement meetings
4. Planning, coordinating and delivering compensation packages and other entitlements to the PAPs including vulnerable groups
5. Managing grievances
6. Planning and coordinating monitoring and evaluation activities
7. Implementation of corrective measures from M&E reports
8. Planning and coordinating the RAP completion audit

11.2. RAP Implementation Team (RIT)

A specific RAP Implementation Team for this project will be established by TWWDA to manage the RAP process. The team shall comprise of a Social Safeguard Specialist, Community Liaison Officer (WSP), Land Surveyor (KICOWASCO), Land Valuer and a Finance Officer (TWWDA) and the Chiefs.

The Roles and responsibilities of the RAP Implementation Team will include but not limited to:

1. Verification of PAPs and compensation of PAPs
2. Resolution of any grievances related to compensation of PAPs
3. Issuance of notice to vacate to PAPs after compensation prior to project activities
4. Determination of compensation for loss of livelihoods, business or structure in special cases where there might have been an oversight
5. Participate in stakeholder engagement on a need basis
6. Determination of compensation for loss of employment/incomes and loss of business in special cases where there might have been oversight
7. Reporting progress on RAP implementation

11.3. The AfDB and Relevant Government Institutions

Table 37 presents the supportive role of various government institutions in RAP implementation

Table 37: Roles of AfDB and Government Institutions in RAP Implementation

Institution	Role in RAP Implementation
African Development Bank (AfDB)	<ul style="list-style-type: none"> • Project financing • General oversight and monitoring the implementation of the RAP
Ministry of Finance and National Treasury	Coordination of project financing through the National Treasury
Ministry of Water, Irrigation and Sanitation	Project coordination, policy direction
County Government	<ul style="list-style-type: none"> • Support in verification of PAPs • Project technical support and information sharing • Partnership with the proponent in capacity building initiatives for livelihood restoration to PAPs
Road Agencies (KERRA and KURA)	<ul style="list-style-type: none"> • Authorization to use the road reserve
Community Based Organizations (CBOs)	<ul style="list-style-type: none"> • Partnership in livelihood restoration activities
Public administration (County Commissioner, Deputy County Commissioner, Ward Administrator, Chiefs and Sub chiefs)	<ul style="list-style-type: none"> • Security provision during RAP implementation and other project phases • Community mobilization for public meetings

11.4. National Land Commission

The National Land Commission is tasked with compulsory land acquisition and disbursing compensation to affected individuals. The Commission handles requests from project promoters, manages gazetting and property inspections, prepares compensation awards, and facilitates the transfer of land ownership upon payment. County offices, established by the National Land Commission, will address concerns related to land acquisition where the affected individuals are dissatisfied with the compensation awards.

11.5. County Government of Kirinyaga

The County Government of Kirinyaga will oversee the acceptability of the plan among local residents, complementing the County's capital programs. Furthermore, the County government assists in facilitating and verifying compensation claims.

The overall responsibility of compensation and resettlement rests with the implementing agency-Tana Water Works Development Agency. The Agency will be the lead agency in the RAP implementation and will work together with the County and National Governments in the PA to implement the RAP.

11.6. Tana Water Works Development Agency Project Implementation Team

Tana Water Works Development Agency will nominate a team composed of experts with diverse key disciplines to oversee the RAP implementation process herein referred to as the Tana Water Works Development Agency Project Implementation Team (PIT). Tana Water Works Development Agency projects are managed by the PIT but the RAP process is spearheaded by the Environmental and safeguard section.

The RAP implementation team will be responsible for:

- Delivery of the RAP compensation and rehabilitation measures;
- Appropriate coordination between the agencies and jurisdictions involved in the RAP implementation;
- The measures (including technical assistance) needed to strengthen the implementing agencies' capacities for managing the facilities and services provided under the project.

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

- i. Plan and coordinate prompt compensation payments;
- ii. Plan and coordinate non-cash compensation such as special assistance to vulnerable groups;
- iii. Ensure that the compensation process and entitlements adhere to legal provisions such as spousal and children's consent where it applies, and following the succession Act in case of the death of a PAH;
- iv. Report to the Tana Water Works Development Agency's senior management team and stakeholders;
- v. Ensure that the information needs of the PAHs are disseminated promptly and effectively;
- vi. Establish, manage and update the RAP implementation database;
- vii. Contribute to the regular monitoring and evaluation of the RAP implementation;
- viii. Consult and sensitize the community and PAHs with regard to the RAP implementation progress.

This includes processes such as

- Validation of PAHs prior to compensation
- Making payments for loss/ easement of land, structures, trees and crops to the PAHs (payments to be made to bank accounts through the National Land Commission)
- Appropriate coordination between the agencies and jurisdictions involved in the RAP implementation;
- Coordinate construction schedule of contractors
- Alert PAHs on when they would be needed to relocate.
- Plan, facilitate and coordinate CRC trainings and subsequent meetings

11.7. Ministry of Finance & National Treasury

The Ministry of Finance & National Treasury plays a crucial role in coordinating project financing and ensuring the availability of funds for RAP implementation.

The ministry shall be responsible for:

- Coordination of the allocation of funds for compensation and resettlement activities.
- Provision of oversight on financial disbursements to ensure transparency and accountability.
- Ensure compliance with budgetary allocations and financial regulations.
- Monitor the financial performance of the project and provide periodic reports to stakeholders.

11.8. Ministry of Water & Sanitation

The Ministry of Water & Sanitation provides policy direction, project coordination, and technical support for the RAP implementation.

The ministry shall be responsible for:

- Coordination with relevant agencies and stakeholders to ensure alignment with national water and sanitation policies.
- Provision of technical expertise and guidance on water-related aspects of the RAP, particularly regarding access to water sources and sanitation facilities.
- Overseeing the integration of RAP activities with broader water and sanitation development initiatives.
- Monitoring and evaluation the effectiveness of RAP interventions in improving water and sanitation outcomes for affected communities.

11.9. Ministry of Interior and National Coordination

The Ministry of Interior and National Coordination, through County Commissioners (CC), Deputy County Commissioners (DCC), Chiefs, and Sub chiefs, facilitates community engagement, security provision, and coordination at the local level.

The ministry shall be responsible for:

- Facilitate communication and coordination between government agencies, project stakeholders, and affected communities.
- Provide security and maintain peace during RAP implementation phases, ensuring the safety of personnel and communities.
- Mobilize community participation in public meetings, stakeholder consultations, and grievance redress mechanisms.
- Serve as intermediaries between project authorities and local communities, addressing concerns and facilitating consensus-building processes.

11.10. Road Agencies

Road agencies such as the Kenya Rural Roads Authority (KERRA) and Kenya Urban Roads Authority (KURA) play a pivotal role in facilitating access to road reserves and ensuring compliance with road construction standards.

The agencies shall be responsible for:

- Grant authorization for the use of road reserves for project implementation activities.

- Provide technical guidance and support on road construction and maintenance requirements.
- Monitor compliance with road construction regulations and standards to mitigate adverse impacts on affected communities and infrastructure.
- Collaborate with project authorities and other stakeholders to address road-related issues arising during RAP implementation.

11.11. National Environment Management Authority (NEMA)

NEMA is responsible for ensuring environmental and social compliance and oversight throughout the project lifecycle, including RAP implementation.

NEMA shall:

- Review and approve environmental impact assessments (EIAs) and environmental management plans (EMPs) related to the project, including the RAP.
- Monitor and enforce environmental regulations and standards to minimize environmental degradation and mitigate adverse impacts on ecosystems and communities.
- Provide technical expertise and guidance on environmental management practices, including measures to enhance environmental sustainability and resilience.
- Conduct periodic environmental audits and assessments to evaluate the effectiveness of mitigation measures and compliance with regulatory requirements.

11.12. Community Resettlement Committee (CRC)

At the community level, CRC committees will be established in each settlement, tailored to accommodate the unique characteristics of the location. The committee's size will range from 7 to 15 members, depending on the specific needs of the settlement. A representative from the local government administration, such as the chief or assistant chief, will serve as a default member and convene the committee when necessary. Upon activation, each committee will elect a chairperson, vice-chairperson, and secretary.

