Ministry of Lands, Public Works, Housing
and Urban Development

KISIP

KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP2)

LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLAN

SIPILI A SETTLEMENT

(2025-2035)

SEPTEMBER, 2025

THE WORLD BANK

County Government of Laikipia

e&G SPATIAL CONSULTANTS LTD
Physical Spatial Planners | Land Surveyors | Environmental Auditors | GIS Experts

Final Plan Adoption by Sipili A Residents (In the Photo: Community Members, CPCT, Area MCA, and the Consultant)

CERTIFICATE

This Plan has been prepared and published as per requirements of the Physical Planning and Land Use Act, 2019

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Signed Date

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Registered Physical Planner-0203

Recommended

....

Signed Date

County Director of Physical Planning

APPROVAL

Certified

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Signed Date

C.E.C.M, Infrastructure, Land, Housing, Energy and Physical Planning

Approved

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Hansard No. Date

Laikipia County Assembly

Departmental Reference No:
……R783/2025/01……

Approved Local Physical and Land Use Development Plan No.:
……01……

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The successful completion of the planning process and this LPLUDP would not have been possible without the invaluable support, participation, and contributions of individuals and institutions. Therefore, we would like to express our sincere gratitude to the following:

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- June Yator – Communication officer
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- Diana Wangari – Social Development Officer

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The consultant is immensely grateful to the various stakeholders and all individuals involved in property boundary verification, data collection, visioning, knowledge sharing, proposal development, and demonstrating commitment to the project's successful completion.

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FOREWORD

In the 21st century, rapid urbanization has accelerated globally, including in Kenya. According to a World Bank report (2016), over 26 percent of Kenya's population resided in urban areas by 2016. In 2015, Kenya joined other nations in adopting the 17 Sustainable Development Goals (SDGs), a global development framework spearheaded by the United Nations in partnership with member states. Specifically, SDG 11 aims at "making cities and human settlements inclusive, safe, resilient, and sustainable" by promoting access to adequate, safe, and affordable housing, basic services, and slum upgrading.

Although the advantages of urbanization and well-planned human settlements are widely recognized, rapid and uncoordinated urban growth in developing countries often presents myriad challenges. These include heightened risks of social instability, deteriorating infrastructure, water and sanitation crises, and possible disease outbreaks. Further, these issues are compounded by the continued rural-to-urban migration. The growing urban population has led to increasing demand for housing, secure tenure, and essential services. However, housing supply has consistently fallen short of this demand, resulting in the proliferation of informal settlements.

The Kenya Informal Settlement Improvement Project Phase 2 (KISIP2) was conceptualized with one of its key objectives being to facilitate the conferment/formalization of secure land tenure for selected informal settlements. This would be achieved through coordinated planning and surveying efforts. The informal settlements identified for intervention were selected from counties participating in the KISIP2 program. In this context, Sipili A Informal Settlement, located in Laikipia County, was selected for intervention. The Sipili A plan responds directly to these urbanization pressures by providing a locally grounded, forward-looking spatial framework that guides sustainable development, infrastructure provision, and secure tenure.

This planning report outlines the core aspects of the Local Physical and Land Use Development Plan for Sipili A. This plan was the basis for the cadastral survey that followed immediately, resulting in an amended Registry Index Map (RIM). The plan and the amended RIM shall be used to process the title deeds, which are the final output of this project on tenure regularization. The plan's preparation was guided by the community's vision— **"To become a well-connected economic hub."**— developed during a stakeholder meeting. This vision ensured that the proposals aligned with the aspirations of the Sipili A community. Consistent with constitutional requirements for public participation in policymaking (Article 269(1)(d)), the planning process was highly inclusive, participatory, and collaborative. Participants included representatives from diverse backgrounds: government agencies, county departments, settlement beneficiaries, the local residents, non-state actors,

professionals, and business entities. This inclusive approach aims to raise awareness, foster accountability, and promote sustainability and ownership of the plan throughout its implementation phase.

I urge all the implementing departments and entities to collectively and voluntarily commit to ensure successful implementation and achievement of the plan's vision and objectives.

.....

Hon. Martin Ekwam Nabos
CECM, Infrastructure, Land, Housing, Energy and Physical Planning

EXECUTIVE SUMMARY

Project Highlights: The Second Kenya Informal Settlements Improvement Project (KISIP2) represents a significant scaling-up of the earlier KISIP1 initiative. While KISIP1 was limited to 15 municipalities in 14 counties, KISIP2 extends its reach to all 47 counties in Kenya. This expansion reflects the National Government's commitment, with the support of development partners such as the World Bank, to address the persistent challenges of informal settlements through coordinated partnerships with county governments. Participation by counties was voluntary, formalized through participatory agreements that outlined collaborative responsibilities, thereby ensuring locally grounded interventions.

The design of KISIP2 draws directly on lessons learned from KISIP1, particularly the need for a more adaptive, inclusive, and context-specific approach to planning in informal settlements. As a result, KISIP2 places enhanced emphasis on physical and land use planning alongside settlement upgrading interventions. These priorities align with the National Land Policy (2009), which identifies informal settlements as areas emerging in the absence of tenure security and planning controls, typically characterized by inadequate infrastructure, insecure livelihoods, and social vulnerability.

Consistent with the policy's directive under Section 211, KISIP2 intervenes in informal settlements by facilitating tenure regularization through planning and surveying services on suitable public land. This policy alignment is operationalized through KISIP2's Project Development Objective: to improve access to basic services and tenure security in participating settlements while strengthening institutional capacity for slum upgrading.

This objective is realized through four components: Component 1 (Integrated Settlement Upgrading), which supports upgrading settlements through tenure regularization and infrastructure improvement; Component 2 (Socio-Economic Inclusion Planning), which promotes the inclusion of beneficiaries in government programs; Component 3 (Institutional Capacity Development), which builds institutional and policy capacities at national and county levels for slum upgrading; and Component 4 (Program Management and Coordination), which ensures efficient project management by supporting the National and County Project Coordination Teams (NPCT and CPCTs). Notably Component 1 on integrated settlement upgrading and Component 2 on socio-economic inclusion, are directly informed by planning activities.

The Consultancy: E&G Spatial Consultants Ltd was contracted to provide *Consultancy Services to Undertake Physical Planning, Cadastral Survey, and Detailed Topographical Survey of Eleven Selected Informal Settlements in Embu and Laikipia Counties, Lot VII Phase IIC– Cluster 1*. Sipili A is one of the settlements in Laikipia county. The firm is experienced in carrying out similar assignments, as

exhibited by its successful completion of similar assignments in several other informal settlements spread across the country.

Sipili A settlement is located in Sipili Centre approximately 30km north-west of Rumuruti town and approximately 45km north of Nyahururu town. Administratively, it is Ol-Moran ward, Laikipia West Constituency, Laikipia West Subcounty in Laikipia County. The settlement location coordinates are; 36.3756255°E 0.4117369°N north, 36.3769662°E 0.4095475°N west, 36.3769662°E 0.4095475°N south and 36.3769662°E 0.4095475°N east. The settlement-identified perimeter boundary acreage measures approximately 16.35Ha. This is just a section of the larger Sipili settlement extent as defined by the initial development plan of 1999.

Project Methodology: The main objective of this consultancy is to facilitate the conferment/formalization of secure land tenure for the selected informal settlements within KISIP2's participating counties through Planning and Surveying. The participating county governments proposed selecting settlements to KISIP for consideration. The proposed informal settlements were then subjected to qualification and eligibility parameters as per the KISIP Project's Operations Manual and the Project Appraisal Document (PAD&POM).

To deliver this assignment, the following steps were undertaken:

i. **Stakeholder Identification and Mobilization** – This initial and foundational activity was critical to the overall success of the project. It entailed identifying all relevant stakeholders and engaging them regarding the project's terms of reference (ToRs), expected outputs and deliverables, timelines, methodologies, and the roles and responsibilities of each party. Stakeholders included the consultant's team, the National and County Project Coordination Teams (NPCT, CPCT), pertinent national and county departments, SEC and GRC members, the broader community, local administrative and political leaders, and relevant government agencies. This process ensured transparency and fostered active participation throughout the planning and surveying phases.
ii. **Social and Environmental Screening** – This foundational step aimed to assess the eligibility of the settlement for inclusion in the project, as well as to identify and mitigate any potential adverse environmental and social impacts arising from the plan's proposals. Due diligence was conducted to confirm the suitability of the settlement for KISIP intervention, with particular attention to verify that the settlement was situated on public land.
iii. **Boundary Delineation and Digital Basemap Preparation** – This stage involved precisely demarcating the project area boundaries, as outlined in the terms of reference. The process included mapping existing property and parcel boundaries, and cataloging physical features relevant to land tenure regularization, such as settlement morphology, parcel boundaries, roads, streets, and spot heights. The outcome was the creation of a digital basemap,

which facilitated comprehensive spatial analysis and supported informed decision-making.

iv. **Due diligence:** This activity was conducted to verify the viability of the settlement for KISIP 2 intervention, by establishing the history of land tenure, the ownership claims, of the settlement to ensure it's situated on uncontested public land.

v. **Socio-Economic Surveys** – This task encompassed the enumeration of all settlement residents (including structure owners and tenants) and households, as well as an in-depth analysis of thematic issues such as physical and environmental attributes, population demographics, infrastructure capacities, land use and tenure profiles, economic activity, and the availability of housing and social infrastructure. A key deliverable was the compilation of the List of Beneficiaries (LOB), which is central to this consultancy.

vi. **Preparation of the Local Physical and Land Use Development Plan** – This core deliverable formed the basis of the current report and established the framework for land tenure rights, land use designation, development control guidelines, an implementation matrix, and the capital investment plan for the settlement. Data from the socio-economic surveys and the digital basemap were instrumental, alongside extensive stakeholder input and participatory planning sessions with the Sipili A community.

vii. **ESMP/RAP Preparation** – Following the development of the Local Physical and Land Use Development Plan, this phase focused on identifying both the positive impacts to be enhanced and the risks or negative impacts to be mitigated as a result of the tenure regularization process. It addressed potential involuntary resettlement or property displacement due to proposed interventions, ensuring that all beneficiaries would ultimately be in an improved position as a result of the project.

viii. **Cadastral Surveying** – As a culminating activity, cadastral surveying involved implementing the plan by formally demarcating boundaries of individual plots or parcels in accordance with the approved layout. This process resulted in the production of approved survey plans and Registered Index Maps (RIMs), which are essential for the subsequent registration of rights.

ix. **Registration of Rights (Preparation of Leases)** – The final phase of tenure regularization included preparing leases for all verified beneficiaries listed in the LOB. Conducted in collaboration with KISIP and the Departments of Land Administration and Land Registration at the national level, this phase concluded with the submission of all approved consultancy outputs—comprising the adopted List of Beneficiaries, approved development plans, survey plans, and endorsed RIMs with corresponding area lists—to KISIP.

Planning Process: The planning process involved the following steps, that have been discussed in detail in the subsequent chapters of this report:

i. Publication of a notice of intention to plan
ii. Preparation of a digital basemap

iii. Situational Analysis-This involved physical mapping of structures/parcels and collecting baseline data (administration of household questionnaires, key informant interviews, focused group discussions, and observation).
iv. Presentation of the socio-economic findings to the CPCT, NPCT and to the Sipili A residents for validation.
v. Visioning and Participatory Planning; the community and other key stakeholders made proposals for settlement upgrading based on key priorities as established from the socio-economic survey. This informed the subsequent exercise (draft plan preparation).
vi. Draft Plans-Three draft plan alternatives were prepared based on the community proposals, expert opinion, and key emerging issues from the socio-economic survey. The three options were presented to the KISIP2 NPCT and CPCT for comments and to the community, who preferred a hybrid of the three alternatives.
vii. Publication of Notice of Completion - a Notice of Completion was published in two dailies and in the Kenya gazette for 60 days for public comments/feedback as per PLUPA provisions.
viii. Final Draft Plan presentation- the preferred/selected plan alternative was presented to the KISIP2 technical team (NPCT & /CPCT), the County Executive, MCAs, and the community, who validated and adopted the plan, with comments. All the comments from the stakeholders were incorporated into the final plan.
ix. Final Plan: The final plan, incorporating the comments issued on the draft plan was prepared and submitted to the County Assembly of Laikipia for approval, thus, becoming a legally binding document.

Synopsis of the Plan

Settlement Highlights: The KISIP2 project intervention in Sipili A settlement was undertaken in an already developed set-up (peri-urban area). Despite the inhabitants of the settlement lacking proof of ownership, significant developments of permanent structures were witnessed. Parcel ownership claims were based on informally 'defined' boundary demarcations (mostly defined by structures and live fences). Absence of planning guidelines attributed to uncontrolled developments which resulted in an organically structured settlement.

It was established that there was some level of acceptance and normalization of the informal land ownership/rights due to the absence of a formal land regime. Various forms of claims to land were displayed, including demarcations using fences, informal sale-agreements (drafted between self-individuals, with correspondences with the local chief's endorsement). Despite the lack of tenure security, individuals were conducting land transactions, albeit very informally. This scenario portrays self-sustaining modes adopted in the informal settlement to bridge the gap where formal systems are non-existent. Largely, a significant number of the dwellers had no proof of ownership of the parcels of land they laid claim to. This necessitated other means of

property identification, including door-to-door enumeration, acknowledgement between neighbours, use of local administration, and community leadership.

Planning Approach: To introduce spatial organization within the area, the preparation of the Local Physical and Land Use Development Plan (LPLUDP) became essential. The plan integrates multi-sectoral proposals, establishes guidelines for physical development and land use, and outlines strategies for access creation and realignment. By incorporating these elements, the LPLUDP serves as a critical tool for guiding new developments, redevelopment projects, and land tenure regularization efforts, while establishing a structured spatial layout that supports systematic urban management and growth coordination.

The subsequent cadastral surveying, which will be executed as per the approved LPLUDP layout, will enable formal tenure rights registration, which will fulfil the tenure regularization objective of this project sub-component. The other proposals accompanying the plan, especially on infrastructure, will be subject to the plan implementation by the county government, or considered under the KISIP2 infrastructure upgrading under subcomponent 1.2.

The preparation of the LPLUDP was primarily based on the findings from the socio-economic survey, which are presented in a separate report volume of this consultancy. These findings were crucial in shaping various aspects of the plan, particularly in projecting demand and supply.

An adaptive planning approach was applied in Sipili A to minimize impacts since the settlement has developed significantly on public land. Adaptive planning is a flexible, context-sensitive planning method that modifies standard planning regulations to suit the unique conditions of informal settlements, thereby minimizing resident displacement and enabling in situ upgrading. This was in line with the project's guidelines on zero or minimum impacts (where necessary). Therefore, this approach minimized disruptions and displacements of the already vulnerable community as much as possible.

An integrated and participatory approach was employed throughout the planning exercise. Relevant stakeholders were engaged from the national government, county government, local community, and local area administration. The engagements were enhanced through direct participation and targeted consultations on key matters concerning the plan preparation. The stakeholders' engagements were done at the various stages, including the consultant's introduction meeting, project launch, environmental and social screening, basemap validation, socio-economic survey, community visioning and participatory planning, draft plans presentation (to county and community), and finally adoption of the final plan for approval. At all these stages, the stakeholders' inputs, in addition to the consultant's professional input, served as the foundation for the final plan in this report.

Community Proposals: During the community participatory stage, the community proposed several key considerations to be included in the plan. These proposals were

aimed at ensuring that the LPLUDP would reflect the needs and aspirations of the community.

Vision: '*To become a well-connected economic hub*' with a planning horizon of 10 years (2025-2035).

Plan Alternatives: The preparation of the LPLUDP was primarily based on findings from a socio-economic survey, which were submitted as a separate deliverable under the consultancy. These findings informed community priorities, demand, supply, and projected needs for preplanning. Two plan alternatives were considered during the process. The first alternative, referred to as "Nil intervention," proposed maintaining the settlement's status quo. This option would involve issuing a block title without making significant changes. The other alternative was adaptive planning options inspired by innovative approaches learned from KISIP1. This adaptive option prioritized flexibility by adopting planning proposals that aligned with the existing development layout rather than adhering strictly to conventional planning standards. This approach aimed to minimize impacts while addressing the complexities of planning in an already developed informal settlement.

During the first presentation of the draft plans, the community expressed a preference for the first adaptive option due to its minimal impact on existing structures. The residents had another opportunity to validate the draft plan during the second draft plan presentation before its final adoption.

The Plan: The following were the key achievements from the proposed plan:

- Key land uses including residential, recreational, public purpose, commercial, transportation, and mixed-use were defined and established.
- Access networks attained ranged from 4.5, 6m, 9m, 15m to25metres wide.
- Tenure options were based on the resultant parcel sizes, with the minimum parcel size for individual registration set at 100m². All the resultant parcel sizes were above this threshold, making them eligible for individual titling. as per the Land Registration Act

The plan impacted 47 structures, including houses, canopies and structures under construction.

The draft plan was subjected to a 60-day mandatory period, where it was made available for public inspection and stakeholder comments. As a precursor to the implementation of the tenure phase and the various proposed infrastructure projects thereafter, this planning report endeavors to actualize the LPLUDP layout and establish guidelines for implementing its proposals to achieve an organized settlement.

Conclusion: This planning report facilitates tenure regularization by analyzing the settlement's sectoral/thematic challenges, proposing a spatial development framework, and advising on applicable titling options. The planning process has been inclusive, bringing together inputs from community members, local leadership, county leadership, county assembly and relevant authorities. The subsequent

implementation of the LPLUDP through cadastral surveying will result in formalization of the settlement's beneficiaries' tenure rights. It is anticipated that settlement redevelopment and transformation will be catalyzed through tenure regularization.

Report structure

This report is organized into eight chapters as follows:

Chapter 1 introduces the KISIP 2 project, outlining its scope, objectives, and stakeholders. It explains the rationale for preparing the Sipili A settlement plan, defines its purpose, and describes the key project undertakings.

Chapter 2 reviews the planning context; the history of the settlement and reviews the national and county laws governing physical and land use planning, and analyzes policy instruments such as the Physical and Land Use Planning Act (2019).

Chapter 3 documents the process followed in developing the settlement plan. It describes stakeholder mobilization and participatory workshops, technical surveys (environmental, social, infrastructural), data collection techniques (GIS mapping, beneficiary enumeration), and iterative feedback loops.

Chapter 4 presents a comprehensive situational analysis of Sipili A settlement. It covers physical attributes (topography, land cover, drainage), socio-economic profiles (population, livelihoods, tenure status), infrastructure inventory (roads, water, sanitation, energy), and environmental conditions (vegetation, erosion). The analysis identifies strengths, vulnerabilities, and critical gaps that inform subsequent planning decisions.

Chapter 5 outlines the multiple strategic scenarios developed to address the settlement's challenges, ranging from incremental upgrades to transformative redevelopment. Each alternative is evaluated against criteria such as the community's vision, availability of land for development, social/community impact, environmental sustainability, and technical feasibility. The preferred option was selected based on a multi-criteria analysis and stakeholder consensus.

Chapter 6 defines the regulatory tools and design standards that will guide future development. It specifies land-use zones, density limits, building-line setbacks, access requirements, and permissible heights. It also includes detailed guidelines for public spaces, landscaping, infrastructure corridors, and environmental protection measures to ensure orderly, safe, and resilient growth.

Chapter 7 outlines the roadmap for formalizing tenure and upgrading informal structures. Strategic actions cover infrastructure servicing, incremental housing improvements, capacity building, and funding mechanisms to support vulnerable households.

Chapter 8 translates plan proposals into a time-bound action plan. It presents a matrix assigning responsibilities to implementing agencies, sets target dates, and

estimates costs and resource requirements. Monitoring indicators and reporting frameworks are defined to track progress, evaluate outcomes, and adapt strategies as needed.

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List of Acronyms

CBO	Community Based Organisation
7Rs	Rethink, Refuse, Reduce, Repurpose, Reuse, Recycle, Rot/Recover
CDC	Centres for Disease Control
CPCT	County Project Coordination Team
ECDE	Early Childhood Development Education
ESMP	Environmental and Social Management Plan
GIS	Geographic Information System
GRC	Grievance Redress Committee
ICT	Information and Communication Technology
ID	Identification Card
IDA	International Development Association
KISIP	Kenya Informal Settlements Improvement Project
KRA PIN	Kenya revenue Authority Personal Identification Number
LIS	Land Information System
LPLUDP	Local physical and Land use Development Plan
NEMA	National Environment Management Plan
NGO	Non-Governmental Organizations
NLC	National Lands Commission
NPCT	National Project Coordination Team
NYAHUWASCO	Nyahururu Water and Sanitation Company
OP	Operational Policies
PAD	Project Appraisal Document
PAP	Project Affected Person
PIDs	Preliminary index Diagrams
PLUPA	Physical and Land Use Planning Act
PLWDs	People Living with Disabilities
POM	Project Operational Manual
RAP	Resettlement Action Plan
RIM	Registry Index map
SEC	Settlement Executive Committee
SOK	Survey of Kenya
SSS	Simplified Sewer Systems
SWM	Solid Waste management System
TOR	Terms of Reference
UACA	Urban Areas and Cities Act
UN	United Nations
WB	World Bank
WC	Water Closet
WRA	Water Resource Authority

Definition of Key Terms

Development control: Managing and regulating land use and development activities to ensure they align with spatial plans, policies, and standards set by planning authorities, thereby promoting purposeful land utilization for public welfare.

Development: Carrying out any works on land or making any material change in the use of any structures on the land.

Disaster Risk Management: Systematic application of policies, strategies, and practices aimed at preventing the creation of new disaster risks, reducing existing risks, and managing residual risks. Its ultimate goal is to strengthen resilience and minimize the adverse impacts of hazards on communities, infrastructure, and ecosystems.

Environmental and Social Management Plan: A structured document that outlines strategies to manage and mitigate environmental and social risks associated with a specific project or activity. It serves as a tool to ensure compliance with environmental and social standards while minimizing adverse impacts on communities and ecosystems.

Environmental Safeguards: Policies, regulations, and practices designed to protect the natural environment and mitigate the negative impacts of human activities.

Existing Use: The continued use of a building or land for a purpose consistent with its original use before the current planning process began in the area.

Informal Settlements: Residential areas where structures have been built without formal planning or adherence to legal regulations, often lacking adequate infrastructure and services.

Land-Use Integration: Coordinated planning and management of land resources to achieve sustainable and multifunctional use while addressing environmental, social, and economic priorities. This approach emphasizes interdisciplinary collaboration and stakeholder engagement to ensure that land allocation and utilization meet diverse needs, including conservation, development, and community well-being.

Local Physical and Land Use Development Plan: A plan for the area or part thereof of a city, municipality, town or urban centre and includes a plan with reference to any trading or market centre.

Participatory Planning: An inclusive approach to urban and community planning that actively involves residents, stakeholders, and marginalized groups in the decision-making process. It aims to ensure that planning reflects the needs, aspirations, and priorities of the community while fostering collaboration and ownership.

Sustainable Development: Development that meets present needs without compromising the ability of future generations to meet theirs, balancing social equity, economic growth, and environmental sensitivity.

Tenure Regularization: A legal and administrative process aimed at formalizing and legalizing the possession or ownership of land, particularly in areas where land rights are informal or unclear.

Urban Regeneration: A comprehensive, area-based and multi-agent collaborative planning process that improves the physical, environmental and socioeconomic conditions of an urban area and links the generated benefits to the wider urban fabric of the city.

Urban Renewal: The process of slum clearance and physical redevelopment that addresses a wide range of urban challenges including unsanitary, inadequate, or outdated housing, poor transportation, sanitation, and other services.

Zoning: A method used in urban planning to regulate land use by dividing areas into specific zones, each with designated rules and restrictions. These zones determine how land can be used, such as for residential, commercial, recreational, or mixed-use purposes, and may also regulate building size, density, placement, and appearance.

1 INTRODUCTION

1.1 Kenya Informal Settlements Improvement Project (2) Background

Informal settlements host a substantial percentage of urban populations, yet there is no specific planning approach for upgrading them that can be applied at scale. Conventional-based planning frameworks that typically apply to green fields or new sites may be unsuitable for informal settlements. The Second Phase of the Kenya Informal Settlements Improvement Project (KISIP 2), under which this consultancy was initiated, is a Government of Kenya initiative supported by development partners and the International Development Agency (IDA). This phase builds on the successful implementation and completion of the first phase, KISIP 1, which was carried out in 14 counties. The positive outcomes, insights, and experiences from KISIP 1 served as a foundation for scaling up project activities to all 47 counties. A key takeaway from KISIP 1 was the development of the "adaptive planning" approach, a flexible strategy for addressing planning interventions in informal settlements that proved instrumental in guiding this planning phase.

The innovative aspect of the approach used in KISIP 1 lay in its ability to significantly reduce project-related displacement impacts for beneficiaries, in some cases by as much as 85% (World Bank, 2019). The flexibility of the "adaptive" approach stemmed from its consideration of existing settlement dynamics, such as parcel sizes, road widths, and service availability, while deviating from conventional standards. This allowed for the retention of narrower road sizes with slight realignments, rather than adhering strictly to standard dimensions. To complement this, planning guidelines were introduced, such as implementing one-way traffic routes or pedestrianizing certain sections. However, where conditions permitted, conventional standards were applied.

Given the unique characteristics of each informal settlement, a one-size-fits-all approach is impractical, making a more flexible strategy preferable. The project's development of a practical approach for upgrading informal settlements aligns with its primary goal of regularizing land tenure. This responsive approach to existing settlement conditions effectively minimizes potential project-related displacements. In this specific project and settlement, the "adaptive" approach was utilized in preparing the Local Physical and Land Use Development Plan (LPLUDP) as outlined in this report.

The overall development objective of KISIP 2 is to enhance access to basic services and improve tenure security for residents in Kenya's urban informal settlements. The adoption of the "adaptive" planning approach allowed the project to achieve these goals without disrupting the existing fabric of the settlements. This aligns with Kenya's

Constitution, which guarantees the right to property ownership, and fulfills the requirements for land use planning. Furthermore, it supports Kenya's Vision 2030's social pillar by addressing urbanization trends and upgrading informal settlements, which often serve as entry points for rural-poor migrants, thereby contributing to the vision's realization.

KISIP 2 also promotes socio-economic inclusion by connecting vulnerable groups such as women, the elderly, orphans, and persons with disabilities to government programs aimed at reducing poverty and vulnerability. Additionally, it links at-risk youth to skill-building initiatives and employment opportunities. Socio-economic inclusion planning is integrated into settlements receiving infrastructure upgrades, ensuring that both infrastructure and socio-economic benefits reach the same communities.

The project has further expanded its focus to include resilience against natural hazards, crime prevention through environmental design, and addressing gender disparities across its interventions. These efforts collectively contribute to improving living conditions while fostering inclusive and sustainable urban development in Kenya. The highlighted undertakings of KISIP2 are fulfilled through its constituent and interdependent four components, as indicated in the matrix below:

Table 1.1: KISIP2 project components

Component	Description
1. Component 1: Integrated Settlement Upgrading	
Subcomponent 1.1: Tenure regularization	Coordinates regularization of tenure for people living on uncontested public lands through planning and surveying
Subcomponent 1.2: Infrastructure Upgrading	Coordinates infrastructure investment
2. Component 2: Socio-Economic Inclusion Planning	Supports community development plans to enhance social and economic inclusion through community capacity building and awareness creation for the various project interventions
3. Component 3: Institutional Capacity Development for Slum Upgrading	Supports institutional, policy development and capacity building at national and county levels towards understanding of slum upgrading processes
4. Component 4: Program management and coordination	Supports activities related to national and county-level project management and coordination (NPCT and CPCTs)

This consultancy falls under Component 1 on integrated settlement upgrading, specifically Subcomponent 1.1, which focuses on tenure regularization. As noted in the introductory sections, the components were refined and reoriented based on lessons from previous experiences. Notably, the integration of Component 1 was informed by insights from KISIP 1, where the coordination of sub-components—initially managed independently and in parallel—was found to amplify the project's impact on local communities through implementation synergies.

It is crucial that the preparation of the Local Physical and Land Use Development Plan, which is the primary focus of this consultancy, not only enhance tenure security in the Sipili A settlement but also serve as a blueprint for implementing various proposals and projects post-tenure regularization. This includes infrastructure projects, highlighting the interdependence of the project's components.