Membership composition will be diverse, encompassing Project Affected Persons (both male and female), structure/landowners, affected institutions where applicable, persons with disabilities, representatives from the council of elders, youth, religious groups, and other relevant stakeholders, considering local dynamics. The local chief or assistant chief's representation will hold authority within the committee as the convener.

The committee's role will include:

- Help individuals submit complaints promptly, without charge, and as their initial contact.
- Make the grievance management process public.
- Collect, assess, and investigate complaints, maintaining detailed records.
- Offer solutions and monitor the implementation of agreements reached.
- Contribute to monitoring and evaluation efforts by providing regular reports on grievances.

11.13. Community Liaison Officer (CLO)

A Community Liaison Officer (CLO) representing, or wayleave officer employed by Tana Water Works Development Agency will be included in the CRC. The CLO positions will be filled by staff hired from the communities in the project area.

12. OVERALL BUDGET AND RAP IMPLEMENTATION SCHEDULE

12.1. Total RAP Implementation Budget

The overall RAP implementation budget constitutes the Valuation and Compensation costs, the Livelihood Restoration budget, the RIT operational budget and the Monitoring and Evaluation budget. The GRM Budget and Stakeholder Engagement Costs have been provided for in the project Stakeholder Engagement Plan (SEP) prepared separately. Compensation shall be done by TWWDA.

Table 38: Total RAP Implementation Budget

Description of costs	Cost in KES
PAPs compensation	5173251.48
Provisional for Road Agencies	1,500,000.00
Capacity Building and in-kind support	1,000,000.00
RAP implementation monitoring and completion audit	1,000,000.00
Livelihood Restoration Activities	1,000,000.00
RAP Implementation Team (RIT) Budget	750,000.00
Sub-Total	10,423,251.48
Add 20% Contingency	2,084,650.30
Total	12,507,901.78

12.2. RAP Implementation Schedule

Table 39 presents an indicative RAP implementation schedule which shall be synchronized with the contractor's work program. The estimated project implementation period is approximately 15 months with planning activities taking first seven (7) months.

Table 39: RAP Implementation Schedule

Activity	Responsible	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Phase 1: Planning Phase																
RAP Study	TWWDA															
Approval of the RAP Report	TWWDA/ AfDB															
Disclosure of RAP Report	TWWDA/ AfDB															
Phase 2: Compensation of the PAPs																
Setting up the RAP Implementation Team	PIU, TWWDA															
Validation and verification of the PAPs	RIT															
Compensation of all PAPs	RIT															
Issuance of 3 months' vacation notice to PAPs	RIT															
Phase 3: Commencement of Construction works																
Site Handover	TWWDA, Contractor															
Site clearance	TWWDA, Contractor															
Excavation, pipe installation, jointing & connection, backfilling and connection to water source	TWWDA, Contractor															
Phase 4: Management Measures																
Grievance Management	RIT/ GRM Committees															

Activity	Responsible	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Implementation of livelihood restoration activities	Social Safeguard Specialist, TWWDA/ County Government															
Monitoring and Evaluation of RAP (Monthly Reports)	TWWDA, Social Safeguard Specialist															
RAP Completion Audit	TWWDA/ External Consultant															

13. CONCLUSION AND COMMITMENTS

13.1. Conclusion

The Resettlement Action Plan (RAP) outlines a structured approach in compensation, and resettlement processes for the project. The project shall impact livelihoods, structures, trees, crops, and cemetery sites with a total of 166 PAPs. The assets have been valued at **Ksh. 5173251.48**, through comprehensive monitoring and evaluation mechanisms, it aims to ensure transparency, accountability, and effectiveness in implementing the RAP. Key objectives include measuring progress, identifying deviations, implementing corrective measures, and assessing project performance. The RAP Completion Audit further verifies compliance with commitments and provides recommendations for future projects. With allocated budgets and institutional arrangements in place, the RAP is poised to facilitate fair and equitable compensation while minimizing adverse impacts on affected communities.

13.2. Commitments

The proponent, TWWDA, is committed to ensuring that the Resettlement Action Plan (RAP) complies with the policies of the African Development Bank (AfDB) as well as national regulations. To fulfill this commitment, the following measures will be undertaken:

- i. Timely compensation of all identified Project Affected Persons (PAPs) prior to project implementation in line with the eligibility criteria and entitlement matrix provided
- ii. Provision of adequate notice to PAPs prior to any demolition of structures to enable them salvage materials from the affected structures
- iii. Sharing the project implementation schedule with key stakeholders particularly the business men who might be impacted through limited access to their businesses for their planning
- iv. Adherence to AfDB Policies: The proponent will thoroughly review and align the RAP with the policies and guidelines provided by the African Development Bank. This includes compliance with the AfDB's Involuntary Resettlement Safeguard Policy and any other relevant directives or frameworks.
- v. Compliance with National Regulations: The proponent will ensure that all aspects of the RAP adhere to the legal and regulatory requirements stipulated by the national government. This includes compliance with laws related to land acquisition, compensation, resettlement, and any other relevant regulations.
- vi. Stakeholder Engagement: The proponent will engage with relevant stakeholders, including affected communities, government agencies, civil society organizations, and local authorities, to solicit feedback, address concerns, and ensure transparency throughout the RAP implementation process.
- vii. Capacity Building: The proponent will invest in capacity building initiatives to enhance the knowledge and skills of project staff, government officials, and other stakeholders

involved in RAP implementation. This includes training on relevant laws, policies, and procedures related to resettlement and compensation.

- viii. Grievance Redress Mechanism (GRM): The proponent will establish and implement a robust Grievance Redress Mechanism to address any complaints or grievances related to the RAP. This mechanism will provide affected persons with a transparent and accessible platform to voice their concerns and seek resolution.
- ix. Monitoring and Evaluation: The proponent will establish a comprehensive monitoring and evaluation framework to track the progress and outcomes of RAP implementation. This includes regular assessments of project activities, impact evaluations, and reporting mechanisms to ensure accountability and transparency.
- x. External Audit: The proponent will conduct an external audit of RAP implementation to verify compliance with AfDB policies, national regulations, and project commitments. This audit will be conducted by an independent consultant to provide impartial assessment and recommendations for improvement.

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Annexes

Annex 1: GRM Tools

Annex 2: Photo Log

Annex 3: Survey Questionnaire

Annex 4: Public Participation Minutes

Annex 5: Public Participation Attendance List

Annex 1: GRM Tools

1. Grievance Register/ Acknowledgement Form, GRM/ 001

Date of receiving the grievance:

Grievance Number:

Project Name:

Mode of Receipt (tick where applicable)

Writing	Verbal	Phone	Email
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Details of the Grievance

Name:

Gender:

Contacts/ Email address:

Location of complainant:

Village/ location/ sub location: County:

Category of Complainant (tick appropriately)

- i. Local Communities
- ii. Regulatory bodies and Road agencies (tick where applicable)

NEMA	WRA	Road Agencies (specify)	KFS	Any other specify
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- iii. Contractors
- iv. NGOs, CBOs
- v. Funding institution/ AfDB
- vi. Other interested party (specify)

Category of Grievance (tick appropriately)

- i. Project implementation related
- ii. Social
- iii. Environment

Brief Description of the grievance

.....
.....
.....

(attach letter or any document provided by the complainant)

Received/ prepared by:

Name:

Date:

Signature:

2. Grievance Resolution Form – GRM/ 002

Date of Meeting:

Complaint No:

Venue of Meeting:

List of Participants

Complainant side	Local Grievance Redress Committee Members present
1.	1.
2.	2.
3.	3.
4.	4.

Brief Description of the Grievance:

.....
.....
.....

Key Discussions

- 1.
- 2.
- 3.

Recommendations made by the Local Grievance Redress Committee

- 1.
- 2.
- 3.

Status of Grievance (Tick appropriately)

<i>Solved</i>	<i>Unsolved</i>

Chairperson, Local Grievance Redress Committee

Name:

Signature:

Date:

3. Grievance Disclosure Form – GRM/ 003

Complaint No:

Name of Complainant:

Date of Grievance Redress:

Brief Description of Grievance:

.....
.....
.....

Summary of Resolution:

.....
.....
.....

Name of complainant:

Signature of complainant (indicating acceptance of the solution or action taken for his grievance)

.....

Name of the Grievance Handling Officer:

Signature of the Grievance Handling Officer:

Date (dd/mm/yy):

4. Format of Quarterly Reports of all Grievances – GRM/ 004

1.0 General Information

Project Name:

Date:

County:

Period of Reporting (Quarter):

2.0 Summary of Complaints Received

Sn.	Name and Address of Complainant	Location of Complaint	Date of receipt of the complaint	Complaint Number
1				
2				
3				

3.0 Summary of Grievance Redress Meetings Held

Complaint No.	Brief Description of Complaint	Date of Meeting	Name of Participants	Recommendations Issued	Date of issuance of grievance disclosure form

4.0 Key Challenges and Measures Taken

5.0 Appendices

- Grievance register
- Minutes of meetings held
- Attendance register (signed)

Annex 7: Photo Log



Photo 1: Public participation at Kandongu Mutithi line on 12-04-2024



Photo 2: Signing of PAPs forms at Kerugoya Chiefs Office

RESETTLEMENT ACTION PLAN (RAP) FOR KERUGOYA –KUTUS WATER SUPPLY LAST MILE CONNECTIVITY (LMC) PROJECT IN KIRINYAGA COUNTY-SURVEY QUESTIONNAIRE

Enter a date and time

yyyy-mm-dd

hh:mm

Enumerator name

- Ann Wanjiku
- Abraham Mwai
- Isaiah Kyengo
- Geoffrey Maina
- Wamuyu Gathinji
- Violet Moraa
- James Muriithi

Record your current location

latitude (x.y °)

longitude (x.y °)

altitude (m)

accuracy (m)



* Free, Prior and Informed Consent

I agree that I have been informed about the project, I understand the risks and opportunities. I offer my opinions and information willingly and without coercion or pressure. I also agree to freely provide my information as is helpful to this project and acknowledge that the data will only be used for the purpose of the project.

OK

Household code

eg. John Kevin (JK001)

What is the name of your constituency?

- Mwea
- Gichugu
- Ndia
- Kirinyaga Central

What is the name of your Ward

- Mutithi
- Kangai
- Thiba
- Wamumu
- Nyangati
- Murinduko
- Gathigiriri
- Tebere

What is the name of your Ward

- Mutithi
- Kangai
- Thiba
- Wamumu
- Nyangati
- Murinduko
- Gathigiriri
- Tebere

What is the name of your Ward

- Mutithi
- Kangai
- Thiba
- Wamumu
- Nyangati
- Murinduko
- Gathigiriri
- Tebere

What is the name of your Ward

- Mutithi
- Kangai
- Thiba
- Wamumu
- Nyangati
- Murinduko
- Gathigiriri
- Tebere

Village

Name of the Respondent

Respondent ID No

Take photo of the front of the ID

Click here to upload file. (< 5MB)

Take photo of the back of the ID

Click here to upload file. (< 5MB)

Respondent Contact

Are you the head of the household

- Yes
- No

If no, kindly provide name of the Head of he Household

Kindly provide the contact of the head of household

How many are you within your household?

Kindly take a photo of the respondent

Click here to upload file. (< 5MB)

Background Information

Gender of respondent

- Male
- Female
- Other

How old are you (Yrs)

- <18yrs
- 18-35 yrs
- 36-60
- Above 60 yrs

What is your Marital Status?

- Married
- Widowed
- Divorced
- Separated
- Never Married
- Other

If other, specify

Do you have any children under the age 18yrs?

- Yes
- No

If yes, how many?

What is the Highest level of education you attained?

- Pre-primary
- Primary
- Secondary
- College
- University
- Never Attended
- Others

If other (specify)

What is your religion

- Christian
- Muslim
- Budhuist
- Etheist
- Other

If other, which one?

What is the average monthly household income?

- 0-10,000
- 10,001-24,000
- 24,001-50,000
- 50,001-100,000
- 100,001-250,000
- Above 250,000

How long does it take to get to the nearest school?

- <20Mins
- 21-40 mins
- 41-60 Mins
- Over1 hour

What type of house do you dwell in?

- Permanent
- Semi-Permanent
- Temporary

What materials have you used to build the walls of house?

- Wood & mud
- Stones & mud
- Stones & cement
- Cement blocks
- Wood poles
- Bricks
- Other

If other, please specify

What materials have you used to build the roof of your house?

- Thatch
- Iron Sheet
- Tin
- Polythene
- Poles
- No roof
- others

If other, please specify

HEALTH AND VULNERABILITY**How long does it take to get to the nearest health center?**

- <20 mins
- 21-40 Mins
- 41-60Mins
- Over 1 hour

Do you have any members of your household who is disabled?

- Yes
- No

What is the nature of the disability?

- Lame
- Blind
- Deaf
- Dumb
- Crippled
- Others
- Mental illness

If other, kindly specify

Is there any member of your household who is chronically ill?

- Yes
- No

Which illness?

- Blood pressure
- Diabetes
- Cancer
- Other

If other, kindly specify

Are any members of the household pregnant

- Yes
- No

If yes, how many months is the pregnancy?

Has any member of your household been ill within the last four months?

- Yes
- No

What is/was the member suffering from?

- Malaria
- Flu/cough
- Stomach disorders
- Diarrhoea
- Chorela
- Headaches
- Chronic Illness
- Other

If other, please specify

WATER AND SANITATION

What is the main source of water for domestic use?

- Borehole
- River/Stream
- Shallow Wells
- Piped water supply
- Dam
- Rainfall harvesting
- Other

For other, kindly specify

How long does it take to the nearest water source

- Below 15 minutes
- 16-30 minutes
- 31-1h
- More than 1 hour

How do you ensure water for household is safe for drinking?

- Boiling
- Filtering
- Decanting
- Use of chemicals
- Others

If other, kindly specify

Do you have a toilet within your compound?

- Yes
- No

If Yes, what type of is it?

- VIP latrine
- Simple Latrine
- Flush toilet

If No, how do you dispose human waste?

- Neighbor Toilet
- Bush
- Others

INCOME AND LIVELIHOOD

Do you own land?

- Yes
- No

If Yes, what size is the land?

- <1 acres
- 1-2.5 acres
- 2.5-4 acres
- 4-5 acres
- Above 5 acres

What is your main source of income?

- Crop farming
- Livestock keeping
- Poultry Farming
- Casual work
- Formal Employment
- Trading/Business(Specify)
- Other

Trading/Business(Specify)

Name any other income generating activities practiced.

Which of your assets are affected by the project?

- Land
- Business
- Structure
- Crops
- Graves/Cultural sites
- None
- Others (Specify)
- Trees

ASSET- LAND OWNERSHIP

Which type of ownership is your land under?

- Leasehold
- Freehold
- Trust land
- Squatter

For the affected land do you have proof of ownership?

- Yes
- No

Which one?

- Title deed
- Allotment Letter
- Other
- None

What is the L.R/plot/parcel. No of the land?

Land Type

- Settlement
- Own
- Other

Nature of Occupancy

- Land Owner
- Co-owner
- Co-tenant
- Licensee
- Renter
- Squatter

If other, Specify

How did you acquire this property?

- Buying
- Inherited
- Gift
- Rented

What is the size of your land?

- 40x80
- 50x100 (eighth of an acre)
- Quarter an acre
- Half an acre
- One acre
- Two acres
- Other

If other, kindly specify

What is the length of the land to be affected by the project (width=2m)

(NaN) Area of land Affected

How do you use your land?

- Crop farming
- Livestock keeping
- Business
- Other uses(specify)

If other, specify

What non-farm activities do you conduct on your land?

- Mining
- Quarry
- Other(Specify)

If other, kindly specify

If affected, can you relocate within your farm?

- Yes
- No

To the best of your knowledge, does this land have any caveats or under any form of dispute?

- Yes
- No

Explain the existing caveats or dispute

Do you or any of the affected families on this plot have any other land holding nearby or elsewhere?

- Yes
- No

If Yes , where?

Estimated total size (Acres)

ASSET INVENTORY

Which of your structures is affected by the proposed project ?