1.2 Objectives of the Project

The main focus of this consultancy is to facilitate the conferment or formalization of secure land tenure for the Sipili A informal settlement in Laikipia County through planning and surveying activities. Fulfilling the tenure regularization target involved undertaking a series of key activities:

i. **Stakeholder Identification and Mobilization** – This initial and foundational activity was critical to the overall success of the project. It entailed identifying all relevant stakeholders and engaging them regarding the project's terms of reference (ToRs), expected outputs and deliverables, timelines, methodologies, and the roles and responsibilities of each party. Stakeholders included the consultant's team, the National and County Project Coordination Teams (NPCT, CPCT), pertinent national and county departments, SEC and GRC members, the broader community, local administrative and political leaders, and relevant government agencies. This process ensured transparency and fostered active participation throughout the planning and surveying phases.

ii. **Social and Environmental Screening** – This foundational step aimed to assess the eligibility of the settlement for inclusion in the project, as well as to identify and mitigate any potential adverse environmental and social impacts arising from the plan's proposals. Due diligence was conducted to confirm the suitability of the settlement for KISIP intervention, with particular attention to verify that the settlement was situated on public land.

iii. **Due diligence** – at this stage, the history of land tenure, ownership claims, and legal considerations of all the parcels in this settlement were established. This ensured that the plan was prepared and implemented on land that met the project criteria (i.e. uncontested public land).

iv. **Boundary Delineation and Digital Basemap Preparation** – This stage involved precisely demarcating the project area boundaries, as outlined in the terms of reference. The process included mapping existing property and parcel boundaries, and cataloging physical features relevant to land tenure regularization, such as settlement morphology, parcel boundaries, roads, streets, and spot heights. The outcome was the creation of a digital basemap, which facilitated comprehensive spatial analysis and supported informed decision-making.

v. **Socio-Economic Surveys** – This task encompassed the enumeration of all settlement residents (including structure owners and tenants) and households, as well as an in-depth analysis of thematic issues such as physical and environmental attributes, population demographics, infrastructure capacities, land use and tenure profiles, economic activity, and the availability of housing and social infrastructure. A key deliverable was the compilation of the List of Beneficiaries (LOB), which is central to this consultancy.

vi. **Preparation of the Local Physical and Land Use Development Plan** – This core deliverable formed the basis of the current report and established the framework for land tenure rights, land use designation, development control guidelines, an

implementation matrix, and the capital investment plan for the settlement. Data from the socio-economic surveys and the digital basemap were instrumental, alongside extensive stakeholder input and participatory planning sessions with the Sipili A community.

vii. **ESMP/RAP Preparation** – Following the development of the Local Physical and Land Use Development Plan, this phase focused on identifying both the positive impacts to be enhanced and the risks or negative impacts to be mitigated as a result of the tenure regularization process. It addressed potential involuntary resettlement or property displacement due to proposed interventions, ensuring that all beneficiaries would ultimately be in an improved position as a result of the project.

viii. **Cadastral Surveying** – As a culminating activity, cadastral surveying involved implementing the plan by formally demarcating boundaries of individual plots or parcels in accordance with the approved layout. This process resulted in the production of approved survey plans and Registered Index Maps (RIMs), which are essential for the subsequent registration of rights.

ix. **Registration of Rights (Preparation of Leases)** – The final phase of tenure regularization included preparing leases for all verified beneficiaries listed in the LOB. Conducted in collaboration with KISIP and the Departments of Land Administration and Land Registration at the national level, this phase concluded with the submission of all approved consultancy outputs—comprising the adopted List of Beneficiaries, approved development plans, survey plans, and endorsed RIMs with corresponding area lists—to KISIP.

The following figure illustrates this process up until the issuance of title documents. The details of the planning approach and implementation strategies are discussed in subsequent sections of this report.

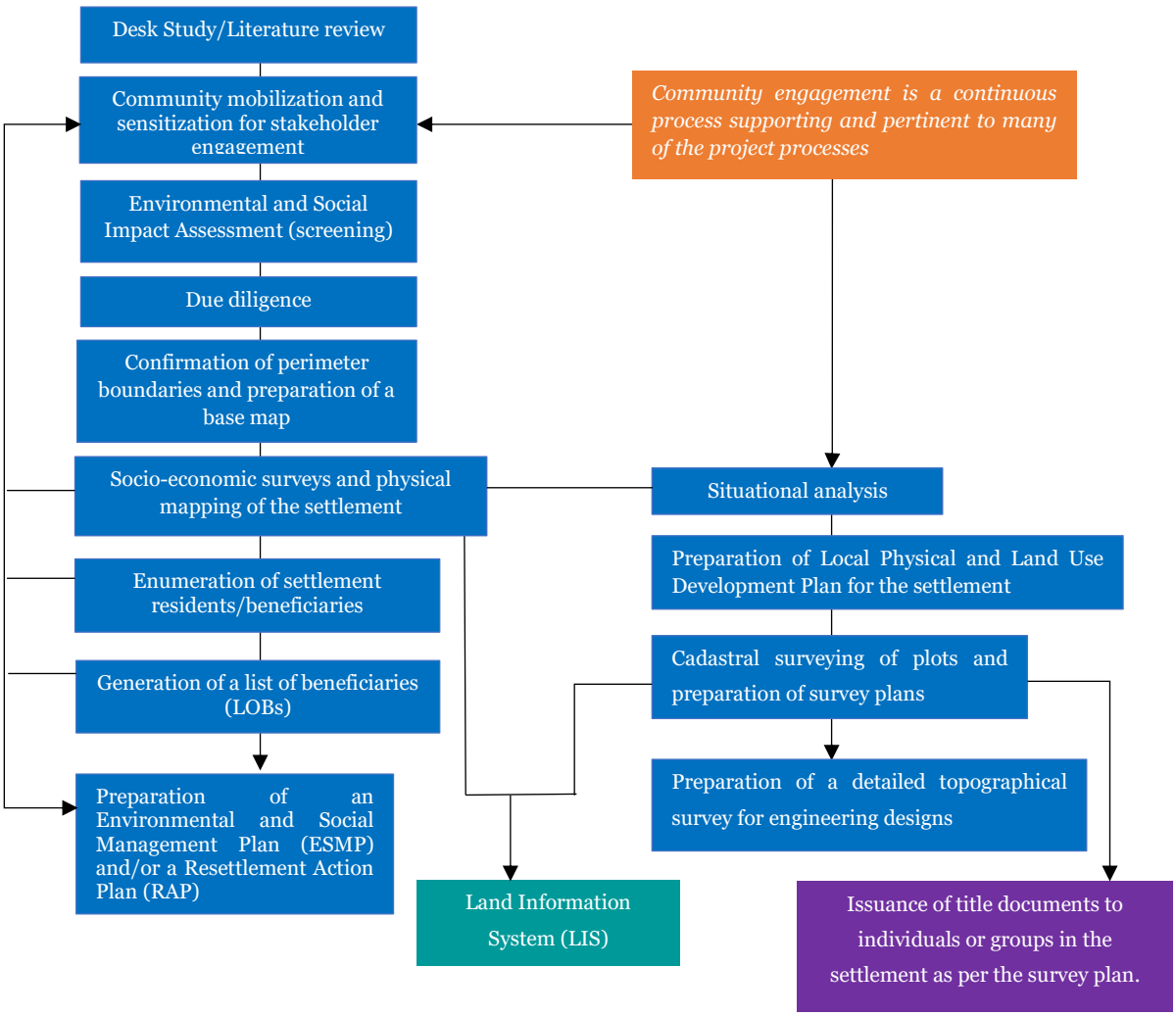


Figure 1-1: Project activities

Among the ***key planning objectives***, this plan aims to:

i. Define desired land use patterns within the informal settlement.
ii. Improve accessibility and transport networks through rationalized road alignments.
iii. Facilitate infrastructure upgrading, including drainage, sanitation, and other essential services.
iv. Provide a legal and spatial framework for tenure security and property rights.
v. Support socio-economic integration by creating spaces for public amenities and economic activities.

1.3 Plan Vision

During the participatory planning process for this plan, community members and stakeholders shared their diverse perspectives on their ideal future settlement. These views were consolidated into a unified vision that reflects the collective aspirations of the community:

‘***To become a well-connected economic hub.***’

Thereafter, this vision became the guiding focus in the preparation of the settlement's development plan as discussed in chapter 5 of this report.

1.4 Plan Preparation Basis

As highlighted in earlier sections, tenure regularization was intended to be achieved through planning and surveying activities. Under the specific objectives outlined in section 1.2, the preparation of the settlement plan is explicitly identified as a key activity within this assignment. This plan preparation serves as a crucial step in fulfilling the project's Terms of Reference (TORs) and sets the stage for subsequent activities, including the cadastral surveying exercise, titling, and topographic surveys for engineering works, particularly for Subcomponent 1.2, which focuses on infrastructure development.

Legally, the plan is anchored on the Physical and Land Use Planning Act (PLUPA) of 2019. The Act defines a local physical and land use development plan as 'a plan for the area or part thereof of a city, municipality, town or urban centre and includes a plan with reference to any trading or market centre (GoK, Physical Planning and Landuse Act No. 13 of 2019, 2019).' PLUPA also outlines the plan's preparation aspects, approval processes, and implementation through development control by the County Government as the planning authority. This plan, being a product of the KISIP2 intervention in collaboration with the County Government, provides guidelines for the realization of spatial orderliness in the informal settlement as well as tenure security enhancement. As a result, it will strengthen the County's capacity for informal settlement upgrading in line with the project's development objective. Specifically, this plan presents the desired land use patterns in the informal settlement, improves accessibility and transport networks, and provides guidance on applicable titling options, including individual and group titling, ensuring clarity on land ownership structures within the settlement.

1.4.1 Planning period

This planning horizon covers a period of 10 years (2025 – 2035), with a review period of 5 years. During this period, all the development applications within the settlement will be as per this plan stipulated guidelines.

1.5 Purpose of this Planning Report

This planning report provides a structured framework for implementing the Local Physical and Land Use Development Plan (LPLUDP) and detailing the guidelines and policy framework for its execution. It serves as a reference for the County Government of Laikipia, landowners, developers, and other stakeholders, offering an interpretive framework for the LPLUDP's proposals and localized development standards.

Additionally, this report documents the preceding activities that informed the plan preparation process, including an analysis of planning options and the rationale for selecting the most suitable approach as elaborated in chapters 3 to 5.

Aligned with the tenure regularization objective, the report provides guidance on applicable titling options, including individual, joint and/or group titling, ensuring clarity on land ownership structures within the settlement.

1.6 Project Undertakings

The Consultant has consistently adhered to key operational principles in engaging the respective community throughout all stages of the KISIP2 project. These principles have been integral to fostering collaboration and inclusivity in every phase of the project, including the current stage of preparing the Local Physical and Land Use Development Plan (LPLUDP). These principles include:

i. Participatory community and stakeholder engagement: The Consultant has actively involved the community in all project activities, ensuring inclusivity and ownership of project outcomes. Engagement will continue throughout the project cycle.

ii. Transparency and access to information: All relevant project information has been disclosed to the community to promote transparency and informed participation.

iii. Voluntary participation: Participation in the project has been entirely voluntary, with all project activities fully funded by KISIP2. Community members were sensitized to this principle to ensure their informed engagement. in total 6 technical and 6 community meetings were held as discussed ih section 3.2 of this report.

iv. Safeguarding vulnerable groups: Special attention was given to vulnerable groups, including minorities, widows, persons with disabilities, and orphans. These groups were represented in the Settlement Executive Committee (SEC) and advised on rights protection measures, such as the use of trustees for underage beneficiaries. 2.3% of the residents were elderly while (30%) parcels were registered under women.

v. Alternative Dispute Resolution Mechanisms (ADRM): Disputes related to the project were referred to the Grievance Redress Committee (GRC), promoting community-led conflict resolution without direct Consultant involvement. If unresolved, the issues were to be forwarded to CPCT and NPCT. However, all disputes were solved by GRC.

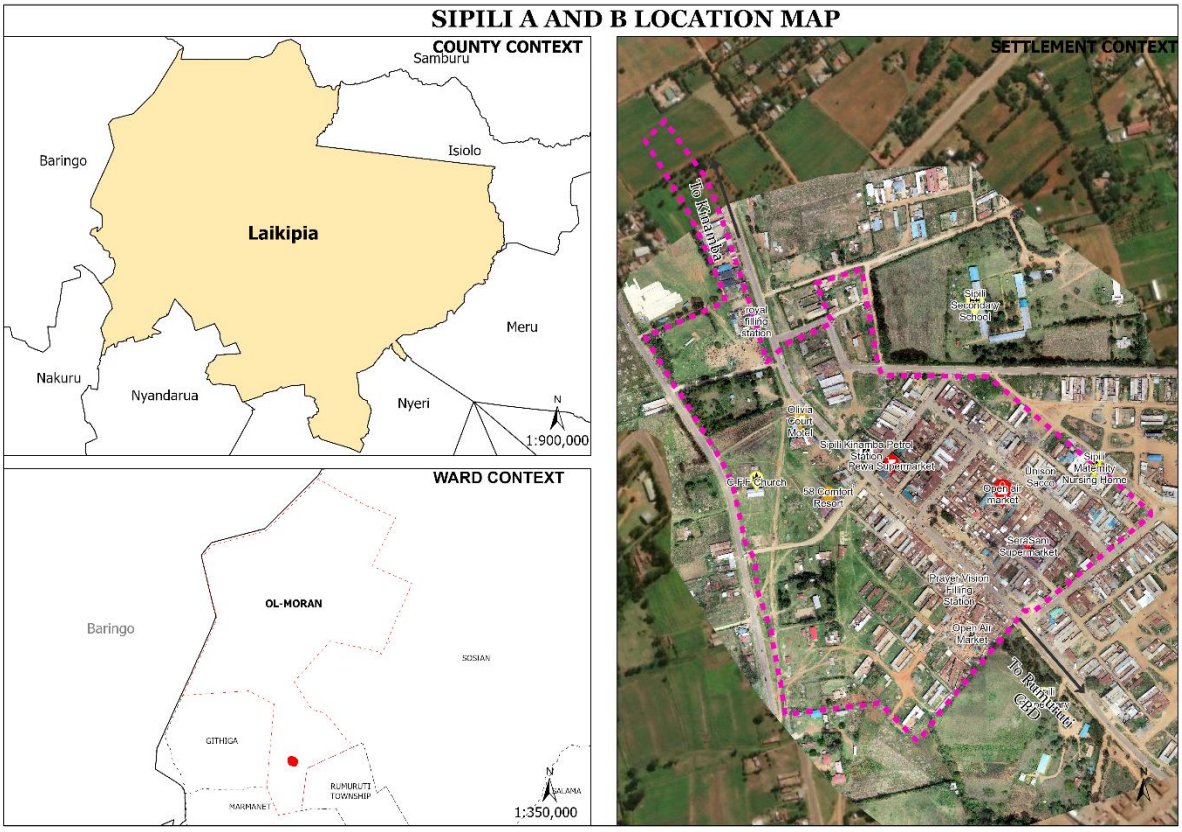
vi. Community-led decision-making: The planning process was community-driven, with residents leading discussions on re-planning impacts and negotiating the most beneficial outcomes for the settlement.

Figure 1-2: Project Undertaking

2 PLANNING CONTEXT

2.1 Project Location and Scope

Sipili A settlement is located in Sipili Centre approximately 30km north-west of Rumuruti town and approximately 45km north of Nyahururu town. Administratively, it is in Ol-Moran ward, Laikipia West Constituency, Laikipia West Subcounty in Laikipia County. The settlement location coordinates are 36.3756255°E 0.4117369°N north, 36.3769662°E 0.4095475°N west, 36.3769662°E 0.4095475°N south, and 36.3769662°E 0.4095475°N east. Within the project-identified perimeter boundary, the settlement's acreage measures approximately 22.33Ha. It's important to note that this is just a section of the larger Sipili settlement extent as defined by the initial development plan of 1999. Map 2.1 shows the location of the settlement.



Map 2.1: Sipili A settlement location map

2.2 History of Sipili A Settlement

The settlement's history, outlined below was corroborated from multiple sources familiar with its origins, including narratives from those identified as its oldest inhabitants.

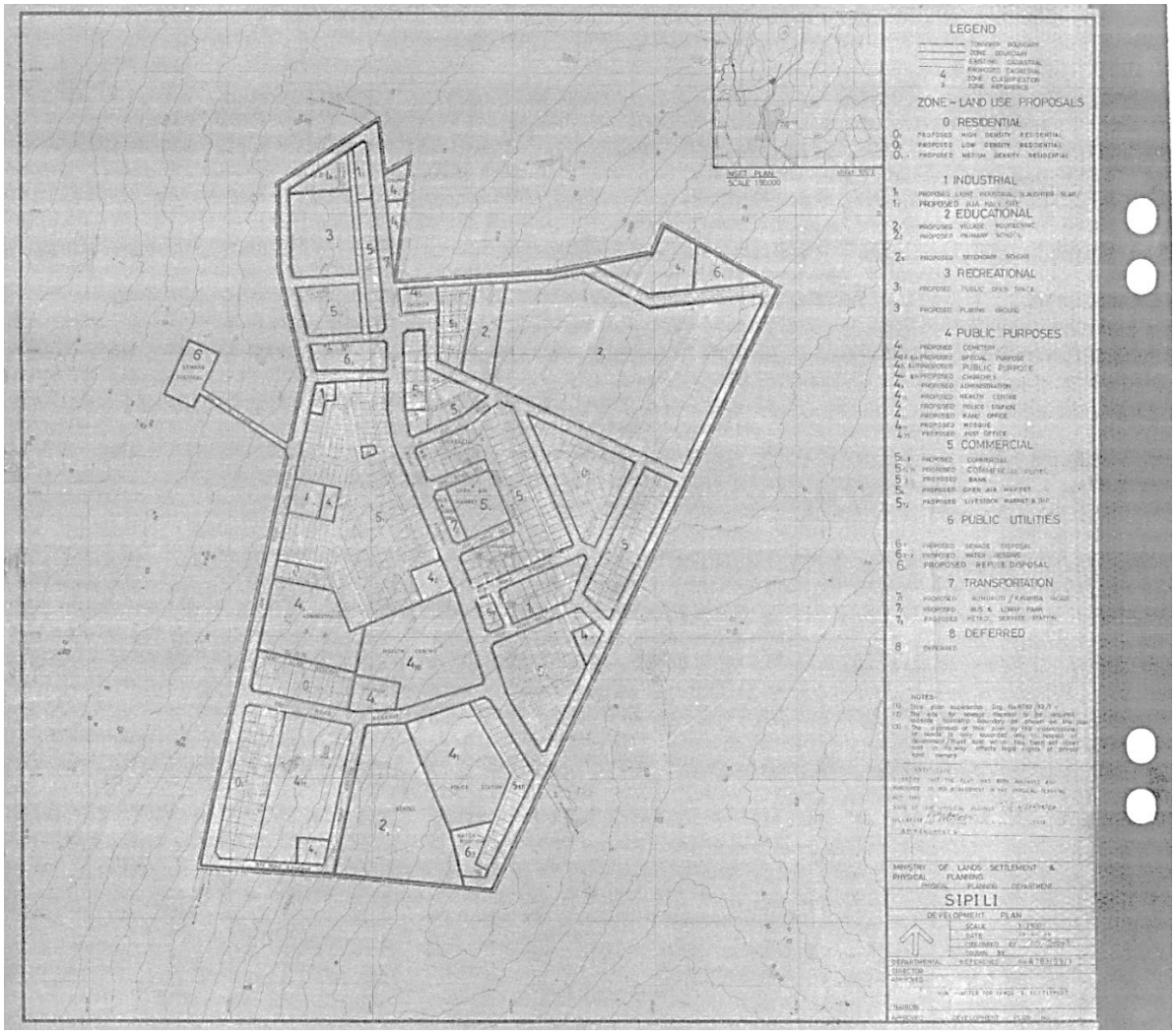
Sipili settlement was originally part of a vast, undeveloped bushland owned by a white settler nicknamed "Nyatole," meaning "slim," due to his slender build. This land

stretched from the Muhotetu area to Ol-Moran. After Kenya gained independence in the early 1970s, the government led by the late President Kenyatta decided to repossess lands owned by white settlers. Nyatole chose to return to his country and sought to dispose of his land. However, the government mandated that settlers could not sell land but only develop it.

Between 1972 and 1974, Nyatole's land was jointly purchased by two cooperatives led by influential government figures: Laikipia West Farmers Co-operative, led by G.G. Kariuki, and Mutukanio Farmers Co-operative, patronized by Dickson Kimani Kihika, father of the current Nakuru County Governor. These cooperatives acted as fronts for the interests of their owners. Mutukanio, meaning "a mixture" in Kikuyu, included members from various tribes, mainly Kikuyu, Luo, and others, with Kikuyus forming the dominant group. This dominance resulted in a notably high number of Kikuyu beneficiaries during plot allocations, contributing to their present-day prominence in the settlement.

The cooperatives allocated about 3 acres each to their members and set aside land for service centers. Each cooperative surrendered 200 acres for trading centers: Laikipia West in Ol-Moran and Mutukanio in Sipili. They agreed that half the plots in each center would go to members of the opposite cooperative, but this arrangement never took effect. In 1978, ownership of the Sipili Trading Centre land transferred from Mutukanio Farmers Group to Laikipia District Council. Between 1982 and 1984, the first Sipili Centre Development Plan was created, outlining plot layouts and public utility sites. Plot allocations were supervised by local councillors.

The open-air market was established in 1984 and still exists today. Initially, temporary structures made of cardboard were built. While the original plan featured large plots separated by wide roads, councillors subdivided plots further and sometimes blocked access roads to create more plots. Plot sizes commonly ranged from 50x100 ft to 60x120 ft from the mid-1980s to the mid-1990s. A revised development plan was prepared in 1999. By 2025, Sipili had transformed significantly. Permanent and multi-story buildings have increased, and some roads have been tarmacked, boosting the settlement's appeal for investment. The formalization of land tenure through this project is expected to further accelerate development. Map 2.2 is an excerpt of the 1999 development plan that influenced the current settlement layout.



Map 2.2: Excerpt of the 1999 Development Plan (DP) that influenced the current settlement layout

2.3 Policy, Legal, and Institutional Framework

The physical and land use planning process was shaped by various legislations. This section outlines the relevant laws, policies, and regulatory frameworks reviewed, which formed the basis for developing the proposed plan. The key components of this consultancy—physical planning and land surveying—were governed by national legal, policy, and institutional frameworks. These regulations were analyzed in the context of their application to complex urban environments, such as informal settlements, with consideration for both present and future planning needs.

Guidelines such as adaptive planning standards have been established to prevent the displacement of vulnerable communities and to steer future (re)developments, especially in informal areas where planning standards have not been met. Appropriate physical planning standards will be progressively attained over time, primarily through the implementation of development control measures. The existing policy and regulatory frameworks played a crucial role in guiding negotiations with the community on potential and desirable project outcomes. For example, the Physical and Land Use Planning Act (2019) and its regulations mandate a minimum road width of 9 meters. However, in cases where this standard could not be met, the community

was informed about the legal requirements and the need for an adaptive approach. Engaging the community at every stage proved invaluable in shaping the settlement plan and associated project activities, aligning with the constitutional principle of public participation. A detailed review and analysis of the policy, legal, and institutional frameworks essential for implementing the project activities was provided in Annex 4 of the project inception report, which was submitted as the first deliverable. Emphasis was put on relevant planning policies and legal documents, and their application to this assignment.

The matrix in Table 2.1 below presents a detailed summary of the policy and legal underpinnings that were instrumental in the realization of the project activities.

Table 2.1: Relevant Policies and Legislations

No.	Policy	Provision	Relevance to the assignment
KISIP 2 Foundational Documents			
1.	Project Appraisal Document	Designed and prepared by the World Bank in 2019, is the introductory document for the KISIP2 project.	Sets out the general project development objective (PDO), Provides the Project's design and assesses its viability through a multi-sectoral analysis. Established the four KISIP2 project components that operationalize this consultancy.
2.	Project Operational Manual	Operationalizes the PAD	Provides the project implementation framework. Outlines the overall settlement selection criteria.
WB Operational Policies			
3.	World Bank Operational Policies	Designed and prepared by the World Bank.	Outlines the project safeguards factored in the undertaking of the project.
International Policy			
4.	Sustainable Development Goals, 2015	Global framework consisting of 17 goals drawn from a shared common universal vision of progress towards a safe, just, and sustainable space for all human beings to thrive. Goal 5 aims at gender equality, goal 17 on partnership, and goal 11 aims to make cities and human settlements more inclusive, safe, resilient, and sustainable. Specifically, targets 11.1 and 11.3 focus on ensuring universal access to adequate, safe, and affordable housing and essential services while upgrading slums by 2030.	KISIP2 significantly contributes towards the realization of Goals 5, 11, and 17 in its implementation.

No.	Policy	Provision	Relevance to the assignment
5.	Africa Agenda 2063	This is Africa's blueprint and Master Plan for transforming Africa into a global powerhouse for the future. It was an initiative by the African Union that aimed to have Africa realize her full potential in development, culture, and peace to establish flourishing, inclusive, and prosperous societies. Aspiration 1 aimed to ensure that the continent transforms and prospers on inclusive growth and sustainable livelihoods, transforming cities and towns into hubs of economic activities with modern infrastructure and access to affordable housing and services, structurally transformed economies to create shared growth, decent jobs and economic opportunities for all and modern agricultural practices for increased production, productivity and value addition to contribute to farmers and national prosperity and Africa's collective food security.	KISIP2's main focus is to improve the livelihoods of people living and working in informal settlements through the regularization of land tenure, thus aligning with the collective vision of Agenda 2063.
National Policy Documents			
6.	Kenya National Spatial Plan 2015-2045	Kenya's long-term plan, covering a period of thirty years (30) from 2015-2045, defines the general trend and direction of spatial development for the country.	This plan has been aligned to the following policy objectives and strategies in the Kenya National Spatial Plan 2015-2045: **Enhancing economic efficiency**: the plan has proposed/designated an economic zone to increase economic vibrancy of the settlement. **Optimizing land and resource utilization:** through preparation of a land use plan discussed in chapter 5 of this report. **Creating livable settlements:** through proposals for recreational areas and walkable streets/pathways. **Establishing an integrated transportation network:** the plan has proposed realignment and widening of the existing transport corridors.