- None
- Main house
- Kitchen
- Latrine
- Fence
- Business premise
- Tank
- Others (Specify)

Other, please specify

Kindly upload photo of the affected structure

Main House

Click here to upload file. (< 5MB)

What is the length of the Main house that will be affected? (Meters)

What is the material used?

Kindly upload photo of the affected structure

Kitchen

Click here to upload file. (< 5MB)

What is the length that will be affected? (Meters)

What is the material used?

Kindly upload photo of the affected structure

Latrine

Click here to upload file. (< 5MB)

What is the length that will be affected? (Meters)

What is the material used?

Kindly upload photo of the affected structure

Fence

Click here to upload file. (< 5MB)

Which type of fence is affected

- Live Fence
- Permanent (Masonry)
- Barbed wire
- Corrugated iron
- Gate
- Other

If other kindly specify

What is the type of gate?

- Iron
- Iron sheets (mabati)
- Wooden
- Barbed wire

Take photo of the gate

Click here to upload file. (< 5MB)

What is the length that will be affected? (Meters)

What is the height of the fence?

How many strands are affected?

Kindly upload photo of the affected structure

Business Premise

Click here to upload file. (< 5MB)

What is the length that will be affected? (Meters)

What is the material used?

Kindly upload photo of the affected structure

Other

Click here to upload file. (< 5MB)

What is the length that will be affected? (Meters)

Other

What is the material used?

How did you acquire this property?

- Buying
- Constructed
- Inherited
- Rented
- Others (specify)

If other, kindly specify?

Kindly upload photo of the affected structure

Click here to upload file. (< 5MB)

Nature of the affected structure

- Permanent
- Semi- permanent
- Temporary

Which of your plants is likely to be affected within the proposed project line?

- Trees
- Crops
- Others
- None of the above

If others, kindly specify

TREES

Which of your trees are affected?

- Indigenous
- Exotic
- Fruit
- Others (Specify)

If indigenous, name them, give size and Number of affected trees

i.e., Mukinduri, small 3, medium 2, large 1

If exotic, name them, give size and Number of affected trees

i.e., Mukinduri, small 3, medium 2, large 1

If fruit, name them, give size and Number of affected trees

i.e., banana, small 3, medium 2, large 1

Specify

How many ?

Which type?

What is the size?

- Small
- Medium
- Large

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

How many ?

Which type?

What is the size of the tree?

- Small
- Medium
- Large

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

How many ?

Which type?

What is the size of the tree?

- Small
- Medium
- Large

How many ?

Which type?

What is the size of the tree?

- Small
- Medium
- Large

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

Why do you own these trees?

- Source of income
- Environmental conservation
- Prestige
- Other reasons

Crops

What kind of Crops are affected by the proposed project?

- Food Crops
- Pasture
- Cash crops
- Others (Specify)

It other, kindly specify

Which ones?

- Bananas
- Sweet potatoes
- Other

If other, kindly specify

How many are on the affected line?

Use the camera to take a photo

Click here to upload file. (< 5MB)

What is the length of the affected area (width=2m)

() Area of land Affected (metres squared)

Use the camera to take a photo

Click here to upload file. (< 5MB)

How many are on the affected line?

Use the camera to take a photo

Click here to upload file. (< 5MB)

Which ones?

- Napier Grass
- Other

If other, kindly specify

How many are on the affected line?

Use the camera to take a photo

Click here to upload file. (< 5MB)

How many are on the affected line?

Use the camera to take a photo

Click here to upload file. (< 5MB)

Which ones?

- Coffee
- Tea
- Other

If other, kindly specify

How many are on the affected line?

Use the camera to take a photo

Click here to upload file. (< 5MB)

What is the length of the affected area (width=2m)

() Area of land Affected land in meters squared

How many are on the affected line?

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

Why do you own these crops

- Source of income
- Source of food
- Animal feed

BUSINESS INVENTORY**Is the business yours?**

- Yes
- No

Kidly provide name of the business owner

Contact of the business owner

What is your primary source of income

- Business
- Employment
- Pension
- Other

If other, kindly explain

What is your monthly income from the primary occupation (in Kenya shillings)?

- 0-9,9999
- 10,000-24,0000
- 25,000-70,000
- Above 70, 0000

What is the estimated monthly income from the business?

Net Monthly income=Total income-expenses

- 0-9,9999
- 10,000-24,000
- 25,000-75,000
- Above 75,000

Do you have other sources of income?

- Yes
- No

What is the estimated income from the other source?

- 0-9,9999
- 10,000-24,000
- 25,000-75,000
- Above 75,000

Which of the following objects will be affected

- Business stall
- Shed
- Workshop
- Pavements and corridors
- Other

Kindly specify

For the business stall, what type of construction materials have been used?

- Wood and mud
- Stones and mud
- Stones and cement
- Cement blocks
- Wood poles
- Bricks
- Metal poles
- Tiles
- Cabros

Use the camera to take a photo

Click here to upload file. (< 5MB)

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

For the shed, what type of construction materials have been used?

- Wood and mud
- Stones and mud
- Stoness and cement
- Cement blocks
- Wood poles
- Bricks
- Metal poles
- Tiles
- Cabros

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

For the workshop, what type of construction materials have been used?

- Wood and mud
- Stones and mud
- Stoness and cement
- Cement blocks
- Wood poles
- Bricks
- Metal poles
- Tiles
- Cabros

Point and shoot! Use the camera to take a photo

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Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

For the pavements and corridors, what type of construction materials have been used?

- Wood and mud
- Stones and mud
- Stoness and cement
- Cement blocks
- Wood poles
- Bricks
- Metal poles
- Tiles
- Cabros

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

For other, what type of construction materials have been used?

- Wood and mud
- Stones and mud
- Stoness and cement
- Cement blocks
- Wood poles
- Bricks
- Metal poles
- Tiles
- Cabros

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

Point and shoot! Use the camera to take a photo

Click here to upload file. (< 5MB)

OWNERS KNOWLEDGE ABOUT THE PROJECT AND PREVIOUS INFORMATION

Did you hear about the project before the survey was launched?

- Yes
- No

What was the primary source of information?

- TV
- Newspapers
- Internet
- Community meetings
- From other people

» SOCIAL STRUCTURES

Which of these Public facilities are you closest to?

- Primary School
- Secondary School
- Health Centre
- Road
- Water Source/Point
- Historical sites
- Others(Specify

If other, kindly specify

Distance to Public facility

- <500M
- 500M TO 1KM
- 1-2KM
- 2-4KM
- 3-5KM
- More than 5Km

Distance to Public facility

- <500M
- 500M TO 1KM
- 1-2KM
- 2-4KM
- 3-5KM
- More than 5Km

Distance to Public facility

- <500M
- 500M TO 1KM
- 1-2KM
- 2-4KM
- 3-5KM
- More than 5Km

Distance to Public facility

- <500M
- 500M TO 1KM
- 1-2KM
- 2-4KM
- 3-5KM
- More than 5Km

Distance to Public facility

- <500M
- 500M TO 1KM
- 1-2KM
- 2-4KM
- 3-5KM
- More than 5Km

Distance to Public facility

- <500M
- 500M TO 1KM
- 1-2KM
- 2-4KM
- 3-5KM
- More than 5Km

Distance to Public facility

- <500M
- 500M TO 1KM
- 1-2KM
- 2-4KM
- 3-5KM
- More than 5Km

What is your preferred mode of compensation

- In Kind
- Cash
- Others

If others, kindly specify

Do you have any additional comments?

Thank you for participating in this survey

MINUTES OF THE PUBLIC MEETING ON ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND RESETTLEMENT PLAN FOR THE CONSTRUCTION OF KERUGOYA KUTUS SEWERAGE LAST MILE CONNECTIVITY PROJECT

Date: 23rd February ,2024

Time: 9:00 AM

Venue: Kerugoya Chiefs Office

Attendance as attached list

Agenda:

1. Team introduction and Project Background
2. Comments, Question and Answer
3. Filling of questionnaires
4. Closing Remarks

Min 1/02/2024: Team introduction and Project Background

The meeting was called to order by area Chief at 9:15 AM with a word of prayer from one of the attendants. The TWWDA Representative then welcomed all the attendants and thanked them for creating time to attend the meeting. She further asked her team to introduce themselves briefly and asked the participants to contribute freely towards the discussions noting that their views and comments will go a long way towards the success of project.