No.	Policy	Provision	Relevance to the assignment
7.	Kenya Vision 2030	The country's development blueprint covers the period 2008 to 2030. Its main aim is to create "a globally competitive and prosperous country with a high quality of life by 2030" through transforming Kenya into a newly industrializing, "middle-income country providing a high-quality life to all its citizens and building a just and cohesive society with social equity in a clean and secure environment". The Vision is being implemented through successive five-year Medium-Term Plans (MTPs) of which we are in the Third phase (MTPIII).	The conceptualization of KISIP2 is envisioned under the Medium-Term Plan III. The project aimed to enhance the social, economic, and political pillars by improving the living conditions of individuals in Sipili A informal settlement through the regularization of land ownership via the issuance of title deeds. This plan shall be used together with the amended RIM to process the title deeds.
8.	National Urban Development Policy, 2016	Framework for the management of urbanization and urban development to ensure that cities, towns, and metropolitan areas play a critical role in national socio-economic development.	KISIP2 under Component 1 seeks to not only enhance tenure regularization but also upgrade infrastructure in informal settlements. This plan shall be the blueprint to guide development of infrastructure within the Sipili A settlement within the next 10 years.
9.	National Land Policy, 2009	Formulated to provide an overall framework and define the key measures that were required to address the critical issues, among others, "land administration, access to land, land use planning, unplanned proliferation of informal urban settlements, and security of tenure for all Kenyans.	This served as the principal anchor of this consultancy as it recognized the need for tenure security for all Kenyans, including residents of informal settlement, like Sipili A. It promoted rights for vulnerable groups, aligning seamlessly with the project's focus on inclusivity. The planning process ensured female-headed households were registered so and encouraged married couples to include the names of both spouses on land ownership documents.
10.	National Land Use Policy, 2017	Formulated from the recommendation of the National Land Policy of 2009 as a key principle to address land use planning issues	This plan has designated various land uses based on the needs of the community members as discussed in chapter 5 of this report. Chapter 6 of this report entails guidelines for the particular land use within the settlement.
11.	National Slum Upgrading and	The strategy adopts a participatory slum upgrading approach that includes	KISIP 2 aims to achieve land tenure security where approaches such as

No.	Policy	Provision	Relevance to the assignment
	Prevention Strategy 2024	facilitating secure land tenure, in-situ upgrading, social housing, enhancing social inclusion and community involvement, and expanding access to basic services like energy, water, and sanitation.	participatory slum upgrading, in situ upgrading, and community involvement are applied in preparation of the plans.
12.	National Environment Policy, 2013	Reviewed and formulated to meet the aspirations of the emerging issues in the management of the environment for posterity, after the promulgation of the Constitution of Kenya 2010.	The proposed LPLUDP aligns with this law by promoting safe, healthy, and dignified living conditions, ensuring people have relatively easy access to essential amenities.
National Legislations			
13.	Constitution of Kenya, 2010	Article 40 stipulates that everybody has the right to own property either individually or in association with others, without any discrimination. Article 42 states that every person has a right to a clean and healthy environment. Article 61 (2) classifies land into three categories (public, community, and private). Article 66 mandates the state to regulate the use of land but is not limited to land use planning. Article 60(1) states that land shall be held, used, and managed in a manner that is equitable, efficient, productive, and sustainable. Art.69 (d)provides for public participation in environmental protection. Article 53(2) states that a child's best interests are of paramount importance in every matter concerning the child.	It is the basis for all legislation in the country. It provides for the right to own property and enshrines the role of the State in controlling the use of land through land use planning. The constitution also enshrines rights for everybody to own property without discrimination. The project takes cognizance of all rights provided for in the constitution. Issuance of property ownership documents is the ultimate goal of the KISIP2 project.
14.	Physical and Land Use Planning Act, 2019 (PLUPA, 2019)	It is the main statute that provides the legal basis for physical and land use planning, development control, and enforcement, and the preparation of different physical development plans. The Act stipulates the planning, preparation, and approval processes.	It is the principle planning law in Kenya. It guided the LPLUDP preparation and will guide the approval processes.
15.	County Government	The Act provides objectives for County planning. Section 8	The County governments, designated as planning

No.	Policy	Provision	Relevance to the assignment
	Act, 2012 [Revised Edition 2020]	enshrines the role of the County Assembly in approving County development plans. It also recognizes citizen participation under Part VIII as a critical component in land use planning.	authorities under the framework of devolution, shall play a central role in approval and implementation of the approved plan. Their involvement extended beyond administrative oversight to include active engagement in public participation processes. Specifically, the County Planning Coordination Team (CPCT), which was instrumental at all stages of the plan's development. Collaborative meetings were conducted between the CPCT and the National Planning Coordination Team (NPCT) for thorough deliberations prior to broader community engagements.
16.	Land Act, 2012 [Revised Edition 2019]	It gives effect to Art. 68 of the Constitution to revise, consolidate, and rationalize land laws to provide for the sustainable administration and management of land and land-based resources. Section 5 identifies the forms of tenure, while Section 5(2) of the Act provides for "equal recognition and enforcement of land rights arising under all tenure systems and non-discrimination in ownership of, and access to land under all tenure systems".	Provides for procedures for the conversion of public land to private, which is the main mandate of this consultancy, to spur tenure regularization. The project, being on public land, entailed enumeration of all structure owners for conferment of land rights to become plot owners. This shall be confirmed through issuance of title deeds at the end of this project. This plan is part of the integral documents that shall be used in processing the title deeds. Annexed in this report is the final list of beneficiaries.
17.	Land Registration Act, 2012 [Revised Edition 2020]	The Act consolidates and rationalizes the registration of titles to land. Section 15 of the Act states that the authority responsible for the survey of land shall prepare and thereafter maintain a map/ series of maps that will be known as cadastral maps for every registration unit. It also requires that the parcel boundaries on such maps are georeferenced and surveyed to such standards as to ensure compatibility with other documents. Section 6 of the Land Act was amended to further add powers	This is the main law on land registration that will be applied to the beneficiaries' titles registration under this project. This will be the ultimate conferment of tenure security to the residents of the informal settlements.

No.	Policy	Provision	Relevance to the assignment
		and functions of the Cabinet Secretary in land management such as coordinating the development and implementation of a National Land Information System in collaboration with the NLC.	
18.	Survey Act, 1961 [Revised Edition 2020]	The Act guides land survey works and processes in Kenya.	This is the principle law that guided and will continue to guide all the surveying activities in this project, from geodetic control survey, parcel beaconing, authentication of survey plans, amendment of RIMs, and generation of area lists.
19.	Environmental Management and Coordination Act, Cap 1999 [Revised Edition 2019]	The Act provides for the establishment of an appropriate legal and institutional framework for the management of the environment. It seeks to integrate environmental concerns into national policies, plans, programmes, and projects. It legislates Environmental Impact Assessments and audits as tools to determine whether or not a programme, activity, or project will have adverse impacts on the environment.	EMCA and the KISIP2 Environmental and Social Management Framework (ESMF) guided the environmental and social screening process as well as the assessment of the plan proposals in relation to environmental impacts and mitigation measures.
20.	Environment and Land Court Act, 2011 [Revised Edition 2016]	The Act gives effect to Art. 162(2) of the Constitution and establishes the Environment and Land Court to hear and determine disputes relating to among others, land use planning, title, tenure, and boundaries.	KISIP2 has developed a robust four-tiered grievance mechanism- at the community, county, and national, and resolution through courts of law. In the event any case escalates; after exhausting all the available local avenues, the complainant(s) shall be entitled to lodge their complaints with the ELC for determination of issues in contestation as a last resort.
21.	National Lands Commission Act, 2012 [Revised Edition 2016]	NLC has major functions, including management of public land on behalf of the County and National governments and advising the national government on a comprehensive programme for title registration. Section 5 (2)(a) notes that on behalf of, and with the consent of the National and County	Reservation of the settlement as a public land; this is done early into the project in collaboration with county government and KISIP. This safeguards the settlement from any possible interference / claims Oversight over land use planning – as a key stakeholder,

No.	Policy	Provision	Relevance to the assignment
		governments, alienate public land that would result in conferring land rights to private individuals (beneficiaries). Additionally, the Commission is mandated to encourage the application of traditional dispute resolution mechanisms in land conflicts.	this plan was shared with NLC for their review and comments Participation in project processes and procedures; like other key stakeholders, NLC were always invited to participate in community engagements, as well as technical meetings The parcels that will be designated for public purpose, by this plan will be under the management of NLC in all processes as a key stakeholder.
22.	Urban Areas and Cities Act, 2011 [Revised Edition 2019]	It enacts Article 184 of the Constitution, which legislates classification, governance, and management of urban areas and cities; criteria for establishing urban areas, and the principle of governance and participation of residents. The act calls for the institutionalization of active participation in urban areas and cities. Section 37 of this Act stipulates that a city or urban area integrated development plan shall be aligned with the development plans and strategies of the County governments. Every city and municipality established under this Act shall operate within the framework of integrated development planning.	Classifies urban areas. The participating informal settlement, Sipili A, met the selection criteria by virtue of being part of Sipili town. Preparation of this plan has been in line with the guidelines of UACA to guide orderly development of the settlement.
23.	Matrimonial Property Act, 2013	This Act provides for the rights and responsibilities of spouses concerning matrimonial property and for connected purposes. Section 4 states that, despite any other law, a married woman has the same rights as a married man.	Safeguards married spouses' equal rights to property ownership. There has been continuous sensitization for the beneficiaries to embrace joint ownership.
County Specific Regulations			
24.	Laikipia County Spatial Plan (2023-2033)	The County Spatial Plan provides a framework for land use management in the County. The CSP has outlined one of the strategic interventions to be on provision for regularization of land tenure in informal settlements.	This corresponds to the KISIP2 project's objective of ensuring tenure is regularized in the selected informal settlements. Therefore, the project will be augmenting the County's effort in addressing informal settlements.
25.	Laikipia County Water	The plan will provide the blueprint that will guide water	KISIP2 will provide comprehensive infrastructure

No.	Policy	Provision	Relevance to the assignment
	Management Master Plan (2021 – 2031)	resource development and supply	upgrading in the settlements, including improved water supply. It will be key in planning for the settlements especially in ensuring that the residents will have access to clean and safe water.
26.	Laikipia County Climate Change Action Plan (2023-2027)	The Plan aims at ensuring that the County is capable of providing quality, sustainable, and affordable services while taking climatic risks into consideration. It also advocates community participation, ensuring that climate actions are implemented in a way that is inclusive and that benefits are distributed fairly.	The KISIP2 Project interventions are aimed at reducing vulnerability in poor urban settlements to disaster and climate risks and to catalyze economic growth, improving the livelihoods of the most vulnerable. The project also advocates community involvement in all the project processes. The LPLUDP incorporates strategies to improve the settlement's resilience against climate change impacts.
27.	The Laikipia County Service Youth Act, 2020	It enacts Articles 55 of the Constitution that provides for the establishment of the Laikipia Youth Service and for matters connected to them.	The consultant enhanced socio-economic inclusion and prioritized the youth by involving them in project activities such as the socioeconomic survey. These activities enhanced their skills.

2.4 Planning Regulatory Framework

2.4.1 Physical and Land Use Planning Handbook, 2025

The application of the Physical Planning Handbook to this planning process is in fulfillment of Article 66 (1) of the Constitution of Kenya 2010, which provides for the regulation of the use of land. The handbook provides guidelines and standards for land use planning and development control that are applicable countrywide. Consequently, it covers various types of physical plans, including national spatial plans, regional plans, and local physical development plans, as outlined in Part III of the Physical and Land Use Planning Act (2019). Additionally, it necessitates that the preparation of plans requires a structured framework that defines guidelines, methodologies, standards, and key planning considerations. It also specifies standard requirements for different land uses and densities.

Guided by adaptive planning approaches, the plan preparation process drew heavily from the handbook and other best planning practices to inform the designation of land uses and the formulation of development control guidelines, which are detailed in Chapter 6. These guidelines cover key standard such as building lines, setbacks, densities, access, and parking, among others. The overarching aim in their application

was to ensure land use compatibility, support appropriate building siting, regulation of development, and ultimately foster sustainable growth in alignment with the existing policy and legislative frameworks.

2.4.2 National Building Code, 2024

Alongside the Physical Planning Handbook, the National Building Code of 2024[1] sets out the building regulations and standards governing construction. Part II of the code necessitates compliance with the physical planning standards on the siting and spacing of buildings. This includes site space, access to the subject plot, sanitary facilities, spacing between structures, building lines, and setbacks. In informal settlements, structures don't conform to established minimum standards for housing, as they are often built using non-permanent materials such as polythene, timber, mud, and iron sheets.

Part XXI section 363 (1) provides that a building shall be designed, constructed, and equipped in a manner that, in case of a fire, the occupants therein are protected. Further, the design and construction should minimize the spread and intensity of fire within the building and the spread to other buildings. Additionally, sufficient stability is retained to ensure that the building does not endanger another building. Informal settlements often experience disasters, especially fires, and as building materials usually comprise timber, iron sheets, among others, the fires tend to spread quickly, affecting a large area.

The issuance of land rights through tenure regularization will thus promote the construction of permanent or semi-permanent structures that are safer. Additionally, the proposed Local Physical and Land Use Development encompasses regulations on development that will be enforced by the respective County government to ensure conformity with the building code/regulations.

2.4.3 World Bank OP 4.12 on Involuntary Resettlement

The Bank's operational policy served as the foundation for the development of KISIP2's Resettlement Policy Framework (RPF), which was designed to implement preventive measures against any involuntary displacement or negative impacts resulting from the plan's proposals. In this context, various planning options were explored, and the 'adaptive' approach was considered as the preferred alternative due to its minimal impact and limited generation of Project Affected Persons (PAPs).

2.5 Governance and Institutional Framework

This section outlines the roles, responsibilities, and coordination mechanisms among various stakeholders involved in the implementation of the Kenya Informal Settlement Improvement Project (KISIP). Further, it highlights the governance structure and partnerships essential for project execution. Figure 2-1 illustrates the various actors, namely, the national and county governments, and non-state actors.

[1] https://www.nca.go.ke:81/media/National_Building_Code_2024.pdf

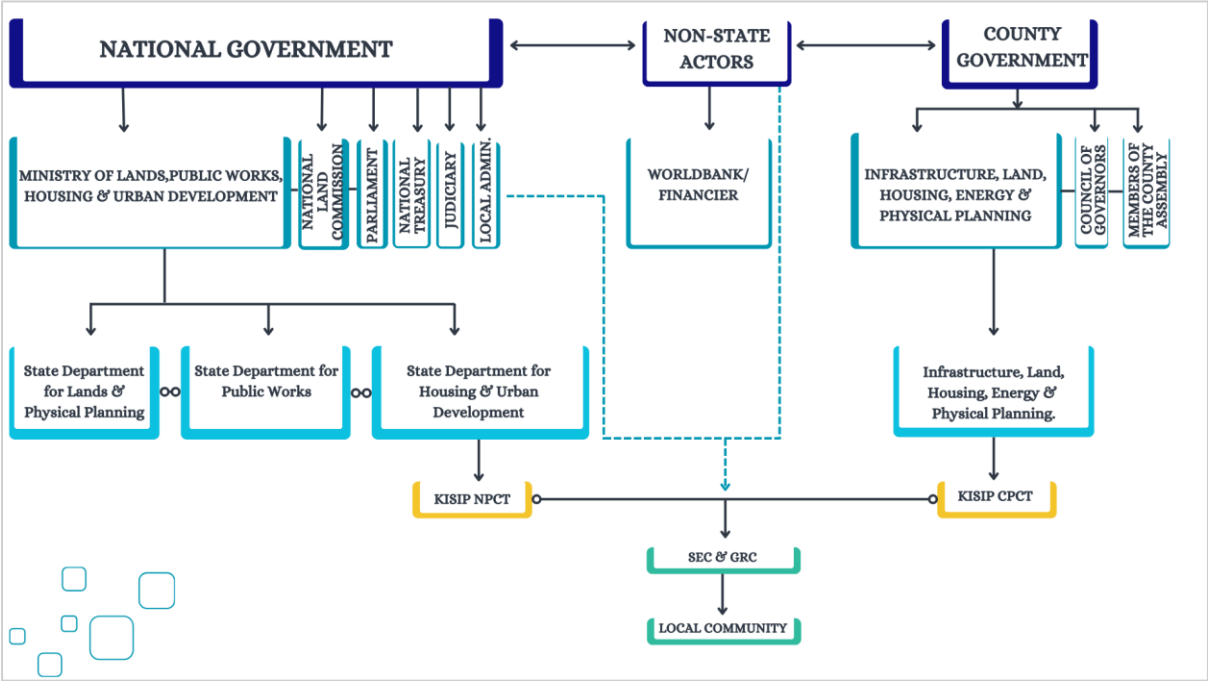


Figure 2-1: Institutional Framework

2.5.1 National Government

This comprises the Ministry of Lands, Public Works, Housing and Urban Development (MLPWHUD), the National Land Commission (NLC), the National Parliament of Kenya, the National Treasury; KISIP NPCT, and the local leadership. The MLPWHUD comprises three State Departments, namely, Lands and Physical Planning, Public Works, Housing, and Urban Development. The State Department of Lands and Physical Planning has been instrumental to the success of the project through:

i. **Provision of technical support to the county on planning matters** – The department provided support to the county through capacity building on the implementation of the KISIP project. It also acted as a link between the Survey of Kenya (SoK), the county and the consultant in the acquisition of geodetic control points that aided ground picking, survey, and drone mapping. These activities were critical in the plan preparation as they informed the preparation of the document that was key to the socio-economic survey and plan formulation.

ii. **Ensuring compliance with the Physical and Land Use Planning Act (PLUPA 2019)** – this included supervision of the plan preparation process to ensure compliance with pertinent statutes, key amongst which was PLUPA, 2019. Amongst the main areas of direction included ensuring adequate public participation through publication of the notices of intention to plan and plan completion in the Kenya Gazette and in two dailies of national circulation. In addition to overseeing public and community engagements, the department also looked at land use compatibility among other key legislative provisions.

The State Department of Lands and Physical Planning has several crucial roles going forward:

i. **Ensuring compliance with the Physical and Land Use Planning Act (PLUPA 2019)** – The department will provide technical oversight in plan review within the planning window and after the lapsing of the ten (10) year plan period. This will ensure that the plan meets the current and future needs of the community. Additionally, the department will support the county in the formulation of county-specific policies as well as play an oversight role in land use planning, management, and development control.
ii. **Authentication and approval of the settlement registry index map (RIM)** – After the cadastral survey and beaconing, the final RIM will be submitted to the Survey of Kenya for approval, which is a necessary step before land titling can begin. Additionally, the department will produce and maintain plans of the property boundaries continuously updating these records to reflect the amendments made.
iii. **Processing and issuance of ownership documents** – Following the cadastral survey, beaconing, and approval of the survey plan, the department will prepare and issue certificates of title to the identified project beneficiaries as per the settlement LoB.
iv. **Custodian and manager of the land information system (LIS)** – The department will manage the database containing property owners' details, including their property boundaries, among other land-related information. The department will also be responsible for updating the database to match changes such as those that occur during cases of succession, and land transactions like changes in property ownership, among others.

Whereas the State Department of Housing and Urban Development oversaw the planning and implementation of the project, the State Department of Public Works provided technical expertise on infrastructure development and quality control.

The National Land Commission (NLC) served as the primary authority responsible for overseeing land matters and carried out specific functions as outlined in the Constitution of Kenya 2010 {article 67 (2)}. These included:

i. Reservation of the settlement as a public land; this was done early into the project in collaboration with the County government and KISIP. This safeguarded the settlement from possible interference and claims.
ii. Oversight over land use planning – as a key stakeholder, this plan was shared with NLC for their review and comments
iii. Participation in project processes and procedures; like other key stakeholders, NLC was always invited to participate in community engagements, as well as technical meetings
iv. The parcels designated for public purpose by the plan will be under the management of NLC in all processes as a key stakeholder.
v. Encouraging application of traditional dispute resolution mechanisms in land conflicts.
vi. Assessing tax on land and premiums on immovable property in any area designated by law.

vii. Monitoring and overseeing responsibilities over land use planning throughout the country.

KISIP2 NPCT, under the Ministry of Lands, Public Works, Housing, and Urban Development, played the following key roles:

i. Contract management and administration, which encompassed the development of project frameworks and guidelines, provision of technical expertise, and capacity building for county governments. It also involved tracking progress, assessing impact, identifying challenges to project implementation, and facilitating community involvement in decision-making.
ii. Engagement with relevant National Government Ministries, Departments, and Agencies to support tenure processes and facilitate the approval of project outputs. Important to note is that approval of RIM remains pending.
iii. Provided dispute resolution, as needed, to mediate leadership conflicts among the SEC/GRC members in Sipili A, hence streamlining the process.

The **National Treasury** was responsible for financial management and coordination of KISIP funds from donors and the national government. This included facilitating financial agreements between donors, the national and county governments, ensuring adequate and timely disbursements of funds for project implementation

Parliament plays the following key roles:

i. Enacting laws related to land tenure, urban development, and informal settlement upgrading
ii. Reviewing and approving funding in the national budget
iii. Monitoring implementation through parliamentary committees.
iv. Monitoring the executive to ensure transparency and accountability.

The local administration, which included the ward administrator, the chief, and the sub-chief, disseminated information to locals through 'Barazas'. They thus ensured local mobilization for the plan's implementation, safeguarded public facilities, and will act as a watchdog on behalf of the community during the implementation of the plan.

2.5.2 County Government

Under the PAD, county governments act as the primary implementing agencies for the project, forming County Project Coordination Teams (CPCTs) that replicate the national project structure in composition. In Laikipia County, the CPCT was led by a Coordinator and staffed with specialists in finance, procurement, monitoring and evaluation, engineering, planning, and safeguards.

With technical support from the National Project Coordination Team, this team handled daily project coordination, infrastructure procurement, and implementation. Consequently, they ensured compliance with safeguards, monitoring, and reporting requirements.

The pre-implementation phase focused on building county capacity in procurement, financial management, and safeguards to ensure effective project execution. This

enhanced framework ensured structured coordination while empowering the county to meet project objectives in line with World Bank guidelines.

The specific roles for CPCT under KISIP2 included:

i. Coordination and supervision of the KISIP project in Laikipia County.
ii. Delineation of settlements boundaries – The CPCT guided in the confirmation and delineation of boundaries for settlements participating in the KISIP2 project in Laikipia County.
iii. Facilitation of entry to the settlement – The CPCT introduced the consultant to the community (Sipili A) for familiarization before project launch.
iv. Community mobilization and sensitization – In collaboration with the ward administrator, chief, and sub-county administrator, the CPCT supported in mobilization.
v. Participation in project activities – The CPCT participated in all project activities including planning and surveying, to ensure accuracy of the work through consultant supervision.
vi. Plan approval and Validation of the List of Beneficiaries.
vii. Implementation of ESMP/RAP – The CPCT will participate in the implementation of an ESMP for Sipili A, as some PAPs were generated as a result of access creation and realignment.
viii. Dispute resolution – The CPCT intervened in settling contestations among the community members, GRC, and SEC on the established settlement boundary, hence paving the way for socio-economic survey, planning, and other subsequent activities.

A **Project Steering Committee (PSC),** chaired by the Principal Secretary of Housing and Urban Development and including representatives from the National Treasury and Council of Governors, provided strategic oversight, reviewing county workplans and funding eligibility. The department of Infrastructure, Land, Housing, Energy and Physical Planning will collaborate with other departments within the County Government of Laikipia to enforce land use plans, environmental regulations, and development approvals.

The CECM Department of Infrastructure, Land, Housing, Energy and Physical Planning was responsible for the adoption of the settlement LPLUDP, issuance of the notice of intention to plan and notice of completion, presentation of the community adopted plan to the entire county executive committee and forwarding the proposed plan for approval by the county assembly.

The Department of Infrastructure, Land, Housing, Energy and Physical Planning reviews and will implement the approved LPLUDPs. It will also communicate the decisions of the county government on development applications, issuance of development permissions, among other applications. Consequently, it will collaborate with other departments within the County Government of Laikipia to implement the approved plan, update the GIS database, enforce environmental regulations, supervise

and advise on applications for environmental impact assessments (EIA) and environmental audits as provided in section 58 of EMCA,1999 (Amendment, 2015).

2.5.3 Non-State Actors

Non-state actors collaboratively worked with state actors in putting efforts towards the project planning process and preparation for future implementation. The key non-state actors in the KISIP2 project included the World Bank and the community.

The **World Bank** played a key role in KISIP, providing funding, technical support, and policy guidance. Its involvement was essential for enforcing environmental safeguards and monitoring the project, ensuring it was effectively executed, sustainable, and aligned with global best practices in informal settlement upgrading.

The Grievance Redress Committee (GRC) and Settlement Executive Committee (SEC) formed the community leadership for Sipili A settlement. The committees comprised elected members who represented different groups including youth, women, elders, and persons with disabilities.

The GRC was responsible for handling complaints and resolving conflicts that arose among community members. This ensured project-affected persons (PAPs) and other stakeholders had a structured platform to voice their concerns. Additionally, resolving issues that did not require the attention of the authorities minimized project delays and related costs, as authorities followed already laid down procedures in resolving such issues.

The SEC served as the primary link between KISIP2 NPCT, CPCT, the consultant, and the local community. It ensured that the community members were actively involved in decision-making and project implementation. Though the GRC and SEC were key, the local community members voluntarily participated in making proposals and developing visions and overseeing the plan implementation.

In Sipili A, ten conflicts arose, whereby seven were resolved by the GRC while 3 were forwarded to CPCT.

Table 2.2: Sipili A Grievances

S.NO.	Parcel No.	Nature of the case	Agreements made	Current status
1	SPA 98C and SPA 98 D	Five people originally purchased the two plots and built structures on them. Four of the original buyers have passed away. The families of the deceased requested to be included in the registration of the property.	Parcel owners were given letters ascertaining ownership	RESOLVED
2	SPA/151A	Case between Paul Njoroge and Ann Warui. Ann claimed the parcel belonged to her deceased father.	Both produced documents and the case was forwarded to the county	**NOT RESOLVED**
3.	SPA/50 SPA/51	Case between Shiphira Kiruthu and Bartholomew	Parties couldn't come to an agreement. The	**NOT RESOLVED**

		Gathu. Bartholomew, the husband, claims that the parcel should not bear the name of the wife.	case was referred to the county government.	
4.	SPA/84	Owner of the parcel is deceased.	Claimants advised to come with transfer letter which they did.	RESOLVED
6.	SPA/152	Case between Shiphrah Kiruta and Simon Ndirangu. The two claimed the same plot, claiming that they each had the necessary documents as proof of their claim.	The parties were advised to share the plot to which they agreed.	RESOLVED
7.	SPA/77	The original owner, Consolata Gitonga, sold the parcel to Lawrence Munuhe. Following Lawrence's passing away, the original seller attempted to reclaim ownership of the parcel.	Since transaction documents were provided, the case was passed in favor of Munuhe's wife, Esther Njogu.	RESOLVED
8	SPA/3	The original owner had sold the parcel but claimed it back once the project was initiated.	Case was referred to the county	**UNRESOLVED**
9	SPA/107A	Albert Waigwa Claimed the Parcel was his and not Catherine Nduta	Catherine didn't avail herself when summoned by the GRC. The case was thus ruled in favor of the defendant	RESOLVED
10	SPA/6	Muciri Kiriro and Kuria both claim the parcel. Documents produced indicate that the parcel belongs to Joseph Muciri Kirio and not Kuria	Case ruled in favor of Joseph Muciri based on documents produced.	RESOLVED

3 PLAN PREPARATION PROCESS

3.1 Overview of Methodology

Section 12(7) of the Land Act 2012 stipulates that public land cannot be allocated unless it has been properly planned, surveyed, and development guidelines have been established. The Physical and Land Use Planning Act, No. 13 of 2019, provides the legal framework for the preparation of plans, including the LPLUDP. In addition to these legal stipulations, the plan preparation process was also based on the practical realities of planning in informal settlements as illustrated in figure 1 below.

Upgrading of informal settlements in Kenya and most parts of the world is a post development endeavour. This makes it quite difficult to adhere to conventional planning standards, such as rules for road widths, parcel sizes, plot coverage, land use zoning, and the provision of public facilities and open spaces. In balancing the legal stipulations, the needs of the community, the overall goal of the project and the realities on the ground, the plan aimed at attaining some level of spatial orderliness in the settlement and mitigate against the number of PAPs generated by the planning exercise.
This is discussed further under the planning alternative options in chapter 5.

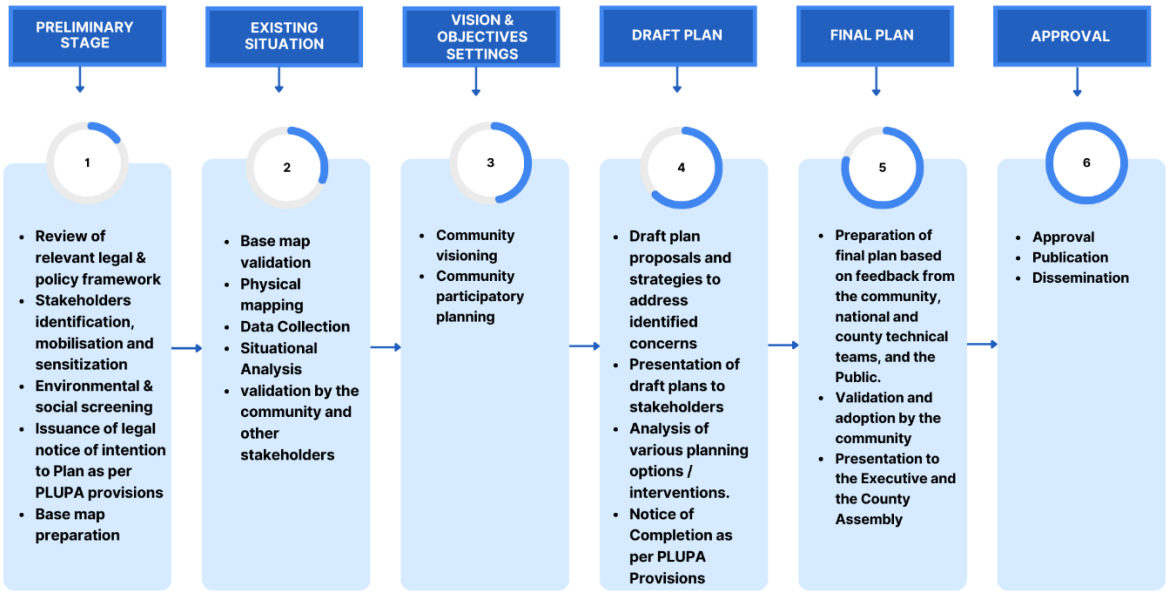


Figure 3-1: Summary of the Plan Preparation process

A methodology specific to the plan was adopted for this exercise. The process commenced with a review of legal and policy frameworks, followed by stakeholder mobilization and sensitization, and preliminary environmental and social screening. Subsequent stages included due diligence, basemap preparation and validation,

physical mapping, socio-economic survey, visioning and participatory planning, as well as preliminary verification of the list of beneficiaries. The next phase involved drafting the plan, which was then presented to both the technical team and the community.