The TWWDA representative briefed the participants about Kerugoya –Kutus Water and Sewerage supply project and a representative of KICOWASCO PLC elaborated on the project areas. The meeting was informed that the project will be funded by Africa Development Bank (AfDB) through the TWWDA. She explained that as part of the study, public consultation was key and that the meeting was organized for the community to give their views on the project. She then welcomed the attendants to give their views, comments and suggestions on the project

Min 2//02/2024: Comments, Questions and Answers

Mr Justus Mwai Question – He noted that some of the residents far away from the main sewer line may not be connected to the sewer line and especially where the connection of their premises to the main sewer line involved pipeline traversing through private land.

A – The TWWDA representative informed the meeting that the aim of the Last Mile Connectivity Project was to establish secondary lines from the main sewer trunk to estates in such a way as to enable direct connections to the users. In situations where is far away from the secondary line, then KICOWASCO PLC will liaise with the customer and guide accordingly.

Mr. Abraham Mwai. Q –He was concerned about the limited space on some of the roads reserves and wondered how in such situation the pipeline will be installed. He also expressed fears of water shortage during construction.

A – It was clarified that with the help of the road Agencies, road demarcation will be done and incase there of encroachment of the road by land owners, then an amicable solution will be arrived at with the involvement of the local administration. During construction, the Contractor will ensure minimum interference with the existing water pipeline and will work closely with KICOWASCO PLC to promptly restore water supply.

Ms Jane Gachoki Q – she enquired on where compensation related complaints will be channeled in case someone was dissatisfied with the compensation matters.

A-The participants were informed that grievance forms will be available at the chief's office or at KICOWASCO PLC, and members of the public would be free to fill the forms in case of any grievance. It was also clarified that frequent public Baraza's shall be conducted during project implementation period where such complaints will be addressed.

Mr Justus Mugo Q – he enquired whether there shall be compensation for structures erected along the road reserve.

A-the participants were informed that compensation for livelihood losses will be done in accordance to AfDB guidelines.

Min 3//02/2024: Filling of Questionnaires

The ESIA consultant informed the participants the importance of public participant in Kenya laws and guided the participants through the questionnaire filling.

Min 4//02/2024: Closing Remarks

The Consultant's team thanked the attendants for their active participation in the meeting and reminded them that their views and comments will be incorporated in the ESIA and RAP report. The participants were then asked by the consultant to sign the attendance sheet and requested to share all they have learned about the project with other residents.

There being no other business the public consultation meeting ended at 10:30 am.

Confirmation of Minutes

These minutes were confirmed as a true reflection of the deliberations that were relayed on the meeting by the undersigned as:

NAME:.....FRANCIS KARANJ KINSAU.....

OFFICE OF THE CHIEF
KERUGOYA LOCAL GOVT
DATE: 11/11/11

POSITION:.....AG. CHIEF, KERUGOYA.....

OFFICE OF THE CHIEF
KERUGOYA LOCAL GOVT
DATE: 11/11/11

INSTITUTION:.....N.G.O.....

OFFICE OF THE CHIEF
KERUGOYA LOCAL GOVT
DATE: 11/11/11

NAME:.....WAMUKU GATHINJI.....

AQUAGREEN ENTERPRISES
LIMITED
P.O. Box 468-10100,
NYERI

POSITION:.....CONSULTANT - AQUA GREEN ENTERPRISES LTD.....

INSTITUTION:.....AQUA GREEN ENTERPRISES LTD.....

NAME:.....Eng. David W Ndegwa.....

POSITION:.....PEWSI.....

INSTITUTION:.....TANA WATER WORKS DEVELOPMENT AGENCY.....

MINUTES OF THE PUBLIC MEETING ON ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND RESETTLEMENT PLAN FOR THE CONSTRUCTION OF KERUGOYA KUTUS WATER AND SEWERAGE LAST MILE CONNECTIVITY PROJECT

Date: 23rd February ,2024

Time: 11:00 AM

Venue: Kirimunge MCAs Office Premises

Attendance as attached list

Agenda:

1. Team introduction and Project Background
2. Concerns and Issues
3. Filling of questionnaires
4. Closing Remarks

Min 1/02/2024: Team introduction and Project Background

The meeting was called to order by area Chief at 11:05 AM who had mobilized the members for the meeting. He then invited a volunteer to officially open the meeting with a word of prayer.

The area MP representative was excited about the project and expressed that the development was welcome to the area.

The Consultant representative introduced her team and then welcomed all the attendants and thanked them for finding time to attend the meeting. She asked the participants to contribute freely towards the discussions noting that their views and comments will go a long way towards the success of project. The surveyor KIRIWASCO briefed the meeting about Kerugoya –Kutus Water and Sewerage supply project and described the project coverage.

The consultant representative then welcomed the attendants to give their views, comments and concerns on the project

Min 2//02/2024: Concerns and Issues

During the discussions the participants raised the following issues:

- The participants wanted the projects areas reviewed to cover other areas that has water challenges.
- Some members were concerned that pipelines installation works will affect and interfere with their farms and other assets such as fences.
- Some members were concerned that for them to be connected to the project, several road crossings need to be established.
- Participants requested that employment of locals be prioritized during project implementation.

Responses

- The proponent was to prepare Resettlement Action Plan for all those affected for proper compensation
- The surveyor KIRIWASCO PLC explained that major road crossings had been included in the design to connect the secondary line to the mainlines and that the users shall be connected to the secondary lines and therefore only a few road crossings will be required and not individual customer crossings. KIRIWASCO PLC will guide and will be involved at the point of customer connection.
- The Contractor will recruit locals for employment but can source for skilled labour if not available locally.

Min 3//02/2024: Filling of Questionnaires

The ESIA consultant informed the participants the importance of public participant in Kenya laws and guided the participants through the questionnaire filling. Most of the participants were not affected by the proposed pipeline so just a few filled the questionnaires.

Min 4//02/2024: Closing Remarks

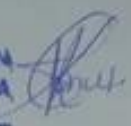
The consultant's team thanked the attendants for their active engagement in the meeting and reminded them that their views and comments will be incorporated in the ESIA and RAP report.

There being no other business the public consultation meeting ended at 1:25 pm.

NAME: GILBERT KARIIMI MURUTHI

POSITION: CHIEF

OFFICE OF THE CHIEF
KANYEKINI LOCATION
P.O. Box 1-10300, KERUGOYA
Date: 26/8/2024 Tel: _____



INSTITUTION: HIGAD

NAME: WANGUDA GATHINI


AQUAGREEN ENTERPRISES
LIMITED
P.O. Box 468-10100,
NYERI

POSITION: CONSULTANT LEAD EXPERT

INSTITUTION: AQUAGREEN ENTERPRISES LTD

NAME: Eng. David W Ndegwa

POSITION: PEWSI

INSTITUTION:  TANA WATER WORKS DEVELOPMENT AGENCY

MINUTES OF THE PUBLIC MEETING ON ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND RESETTLEMENT PLAN FOR THE CONSTRUCTION OF KERUGOYA KUTUS WATER AND SEWERAGE LAST MILE CONNECTIVITY PROJECT

Date: 23 February ,2024

Time: 11:00 AM

Venue: Ngaru Chiefs Office

Attendance as attached list

Agenda:

1. Team introduction and Project Background
2. Concerns and Issues
3. Filling of questionnaires
4. Closing Remarks

Min 1/02/2024: Team introduction and Project Background

The meeting was called to order by area Chief at 11:05 AM who had mobilised the members for the meeting he then invited a volunteer to officially open the meeting with a word of prayer.

The TWWDA Representative introduced her team and then welcomed all the attendants and thanked them for finding time to attend the meeting. She asked the participants to contribute freely towards the discussions noting that their views and comments will go a long way towards the success of project. The KIRIWASCO member briefed the meeting about Kerugoya –Kutus Water and Sewerage supply project and elaborated on the project areas especially water component.