Following this, the consultant prepared the draft final LPLUDP and presented it again to the technical team and community for plan adoption. A final verification of the list of beneficiaries was also conducted by the consultant. Moving forward, the consultant will prepare an Environmental and Social Management Plan (ESMP) report, carry out cadastral surveying, and integrate the data into the Land Information System (LIS). Subsequently, KISIP2 will begin the titling process.

3.2 Stakeholders' Identification and Analysis

As the project kicked off, it was necessary to identify groups, individuals and institutions, which could directly or indirectly affect, or be affected by the activities of the project and its outcomes. Stakeholder engagement was deemed critical in ensuring project acceptance and success. The stakeholder identification exercise was comprehensively done to help in determining the relationships between various stakeholders and the project helping to identify the appropriate consultation methods for each stakeholder group during the life of the project. The various stakeholders identified are detailed in a separate report, stakeholder identification and analysis, submitted alongside this deliverable. Table 3.1 outlines the stakeholders and their roles.

Table 3.1: Stakeholders and their roles

Category	Name of Stakeholder	Role in the project
Primary Stakeholders		
Community members	• Structure owners	• The primary beneficiaries of the project as they are the direct beneficiaries in the provision of tenure security.
	• Tenants	• Indirect beneficiaries who will benefit from the settlement planning and upgrading. • Important for determining the various social and physical infrastructural requirements in the long term.
	• SEC members	• The SEC played a critical role in linking the Consultant to the community. • The membership of SEC was representative of the various interest groups within the settlement.
	• GRC members	• Addressed conflicts/grievances arising from the project related activities within the settlement.
Social institutions and facilities	• Worship centres	• Offered their facilities as venues for various project activities e.g. Catholic church hosted the introduction, launch and socioeconomic and draft plans presentation meetings and served as the meeting point for enumerators,

		supervisors and SEC members during the socioeconomic survey exercise. • Worship centres were used to advertise the details of the socioeconomic exercise
Secondary Stakeholders		
Local leadership (Elected representatives and administrators)	• Chief, MCA, women rep, ward admin	• Ex- officio members of the SEC • Local administration gave support to the GRC in some dispute cases • The MCA will take a lead role in formulating legislation and supporting the project • Championed the approval of the final settlement LPLUDPs and accompanying reports at the County Assembly. • Provided political goodwill and ownership of the project • Assisted in the mobilization and sensitization of the project to the community through assuring the locals of the administration's support of the project
	• Laikipia County Assembly	• Active participation throughout the project public forums
Government Agencies		
National government	• National KISIP Coordinating Team	• Supervision of the Consultant and the project implementation.
	• State Department for Lands and Physical Planning	• Provided technical oversight to county teams on land use planning issues.
	• NLC	• Reservation of the settlement as a public land; this was done early into the project in collaboration with county government and KISIP. This safeguards the settlement from any possible interference / claims. • Oversight over land use planning – as a key stakeholder, this plan was shared with NLC for their review and comments • Participation in project processes and procedures; like other key stakeholders, NLC were always invited to participate in community engagements, as well as technical meetings • The parcels that will be designated for public purpose, by this plan will be under the management of NLC in all processes as a key stakeholder. • Encouraging application of traditional dispute resolution mechanisms in land conflicts. • Assessing tax on land and premiums on immovable property in any area designated by law.

		• Monitoring and overseeing responsibilities over land use planning throughout the country.
Laikipia County Government	• County KISIP Coordinating Team • County Executive Committee member • County director of physical planning • Subcounty planners	• Steering and project coordination at the County Level • Link between KISIP 2 National Team, the Consultant, and the respective communities • Link the Consultant to relevant County departments • Participated in project activities such as perimeter boundaries verification, beneficiary enumeration, physical mapping, confirmation of the final list of beneficiaries, planning and surveying • Participated in handling of any escalated dispute resolution in the settlements

3.3 Stakeholder Engagement

The project's stakeholders included individuals, groups, and organizations that had an interest in and with the potential to be affected by the planning process and its outcomes. They included parcel owners, tenants, businesses, community groups, government agencies, and other organizations. Stakeholder engagement was crucial throughout the project to ensure that the community's needs and priorities were considered. For this exercise, the process began during the project launch held on 20th January 2025 at Olivia Hall. This meeting focused on the project's core activities, planned undertakings, and upcoming tasks. Key discussions included the socioeconomic survey, physical mapping, community visioning, and participatory planning, all of which would form the basis for the plan preparation.

The second stakeholder engagement in the plan preparation process involved validation of socioeconomic findings, visioning, and a community participatory planning session, which took place on 20th February 2025, at the Olivia Hall. The consultant presented the findings as established from the socio-economic survey, which the community validated.

In re-imagining the settlement, thereafter, the community developed a vision, ***'To become a well-connected economic hub'***.

Key proposals included:

- Installation of a piped water reticulation system,
- Establishment of a sewerage system,
- Establishment of an effective solid waste management system,
- Installation of adequate streetlights, and
- Provision for a social hall.

These proposals were made with the aim of enhancing essential service provision, improving public health and safety, and fostering community engagement within the area. These key insights, integrated with expert contributions from the Consultant, KISIP2 team (NPCT and CPCT), among others, informed the preparation of various plan alternatives.

The third stakeholder engagement involved presentation of the draft final plans to the community and technical teams (CPCT, NPCT). Various plan alternatives were prepared based on the key community proposals, expert opinion, and planning standards. The two plan alternatives, dubbed the nil intervention and the adaptive option, were presented to the technical team on 24th March 2025 and to the community on 26th March 2025. The community preferred the adaptive option which has provided accessibility to all parcels. The two plan alternatives and their impacts are analyzed in chapter 5 of this report.

The fourth stakeholder engagement involved presentation of the draft final plans to the community and technical teams including the CPCT, NPCT, county executive committee, and MCAs for comments. Before the community engagement, the draft plans were presented to the technical team (CPCT and NPCT), who appreciated the consultant's efforts against a constrained timeline and settlement realities. The technical team urged the consultant to provide details of the impacted structures, a list of PAPs generated, and a tentative budget for the facilitation of the PAPs to inform the county on budget allocations.

The draft final plan was also presented to the technical team (the CPCT and NPCT), the county executive and MCAs on 19th June 2025. The major emerging issue from the presentations was the number of PAPs generated and the budget estimate for their facilitation.

The plan was further validated by the community on 25th June 2025 after incorporating their comments, most of which were related to access realignment and width reduction to reduce the high number of impacts on structures.

The comments and requests for revision received served as the foundation for the planning process and the report presented here.

3.4 Due Diligence

Validation of the project scope involved a comparison of the scope provided in the terms of reference under this consultancy, vis a vis the actual situation on ground. This activity commenced by first establishing the tenure and ownership status of the land on which the settlement is located, before confirmation of the physical extents. This was in line with the project provisions that tenure regularization interventions would only be done for settlements sitting on public lands. The following processes were followed in the validation exercise for Sipili A;

(i) Meetings with the County Government of Laikipia. The county provided details on the scope of the settlement.
(ii) Meetings with the residents to obtain relevant information that would have an impact on the scope. This included disclosures on existing proprietorships and historical perspectives of the settlements' existence/emergence.
(iii) Obtaining relevant survey and physical planning documents of the settlement, and/or abutting properties, including, survey plans, RIMS, PIDs, Physical Development Plans, etc.
(iv) Obtaining existing land registration documents, including titles & leases. No legal ownership documents were obtained from this settlement until the preparation of this plan. However, this is an ongoing effort until the completion of the project.
(v) Carrying out field verifications of the scope. This activity was undertaken in collaboration with the KISIP2 National and County Teams and the community members,

3.5 Preliminary Environmental and Social Screening

The environmental and social screening in Sipili A was conducted on January 31st, 2025, to assess the potential impacts of formalizing land tenure on both the environment and the community. This process aimed to ensure that the tenure regularization efforts would not result in adverse effects, such as environmental degradation or social displacement. By identifying and addressing potential risks early, the screening ensured that the regularization process aligned with sustainable development principles and safeguarded the well-being of the settlement's residents and their environment. Areas of interest in this exercise included assessment of natural resources, infrastructure and services, climate resilience, land degradation, waste management, livelihood, cultural heritage, social cohesion, access to service, gender equity, vulnerable groups, among others.

Upon completion of the plan, a detailed settlement screening will be carried out against the finalized plan to clearly assess its specific impacts and identify appropriate mitigation measures. The goal is to ensure that the project interventions will leave the community better off than they were before the project began. In line with the project's Environmental and Social Management Framework (ESMF), any adverse effects identified will be addressed through the Environmental and Social Management Plan (ESMP).

3.6 Basemap Preparation and Adoption

A base map, as defined by the Merriam-Webster Dictionary, is a map that contains only essential outlines and is used for plotting or presenting specialized spatial data (Merriam-Webster, 2025). It serves as a fundamental layer upon which additional data can be overlaid or analyzed. A base map provides enough detail to allow viewers to identify locations and contextual elements relevant to the subject area of interest.

The base map was prepared before undertaking the socioeconomic survey and physical mapping exercise. Its preparation involved multiple activities, detailed out in a separate report of this consultancy. Considering its importance in aiding the registration of rights of beneficiaries, and as a foundational input to this assignment, the base map had first to be adopted by the respective community, the county government and finally approved by the Client.

Residents and SEC/GRC members played a crucial role in the process. They assisted surveyors in identifying and mapping features within the settlement, including structure and parcel boundaries. The collected data was processed, and each parcel was assigned a unique identifier number (Parcel ID number), as illustrated in Map 3.1. These identifiers were used during the physical mapping exercise and the administration of questionnaires.

The preparation of the base map was a critical step in the assignment, laying the groundwork for the successful execution of the project. The project commenced with a reconnaissance survey, followed by the identification and confirmation of the settlement's perimeter boundaries during the introductory meeting. The following steps were undertaken to generate the base map:

i. Due diligence and acquisition of secondary survey data.
ii. Reconnaissance survey.
iii. Identification, verification, and confirmation of perimeter boundaries and acreage.
iv. Establishment of ground control points.
v. Acquisition of high-resolution imagery.
vi. Perimeter boundary establishment and validation.
vii. GPS survey and ground picking.
viii. Feature identification and mapping.
ix. Data processing.
x. Base map drafting.

The resulting base map accurately captured the settlement's existing spatial conditions and includes the following elements:

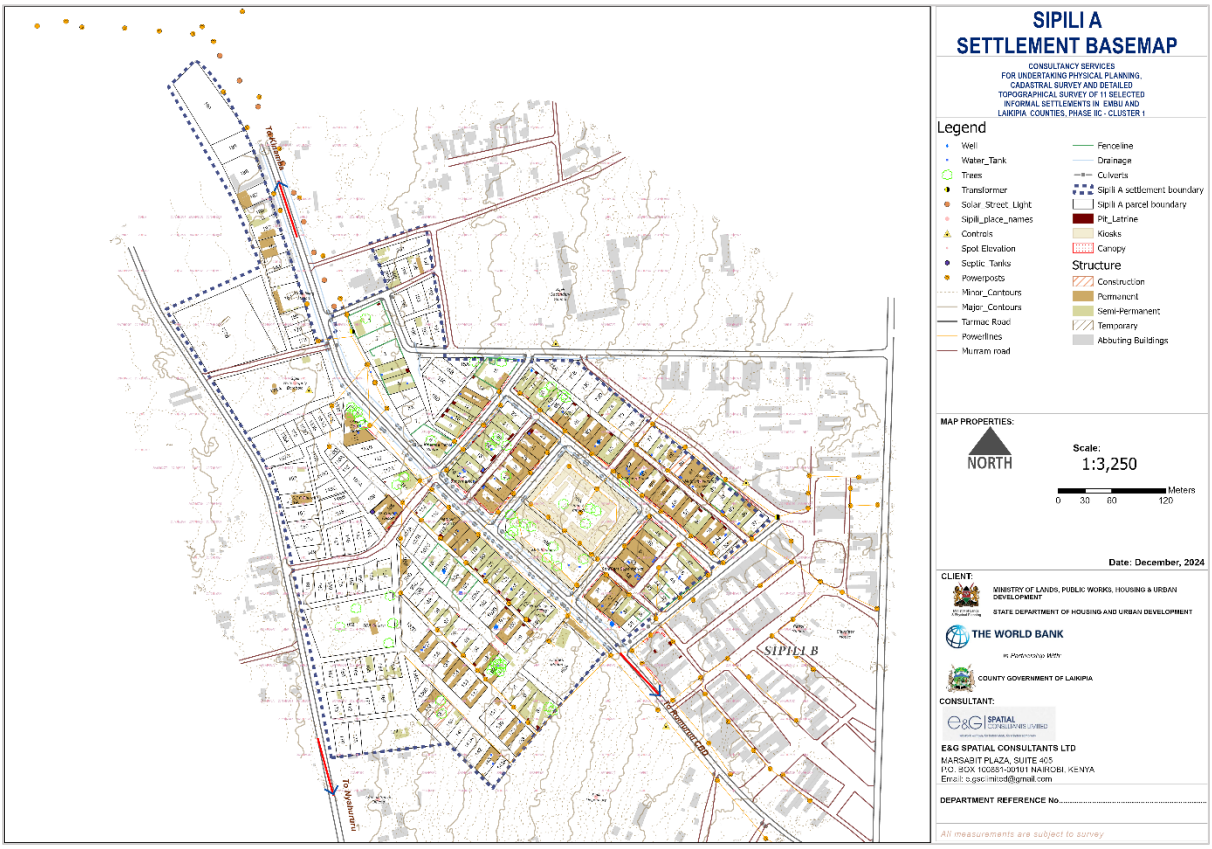
i. Location context: The broader geographical setting of the settlement.
ii. Boundary of the area of interest: Clearly demarcated perimeter of the settlement.
iii. Existing structures and their uses: Permanent and temporary structures, along with their functions.
iv. Infrastructure facilities and networks: Roads, utilities, and other essential infrastructure.
v. Perceived plot boundaries: Boundaries as recognized by residents.
vi. Significant landmarks: Key physical features, as well as known points such as the waterpoints.
vii. Other relevant existing features: Natural or man-made elements of importance.

viii. Immediate neighborhood context: Surrounding areas and their relationship to the settlement.
ix. Topographical features such as the terrain.

The base map served as the foundation for all subsequent project activities, including:

i. Generating unique parcel ID numbers to identify plots claimed by beneficiaries.
ii. Guiding the physical mapping exercise.
iii. Presenting spatial analyses in socio-economic and planning reports.
iv. Acting as a reference layout during community participatory exercises.
v. Supporting the development of planning proposal layouts.
vi. Assisting with final surveying implementation layouts, including beacon data generation.
vii. Identifying and mapping of project-affected structures.

Map 3.1 illustrates Sipili A settlement's base map.



Map 3.1: Sipili A settlement base map

3.7 Socioeconomic Survey

The socioeconomic survey, conducted from 23rd to 25th January 2025, aimed to gather comprehensive data on households and demographics, including economic and social conditions, access to public and utility services, and community perceptions of priority areas for upgrading. The socio-economic survey data collection was conducted by using three tools that were digitally administered under the Client's provided KeSMIS platform. They included:

i. Socio-economic survey tool-was meant for enumeration of households residing within the settlement.
ii. Structure tool- was used for enumeration of structure owners.
iii. Mapping tool was used to pick key facilities including line infrastructure and their associated assets.

This information informed planning interventions designed to improve living conditions in Sipili A informal settlement. The survey provided critical insights into the needs and priorities of the community, forming the basis for targeted and effective upgrading proposals. Preceding socio-economic survey was a physical mapping exercise which involved physical numbering of all the structures in the settlement based on numbers generated in the base-map. The physical mapping exercise was crucial in giving spatial identity to structures and further administration of questionnaires during the socio-economic survey exercise. This culminated in the preparation of a socioeconomic survey report, which was provided to the client as a separate deliverable. The socioeconomic findings, presented to the technical team on February 13, 2025, and to the Sipili A community on February 20, 2025, formed the basis for this planning report. Plate 3.1 shows the presentation of socioeconomic findings in Sipili A settlement.

Plate 3.1: Presentation of the socioeconomic Survey findings in Sipili A Settlement

3.8 Community Visioning and Participatory Planning

Community visioning is a collaborative process that empowers residents and stakeholders to define a shared vision for the future of their community, guiding decisions and planning efforts based on their aspirations and values. Participatory planning involves actively engaging community members in identifying issues, setting priorities, and developing proposals to achieve desired social and economic goals, ensuring that the planning process reflects the interests of all groups within the community.

This approach was employed in this project, emphasizing the direct involvement of the Sipili A community and other key stakeholders. The community visioning sessions were a crucial component of this participatory approach. These sessions were designed to allow local residents to envision their ideal settlements and project how they would

like them to look in the near future. This stage of the planning process occurred after the socioeconomic survey, during the presentation of the findings to the residents of Sipili A informal settlement. The vision statements presented by the community were summarized into a comprehensive vision: "***To become a well-connected economic hub***."

Residents were also given the opportunity to spatially represent their envisioned settlement. The various hand-drawn options were then digitized with professional input added to form several planning proposals. All activities outlined in the methodology were conducted in collaboration with the community, which helped build a sense of ownership among local residents in both the project and the plan-making exercise. The community proposals included the installation of adequate street lighting, improved water access, establishment of a social hall, establishment of an effective solid waste management system, and provision of a sewerage system. The combination of these community proposals with professional input from the Consultant and other stakeholders provided the foundational background for this planning exercise and this report.

Plate 3.2: Community participatory planning in Sipili A Settlement

3.9 Preliminary Verification of the List of Beneficiaries

In the context of the KISIP2, the List of Beneficiaries (LoBs) refers to individuals who are identified as plot owners or direct recipients of the land rights. The basemap for Sipili A settlement contained unique identifier numbers that guided the physical mapping and subsequent socioeconomic survey activities conducted from January 23rd to 25th, 2025. From this data, the list of beneficiaries was generated. These beneficiaries played a crucial role in the preparation of the LPLUDP by providing input on their needs and priorities. Their participation ensured that the plans were tailored to address specific community challenges, such as improving infrastructure and upgrading social amenities. The beneficiaries were involved in community-led

visioning processes and stakeholder meetings, where they helped prioritize projects like road realignments, water access improvements, and establishment of a sewerage system.

The LoB underwent a preliminary verification exercise on February 20, 2025 and a final verification on 25th June 2025. The purpose of this exercise was to confirm and update details on the List of Beneficiaries (LOB). As part of the final verification process, project identification cards were issued to beneficiaries, featuring their name, photo, National ID number, and parcel ID details. However, these cards do not serve as proof of ownership of the parcels. The list of beneficiaries is a precursor to the issuance of land rights.

Plate 3.3: Verification of the list of beneficiaries

3.10 Preparation of the Local Physical and Land Use Development Plan

The preparation of a Local Physical and Land Use Development Plan (LPLUDP) in Kenya is stipulated by the Physical and Land Use Planning Act, No. 13 of 2019. This Act provides the legal framework for the development of various physical and land use plans, including LPLUDPs, which are essential for guiding land use and development at the local level (Section 46 and 47 of the Act). The culmination of the above preceding activities was the preparation of the development plan discussed in this report. The settlement base map was the reference map upon which the plan proposals were laid and contextualized spatially. During the community visioning and participatory planning exercise, the settlement residents expressed their desired structure for the settlement which shaped the land use proposals included in the plan. In addition, the people proposed access networks especially in areas that had accessibility challenges.

In addition to the community's input, the Consultant factored in all other planning aspects including the existing development layouts, the number of impacts/PAPs generated and the feasibility of the given community proposals vis a vis space availability, for example. Additionally, a neighborhood context analysis was undertaken which assessed the location of existing facilities and their potential to optimally serve the settlement, even if situated outside the settlement.

After all these considerations were incorporated, two plan options were drafted, the nil intervention and the adaptive option. Each option was analyzed independently as well as comparatively and then scored pertaining key project elements. Both options were subsequently presented to the community, in a participatory review, where the adaptive plan option – with minor adjustments to some road sizes and defined land uses – was selected as the preferred approach. The detailed analysis of the plan options is presented in chapter 5 of this report.

3.11 Draft Plan Presentations

3.11.1 Presentation to the Technical Team (NPCT and CPCT)

After incorporating input from the community participatory planning exercise and adhering to the applicable standards given the settlement's prevailing conditions, the plan options (discussed in Chapter 5) were presented to the technical team (KISIP2 National and County teams) on 24th March 2025. The highlights of the technical team presentation included the need to minimize Project-Affected Persons (PAPs) and sensitize communities about the types of land titles they would receive.

3.11.2 Draft Plan presentation to the community

The community presentation on 26th March 2025 allowed the Sipili A residents to review the plan options, assess their potential impacts, and select the most suitable alternative. During the deliberations, community members actively shared their perspectives where for instance, one member suggested that the settlement should remain as it is while another suggested that space for a cemetery should be designated. A detailed account of these discussions is provided in the annexed meeting minutes.
After the discussions, the community collectively chose the first adaptive option. This chosen option was then refined to meet the current and future needs of the settlement. Plate 3.4 illustrates the draft plan presentation to the community.

Plate 3.4: Presentation of draft plan options to the community

3.12 Notice of Completion

Following the completion of the draft plan preparation and presentation to the community, a notice of completion was published on April 7, 2025 in the Kenya Gazette and two national dailies in line with the Physical and Land Use Planning Act, 2019. The notices have been annexed to this report. This enabled the public to inspect the plan for any comments.

Several members of the public raised concerns regarding land use designations in the proposed draft plan. Specifically, they recommended that the recreational areas

designated as Plot 3(1) and 3(2), as well as the public purpose plots 4(1), 4(2), and 4(3), to be re-designated for residential use.

Additionally, the SEC engaged in discussions with community members and relevant stakeholders, and they agreed to exchange the location of the slaughterhouse in neighboring Sipili B (Plot SPB/90) with two plots in Sipili A, namely, SPA 4(3) and SPA/153. This adjustment aimed to facilitate more effective waste management. All the above suggestions and changes were incorporated into the draft final plan.

3.13 Presentations of the Draft Final Plan

3.13.1 Presentation to the Technical Team, the Executive and MCAs

Following the integration of feedback from various stakeholders, the draft final plans for the eight settlements in Laikipia county, including Sipili A settlement, were presented to the technical team (NPCT and CPCT), the Executive and MCAs on 19th June 2025. Several key issues were raised during the meeting. Solid waste management was highlighted as a significant cross-cutting challenge, with calls for dedicated spaces for waste collection, recycling, or sanitary landfills, alongside community sensitization programs to prevent indiscriminate dumping. Additionally, the incorporation of Non-Motorized Transport (NMT) facilities was emphasized to support children's activities such as skating and socialization. The meeting also highlighted the insufficiency of recreational and public spaces in high-density areas, suggesting the designation of more land for public purposes and the expansion of facilities such as health centers and early childhood development centers. However, it was noted that planning post-development posed challenges in identifying suitable spaces for these facilities.

The location of the slaughterhouse in Sipili sparked debate, with a consensus leaning towards situating it outside residential settlements to enhance waste management and community health. Discussions on urban character and aesthetics emphasized the importance of proposing landscaping, greening, and maintaining the urban identity of the area. Environmental conservation was also strongly stressed, particularly for waterlogged areas, with recommendations for tree planting and greening initiatives to improve these vulnerable zones.

Community reluctance to repurpose land uses and challenges in reallocating spaces for new functions were acknowledged, highlighting the need for further engagement and sensitization. Valuation and facilitation of Project-Affected Persons (PAPs) were flagged as critical steps to avoid future disputes and delays. Budgetary constraints and impractical policies were identified as major barriers to PAPs facilitation, with stakeholders agreeing on the necessity for pragmatic policy frameworks and adequate financial resources. Concerns regarding the centralization of administrative units and the adequacy of public services, including police posts and health facilities, were raised as ongoing issues requiring attention.

Stakeholder engagement was underscored as vital, with a call for continued collaboration between the community, executive, and assembly to ensure smooth plan

approval and implementation. Timely approval of the plan was urged, encouraging the assembly and executive to expedite the process to facilitate land titling and access to future budget allocations. Revenue generation opportunities were identified through proposing improved urban infrastructure and the multi-purpose use of wide roads, such as for parking and water reticulation.

Plate 3.5: Presentation to the Technical team, Executive & MCAs

3.13.2 Presentation to the Community

Following the integration of feedback from various stakeholders, the finalized draft final plan was presented to the community for review, validation, and formal adoption on 25th June 2025. The primary objective of this exercise was for the community to confirm that the plan option that will be forwarded for approval is the preferred option that is deemed as the best fit for intervention in Sipili A. The residents unanimously agreed with the plan and the proposed land uses such as the slaughterhouse. A detailed record of the meeting can be found in the minutes annexed to this report. Table 5 and Plate 3.6 illustrates the plan validation and adoption meeting.

Table 3.2: Concerns raised during presentation of final plan to the community

Issue/Concern	Response
A community member sought clarification on why parcels SPL/149 to SPL/152 had not been subdivided into ten separate parcels as proposed by the residents living there.	The Project Director explained that parcels SPL/149 to SPL/152 had not been subdivided into ten parcels because the proposed subdivision did not meet the minimum planning standards and regulations. He noted that any subdivision must comply with legal plot size requirements, access road provisions, and proper service allocation. Adjustments to the layout were therefore made to ensure compliance with

	planning guidelines and to facilitate approval by the relevant authorities.
A community member sought clarification on why the consultant chose not to use the existing Part Development Plan (PDP) and instead opted to develop a new plan, which, if implemented, would have significant negative impacts on existing structures for plot owners. The member questioned the need for the new plan and expressed concern about its implications on the community.	The Planner clarified that the Final Draft Plan is not just a technical document, but a community-driven plan that reflects the ideas, priorities, and proposals shared by residents during the planning process. It includes aspects such as road layouts, land use allocations, and provisions for public amenities, all shaped by community input. He emphasized that once the community formally adopts the plan—signifying their agreement and approval—it will be submitted to the Senate as part of the legal and administrative process. Senate approval is necessary to formalize the plan and allow the next steps to proceed, including land surveying, beaconing, preparation of the Resettlement Action Plan (RAP) where necessary, and ultimately, issuance of title deeds.
A member had proposed exchanging his parcel outside the settlement for the slaughterhouse site, suggesting the facility be moved outside the settlement to prevent potential health and environmental risks in the town center.	In response to concerns about the slaughterhouse's location, the Planner explained that it had been relocated outside the settlement. She added that the site where the slaughterhouse currently stands has been proposed for the construction of a social hall.
A community member asked if the consultant could designate an area within the settlement to be used as a cemetery for the community members, ensuring there is a proper and dedicated space for such needs.	The Planner stated that the County Team would allocate a parcel of land outside the settlement for the cemetery. This new site would be strategically located to serve both the current settlement and neighboring ones, ensuring it meets wider community needs without posing health risks to residents. She further emphasized that a cemetery should not be located close to residential areas due to the potential health hazards.

Plate 3.6: Plan validation

3.14 Final Verification of the List of Beneficiaries

This exercise was conducted on 25th June 2025 after adoption of the draft final plan. Similar to the preliminary verification, the community members brought copies of their IDs and KRA pins for verification. Thereafter, they were issued with project identification cards bearing the name, photograph, National ID number and the parcel ID details of the respective beneficiaries.