The consultant representative then welcomed the attendants to give their views, comments and concerns on the project

Min 2//02/2024: Concerns and Issues

During the discussions the following points were noted:

- The participants wanted to know the project areas coverage
- Interference with the existing water systems in the area
- Some members felt that pipelines may affect their farms, fences etc
- Members requested that water charges be friendly

- Members requested that water charges be friendly

Responses

- The design was explained in details
- The existing water system will be consulted before construction works commence
- The proponent was to prepare Resettlement Action Plan for all those affected for proper compensation
- The participants were promised that the charges will be necessary for operation and maintenance of the project

Min 3//02/2024: Filling of Questionnaires

The ESIA consultant informed the participants the importance of public participant in Kenya laws and guided the participants through the questionnaire filling. Various issues were raised and addressed by the team.

Min 4//02/2024: Closing Remarks

The TWWDA team thanked the attendants for their active engagement in the meeting and reminded them that their views and comments will be incorporated in the ESIA and RAP report.

The cut off date off date was agreed upon as 31st March 2024

There being no other business the public consultation meeting ended at 1:00 pm.

Confirmation of Minutes

These minutes were confirmed as a true reflection of the deliberations that were relayed on the meeting by the undersigned as:

NAME: BETH ROSE ATCONDE

POSITION: CHIEF

CHIEF
NGARU LOCATION
Date: 26/3/2024
Sign: [Signature]

INSTITUTION:..... Danga Location

NAME:..... WAKUHU GATHINI


AQUAGREEN ENTERPRISES
LIMITED
P. O. Box 468-10100,
NYERI

POSITION:..... CONSULTANT - LEAD EXPERT

INSTITUTION:..... AQUA GREEN ENTERPRISE LTD

NAME:..... Eng. David W Ndegwa

POSITION:..... PEWSI

INSTITUTION:.....  TANA WATER WORKS DEVELOPMENT AGENCY



TANA WATER WORKS DEVELOPMENT AGENCY

MAJI HSE BADEN POWELL ROAD
P.O. BOX 1292 – 10100 NYERI
Tel: 061-2032282 Fax: 061-2034118
Email: info@tanawwda.go.ke
Website: www.tanawwda.go.ke



TWWDA/PRJ/6/210 VOL.I/ (58)

21st February, 2024

Kenya Rural Roads Authority
P.O.BOX 390-10300
KERUGOYA.

PUBLIC PARTICIPATION FOR PROPOSED KERUGOYA KUTUS WATER SUPPLY AND SEWERAGE LAST MILE CONNECTIVITY PROJECTS, KIRINYAGA COUNTY

Tana Water Works Development Agency (TWWDA) plans to implement Kerugoya Kutus Water supply Sewerage Last Mile connectivity Projects and is in the process of preparing the required documents for funding approval. Part of the mandatory requirements for funding approval is to carry out the Resettlement Action Plan (RAP) and update the previously conducted Environmental & Social Impact Assessment (ESIA) study.

We therefore plan to undertake Public Participation for the Proposed Kerugoya Kutus Water Supply and Sewerage Last mile connectivity Projects with the aim of updating the previously conducted ESIA and for preparation of undertaking a Resettlement Action Plan (RAP).

In line with the Article 10(2)(a) of the Constitution of Kenya on public participation, Tana Water Works Development Agency has invited members of the public, interested parties, and other stakeholders to attend the Public Participation Forum.

The Agency intends to carry out community sensitization Baraza as follows:

Date	Time	Venue
23 rd February 2024	8.30 am – 9.30 am	Kerugoya Chief's camp
23 rd February 2024	9.30 am- 10.30 am	Kiamurunga ACK church grounds
23 rd February 2024	10.30 am- 11:30 am	Ngaru Chief's Office
23 rd February 2024	11:30am-12:30pm	Kirimuge MCA Office
23 rd February 2024	2:00pm-3:00pm	Holy Rosary Catholic Church grounds



TWWDA IS ISO 9001:2015 CERTIFIED

You are therefore invited for the meeting.

Your presence will be highly appreciated.



Eng. Philip Gichuki, MBS
CHIEF EXECUTIVE OFFICER



TW.DA.IS.ISO9001:2015 CERTIFIED

**MINUTES OF MEETING BETWEEN KENYA RURAL ROADS AUTHORITY (KeRRA),
KIRINYAGA REGION AND TANA WATER WORKS DEVELOPMENT AGENCY
(TWWDA) ON THE RESETTLEMENT ACTION PLAN (RAP) FOR THE PROPOSED
KERUGOYA- KUTUS WATER SUPPLY AND SEWERAGE LAST MILE
CONNECTIVITY PROJECTS.**

Date: 18th March, 2024

Time: 8.15am

Venue: KeRRA Offices Keruguya

Attendance as attached list.

Agenda:

1. Introduction and Project Background.
2. Comments and Discussions.
3. Closing Remarks.

Min 1/03/2024: Team Introduction and Project Background

The meeting was called to order at 0815hours with a word of prayer from one of the attendants. Eng.Murage (KeRRA) then welcomed all the attendants and thanked them for finding time to attend the meeting.

The meeting was informed by Eng Ndegwa about the following issues regarding the upcoming project:

- That Tana Water Works Development Agency (TWWDA) had planned to undertake Kerugoya Kutus Water and Sewerage Projects and was in the process of preparing the requisite documentation on environmental and social safeguards for approval by AfDB who were the main project financiers.
- That TWWDA was conducting Resettlement Action Plan and ESIA studies for the projects in line with the legal and AfDB requirements which involved engaging individuals, Corporates and Government Agencies that may be affected by the projects.
- That approximately 35km of the water and sewer pipeline have been designed to traverse through the road reserve managed by Kenya Rural Roads Authority (KeRRA).

- That in view of this, TWWDA was engaging KeRRA so as to establish a good working relationship and understand statutory requirements and costs for utilising this corridor.

Min 2//03/2024: Comments and Discussions.

During the discussions the following points were noted:

- Eng. Murage expressed some challenges experienced by KeRRA during Construction of the ongoing Kerugoya Sewerage Project implemented by TWWDA. He observed that deep excavation on a section adjacent to the tarmac road had been carried out without proper reinstatement. He also noted that some sections of the road drains had been clogged and corrective measures had not been undertaken. He urged TWWDA to expedite on the reinstatement and appropriate corrections of the damaged sections. TWWDA committed to making appropriate correction to the required standards.
- Eng Murage advised that road crossings on bitumen roads were to be done through micro tunnelling and sleeve installation while murrum and earth roads were to be cut and concrete sleeves installed. For the sections where road improvement to bitumen was ongoing, KeRRA would liaise with the road Contractor to install sleeve ducts across the roads at identified points to allow for future pipe installation across the road.
- Eng. Murage advised that for approval of the pipe works on the road reserve, TWWDA needed to make an application to the Director General KeRRA giving precise details of the works such as the layout maps, coordinates and the pipe installation and road crossing designs. KeRRA would assess the application and respond by giving the conditions that TWWDA needs to adhere to before commencement, during construction and after construction. The applicable fee will also be detailed in the approval letter. TWWDA would also be required to cater for the costs of the daily allowances for KeRRA's supervision staff for the active days when the work shall be going on.

Min 3//03/2024: Closing Remarks

Eng Murage thanked the attendants for their active engagement in the meeting and was looking forward to a cordial working relationship between KeRRA and TWWDA in the implementation of the projects.

There being no other business meeting ended at 1000hours.

Confirmation of Minutes

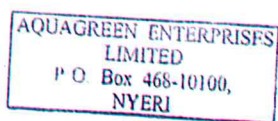
These minutes were confirmed as a true reflection of the deliberations that were relayed on the meeting by the undersigned as:

For: Kenya Rural Roads Authority, Kirinyaga Region.

Name:.....Position:.....Date.....

For: Aqua Green Enterprises Ltd (ESIA and RAP Consultant)

Name:.....Position:.....Date *25/3/24*



A handwritten signature in blue ink, consisting of a stylized 'A' followed by a loop.

For: Tana Water Works Development Agency.