It should be noted that the enumeration cards are not proof of ownership of the parcels.

Plate 3.7: Plan validation

3.15 Plan Approval

Following the adoption of the preferred plan by the community, the LPLUDP was revised, incorporating the final comments raised by the community during the validation and adoption exercise, and submitted to the CECM in charge of Infrastructure, Land, Housing, Energy and Physical Planning for adoption, and onward forwarding to the county assembly of Laikipia for approval in line with Section 49 of the Physical and Land Use Planning Act, 2019.

3.16 Environmental and Social Management Plan /Resettlement Action Plan Preparation

As per the World Bank OP 4.12 (involuntary resettlement) and the resettlement policy framework, preparation of a Resettlement Action Plan or Environmental and Social Management Plan is one of the requirements of this Consultancy. This was triggered after preparation of the Local Physical and Land Use Development Plan as the plan and the proposals therein resulted in some impacts and PAPs generation mainly through the proposed road realignments and widening.

Based on the anticipated outcomes of the draft plan, the preparation of the Draft ESMP will be focused solely on mitigating negative impacts because no resettlement is expected. The ESMP will specifically address issues such as partial impacts on existing developed structures.

For the preparation of the final ESMP, ground truthing will be conducted to determine the type, nature, and magnitude of these impacts. Additionally, further discussions will be held with the county government to assess their capacity for implementing the

ESMP. The final plan will be developed based on the assessment of these impacts and the county's consent, as the implementing agency.

Whereas RAPs have previously generally been prepared as a mitigation tool towards addressing negative impacts of projects of this nature, ESMPs are now being prioritized as an alternative tool for the same purpose, using community driven approaches. The following are some of the negative impacts that were generated by the plan proposals:

Table 3.3: Negative Impacts generated from the plan

No	Potential Impact	Causes	Mitigation Options	Mitigation Instrument
1.	Partial loss of Land	– Road widening – Roads realignment	– Title to the resultant parcels after regularization.	ESMP
2.	Beneficiaries receive land which is viable but is too small for land registration for purpose of titling.	– Roads realignment – Continued informal land transactions over the years – Haphazard informal developments over time	– Amalgamation of parcels – Consultations with PAPs for agreement on block title – Allocation of appropriate land use if amalgamation is not feasible (e.g., low-scale commercial use, single dwelling residential use, recreational, etc.)	ESMP
3.	Total impact on land size – taken over by public utility or remaining is not viable for residential and/or commercial purposes.	– Proposals by the community to have land for public facilities during planning phase	– Alternative land for the PAP of comparable value. – County to get into acquisition processes with the PAP post tenure exercise.	RAP
4.	**Loss of structures** Complete/Partial loss of: residential/ commercial buildings, toilets/soak pits/septic tanks, temporal/permanent fences etc.	– Road widening – Roads realignment	– SMP to document agreed mitigation measure with the community. – For total losses, application of RPF provisions – Facilitate for repair costs. – Give adequate notice period for the affected to make necessary adjustments.	ESMP

No	Potential Impact	Causes	Mitigation Options	Mitigation Instrument
5.	**Loss of livelihoods** Loss of temporal business premises- *vibandas*, Loss of rental income.	– Road widening – Roads realignment – Space reclaimed / repossessed by different claimants	– Give adequate notice period. – Facilitate for movement costs. – Facilitate repair costs.	ESMP

3.17 Cadastral Surveying

Section 12(7) of the Land Act 2012 requires that public land shall not be allocated unless it has been planned, surveyed and guidelines for its development prepared. By this plan preparation, settlement development guidelines have been set. Therefore, upon the approval of the settlement development plan, it will pave way for cadastral surveying exercise. This exercise will formally establish the parcels boundaries pursuant to the development plan generated. The boundaries of the resultant parcels will be fixed through georeferenced positioning and placement of beacons, and the beneficiaries will be required to sign beacon certificates confirming their parcel boundaries demarcation.

The Survey Act, section 32, states that no land shall be deemed to have been surveyed until the survey plan thereof has been authenticated by the Director of Surveys. In reference to the Land Registration Act, the cadastral map will be the basis for amendment of a registry index map which will pave way for registration of the title documents. Therefore, authentication of the survey plans will be done in line with the Survey Act and its regulations to generate a new/amendment of Registry Index Map (RIM) for the settlement together with the area list.

3.18 Land Information System Creation

The Land Information System (LIS) serves as a critical tool for managing land-related data and supporting decision-making processes. Its primary purpose is to facilitate efficient land administration and planning by providing a centralized repository of spatial and cadastral information. The LIS enables stakeholders to capture, store, manage, and visualize geo-referenced data, thereby enhancing the accuracy and accessibility of land records.

The LIS framework under this project was populated with all the raw data collected during socio economic survey as per the data dictionary that was provided by the Client. The data dictionary included in the LIS framework comprises a standardized set of definitions and attributes for all data elements collected during the project. The data dictionary typically includes information on land parcel boundaries, georeferenced positioning, beacon placements, and beneficiary details. Additionally, it may encompass environmental characteristics, infrastructure details, and socio-economic data pertinent to the settlement.

The inclusion of raw data collected as per the data dictionary guarantees that the LIS database is readily accessible and can be referenced by other project components, including infrastructure development, without the need for repeated field visits. This integration of data facilitates seamless coordination among various stakeholders and enhances the overall efficiency and effectiveness of land management efforts.

The LIS database will be among the final deliverables of this assignment, as it will also incorporate the parcel numbers that will be issued by the DoS upon approval of the survey plan.

4 SITUATIONAL ANALYSIS

4.1 Overview

The Physical and Land Use Planning Act, No. 13 of 2019 (PLUPA), emphasizes the importance of situational analysis covering population, physiographic dynamics, land analysis, and economic factors in various levels of planning, including LPLUDPs. Part B of the second schedule of the Act requires that before commencing preparation of a local physical and land use development plan a survey report shall be prepared providing details on spatial analysis, demographic characteristics, the state of the environment, economic base analysis, transport, communications networks, housing situation and social aspects such as education, health, recreational areas and other public purpose uses. This approach ensures that plans are informed by comprehensive assessments of local conditions and challenges.

This chapter provides a comprehensive summary of the existing situation in Sipili A settlement, utilizing both textual and spatial data presentation formats. The data was collected through a socio-economic survey conducted in Sipili A informal settlement from 23rd to 25th January 2025. Additionally, Key Informant Interviews (KIIs) were conducted with various stakeholders, including county officials and well-informed individuals from the settlement. These informants included the CECM in charge of Lands and Physical Planning, Chief Officer- Lands, KISIP County Project Coordinator, Laikipia West Sub-County Planner, Area Member of County Assembly (MCA), County Environmental officer and area Chief. The engagement was conducted at both formal and informal levels to gather a wide range of information that helped the consultant understand local dynamics.

Input from environmental key informants, gathered during a screening exercise on January 31st, 2025, informed the environmental section of this report. Furthermore, GIS spatial analysis provided valuable insights into the settlement's structure, infrastructure, and environmental aspects such as topography and vegetation distribution.

This comprehensive approach ensured a thorough understanding of the settlement's current state and its implications for planning. The following is a summary of the emerging issues and how they were addressed in the plan.

Sector	Key issues	How the Plan has Addressed Them
Population & Demographic characteristics	❖ Other factors held constant; the settlement population is expected to keep increasing. ❖ Current population is dominated by teenagers and young adults.	❖ Current population size, structure, and its projections and dynamics informed the justifications for planning proposals.

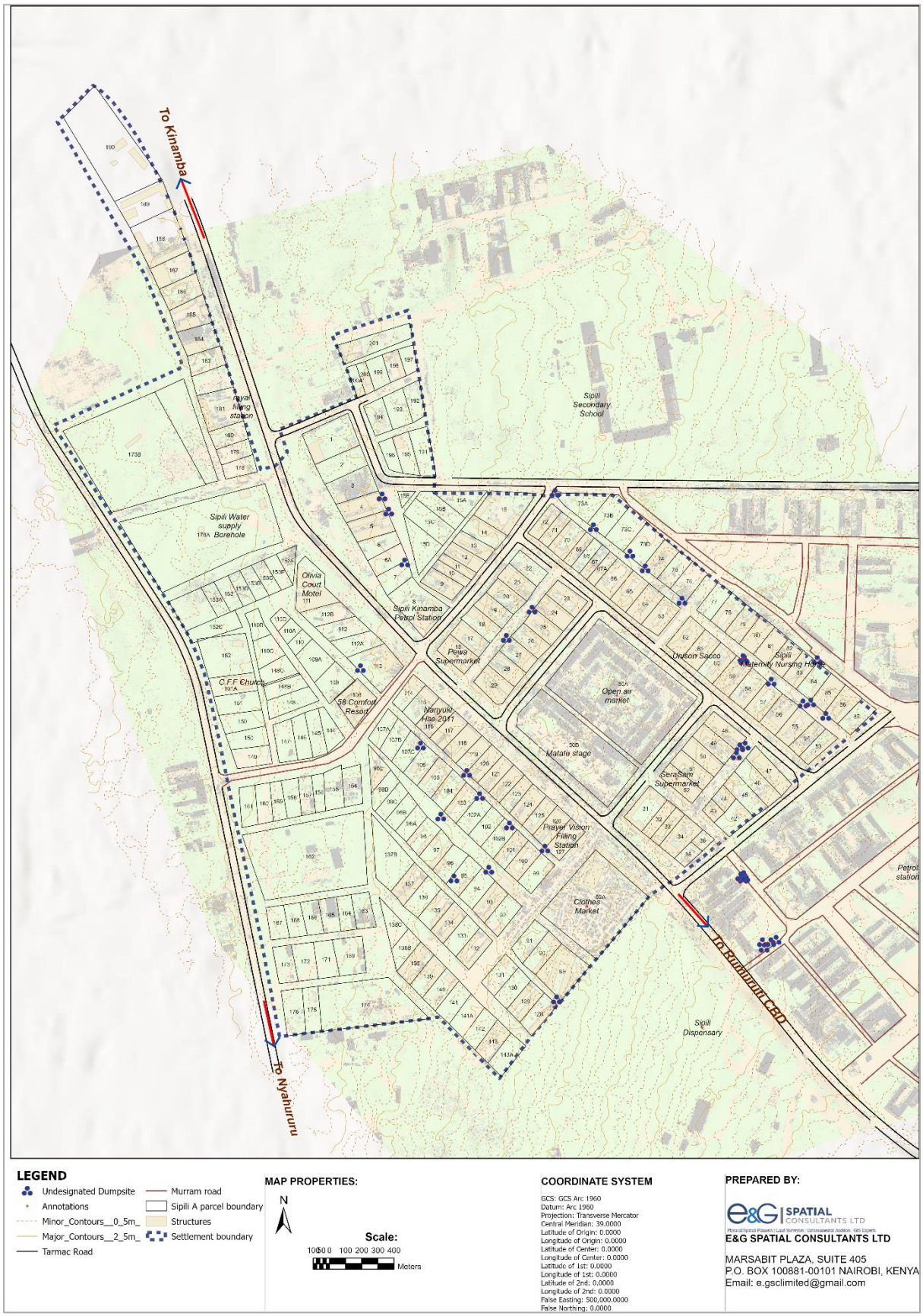
Sector	Key issues	How the Plan has Addressed Them
		❖ The plan has designated commercial/mixed-use zones for job creation and proposed strategies to improve services at neighboring primary and secondary schools.
Economy	❖ High rates of unemployment coupled with low levels of income.	❖ The plan has designated commercial/mixed-use zones for job creation. ❖ The plan has improved connectivity to places of work within and outside the settlement.
Tenure system	❖ The current residents do not have any legal ownership documents.	❖ The goal of the project is to confer tenure rights to the beneficiaries, and this planning process will facilitate that.
	❖ There is a sense of entitlement to individual parcel ownership. This has resulted in unregulated subdivisions of parcels.	❖ Individual titling has been recommended since all parcels are above 100sqm.
Settlement structure	❖ The settlement has a structured layout. ❖	❖ The LPLUDP has designated land use zones and development control guidelines to guide future development. ❖ The plan has realigned access networks to improve connectivity.
Housing	❖ Majority of the structures are non-storey.	❖ The plan has recommended vertical densification of the settlement in the long term.
	❖ Majority of the structures are semi-permanent.	❖ The plan has designated residential & other land use zones to facilitate increased investments in sustainable housing. ❖ Development control guidelines outlined to guide development.
Transportation	❖ Sipili A has a well-structured transport network comprising main access roads ranging from 9 to 18 metres wide and rear service lanes about 6 metres wide. ❖ Some roads are narrow, and others have irregular widths.	❖ The plan has realigned access networks to improve connectivity in the settlement. ❖ The resultant road network corridors will also be carriers of other line infrastructures such as waterlines, powerlines, NMT, etc.
Infrastructure and utility services	❖ Reliance on groundwater which is unsustainable and prone to pollution. ❖ Inadequate solid waste management.	❖ The LPLUDP has proposed establishment of a piped water reticulation system.

Sector	Key issues	How the Plan has Addressed Them
	❖ There is an overreliance on the use of the pit latrines which is not sustainable.	❖ The LPLUDP has proposed strategic placement of waste receptacles. ❖ The plan has recommended adopting onsite waste disposal methods e.g. using biodigesters, and installation of simplified sewer systems.
Social Infrastructure	❖ There is no health facility in the settlement and people rely on neighboring Sipili health centre.	❖ The plan has proposed densification of the existing health facility and improvement of services.
	❖ Residents rely on primary and secondary schools located outside the settlement.	❖ The plan has proposed densification of the educational facilities and improvement of services.
	❖ Lack of designated recreational facilities.	❖ The plan has designated recreational spaces.
Environment	❖ High reliance on charcoal for cooking thus destruction of the natural environment.	❖ The LPLUDP has proposed adoption of alternative green energy sources.
	❖ Water stagnation	❖ The plan has recommended installation of stormwater drainages along the accesses, developers are advised to implement comprehensive drainage mechanisms such as installing rain barrels to collect roof runoff to reduce surface water pooling and creating vegetated swales.
	❖ Uncoordinated solid and liquid waste management.	❖ The LPLUDP has proposed strategic placement of waste receptacles; adopting onsite waste disposal methods e.g. using biodigesters, and installation of simplified sewer systems.
	❖ Lack of designated green spaces.	❖ The plan has proposed green spaces.
	❖ Groundwater seepage	❖ The LPLUDP has recommended strategies such as diverting surface water away from the foundation using channels or berms, installing drainage systems to redirect water from the seepage area, and conducting hydrogeological surveys.

4.2 Physical and Environmental Characteristics

The environment is key in planning as it represents the surroundings or conditions within which human activities take place. In this context, the physical and environmental conditions affected the decisions made in terms of both the planning process and resultant proposals. The data used in this analysis was gathered from both primary and secondary sources. Secondary sources provided information on climate and soil conditions, while primary data collected through field observations, focus group discussions with community members, and key informant interviews with Laikipia County officials provided details on vegetation, topography, slope, and drainage systems. Data on disaster occurrences was obtained from the residents using the socioeconomic survey tool. Additionally, GIS-based land cover analysis aided the quantification of vegetation cover which was approximately 20.2%.

Map 4.1 illustrates Sipili A settlement's environmental status, focusing on the vegetation, undesignated solid waste dumping sites, septic tanks, water tanks, and the toilet facilities within the settlement. The plan preparation has put into consideration the existing environmental conditions in the allocation of various land use proposals and strategies.



LEGEND

- Undesignated Dumpsite
- Annotations
- Minor_Contours__0_5m_
- Major_Contours__2_5m_
- Tarmac Road
- Murram road
- Sipili A parcel boundary
- Structures
- Settlement boundary

MAP PROPERTIES:

N

Scale:

100 50 0 100 200 300 400 Meters

COORDINATE SYSTEM

GCS: GCS Arc 1960
Datum: Arc 1960
Projection: Transverse Mercator
Central Meridian: 39.0000
Latitude of Origin: 0.0000
Longitude of Origin: 0.0000
Latitude of Center: 0.0000
Longitude of Center: 0.0000
Latitude of 1st: 0.0000
Longitude of 1st: 0.0000
Latitude of 2nd: 0.0000
Longitude of 2nd: 0.0000
False Easting: 500,000.0000
False Northing: 0.0000

PREPARED BY:

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Map 4.1: Environmental status map

4.2.1 Vegetation

Identifying vegetation types and their distribution is crucial for developing sustainable land use practices that balance infrastructure needs with conservation goals. Vegetation provides essential ecosystem services, including flood control, air filtration, and aesthetic improvements that contribute to psychological well-being for residents. Vegetation also enhances the aesthetic appeal of settlements by introducing landscape variations with diverse colors and dynamics, effectively blending built-up areas with natural environments (Zhang, Zheng, & Wang, 2022). Assessing vegetation cover helps identify areas of land bareness and exposure to erosion.

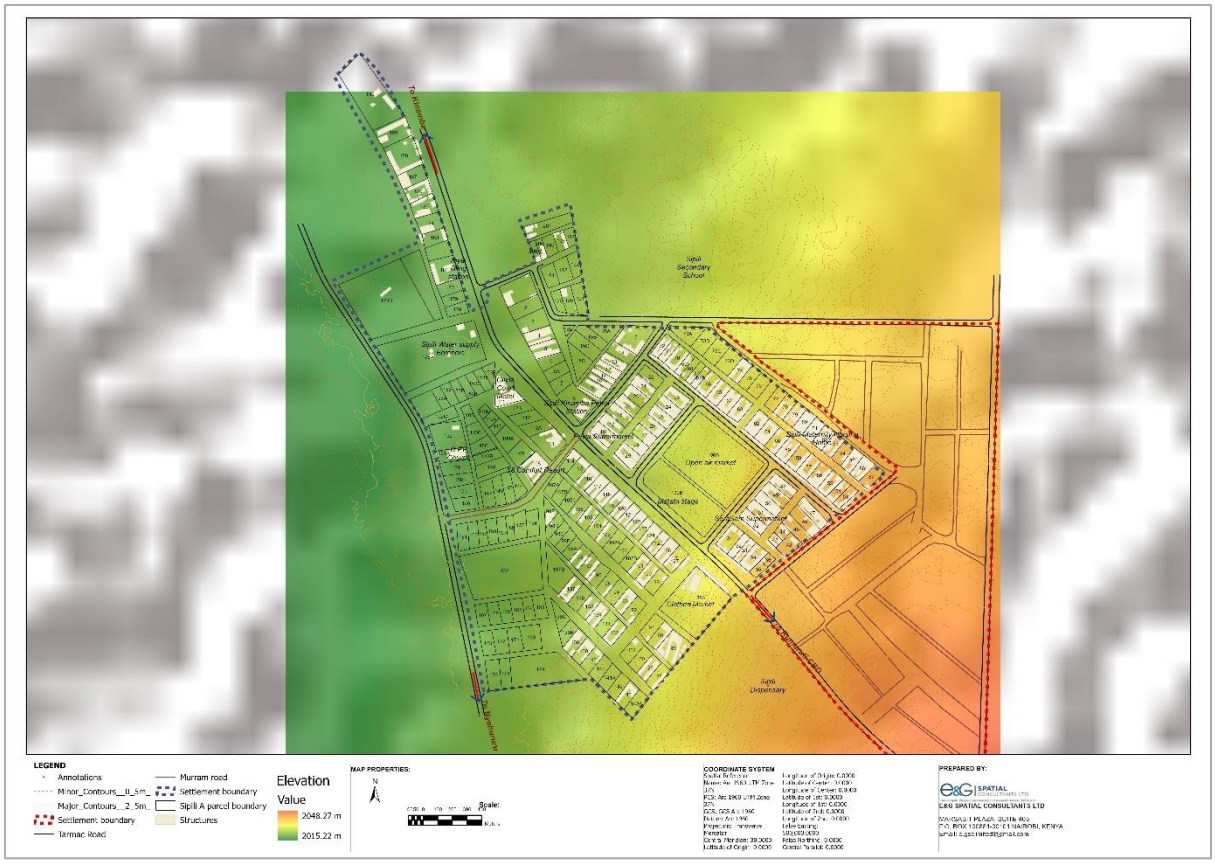
Using GIS-based unsupervised classification analysis, it was established that the settlement's vegetation cover accounts for approximately 20.2% of its total area. The limited vegetation cover in the settlement contrasts with the historical background of the settlement, which indicates that the area was bushy before the settlement began. The current state reflects a significant transformation, resulting from the clearance of bushes to make way for building developments. The proposed land uses during redevelopment may lead to more vegetation loss. To mitigate this potential loss, the plan has recommended strategies such as planting trees along road reserves and other open spaces within the settlement. This approach aims to maintain vegetation cover and ensure that the benefits of vegetation are preserved during redevelopment.

Plate 4.1: Vegetation in Sipili A

4.2.2 Topography and Slope

Topography refers to the configuration of a surface including its relief and the position of its natural and man-made features (Merriam-Webster, 2025). Slope indicates the percentage change in elevation over a distance. Topography and slope play a crucial role in shaping land use patterns and can impact the usability of land resources and ecosystems. Understanding both is essential for land use planning, as it helps identify suitable areas for development. The settlement slopes from east to west, descending from the highest point of 2,046 meters above sea level to the lowest point of 2,015

meters above sea level. This gradient was a critical factor that significantly influenced the layout of the road network as well as proposals for the design of the stormwater drainage channels. Map 4.2 indicates the topography of the settlement.



Map 4.2: Topography of the settlement

The elevation profile in Figure 4-1 illustrates the change in slope by showing the variation in height above sea level over a horizontal distance. The settlement has a gentle slope which is considered optimal for residential and commercial development, making this area suitable for such purposes (United States Department of Housing and Urban Development (HUD, 2025).

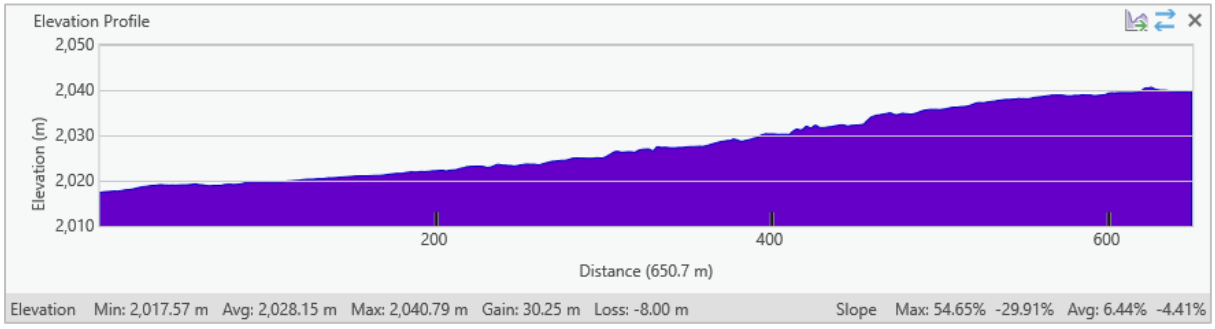


Figure 4-1: Elevation profile

4.2.3 Drainage

Analyzing the drainage patterns in the Sipili A settlement was crucial for developing effective proposals for flood prevention, water resource management, and environmental protection. Field surveys established that the settlement features a

gently undulating terrain with an average gradient of about 6%, which promotes natural drainage (see Figure 4-1 for the elevation and slope profile). Due to this gradient, stormwater flows by gravity from higher to lower areas, while some water percolates into the ground owing to the settlement's well-draining sandy-loam soils. Currently, the tarmacked roads in the settlement are equipped with stormwater drainages. Therefore, the LPLUDP has proposed installing drainage channels along roads that lack them, connecting these new channels to the existing drainage system to ensure coordinated and efficient stormwater management.

The persistent challenge of groundwater seepage in the south-western section of Sipili A settlement is closely related to the area's topography and slope. The settlement slopes from east to west, with the lowest elevation at 2,015 meters above sea level located in the southwestern part. This gentle gradient causes stormwater and surface runoff to naturally flow towards these lower-lying areas. As a result, water tends to accumulate in the southwestern section, especially during the rainy season, raising the water table and increasing groundwater seepage into homes. This not only damages structures and creates damp living conditions but also leads to rapid filling of pit latrines, resulting in unsanitary conditions and posing a threat to groundwater quality. Thus, the combination of the settlement's slope and drainage patterns exacerbates the groundwater seepage problem in this area.

The LPLUDP has addressed the sanitation challenge by proposing onsite sanitation methods such as biodigesters to improve living conditions and public health. To tackle the issue of groundwater seepage, the plan has proposed strategies such as diverting surface water away from the foundation using channels or berms and installing drainage systems to redirect water from the seepage area. However, these measures only provide temporary relief and may necessitate long-term solutions, such as comprehensive foundation waterproofing or upgrades to the drainage system, to fully resolve the problem. Furthermore, the planning strategies include recommending a geotechnical survey to determine the optimal foundation depth for the houses, thereby ensuring stability and structural integrity.

Figure 4-2: Zone experiencing groundwater seepage

4.2.4 Soils

Soil analysis informs land use planning by determining land suitability for development and revealing drainage patterns. Soil suitability measures how well soil qualities support the requirements of proposed land uses. The settlement is underlain by basic and ultra-basic igneous rocks, including basalts and nepheline phonolites, as well as older basic tuffs. The soils in the settlement are classified as Phaeozems, characterized by diagnostic features of chromo-luvic and partly lithic phases. These soils are well-drained and range from shallow to moderately deep, exhibiting a reddish-brown color and a firm clay loam consistent with a humic topsoil (RCMRD, 2025). Therefore, they are suitable for development.

Following the issuance of title deeds to the residents of Sipili A, an increase in construction activity is anticipated. To mitigate the potential for increased water stagnation, the plan has recommended incorporating stormwater drainage channels along all the roads. Additionally, developers are advised to implement comprehensive drainage mechanisms at the plot level to ensure effective water management and prevent stagnation issues. Such measures include installing rain barrels to collect roof runoff, reducing surface water pooling and providing water for household use, and creating vegetated swales to slow down and absorb runoff naturally. Plate 4.2 shows the soils in Sipili A settlement.

Plate 4.2: Soils in Sipili A settlement

4.2.5 Disaster Management

Disasters often inflict damage on both people and infrastructure. To determine the vulnerabilities in Sipili A settlement, residents were asked to rank disasters that have occurred in their area in the last ten years using the socioeconomic tool. The analysis identified droughts and conflicts as the most common disasters affecting the settlement. In response, the LPLUDP has proposed several strategies to enhance resilience. These include installation of a piped water reticulation system to ensure a consistent water supply throughout the year, complemented by greening the area to improve water retention and infiltration. Additionally, the issuance of title deeds is expected to reduce land-related conflicts in the area.

4.2.6 Environmental challenges

The following is a summary of the main environmental challenges observed in the settlement:

- The absence of adequate stormwater management infrastructure resulted in water stagnation along the dirt access roads, posing significant environmental challenges. To address this deficiency, the plan has proposed the implementation of a proper stormwater management system along all the accesses. This strategy aims to improve the overall well-being of the settlement by effectively managing stormwater runoff and reducing the risks associated with flooding and stagnant water.
- The settlement currently lacks an effective solid waste management system, leading to open burning and indiscriminate dumping. To address this, the plan has incorporated a comprehensive waste management system following best practice models. This system encompasses waste storage, transportation, aggregation, reuse, recycling, and proper disposal. The plan also recommends public awareness campaigns to promote waste reduction, encouraging sustainable consumption and responsible waste handling.
- Liquid waste and wastewater pollution are major concerns in the settlement, primarily due to the overreliance on pit latrines and the lack of a proper liquid waste management system. This absence of sanitation infrastructure leads to

widespread pollution from unmanaged sewage and other liquid wastes. To address these issues, the plan has proposed the use of bio-digesters in the short term, with their development closely regulated by the County Government. In the long term, the plan recommends the installation of a conventional sewer system. Additionally, the plan has expanded the dirt access roads to accommodate the future integration of these trunk lines, ensuring a comprehensive and sustainable solution to the settlement's liquid waste management challenges.

- The prevalent use of firewood and charcoal as primary energy sources for cooking poses a significant threat of deforestation and exposes households to harmful indoor air pollution. As part of a sustainable development strategy, the LPLUDP has recommended the integration of cleaner energy technologies and practices to improve environmental and public health outcomes.
- The settlement currently lacks designated green spaces and recreational areas. To address this, the plan has provided for these essential amenities by designating recreational areas to enhance both the environment and the quality of life in the settlement. The plan has also incorporated greening of road reserves to contribute to a more livable and sustainable community.
- Groundwater seepage is prevalent in the south-western part of the settlement. To tackle the issue of groundwater seepage, the plan has proposed strategies such as diverting surface water away from the foundation using channels or berms and installing drainage systems to redirect water from the seepage area. However, these measures only provide temporary relief and may necessitate long-term solutions, such as comprehensive foundation waterproofing or upgrades to the drainage system, to fully resolve the problem.

4.3 Population and Demographic Characteristics

Population is a fundamental parameter in the planning process, serving as the basis for determining the demand and supply of essential infrastructure, services, and facilities (Tong & Qiu, 2020). According to Mungai (2024), the study of human population is vital since it enables planners to understand the complexities of human societies and the challenges and opportunities they face. Analyzing population trends allows them to identify the factors driving population growth, grasp the distribution of people within a given area, and evaluate the social and economic consequences of population shifts. This understanding is essential for making informed decisions and devising effective strategies to tackle various societal challenges (Mungai, 2024). The population figures for Sipili A were derived from the enumeration of households conducted during the socioeconomic survey. This process revealed several key emerging issues related to the population and demographic characteristics of Sipili A that are outlined in Table 4.1.

Table 4.1: Emerging Issues

Emerging Issues

• **The population was youthful, with the highest number of individuals aged between 10 and 17 years. A very small proportion of the population was aged 65 or older.**
• **Small to medium household sizes were prevalent.**
• **Relatively high literacy levels-93.1% of the population had attained primary education and above.**
• **67.17% of the structure owners were male.**
• **There were few PWDs and they are represented in SEC.**

4.3.1 Population Size and Projection

The socio-economic survey established that Sipili A Settlement had an estimated population of 463, with an average household size of 2. The females constituted 47.7% and the males 52.3%, This demographic data was instrumental in projecting housing needs, and infrastructure development, ensuring that the planning proposals aligned with the anticipated population trends. Therefore, to facilitate long-term planning, an extrapolation of the current population was carried out, assuming that existing conditions in the settlement remain constant. Using an intercensal growth rate of 2.6% (as per the 2019 population census), the expected population over 5 and 10 years was projected. These projections were critical in guiding settlement upgrading strategies, ensuring that space was sustainably allocated for housing, social amenities, water supply, and waste management systems. Table 4.2 shows the projected population. It is important to note that land tenure security is a key factor in economic development, consequently affecting the population growth factors. Thus, the population of this settlement is likely to increase significantly beyond the projected figures, upon the provision of land tenure security.

Table 4.2: Population projection

Current population (2024)	Intercensal Growth rate (%)	5 years projection (2029)	10 years projection (2034)
463	**2.6%**	**526**	**598**

4.3.2 Population Structure and Composition

Population structure and composition highlight the settlement's general population distribution in terms of the age-sex parameters. Analyzing age distribution helped to determine service demand, ensuring that planning proposals catered to the unique needs of various demographic groups. Figure 4-3 shows the population structure for Sipili A settlement. In the settlement, the 10 to 17-year-old age group comprised the highest percentage (22.7%) of the settlement's population, indicating a growing and vibrant community with an increasing demand for primary and secondary education facilities.

Currently, school-going children in the 10 to 17-year-old age group attend Lariak Primary school and Lariak Secondary School that are within a 1km radius of the Sipili A catchment population area. Secondary school students in this age group attend Sipili Secondary school that borders the settlement to the east. There is also Sipili School for

the Deaf that caters to children with special needs. The handbook recommends that secondary schools occupy a minimum of 2 hectares and be located within a 3km catchment area. The plan has recommended densification of these facilities in the future to accommodate the growing population. To meet the recreational needs of the 10-17 years age group, the land use plan has included designated recreational/green open spaces.

This land tenure regularization project will enable residents to obtain title deeds, potentially allowing them to invest in diverse housing options like multifamily units. This demographic will also benefit from mixed-use developments that combine residential and commercial spaces for employment, which are included in the plan. Additionally, young adults value walkable neighborhoods with access to amenities like shops and restaurants within walking distance (Benfield, 2017), and the plan has regularized access roads and paths to support this. Furthermore, the plan incorporates recreational spaces to foster social interaction, which is essential for this age group. At the project level, the youths are represented in the SEC.

The 26 to 45-year-old cohort also constituted 17% of the population. This demographic requires provisions for commercial and industrial spaces to create employment opportunities, which are crucial for their economic stability. Additionally, this age group will benefit significantly from the KISIP2 land tenure regularization, as it will enable them to obtain title deeds that can be used to invest in more permanent structures or as collateral for development financing. To address the needs for this demographic, the land use plan has included designated commercial and mixed-use zones (combining commercial and residential areas) to provide employment opportunities tailored to the needs of this demographic. The plan also regularized access roads, enhancing transportation links both within and outside the settlement, thereby facilitating easier commutes to work. At the project level, the youths are represented in the SEC and are always engaged in the project activities in the settlement including the socio-economic surveys where the selected few were engaged in data collection.

The 0-4-year olds account for 16% of the settlement's population. This cohort requires essential maternal and child health services such as neonatal care, immunization programs, and early childhood development (ECD) centers. To address the educational needs, the plan has proposed densification of nearby health facilities. Majority of residents of Sipili A currently rely on the public Sipili Health Centre located within a 1km radius of the settlement. However, residents raised concerns about severe challenges at the health centre, including understaffing and inadequate medicine supplies. To address this issue, planning strategies have incorporated vertical expansion of the health centre and improvement of pediatric services. The 5-9 years age cohort constituted for 13.6% of the population. To support their development, this demographic requires safe and accessible recreational spaces that promote play and social interaction. In response, the planning phase included the integration of proposed recreational spaces within residential zones.

The 46-65 age group represented 11.4% of the population and had distinct needs that are addressed in the land use plan. This demographic required adequate housing, which the tenure regularization project supports by enabling residents to obtain title deeds and potentially invest in improved housing options. Access to quality healthcare is also critical for this group, necessitating future expansion of Sipili health centre and improvement of the health services. To promote physical activity and mental well-being, the plan has included designated green spaces for recreation. Additionally, this age group will benefit from the proposed commercial and mixed-use developments that will provide flexible workspaces for part-time work or small businesses. Finally, improved connectivity is essential, and the plan addresses this by regularizing access roads within the settlement.

The elderly population, aged 65 and above, constituted only 2.3% of the total population, which is the smallest demographic segment. This low percentage is attributed to high mortality rates and migration. To address these challenges, the plan has recommended improving healthcare services, particularly by introducing specialized geriatric care and community programs that promote active aging, aiming to increase life expectancy within the settlement. The LPLUDP has also included provisions for a commercial zone and mixed-use developments to encourage the establishment of more businesses, which can help reduce migration by providing economic opportunities and improving the overall quality of life for residents, including the elderly.

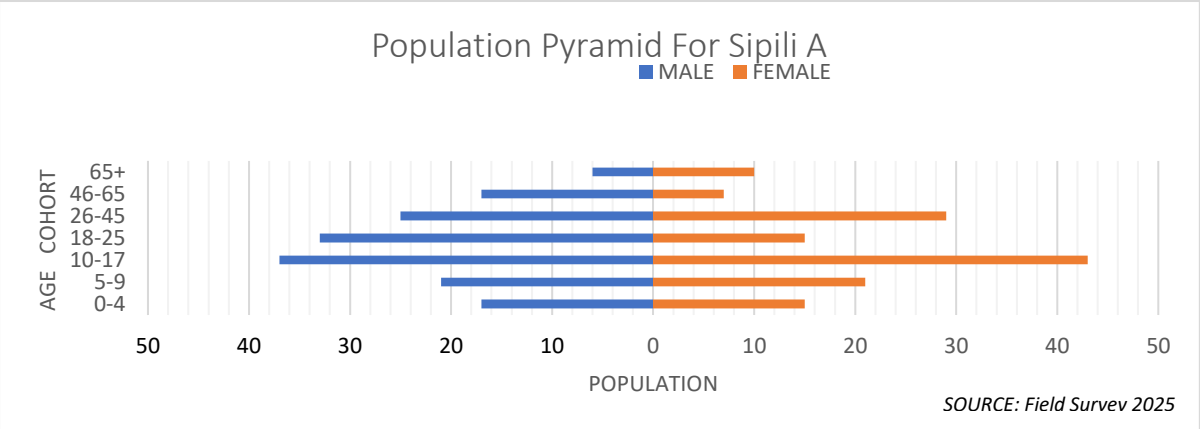


Figure 4-3: Sipili A population structure

4.3.3 Gender-Split on Title Ownership

In Sipili A, approximately 67.17% of the structure owners were male, 30.96% were female and the rest were organizations. With about 60.47% of the population married, there was a significant need for advocating joint land registration to promote gender equity in land ownership. To address this, the consultant has consistently encouraged married couples to register their plots jointly, ensuring that if a spouse passes away, the surviving spouse can maintain ownership without facing difficulties in the inheritance process.

4.4 Economic Profiles

4.4.1 Occupation Types

According to the socioeconomic findings, the largest proportion (30.23%) of Sipili A informal settlement residents are engaged in self-employment, mainly business activities. Casual laborers represent the second largest group at 25.58%, followed by those involved in farming or livestock keeping at 16.28%. Unemployment is also notable, affecting 13.95% of the population. Employment in county government stands at 6.98%, while private company employment, NGO/FBO roles, and national government employment each constitute 2.33%. This distribution underscores a workforce heavily reliant on informal and self-driven economic activities, with formal employment sectors representing a relatively small share.

The high unemployment rate in Sipili A settlement highlighted substantial economic vulnerability, necessitating targeted planning interventions to create employment opportunities and enhance community resilience. To address this issue, the LPLUDP has incorporated a designated commercial zone and mixed-use zone to promote businesses that will generate income for residents, fostering economic growth and stability. Figure 4-4 shows the types of occupations that Sipili A residents engage in.

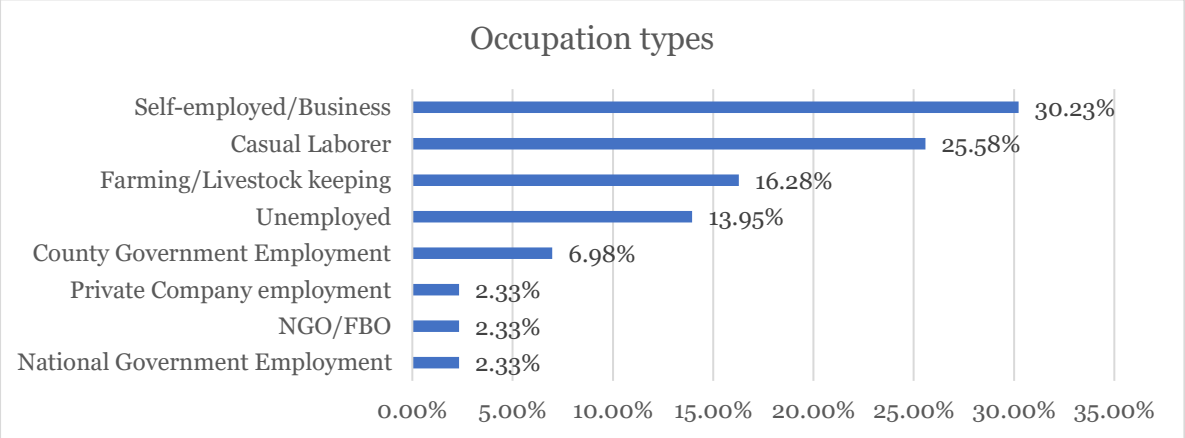
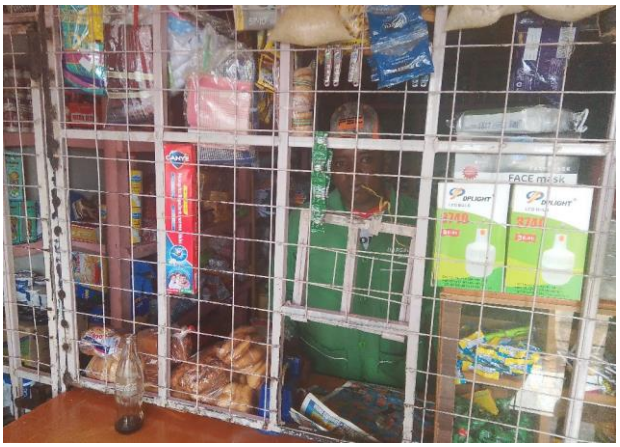


Figure 4-4: Occupation types



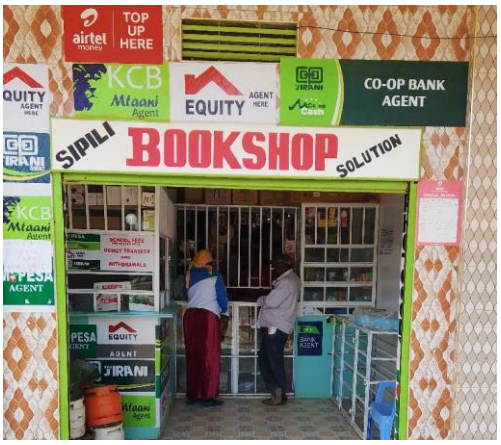


Plate 4.3: Businesses within the settlement

4.4.2 Places of Work

Within Sipili A, approximately 81% of residents reported working within the settlement itself. This high proportion reflects Sipili A's role as a local trading center, providing economic opportunities primarily at a small to medium scale. Most businesses in the area are small enterprises with relatively low-income levels. Given that Sipili A functions mainly as both a residential area and a trading hub, the need to regularize and improve access roads became apparent.

The improved linkages proposed by the LPLUDP aim to facilitate efficient movement of goods and services, as well as enhance the settlement's attractiveness to private investors. To further support economic growth and job creation, the plan has proposed the development of additional economic zones within Sipili A. This included designating a mixed-use zone alongside the existing commercial zone, with the goal of expanding employment opportunities for residents and fostering a more vibrant local economy.

Plate 4.4: Markets within the settlement

4.5 Settlement Land Tenure, Structure and Housing

4.5.1 Settlement Land Tenure and Ownership

Land tenure system refers to the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land and associated natural resources (including water, trees, minerals, and wildlife). Rules of tenure define how property rights in land are allocated within societies and may determine who can use what resources, for how long, and under what conditions (FAO, 2002). KISIP2 aims to enhance tenure security through planning and surveying processes for informal settlements such as Sipili A, which currently sits on public land under the ownership of the Laikipia County Government.

Despite the informal status of Sipili A's land ownership, many residents perceive themselves as rightful owners of the plots they occupy, often holding documentation such as purchase agreements, letters of allotment and beacon certificates. These rights were picked and presented on a base map, totaling to 183 parcels. A survey conducted in the settlement revealed that approximately 53.4% of the structure owners purchased their plots, 26.1% were allocated, and 18% inherited their plots. This informal land administration system has led to a situation where structure owners act as de facto landlords within the settlement. Based on the plan and the land registration guidelines, the resultant plots will be subjected to the suitable type of tenureship (joint or individual).

4.5.2 Settlement Structure

Sipili A settlement features a structured development layout characterized by main access roads ranging from 9 to 18 meters in width and rear service lanes of 6 meters. This layout was largely influenced by the 1999 development plan, despite the plan never receiving formal approval. The settlement's main structuring element is the Kinamba-Sipili-Rumuruti main road, which bisects the area almost centrally. Surrounding public facilities include Sipili Secondary School to the northeast, Sipili Dispensary to the southwest, public administration offices to the south, and a borehole plot to the west.

The existing layout of Sipili A is well-defined and was adopted with only minor road realignments during the planning phase. To ensure orderly growth and provide a clear framework for future development, development control guidelines have been established and outlined in the report. These guidelines aim to regulate redevelopment efforts and maintain the settlement's structured growth pattern consistent with broader county planning objectives and sustainable land use management strategies. Map 4.3 illustrates the current structure of the settlement.

Map 4.3: Sipili A settlement structure

4.5.3 Existing Land Use Patterns

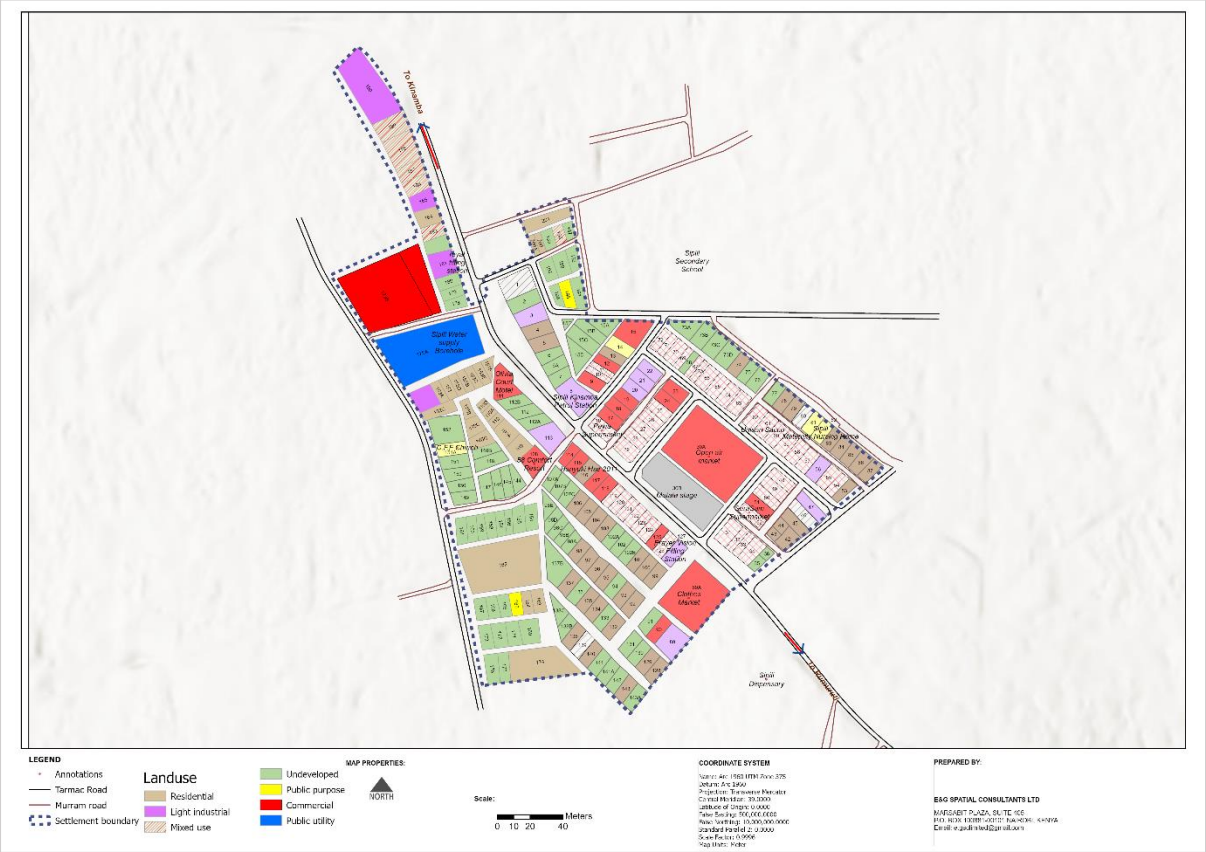
The settlement is predominantly characterized by a residential (16.79%), commercial (13.11%) and mixed-use pattern (10.15%), combining commercial and residential land uses on most plots. There are also two main open-air markets. However, transportation land use covers a larger area (31.35%), largely due to the substantial road widths and the presence of a matatu stage. Additionally, several parcels within the settlement remain undeveloped. Since the project's intervention has occurred in situ, this existing land use pattern has significantly influenced the resulting plan's character.

This mixed-use and transportation-heavy layout reflects the settlement's function as both a residential and economic hub, with transportation infrastructure playing a critical role in supporting mobility and commerce. The sizable roads and matatu stage facilitate movement and access, which is vital for the settlement's economic activities. Meanwhile, the presence of undeveloped parcels offers opportunities for future growth and structured development within the established framework. Overall, the in-situ approach respects and builds upon the existing land use dynamics, ensuring that the LPLUDP aligns with the current socio-economic and spatial realities of the settlement, while also providing room for orderly expansion and enhanced economic zones. Map 4.4 illustrates the existing land uses.

Table 4.3: Existing land use budget

Land Use Code	Land use	Area (Ha)	Percentage (%)

0	Residential	3.63751	16.79%
1	Light industrial	1.25583	5.80%
4	Public Purpose	0.28063	1.30%
5	Commercial	2.84064	13.11%
6	Public Utility	0.65061	3.00%
7	Transport	7.45429	31.35%
10	Mixed use	2.1989	10.15%
	Undeveloped	4.01159	18.51%
Total		**22.33**	**100.00%**



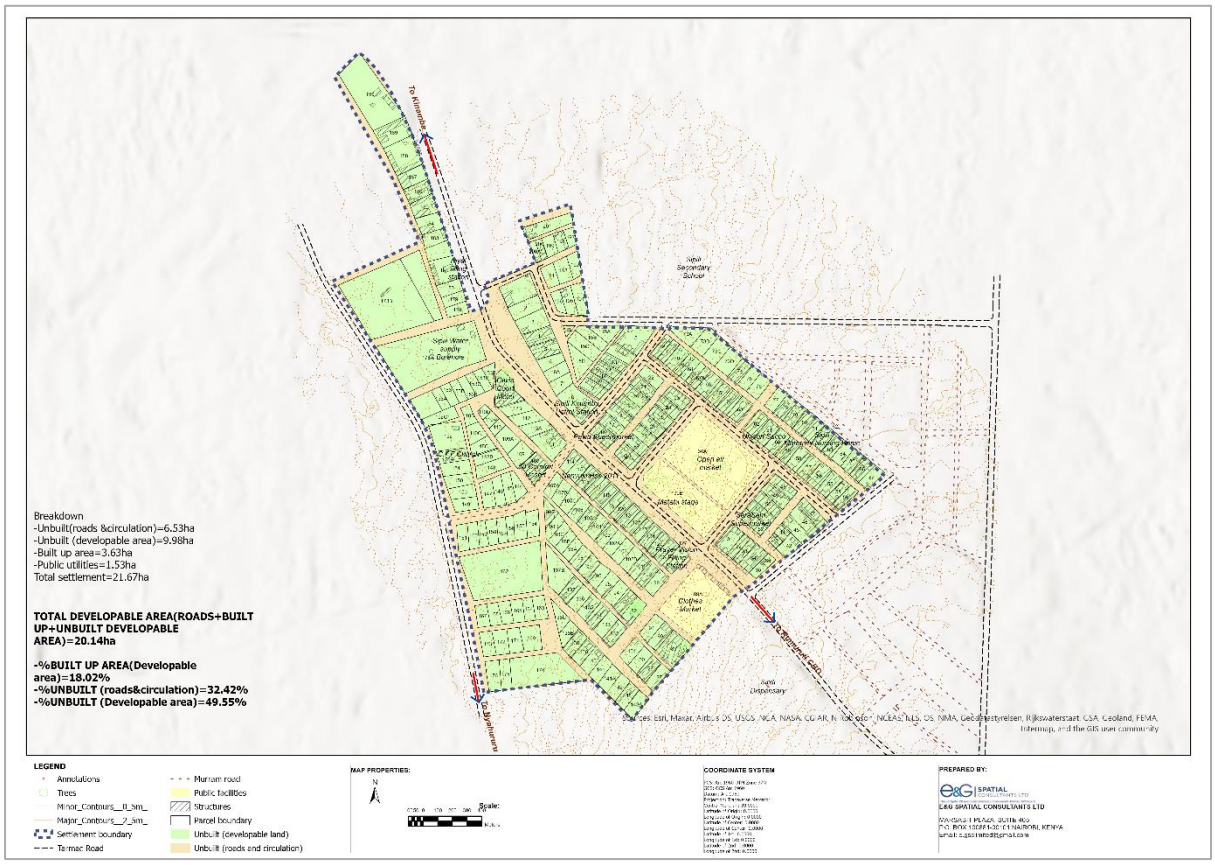
Map 4.4: Existing land uses

4.5.4 Built vs Unbuilt Up areas

In Sipili A, the spatial analysis revealed that a significant portion of the settlement is undeveloped, offering substantial opportunities for development. Map 4.5 shows the built vs. unbuilt areas. Approximately 79% of the area is undeveloped, with 37% classified as developable land. This presents a considerable opportunity for new construction and infrastructure projects, which can be guided by community proposals identified during participatory planning processes. These proposals include the establishment of street lighting, sewerage infrastructure, and a social hall.

The existing built-up areas (21%) also present opportunities for redevelopment. Spatial analysis indicated that majority (approximately 58%) of the structures were semi-permanent and 10% were temporary. Once residents are issued with titles,

redevelopment efforts can focus on upgrading these structures to improve living conditions and increase property values. Although the KISIP2 project generally advocates for the protection of the built form of a settlement, the current status of Sipili A offers opportunities for development and redevelopment post-title issuance. Moving forward, the development of Sipili A will be guided by the LPLUDP, which integrates community needs with sustainable development principles. This approach will ensure that the settlement's growth is both sustainable and responsive to the needs of its residents. The vast undeveloped areas will be utilized for both residential, commercial or mixed-use purposes, supporting the overall growth of the settlement and enhancing its economic and social landscape.



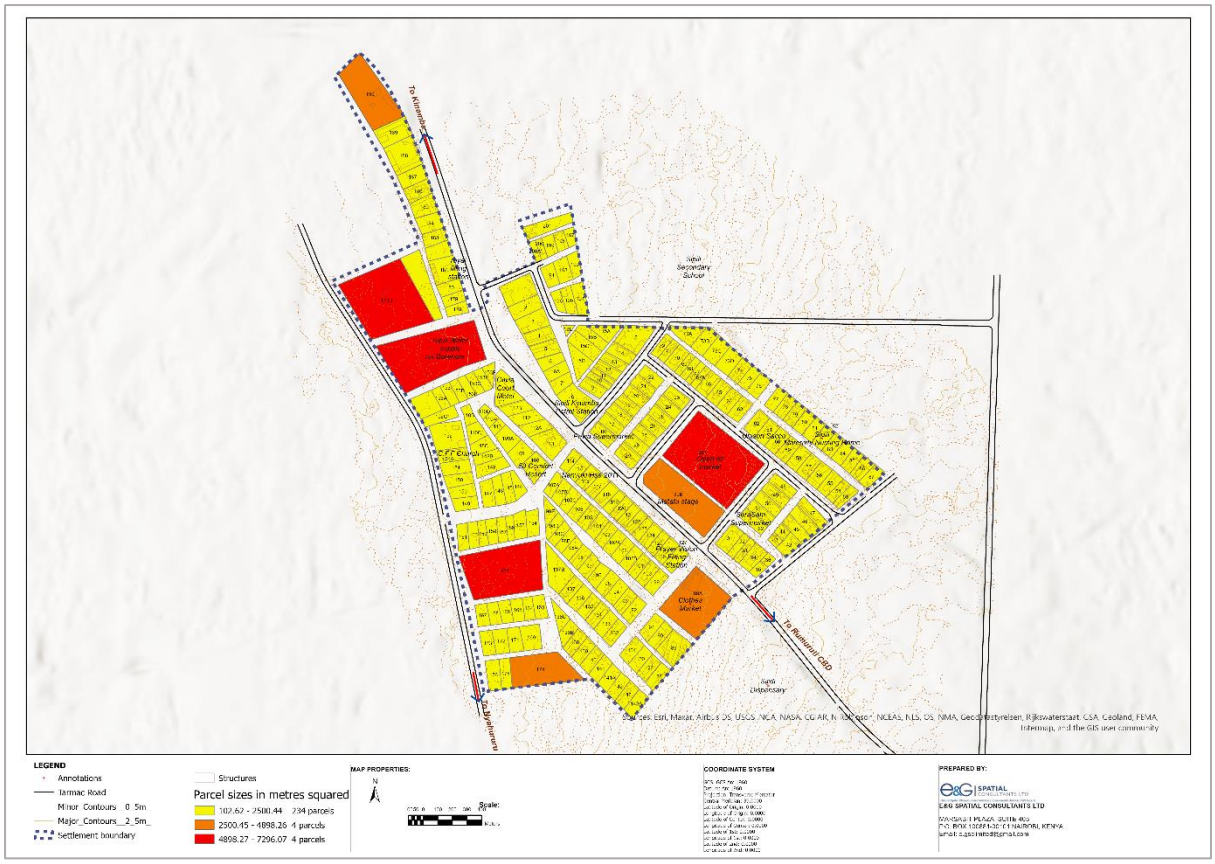
Map 4.5: Map showing built vs unbuilt areas

4.5.5 Parcel Sizes

The minimum plot sizes that are registrable vary significantly across different locations, influenced by factors such as parcel location, land use, and development control guidelines set by respective county governments. There are no uniform national guidelines for minimum or maximum land holdings. However, in informal settlements, where development conditions are unconventional, parcels as small as 100 square meters may be considered for titling, subject to negotiations with relevant stakeholders, including county and national government officials. KISIP2 employs an adaptive planning approach, which accommodates flexible standards, allowing for a minimum land size of 100 square meters. This approach is designed to minimize displacement by aligning infrastructure and plot layouts closely with the existing settlement layout, thereby reducing the need for extensive relocations. This method

allows residents to maintain their current living conditions while benefiting from improved tenure security and infrastructure upgrades, enhancing their overall quality of life.