Name: *Eng. David W. Ndlovu* Position: *PC - MUWASSAP* Date: *25/3/24*



ATTENDANCE REGISTER

SUBJECT: RESETTLEMENT ACTION PLAN FOR KERUGOYA KUTUS WATER SUPPLY AND SEWERAGE LAST MILE
CONNECTIVITY PROJECTS

DATE: 15/03/24 - KERRA KUTUS

NAME	ORGANISATION	TELEPHONE NUMBER	EMAIL	SIGNATURE
1. Mrs. J. Murage	KERRA	0722-001088	kinjasa@kerra@gmail.com	
2. ENY SUSAN MUNGORI	KERRA	0727099499	Susan.mungori@kerra.co.ke	
3. Eng. David W. Ndlovu	Taus Water Works Development Agency	072092112	davidndlovu@gmail.com	
4. Wamunywa BATHIISI	ADWA GREEN POWER PROJECT CONSULTANT: Sefeg words	0710474558	wamunywa@sefegwords.com	
5.				



TANA WATER WORKS DEVELOPMENT AGENCY

MAJI HSE BADEN POWELL ROAD
P.O. BOX 1292 – 10100 NYERI
Tel: 061-2032282 Fax: 061-2034118
Email: info@tanawwda.go.ke
Website: www.tanawwda.go.ke



TWWDA/PRJ/6/210 VOL.I/ (57)
The Regional Director -Central Region
Kenya National Highways Authority
P.O.BOX 372-10100
NYERI.

21st February, 2024

PUBLIC PARTICIPATION FOR PROPOSED KERUGOYA KUTUS WATER SUPPLY AND SEWERAGE LAST MILE CONNECTIVITY PROJECTS, KIRINYAGA COUNTY

Tana Water Works Development Agency (TWWDA) plans to implement Kerugoya Kutus Water supply Sewerage Last Mile connectivity Projects and is in the process of preparing the required documents for funding approval. Part of the mandatory requirements for funding approval is to carry out the Resettlement Action Plan (RAP) and update the previously conducted Environmental & Social Impact Assessment (ESIA) study.

We therefore plan to undertake Public Participation for the Proposed Kerugoya Kutus Water supply Sewerage Last Mile connectivity Projects and with the aim of updating the previously conducted ESIA and for preparation of undertaking a Resettlement Action Plan (RAP).

In line with the Article 10(2)(a) of the Constitution of Kenya on public participation, Tana Water Works Development Agency has invited members of the public, interested parties, and other stakeholders to attend the Public Participation Forum.

The Agency intends to carry out community sensitization Baraza as follows:

Date	Time	Venue
23 rd February 2024	8.30 am – 9.30 am	Kerugoya Chief's camp
23 rd February 2024	9.30 am- 10.30 am	Kiamurunga ACK church grounds
23 rd February 2024	10.30 am- 11:30 am	Ngaru Chief's Office
23 rd February 2024	11:30am-12:30pm	Kirimuge MCA Office
23 rd February 2024	2:00pm-3:00pm	Holy Rosary Catholic Church grounds



TWWDA IS ISO 9001:2015 CERTIFIED

This is to therefore request for representation of KENHA in these Barazas.

Your presence will be highly appreciated.



Eng. Philip Gichuki, MBS
CHIEF EXECUTIVE OFFICER



FWDA/ISO9001:2015 CERTIFIED



TANA WATER WORKS DEVELOPMENT AGENCY

MINUTES ON CONSULTATIVE MEETING WITH KENHA CENTRAL REGION FOR THE PROPOSED PROJECTS IN NYERI, KIRINYAGA, THARAKA NITHI AND EMBU COUNTIES HELD ON 15th MARCH, 2024 AT KeNHA CENTRAL REGION OFFICE

Present

1.	Eng. Mbae John	Resident Engineer-Kenya CENTRAL REGION
2.	Eng. David Ndegwa	Program Coordinator -NuWaSSaP- TWWDA
3.	Evans Kageche	Environmentalist-TWWDA
4.	Shaurot Kamama	Environmentalist Intern- TWWDA

Agenda

- Preliminary matter
- Introduction and Presentation of the Project to KeNHA
- Comments and Concerns from KeNHA
- A.O.B
- Closing remarks

MIN 1/15/03/2024: PRELIMINARY MATTER

Eng. Mbae called the meeting to order promptly at 4pm welcoming the Tana Water Works Development Agency team.

Additionally, he provided a brief overview of KeNHA's mandate and the area of jurisdiction of Central Region Office namely the counties of Nyeri, Murang'a, Tharaka Nithi, Kirinyaga, and Kiambu Counties.

Dmt



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TANA WATER WORKS DEVELOPMENT AGENCY

MIN 2/15/03/2024: INTRODUCTION AND PRESENTATION OF THE PROJECT

Eng. Ndegwa provided an overview of the projects that TWWDA was planning to undertake under the AfDB's National Urban Water Supply and Sanitation.

Eng. Ndegwa emphasized that the projects were at the final planning phase, with Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) documentation being under preparation for funding by the African Development Bank (AfDB). He explained that the purpose of the visit to KENHA office was to appraise KENHA about the proposed projects, which will involve usage of KENHA road reserve for road crossings and pipe installation along the road.

MIN 3/15/03/2024: COMMENTS AND CONCERNS FROM KENHA

Eng. Mbae acknowledged the importance of the water and sanitation projects and appreciated the effort of TWWDA to make the consultations with KENHA prior to commencement of construction.

Eng. Mbae highlighted some of the requirements/conditions by KENHA before and during project construction as follows;

Special Requirements

- Site reconnaissance by surveyors and Engineers from KeNHA to know the exact points of road crossing in the project coverage.
- Provision of the approved project drawings for both the water and sewerage project.
- TWWDA to provide project maps to show the coverage.

Technology to be used

- To use micro tunnelling method for paved road crossings to avoid destruction of the road.
- The Agency to provide for traffic diversion during micro tunnelling and ensure safety to the motorists and workers.

Dint



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TANA WATER WORKS DEVELOPMENT AGENCY

Application for Approvals

- Eng. Mbae guided the Agency on the process of online application for authorization to use the road reserve.
 - He also outlined the rates for the road Crossing based on the Class of the road as stated below
 - ❖ Road Crossing on Class A Roads-Kshs 100,000 per Lane
 - ❖ Road Crossing on Class B Roads-Kshs-80,000 per Lane
 - ❖ Utilization of Road reserve-Kshs 5000 per Kilometre (Both Road Class A &B)
- NB:** The amounts paid would have an equivalent deposition which is refundable once the project was complete and the Reinstatement done to KeNHA's standards.
- He advised that application for approval should be made once the project is fully ready for implementation since the approval once given is valid for 6 months after which a renewal of the approval is required.

MIN 4/15/03/2024: A.O.B

Eng. Mbae advised on the need to map the existing utilities on the road reserve such as fiber optic cables to minimise damage during construction and avoid unnecessary disputes.

MIN 5/15/03/2024: CLOSING REMARKS

Eng. Mbae thanked the TWWDA team and assured them of KENHA's support in implementing the projects.

Eng. Ndegwa thanked KENHA's representative for the meaningful deliberations assuring him of TWWDA's commitment to following all the requirements by KENHA for the proposed works and shall in due time submit the necessary documents and make applications for approval.