In the context of Sipili A settlement, the total number of parcels were 242 and none was below 100sqm before the realignment of accesses. After the realignment, all parcels remained above 100sqm. The parcel sizes raised important considerations regarding the preferred tenure options. For very small plots, joint titling was proposed as a viable solution since small parcels may limit the type of development that can be accommodated. For example, the parcel less than 100 square meters may not support vertical developments when considering recommended setbacks, plot ratios, and building lines. Consequently, the plot sizes significantly influenced the proposed development control guidelines, shaping the future development trajectory of the settlement. Map 4.6 shows the existing parcel sizes in Sipili A settlement. Given that the development control guidelines have been established in relation to plot sizes, the county government stands guided on the types of developments and subsequent subdivisions to permit.



Map 4.6: Parcel sizes

4.5.6 Housing Typologies and structure Types

The analysis of housing typologies and structure types was conducted for two primary reasons: (i) to determine the economic levels of the Sipili A community and the associated vulnerability index, and (ii) to identify the types of houses that would be impacted during the implementation of planning proposals. During the participatory

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planning stage, the community actively contributed proposals they deemed crucial for enhancing their livability and quality of life. However, it is essential to note that KISIP2 safeguards emphasize leaving the community in a better state than initially found, thereby discouraging destructive strategies or proposals. Understanding the housing typologies was crucial to assess the potential impact of the planning proposals on existing structures, ensuring that any interventions are beneficial and sustainable.

The socioeconomic findings and spatial analysis of Sipili A settlement revealed that of structures (58%) were semi-permanent, characterized by timber walling, cemented floors, and iron sheet roofs. The assessment of structure permanency played a pivotal role in evaluating the implications of proposals such as road widening and realignment. This analysis was crucial for informed decision-making, ensuring that future developments align with the settlement's existing conditions. Additionally, the prevalence of low-rise developments presented an opportunity for redevelopment through vertical densification. In response, this plan has proposed an incremental redevelopment strategy for the settlement over the long term. Plate 4.5 illustrates the various structure types found in Sipili A settlement.

Plate 4.5: Types of structures in Sipili A

4.6 Infrastructure and Utility Services

4.6.1 Transportation Networks

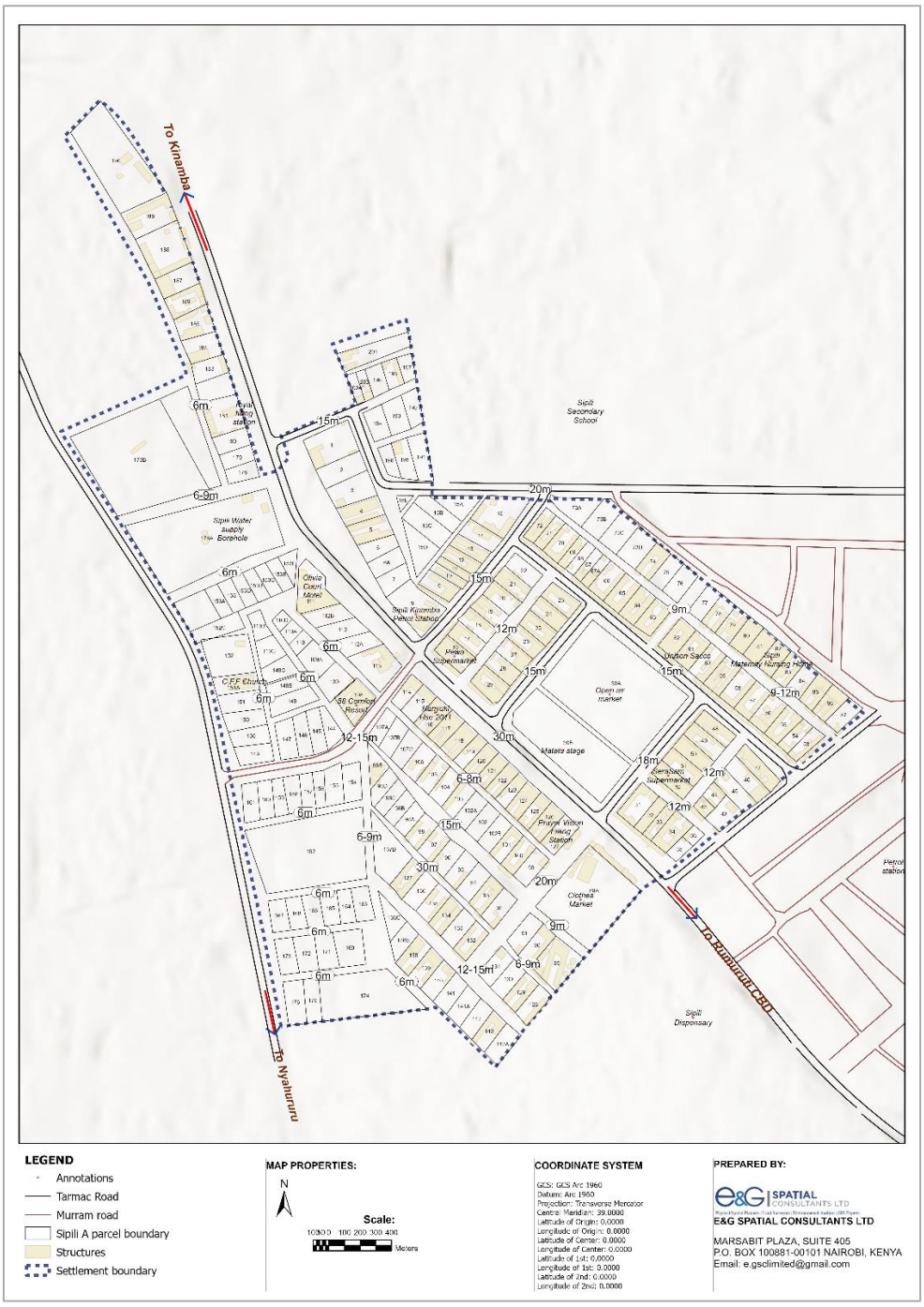
Sipili A informal settlement is accessed via an approximately 30-metre-wide tarmacked road that connects it to the nearby Kinamba center as well as to Rumuruti and Nyahururu towns. Internally, the settlement features a well-structured transport network comprising main access roads ranging from 9 to 18 meters wide and rear service lanes about 6 metres wide. Some of the access roads on the eastern side are already tarmacked, contributing to generally good motorability throughout the

settlement. These access corridors serve multiple secondary functions beyond transportation. They accommodate utility infrastructure such as water, sewer, and electricity lines, and hold drainage channels. Some roads already support roadside auxiliary services, reflecting an integrated approach to infrastructure within the settlement.

As part of this project's objectives, planning the settlement involved enhancing connectivity through realignment and improvement proposals for the transport networks. Similar projects have shown that realigning access roads can have a significant impact on informal settlement planning. However, this process was complicated by irregular construction of structures along some access roads. To address these challenges, creating an accessible settlement was essential, and the related impacts will be mitigated through the preparation of an Environmental and Social Management Plan (ESMP). Given the high number of residents who walk to various destinations, integrating pedestrian-friendly infrastructure, such as dedicated walkways and bicycle lanes along all the access roads would improve safety and connectivity. The absence of structured transport nodes and defined stops contributes to public transport inefficiencies, highlighting the need for designated stops and better road conditions to support formalized transport services.

Plate 4.6: Kinamba-Sipili-Rumuruti road

Plate 4.7: Service lanes in Sipili A



Map 4.7: Settlement access network

4.6.2 Water Supply

Water supply is a crucial factor affecting the livability of any settlement, as it is essential for daily domestic needs and various human activities. This aligns with Sustainable Development Goal 6, which aims to ensure universal access to safe drinking water by 2030. Kenya's Vision 2030 also emphasizes this priority under its social pillar. The KISIP2 projects promotes adaptive planning approaches to minimize disruption to community structures. Nonetheless, it is vital to recognize the significance of planning for support services such as water supply. In the context of

settlement planning, key factors like population growth were utilized to develop strategies for improving water supply.

The socioeconomic data revealed that many of the residents (39.53%) relied on mobile vendors for their water supply, making it the most common source. Shallow wells were the second most prevalent source, used by 25.58% of the population. Piped water into the compound accounted for 16.28%, while piped water from a community tap served 11.63% of the population. Less common sources included rainwater or roof catchment (4.65%) and piped water directly into the house, which was the least utilized at only 2.33%. The water supply in the settlement, including the piped water, was mainly from public boreholes (under the Sipili Water Supply Project). For those that reported to have piped water into the plot, it was clarified by the community members during the presentation of socioeconomic survey findings that they only had piped water connections but barely received water at the taps. This situation highlighted an urgent need for improved infrastructure, specifically the planning and implementation of piped water reticulation systems into individual homes to enhance water supply and accessibility within the settlement.

Plate 4.8: Sources of water

A study by the UN indicates that the minimum amount of water used per day per person is 0. 025m^3 (without meeting all needs) (U.N, 2020). Currently the residents of Sipili A will require 11.56 m^3 per day. The settlement water demand across different time periods is depicted by the Table 4.4 as follows:

Table 4.4: Water Demand up to 2034

Year	2025	2030	2035
Population	**463**	**526**	**598**
Daily Water Demand (m^3)	11.56	13.15	14.95
Monthly Water Demand (m^3)	346.8	394.5	448.5
Annual Water Demand (m^3)	4,161.6	4, 734	5,382

The widespread use of pit latrines in the settlement poses a significant risk of groundwater contamination due to the leaching of microbial and chemical pollutants into the soil and water sources, especially considering the shallow water table in the area. To address this issue and ensure safer sanitation practices, the plan recommends installing piped water connections managed by NYAHUWASCO, which would mitigate contamination risks.

4.6.3 Storm Water Drainage

Sipili A settlement benefits from a well-inclined terrain that supports effective stormwater flow. The main access road (Kinamba–Sipili–Rumuruti) features drainage channels on both sides, while most tarmacked internal roads have one-sided open drainage channels with access culverts to adjacent properties. However, some drainage channels are clogged due to siltation and waste dumping, necessitating unclogging to improve flow.

In contrast, untarmacked access roads lack designated drainage channels, which affects stormwater management in those areas. In the absence of drainage channels, surface runoff flows unchecked along access paths, rendering roads and footpaths impassable during rainy seasons.

Plate 4.9: Clogged drainage channel along the main access road

The plan recommends that the county regulates future encroachment on stormwater drainage systems through enforcing the proposed land use zones and conducting hydrological assessments to prevent waterlogging and the diversion of runoff into inhabited areas. The county should also oversee regular cleaning of the drainage channels. Community engagement will be critical in maintaining drainage systems, including sensitization on proper waste disposal to minimize blockages. Additionally, the plan suggests integrating stormwater harvesting into water management strategies, with captured runoff reused for groundwater recharge. These measures aim to enhance livability and promote environmental sustainability. Effective implementation will require sustained community involvement, robust enforcement mechanisms, and careful hydrological planning to ensure long-term functionality and resilience.

4.6.4 Sanitation and Hygiene

Article 43(1)(c), of the Constitution of Kenya, 2010 recognizes the right to sanitation. It states that, "Every person has the right to accessible and adequate housing and to reasonable standards of sanitation." Further, the Kenya Environmental Sanitation and Hygiene Policy 2016-2030 (KESHP) envisions a clean, healthy and economically prosperous Kenya free from sanitation and hygiene related diseases and seeks to ensure universal access to improved sanitation, clean and healthy environment by 2030. These aspirations gave guidance on what this planning project aimed to facilitate for Sipili A community.

According to the socioeconomic survey findings, majority of Sipili A settlement residents (69%) relied on pit latrines as their primary on-site sewage disposal method, as illustrated in the figure below. However, the use of pit latrines increased the risk of groundwater contamination and is unsustainable due to the small plot sizes in the settlement. To address this issue, the LPLUDP has proposed short-term and long-term solutions. In the short term, the installation of biodigesters has been recommended to reduce reliance on pit latrines, especially as their appropriateness diminishes with increasing population densities typical of urban areas. For the long term, a conventional sewer system has been identified as a more sustainable solution to meet the settlement's growing sanitation needs.

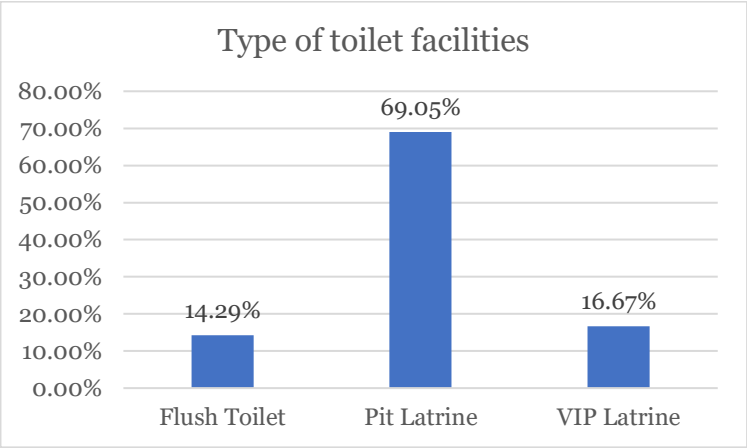


Figure 4-5: Toilet facilities used

4.6.5 Liquid Waste Management

Liquid waste disposal in Sipili A primarily relied on pit latrines and adjacent pathways. This was attributed to the absence of defined drainage facilities to manage wastewater effectively.

Plate 4.10: Grey water disposal in Sipili A settlement

Approximately 80% of the water consumed per person daily becomes wastewater (UNESCO World Water Assessment Programme , 2017). Therefore, wastewater projections for the settlement were calculated based on the water demand discussed in section 4.6.2 and illustrated in Table 4.5.

Table 4.5: Sipili A Waste Water Projection

Year	2025	2030	2035
Population	**463**	**526**	**598**
Daily Waste Water (m^3)	9.25	10.52	11.96
Monthly Waste Water (m^3)	277.5	315.6	358.8
Annual Waste Water (m^3)	3,330	3,787.2	4,305.6

Based on the above calculations, the plan has proposed sustainable waste water disposal mechanisms such as installation of onsite sanitation mechanisms (biodigesters) that will ensure proper sanitation in the settlement. Long-term planning includes the integration of simplified sewer systems as a sustainable solution for managing wastewater effectively.

4.6.6 Solid Waste Management

Solid waste refers to any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities (U.S. Environmental Protection Agency, 2024). Effective solid waste management is a crucial aspect of urban development, as it directly impacts habitability and environmental cleanliness. Solid waste generation in Sipili A settlement mainly occurred at the household level. However, the settlement

lacked a formal solid waste disposal mechanism, leading to widespread burning as the main disposal method.

Plate 4.11: Open dumping of solid waste

A study by word bank on trends in solid waste management revealed that worldwide, waste generated per person per day averages 0.74 kilogram but ranges widely, from 0.11 to 4.54 kilograms (World Bank, 2025). The National Sustainable Waste Management Policy for Kenya projects that in urban areas, every person generates about 0.5 Kg of waste daily (GoK, 2021). Since Sipili A settlement is located within an urban area in Kenya, the provisions of the policy document (daily waste generation per person 0.5Kgs) were applied in the projection of solid waste generation as illustrated in Table 4.6.

Table 4.6: Solid Waste Generation Projection

Year	**Daily waste generation per person 0.5Kgs**	**2025**	**2030**	**2035**
Population		**463**	**526**	**598**
Projected Daily Solid Waste Generated (Kgs)		231.5	263	299

Projected Monthly Solid Waste Generated (Kgs)		6,945	3,156	8,970
Projected annual Solid Waste Generated (Kgs)		83,340	37,872	107,640

The National Sustainable Waste Management Policy estimates that 60% to 70% of waste generated is organic, 20% plastic, 10% paper, 1 % medical waste and 2% metal (GoK, 2021). Thus, the projections for solid waste segregated by type in Sipili A is as shown in Table 4.7.

Table 4.7: Waste Generation projection per waste type

Type of waste	Segregated Waste Generation Projection (annual Projection (Kgs)		
	2025	**2030**	**2035**
Organic (68%)	56,671.2	25,752.96	73,195.5
Plastic (20%)	16,668	7,574.4	21,528
Paper (10%)	8,334	3,787.2	10,764
Metal (2%)	1,666.8	757.44	2,152.8

The LPLUDP has recommended incorporation of the 7R's waste management strategy to ensure sustainable management of solid waste. This strategy provides a comprehensive framework for minimizing waste and promoting sustainability. It includes Rethink, Refuse, Reduce, Reuse, Repair, Recycle, and Rot, arranged in a hierarchy of importance (Raman Jasrotia, Laanger, & Rozumbetov , 2024). This approach emphasizes reducing waste at its source, reusing and repairing items to extend their lifespan, recycling materials, and composting organic waste to achieve a zero-waste economy. This strategy aligns with the provisions of the Laikipia County Solid Waste Management Act, 2022 which mandates segregation of non-hazardous waste into organic and non-organic categories at the source.

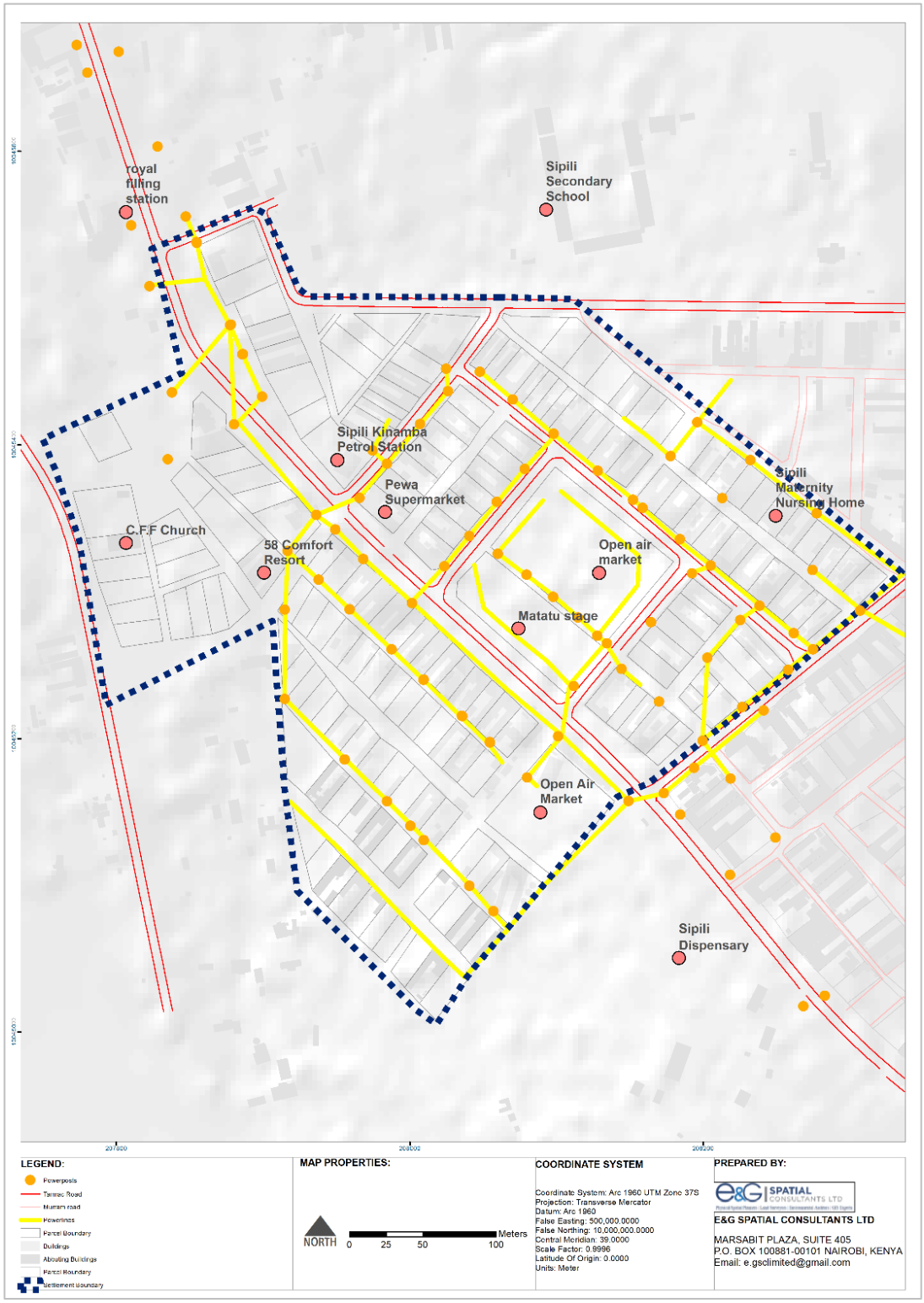
4.6.7 Energy

According to the World Bank, access to a reliable and high-quality energy supply can enhance productivity and economic activity, opening new job and income prospects. It can also improve public safety and make education, health care, and e-government more accessible (World Bank, 2015). Specifically, it can save time spent gathering fuel, benefiting women and girls (who typically bear the burden of collection), and lessen the hazardous effects of smoky cook burners. Consequently, areas that are well connected to energy sources are likely to be more developed than the less connected areas.

In view of the above, this project aimed to understand energy dynamics in the settlement. A spatial analysis of Sipili A settlement revealed that KPLC electricity poles are located along the access roads, as shown in Map 4.8. Following the planning and realignment of the road networks, it will be necessary to reroute some of the electricity poles to ensure proper alignment. Those who have no access to the main electricity grid cited high costs of connection as the main reason behind this. To address this, the LPLUDP has recommended use of sustainable energy sources such as solar power.

Although initial solar power installation costs are high, in the long-term it's a cheaper energy source.

Map 4.8: Electricity connectivity



relatively cheap but has harmful effects on health and the environment. Prolonged exposure to smoke from charcoal can cause respiratory illnesses, while its use contributes to deforestation, land degradation, and greenhouse gas emissions. To

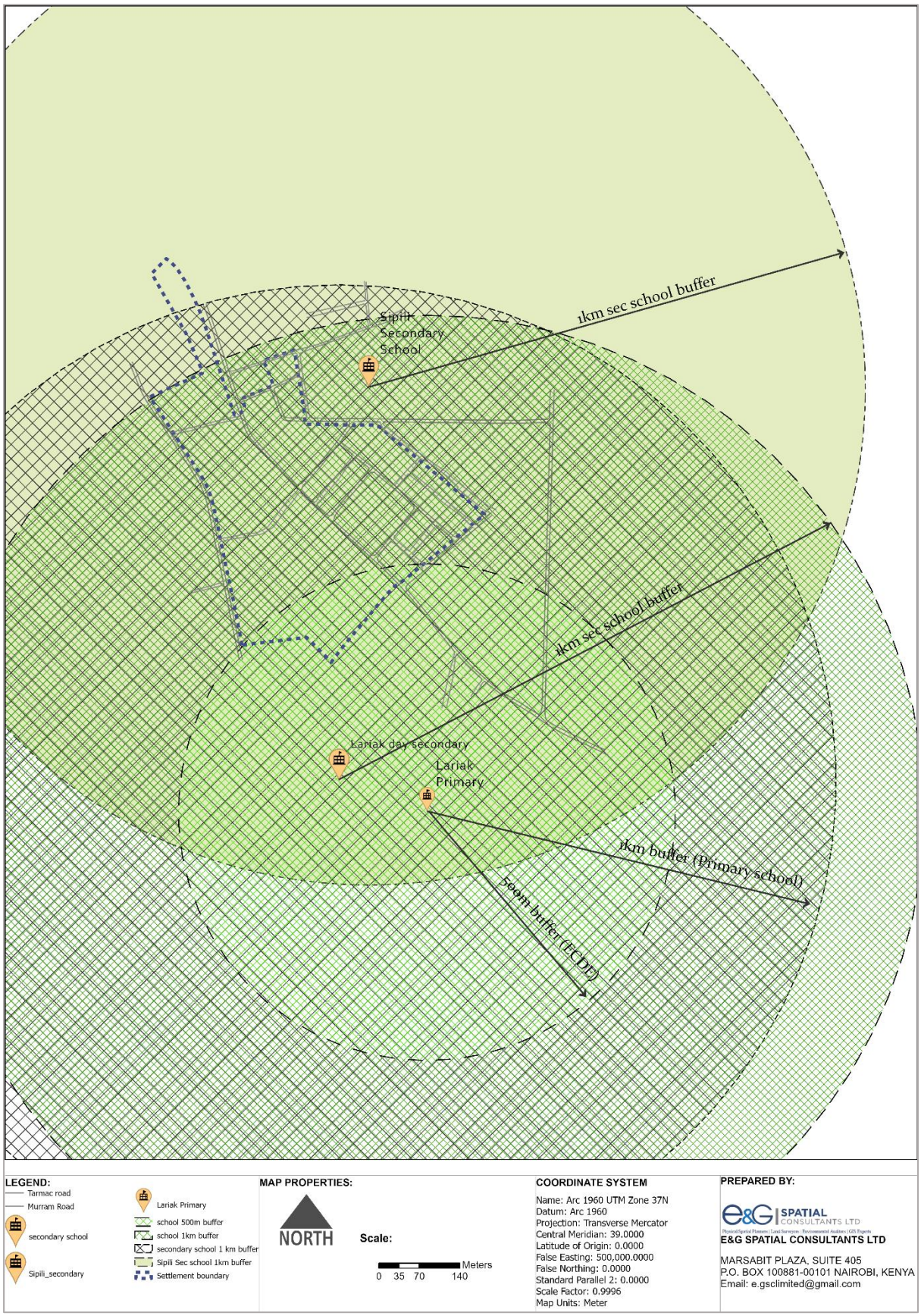
address these challenges, the plan has proposed transitioning to cleaner cooking energy sources such as liquefied petroleum gas (LPG), biogas, and improved cookstoves. These alternatives reduce indoor air pollution, lower carbon emissions, and alleviate pressure on natural resources. Promoting cleaner energy solutions will require community sensitization, subsidies for adoption, and policy support to ensure accessibility and affordability for low-income households.