Dmn



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TANA WATER WORKS DEVELOPMENT AGENCY

Confirmation of True Record of the Meeting:

<i>Eng. David W. Adegoke</i>		
TWWDA's Representative	<i>[Signature]</i> Signature	<i>25/3/24</i> Date
KeNHA's Representative	Signature	Date

Down



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Appendix 1: List of participants
Venue: Kerugoya Chiefs Office



ATTENDANCE REGISTER

Page 1 of 8

SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA) AND RESETTLEMENT ACTION PLAN(RAP)										
PROJECT NAME:										
VENUE:										
DATE:										
S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
1.	BERNARD MITHAMO	KARARE WEST Loc.	11170352	071573566	M	—		✓		<i>[Signature]</i>
2.	CATHERINE NGALI	KITHURU Sub location	00089638	07243220	F	NO		✓		<i>[Signature]</i>
3.	LUKE N. KITIKUNGA	A/CHIEF Kufus	22309289	072320415	M	Y		✓		<i>[Signature]</i>
4.	KENNETH M. NDAMBIA	A/CHIEF Kerugoya	2060028	072170403	M			✓		<i>[Signature]</i>
5.	SHADRACK N. OBE	A/CHIEF	21929443	072486728	M			✓		<i>[Signature]</i>

Revision

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ATTENDANCE REGISTER

SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35	35-70	Above 70	
6.	DENNIS Mithamo	Mikayama	23012676	07/412866	Male	✓ NO	✓	✓	70 ✓	Mithamo
7.	Christian Nibiki	Githirigi	32377626	071249284	Male	NO	✓			Christian
8.	Edward Mwangi	Kibitici	3218677	0723289779	Male	NO	✓			Edward
9.	Beatrice Njira Muri	Kususi	4694414	0797462373	F	NO		✓		Beatrice
10	Simon Njiru Muri	Kususi	2406061	092322846	M	NO	✓			Simon
	WINNIE WAKIO	KUSUSI	0756158	072000840	F	NO		✓		Wakio

Revision

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ATTENDANCE REGISTER

SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
11	Elijah Mwachiro	Kutus	31333477	07761765	M	No	✓			[Signature]
12	DAVID GICAYI	Kutus	9678683	0723760187	M	No		✓		[Signature]
13	John Kinyua	Kutus	5753706	0701330294	M	No Yes		✓		SOHA
14	Sammy Kireye	Kutus	312199	072059856	M	No			-	[Signature]
15	Mweni Mpetereka	Kutus	2059344	072373508	F	No		✓		mweni

Revision

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ATTENDANCE REGISTER

**SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)**

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
16	LAWRENCE MIGWI	KITHIRI	20217226	0719417239	MALE	NO		✓		
17	ROS WAMJIRU	LABARE	4951506	0721539385	F	NO		✓		
18	LUCY NJERI	KUTUS	37891098	0745909791	F	NO	✓			
19	IBRAHIM MUYATI	KUTUS	32961839	0745405550	MALE	NO	✓			
20	BERNARD MAINA	KUTUS	24415627	0746885869	MALE	NO	✓			

Revision

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ATTENDANCE REGISTER

**SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)**

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
21	ESTHER KANJIKU GATHUTWA	Kutus	5753212	0713245579	F	NO		✓		Wangeci
22	Faith makera Gitonga.	Kutus	33609497	0111247946	F	NO	✓			Faith.
23	Edward Mpingi Karawa	Kutus	10750744	074457776	M	N/A		✓		Edward
24	DOUGLAS GICORI NDAMBARI	Kutus	13696030	0727328505	M	NO	✓	✓		Douglas
25	LYDIAH WAMBUI WANGECHEI	Kutus	10888961	0714988835	F	NO		✓		Wangeci

Revision

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ATTENDANCE REGISTER

**SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)**

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
26	AGNES MICHELLE	KUTUS	27983554	0711182981	F	NO	✓			<i>[Signature]</i>
27	JOSPHAT WASHARA	KUTUS	23626123	0723890701	M	NO		✓		<i>[Signature]</i>
28	Celan WSWERYU	KUTUS	mijani		M	NO			✓	<i>[Signature]</i>
29	Wilson Kaniuki	Kutus	6091322	0720430827	M	Yes		✓		<i>[Signature]</i>
30	JANE WAIKURU	Kutus	21495458	071706888	F	NO		✓		<i>[Signature]</i>

Revision

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ATTENDANCE REGISTER

**SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)**

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
31	JOSEPHINE MURANGO MUGWI	KITHIRATI	12977227	0726475883	F	NO		✓		
32	chang muchira	Kapuvaya (Kutus)	8797030	0720110063	f	NO		✓		
33	Dominic K. Maitava	Kutus (Kithirati)	5528729	072114099	M	NO		✓		
34	Emilio Kema	Kutus	11599535	0721169127	M	YES		✓		
35	JACKSON CARILLI	KITUS	10953509	0720212352	M	NO		✓		

Revision 00

Appendix 1: List of participants

Venue: Kirimunge MCA s Office



ATTENDANCE REGISTER

Page 1 of 8

SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)

PROJECT NAME: KERUGOYA KUTALS LAST MILE CONNECTIVITY

VENUE: KIRIMUNGIE MCA'S OFFICE

DATE: 23/02/2023

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
1.	JOSEPH M. WITANI	Kimuria	12946825	0720832487	M	N/A NO		✓		
2.	BENSON G. CHOTO	Kimuria	11598338	072628889	M	NO		✓		
3.	Paul Kioko	Kimuria	22400022	0726686597	M	NO		✓		
4.	Alvise N. Macondu	NBIMI	2905168	0723374682	M	NO		✓		
5.	Dominic Mubene	NBIMI	1899905	07247977 66	M	NO		✓		

Revision 00



ATTENDANCE REGISTER

SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
6.	SIT JEMINAH MWANGI		22171764	0721991193	FEMALE			✓		<i>[Signature]</i>
7.	ND GUGU MUKIIBI		2025215	0722612017	MALE			✓		<i>[Signature]</i>
8.	SOLY MUKIIBI		075479	0711722291	MALE			✓		<i>[Signature]</i>
9.	ANTONY MUNGU MWARIRI		51663755	0719226502	MALE		✓	✓		<i>[Signature]</i>
10	JONAS MUKIIBI MUKIIBI	Kianga	1072165	0725972266	MALE	N/A		✓		<i>[Signature]</i>

Revision

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ATTENDANCE REGISTER

Page 3 of 8

**SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)**

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
11	Bernard Muege	KIAGA	0809606	0726473946	M	YES			✓	<i>[Signature]</i>
12	PREDEN KAROKI	KIAGA	(297897)	0721959313	M	YES		✓		<i>[Signature]</i>
13	Mary Muthoni	Diaga	3691191	0705300466 0705300466 0705300466	F	YES		✓		<i>[Signature]</i>
14	ANNE WAMJIKU	KATHARC	0754363	0710567786	F	YES		✓		<i>[Signature]</i>
15	Rose Wanjiku	Katharc	35294635	0759098086	F	YES		✓		<i>[Signature]</i>

Revision 00



ATTENDANCE REGISTER

Page 5 of 8

**SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)**

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
21	ANILS MINNENE	KATHARE	30567929	0704402088	M	NO	✓			
22	Priscilla Madina	KATHARE	0254944	0712 566404	M.	NO			✓	
23	MILKA MAINA	KRAGA	3691997	0791305517	F	NO		✓		
24	THABISHA LAMAU	KATHARE	11651946	0748 619730	F	NO		✓		
25	Funice Wanjira	Kraga	2897179	0712 725205	F	NO		✓		

Revision

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ATTENDANCE REGISTER

SUBJECT: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)
AND RESETTLEMENT ACTION PLAN(RAP)

PROJECT NAME:

VENUE:

DATE:

S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tiek one			SIGNATURE
							18-35 ✓	35-70 ✓	Above 70 ✓	
26	PENIAAH W. MUTUWI	KIAGA	39553424	-	F	NO		✓		P.w.
27	LOYCE MULERE	KIAGA	3680013	-	F	NO		✓		L.M.
28	MARIHA WAMBUI	KIAGA	7237474	0708851224	F	NO		✓		Mariha
29	LIGIANG WAKUMI	KIAGA	0671746	0727105150	F	YES		✓		<i>[Signature]</i>
30	ROSE WAKUTHI	KIAGA	3128596	0705124275	F	YES		✓		R.w

Revision

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S/N O	NAME	SUB- LOC.	ID NO.	TEL CONTACT	GENDER M/F	PWD YES/NO	AGE -Tick one			SIGNATURE
							18-35	35-70	Above 70	
	GAFFET COMBA WONGE	KIAGA	1254407	04330768	MALE		✓	✓	70 ✓	
31	Peter GIKUNDU NJOGU	Kathare	0755347	04358262	Male					
32	JUSTUS NYAMA	KIAGA	3128841	0720707696	MALE					
33	SOLONON WANJOMI	Kathare	0752733	0721277433	MALE					
34	JOSEPH MWANGI	Kathare	1499222	0713622448	Male					
35	Stanley Mutuku	Kathare	2899763	0723129210	Male					

Revision

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