4.7 Social Infrastructure

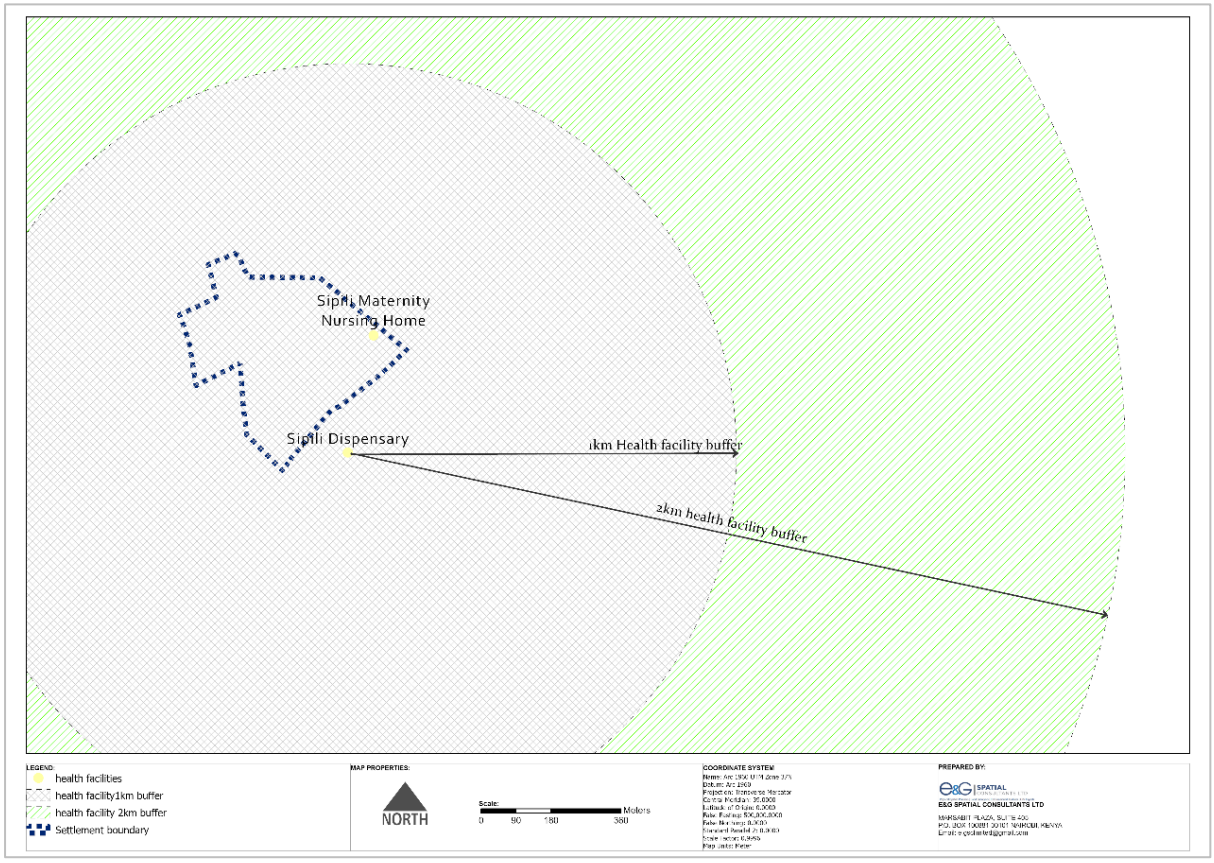
Social infrastructure refers to the crucial organizations, places and spaces that enable communities to create social connections, and to form and sustain relationships that help them to thrive (Barratt, 2023). These include schools, places of worship, health facilities, police posts, recreational areas and cemeteries. These facilities were identified either within Sipili A settlement or in its proximity.

The spatial analysis indicated that there are no educational facilities located directly within the settlement. However, Lariak Primary School and Lariak Secondary School lie within a 1km radius, while Sipili Secondary School borders the settlement to the east. Additionally, the Sipili School for the Deaf provides learning opportunities for children with special needs. These facilities are adequately sufficient to serve the settlement, as they fall within the acceptable catchment radius, as illustrated on Map 4.9 This proximity complies with the Physical and Land Use Planning Handbook (2025), which recommends that primary schools occupy a minimum of 2 hectares and secondary schools 3 hectares, both within a 3km catchment area. To accommodate the growing population, the plan has recommended densification of the existing educational facilities.

Sipili A informal settlement is served by the public Sipili Health Centre, which is located on the south-east border of the settlement. In addition to this public facility, there are private healthcare providers within the settlement, including the Sipili Maternity and Nursing Home hospital and the BETHSDA clinic. During the participatory planning process, some residents prioritized upgrading services at the neighboring public health centre, a recommendation that has been formally integrated into the plan. Proposed improvements include enhancing medical staffing, expanding access to essential medicines, and upgrading infrastructure to ensure better healthcare delivery and accessibility for the community.



Map 4.9: Proximity analysis of educational facilities



Map 4.10: Health facility proximity analysis

5 PLANNING APPROACH, ALTERNATIVES, AND SELECTED PLAN

5.1 Overview

This chapter builds upon the insights and findings presented in Chapter 4. It focuses on the planning approaches, principles, and structuring elements that guided the plan-making process. It elaborates on the various plan proposals explored for Sipili A settlement, providing an analysis of each alternative. The chapter also discusses the selection of the best alternative for implementation, outlining the specific plan proposals that should be implemented within this chosen option. The chosen proposal integrates targeted strategies to improve land use, infrastructure, social services, and environmental management, effectively promoting sustainable settlement development.

5.2 Planning Approaches

An evaluation of various planning approaches was undertaken to determine the most suitable strategy for the planning and upgrading of Sipili A Settlement. This evaluation considered the existing settlement characteristics as exhibited in chapter four of this report, including: settlement layout pattern, environmental characteristics, land tenure issues, infrastructure deficits, and the social and economic realities of the residents, and project safeguard guidelines. The selected planning approach needed to ensure minimal displacement, integrate tenure regularization with infrastructure development, and maintain the existing social fabric while enhancing the overall quality of life for residents. The following approaches were considered.

5.2.1 Informal Settlement Upgrading

Informal settlements house over one billion urban dwellers, having emerged in response to rapid population growth and a lack of affordable, quality alternatives (GSG Impact, 2022). These settlements are termed "informal" because they do not comply with government regulations. Historically, the official response was often to demolish them or ignore them if they were not too visible. However, over the past 50 years, many local and some national governments have come to recognize the crucial role informal settlements play in providing housing for low-income populations and workforces, as well as supporting numerous enterprises (Satterthwaite, 2021). As a result, these governments have shifted their approach from demolition to upgrading, aiming to improve living conditions and integrate these areas into the formal urban landscape. This shift in approach is exemplified by the Kenyan government's introduction of the KISIP project, which focuses on upgrading informal settlements to enhance living conditions and facilitate their integration into the formal urban framework.

Upgrading informal settlements presents unique challenges compared to conventional planning. The land is already inhabited, and much of the existing housing and site layout does not meet official standards. Residents typically wish to remain in their homes during the upgrading process, as they often have no alternative accommodation, which complicates construction activities. Reaching agreements with residents is crucial, particularly regarding reblocking, which is the process of reorganizing plots to create access roads, internal roads, and essential infrastructure like water mains, sewers, and drains (Satterthwaite, 2021). This involves addressing the needs of residents whose plots may be partially or fully required for these improvements.

Upgrading can take various forms, leading to diverse outcomes, including comprehensive government-led upgrading. This approach involves providing residents with legal land titles for their plots, along with a comprehensive range of infrastructure and services for both residential and commercial use. The process includes consulting with residents to ensure their needs are met. This methodology is applied in the KISIP2 project under Component 1, which focuses on integrated upgrading. Specifically, the tenure aspect is addressed under Sub-component 1.1, while infrastructure interventions are covered under Sub-component 1.2, following the completion of sub-component 1.1.

In this planning context, informal settlements' upgrading incorporated adaptive planning, an approach tailored to the prevailing conditions within the settlement. It prioritizes aligning parcel boundaries and road widths as closely as possible with the existing layout on the ground. For example, whilst standard planning regulations, prescribe road widths of 9m, application of such standards in informal settlements would lead to significant impacts, displacements and prohibitive compensation and replacement costs. Adaptive planning introduces flexible alternatives, such as 3m wide footpaths, which ensure accessibility while minimizing the adverse impacts. Under KISIP1, this approach reduced displacement by up to 85% in some cases (World Bank, 2019). For Sipili A Settlement, the adaptive approach was deemed the most suitable strategy since it led to minimal impacts.

5.2.2 Urban Renewal

Urban renewal is defined as the process of slum clearance and physical redevelopment that takes account of other elements such as heritage preservation (Zheng, Shen, & Wang, 2014). This strategy addresses a wide range of urban challenges including unsanitary, inadequate, or outdated housing, poor transportation, sanitation, and other services. Other challenges include haphazard land use, traffic congestion, and sociological problems like crime associated with urban decay. Historically, early urban renewal initiatives focused on improving sanitary and public health conditions, reforming housing, and emphasizing slum clearance. This involved relocating people and industries from overcrowded areas to less congested sites, as seen in the garden city and new-town movements in Great Britain (Sutcliffe, 1983). Although urban renewal has been successful in certain contexts, its application in Sipili A was deemed unsuitable due to the high impact it would have on existing structures and the likely displacement of a significant proportion of residents.

5.2.3 Urban Regeneration

The term "urban regeneration" has evolved globally over time and varies across different regions and linguistic contexts. Its usage adapts to specific local contexts. In Kenya, urban regeneration focuses on infrastructure improvements and sustainable practices (UN-Habitat, 2024). According to literature, urban regeneration is defined as a comprehensive, area-based and multi-agent collaborative planning process that improves the physical, environmental and socioeconomic conditions of an urban area and links the generated benefits to the wider urban fabric of the city (UN-Habitat, 2024). According to Liu et al. (2023), urban regeneration is a transformative process that involves rebuilding urban environments and reusing local resources, offering a fresh opportunity to reimagine the use of spaces. While urban regeneration offers a viable pathway for long-term settlement improvement, its application in Sipili A was considered secondary to tenure regularization and infrastructure upgrading. Economic development strategies would be essential in the later phases of the settlement's transformation, once land tenure is formalized and infrastructural investments have been made.

5.2.4 Urban Redevelopment

Urban redevelopment is a more specific and smaller-scale process of addressing urban challenges, involving new construction on sites with pre-existing uses (Zheng, Shen, & Wang, 2014). For example, it might involve redeveloping a block of townhouses into a large apartment building. In the context of Sipili A, complete urban redevelopment was not considered viable in the short term due to the potential displacement of residents and the disruption of existing social networks. Given that most households rely on informal livelihoods and have developed intricate social and economic linkages within the settlement, large-scale redevelopment would have created significant hardships for the affected communities. Instead, an adaptive and incremental upgrading approach was preferred. Nevertheless, in the long run the adaptive approach will allow for the incremental redevelopment of the settlement. However, this is dependent on the implementation of the guidelines set out in this plan. In addition, issuance of ownership documents will improve access to financing and credit which could potentially trigger large scale (re)-development.

5.3 Planning Principles

The planning process for Sipili A Settlement was guided by a set of principles aimed at ensuring the sustainability, inclusivity, and effectiveness of the proposed interventions. These principles informed both the physical planning process and the subsequent surveying and tenure regularization efforts, ensuring that land use decisions were made in a manner that maximized resource efficiency and community benefits. Figure 5-1 presents the planning principles.

Figure 5-1: Planning principles

5.3.1 Participatory Planning

Public participation is a fundamental requirement in urban planning and governance in Kenya, as enshrined in the Constitution of Kenya, 2010. Articles 10, 174, and 61 emphasize the importance of community involvement in decision-making, particularly in land-related matters. The planning and surveying of Sipili A settlement directly impacted the residents, necessitating their active engagement in all stages of the process.

Community participation was embedded in the planning process to enhance project ownership and ensure that residents' voices were incorporated into the development framework. The consultant facilitated participatory sessions involving residents, county government officials, the KISIP national team, and other stakeholders to gather input on land use preferences, infrastructure needs, and tenure considerations.

The community and all relevant stakeholders including county government officials were actively involved through all the stages of preparation of this plan as discussed in section 3.3 of this report.

5.3.2 Land-Use Integration and Effective Land Management

Efficient land management is a cornerstone of sustainable urban development. The planning exercise assessed existing land characteristics, demographic patterns, and infrastructure requirements to develop a land use framework that optimizes resource use and promotes orderly growth. The plan prioritizes the conservation of natural resources, particularly the zone with groundwater seepage within the settlement, while facilitating settlement upgrading and infrastructure development.

Land use regulations were established to promote integration, compatibility, and sustainability. The plan seeks to balance residential, commercial, and public spaces in

a manner that enhances functionality while safeguarding environmental resources. Effective land management practices will also ensure that land tenure regularization aligns with spatial planning objectives, facilitating sustainable settlement growth.

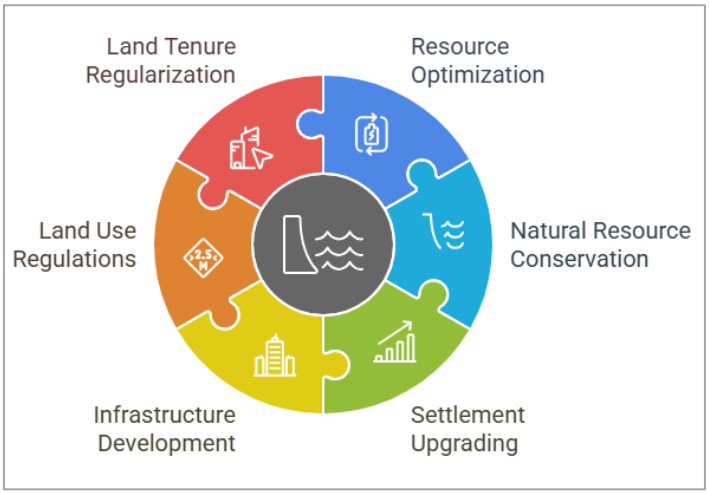


Figure 5-2: Land Use Integration

5.3.3 Environmental Protection and Investing in Green Assets

Urban settlements are often associated with environmental challenges, including pollution, habitat degradation, and waste accumulation. The planning approach for Sipili A incorporates environmental sustainability measures to mitigate these challenges and promote green development. Investments in green infrastructure, conservation initiatives, and sustainable land use planning are prioritized to enhance environmental resilience. Collaborative efforts between the county government, community organizations, and conservation stakeholders will be key in implementing the proposed environmental protection strategies. Initiatives such as waste management programs and green space development have been integrated into the settlement upgrading process to ensure ecological sustainability.

5.3.4 Inclusive Governance Systems

Effective governance is crucial for the successful implementation of the settlement upgrading plan. The planning process incorporated both traditional and formal land governance systems to ensure a harmonized approach. Engaging diverse stakeholders, including government agencies, community representatives, and civil society organizations, enhanced transparency and accountability in decision-making. The plan promotes partnerships between the county government and relevant national agencies to support the implementation of infrastructure and service improvements. By fostering inclusive governance structures, the planning framework ensures that settlement upgrading efforts are participatory, equitable, and sustainable.

5.3.5 Enhance Economic Potential

The principle of enhancing economic potential focuses on fostering sustainable economic activities and creating opportunities that improve livelihoods while balancing urban expansion with the preservation of agricultural and rural economies. Sipili A Settlement, situated in an urban context, required a planning approach that integrated land-use strategies to protect surrounding agricultural land, enhance food

security, and mitigate the adverse effects of unregulated urban sprawl. The economic potential of Sipili A can be harnessed by fostering an enabling business environment that attracts investment and stimulates entrepreneurship. This requires reducing bureaucratic hurdles, streamlining regulatory processes, and ensuring a stable and predictable policy framework. By simplifying business registration, securing property rights, and enforcing transparent taxation policies, the county government can create a conducive environment for small businesses and investors to thrive.

Infrastructure investment remains central to unlocking economic potential. Strategic improvements in transportation networks, energy supply, water infrastructure, and communication systems enhance connectivity, facilitate trade, and reduce transaction costs. The plan proposes realigning and upgrading road networks to improve accessibility, installing street lighting, and expanding water supply systems, all of which support both local and regional economic activities. Additionally, promoting research, technological innovation, and market diversification is key to fostering economic resilience. Proposals such as enhancing market access for local producers aim to encourage agricultural value addition and facilitate technology adoption in key sectors. These measures contribute to job creation and poverty reduction. Currently, economic activities in Sipili A rely heavily on informal business activities, many of which are unsustainable. By integrating these targeted interventions, the plan seeks to formalize productive economic activities, strengthen the local economy, and enhance long-term economic sustainability within the settlement.

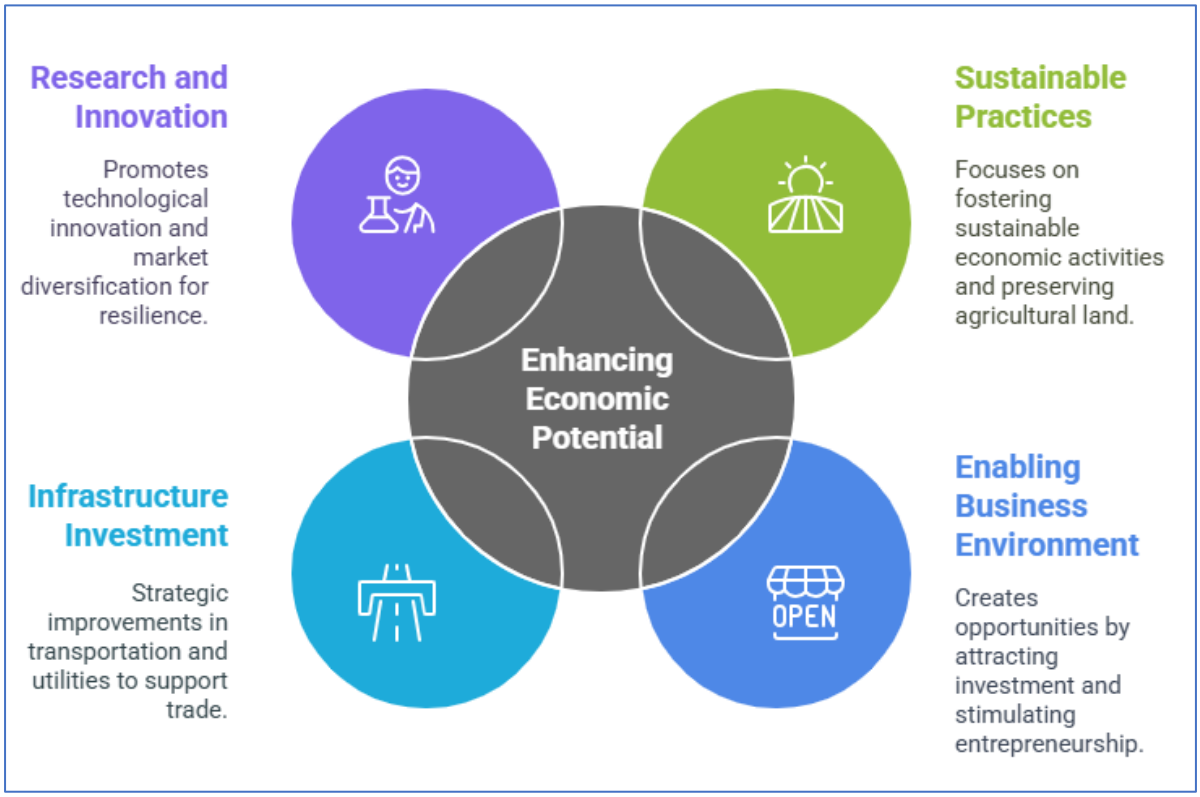


Figure 5-3: Enhanced Economic Potential

5.3.6 Promotion of Connectivity and Sustainable Mobility

Connectivity and mobility are essential for economic growth, social inclusion, and environmental sustainability. The principle of sustainable mobility ensures that

people and goods can move efficiently, safely, affordably, and with minimal environmental impact. The transportation infrastructure in Sipili A needs improvement to enhance accessibility while minimizing traffic and pollution. The plan considered an integrated transport system that includes various modes, including road networks, pedestrian pathways, and cycling lanes, to ensure inclusivity and efficiency. Well-planned transport infrastructure supports economic activities by improving market access and reducing transaction costs for businesses and producers.

Sustainable mobility also requires considerations for public transport, road safety measures, and environmental conservation. Reducing reliance on private motor vehicles through improved pedestrian and cycling infrastructure enhances urban sustainability while contributing to public health and reduced carbon emissions. The principle ensures that mobility systems in Sipili A settlement are not only functional but also environmentally sound and socially inclusive.

Figure 5-4: Sustainable Mobility

5.3.7 Develop a System of Public Facilities and Services

Equitable access to public facilities and services is a cornerstone of sustainable urban development. This principle emphasizes the need for all residents, regardless of their socio-economic status or physical ability, to access essential public services. The plan seeks to ensure that public administration offices, education facilities, healthcare centers, law enforcement services, emergency response units, and social welfare

programs are strategically distributed and easily accessible. The development of public facilities should prioritize inclusivity, ensuring that people with disabilities, women, children, and other vulnerable groups can access services without discrimination. The settlement plan envisions the integration of well-designed public spaces, including markets, recreational areas, and administrative centers, that foster social cohesion and enhance community well-being. The strategy for public service provision includes leveraging digital technologies to improve service delivery, implementing policies that promote equitable distribution of facilities, and ensuring participatory governance to involve residents in planning and decision-making. By strengthening access to public facilities, the settlement plan aims to enhance quality of life and support socio-economic development.

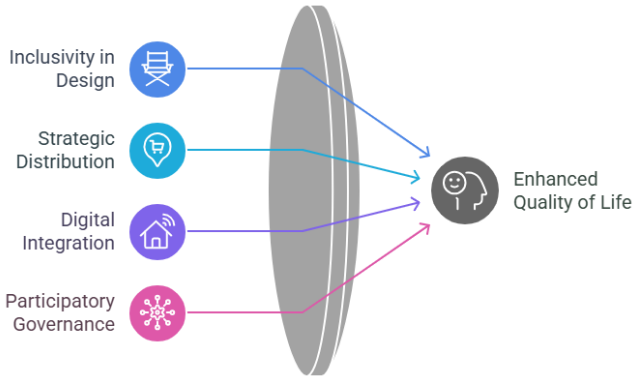


Figure 5-5: Public Facilities and Services Concept

5.3.8 Equitable and Enhanced Utilities Provision

The principle of equitable utilities provision ensures that essential services such as clean water, sanitation, electricity, and waste management are accessible to all residents. Reliable access to these services is fundamental to improving living conditions, promoting public health, and supporting economic activities. Infrastructure development for utility services was strategically planned to reduce inequalities and address the needs of marginalized communities. This included implementing affordable service delivery models and leveraging technology to improve efficiency. Investments in renewable energy sources, such as solar and wind power, have also been proposed to enhance sustainability while reducing dependency on non-renewable resources. Community participation in utility management is key to ensuring that services are tailored to local needs. The plan supports mechanisms for engaging residents in decision-making, promoting transparency in service provision, and strengthening local governance structures. By addressing disparities in service access, the settlement plan fosters inclusivity and resilience.

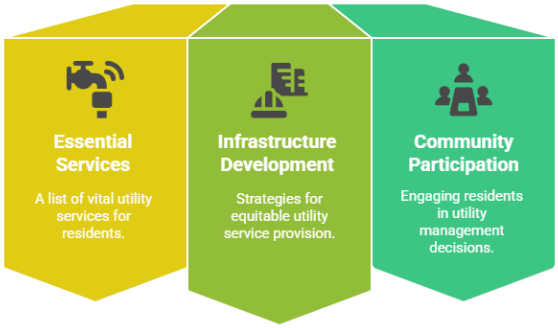


Figure 5-6: Equitable and Enhanced Utilities

5.3.9 Gender Equity and Social Inclusion

Gender equity and social inclusion are fundamental to the fair and just development of settlements. This principle recognizes that vulnerable and marginalized groups, such as women, children, persons with disabilities, and elderly residents, must be protected from discrimination and exclusion. In Kenya, gender disparities in land ownership and access to resources remain significant challenges, and the KISIP2 project is committed to addressing these inequalities. Sipili A Settlement has identified vulnerable groups, including orphans, widows, and persons with disabilities, whose rights must be safeguarded throughout the planning and implementation process. The plan ensures that land allocation, housing policies, and service provision incorporate the needs of these groups, allowing them full participation in decision-making processes and securing their right to tenure and social services. By embedding gender equity and social inclusion into the planning framework, the settlement's development fosters fairness, empowerment, and community resilience, ensuring that all residents benefit from urban transformation.

Figure 5-7: Gender Equity and Social Inclusion

5.4 Plan Structuring Elements

Structuring elements refer to the foundational components or frameworks that guide the development and organization of urban spaces. These elements are essential in shaping the physical, social, and economic landscape of a settlement, ensuring that it functions efficiently and sustainably. This plan preparation was largely informed by the following structuring elements.

5.4.1 Project area boundary

The project boundary was defined by the Laikipia County government and served as a crucial structuring element for the LPLUDP. Based on the project boundary provided, the consultant established that the project area spans approximately 16.3ha. This boundary provided a clear spatial delimitation, that ensured all the proposed development activities were coordinated and managed within a well-defined area. By setting these limits, the boundary served to prevent further unplanned expansion and protect existing open spaces.

Additionally, the boundary also facilitated effective stakeholder engagement and regulatory compliance, ensuring that the plan aligned with national and local planning standards.

5.4.2 Existing access networks

In the preparation of the LPLUDP access networks played a significant role as structuring elements. The main access network is the Kinamba-Sipili-Rumuruti road that serves as a primary entry point into the settlement. Internally, the settlement features a well-structured transport network comprising main access roads ranging from 9 to 18 metres wide and rear service lanes about 6 metres wide. These networks were crucial in shaping connectivity and accessibility within the settlement. They influenced the alignment of transport networks and allocation of land uses, ensuring that development was coordinated and accessible.

5.4.3 Existing settlement development layout

The existing development layout of the settlement served as a key structuring element in the plan. Given the main objective of regularizing tenure, many of the current settlement features were retained to minimize potential negative impacts that could lead to displacements. However, proposals for road realignment were included to enhance accessibility and connectivity. The settlement's existing distribution of land uses formed the basis for determining the proposed land-use zones, ensuring that the plan aligned with the existing character of the area while promoting sustainable development.

5.4.4 Natural features

Natural features played a significant role as structuring elements in the preparation of the LPLUDP for the settlement. Key natural features include:

- Terrain: The gently sloping nature, with elevations ranging from 2015 to 2046 meters above sea level, affects drainage patterns and land use suitability. It also influences the future alignment of linear infrastructure such as roads, drainage, and trunk sewer systems.
- Vegetation Cover: Accounting for about 20.2% of the total area, it impacts biodiversity and aesthetic appeal. Sections under agricultural cropping limit the uses to which those sections could be assigned.
- Phaeozems soil: Guided the allocation of land uses that benefit from good drainage, easy root penetration, and stable terrain, such as residential and agricultural zones.

These natural features guided the allocation of land uses and informed strategic actions such as installing drainage channels to prevent water stagnation and greening accessways to enhance environmental sustainability.

5.4.5 Abutting Features

The abutting facilities such as Sipili secondary school, Lariak primary and secondary schools, and the slaughterhouse were key in defining the boundaries.

5.4.6 Project Guidelines on PAPs

Project guidelines prioritized minimizing impacts on PAPs (Project-Affected Persons), with road width specifications and realignments identified as the primary impact sources. Consequently, these factors critically shaped the design of proposed access roads, pathway networks, and, more broadly, the overall spatial layout of the plan. The emphasis on zero or minimal disruption ensured that road dimensions and alignment adjustments were central to balancing development needs with community welfare.

5.5 Alternative Planning Scenarios

5.5.1 Overview

In developing plan alternatives for Sipili A settlement, two distinct options were explored: The Nil intervention and the adaptive option. The development of these alternatives was informed by several key considerations to ensure that the plans effectively met community needs while complying with relevant standards and policies. The following discussion outlines these considerations:

i. Objective of the Exercise

The primary goal of the KISIP2 project is to enhance the quality of life for residents in informal settlements by providing security of tenure. The main objective of this assignment was to facilitate the conferment/formalization of secure land tenure for Sipili A informal settlement within the KISIP2 through planning and surveying activities.

ii. The World Bank Operational Policy (OP) 4.12

The World Bank Operational Policy (OP) 4.12 addresses involuntary resettlement. This policy emphasizes avoiding resettlement where feasible and minimizing displacement through alternative project designs. The preparation of the plans employed an adaptive approach to minimize or avoid resettlement.

iii. Physical Planning Standards at the National Level

The plans were aligned with Kenya's national physical planning standards, which dictate how land should be used, developed, and managed. This includes adherence to zoning regulations, building codes, and infrastructure standards to ensure consistency and sustainability in urban development. However, some conventional planning standards were not applied since the planning process is occurring after the development has already taken place.

iv. Requirements of Land Registration by the Ministry of Land, Public Works, Housing and Urban Development

The plans had to comply with the legal requirements for land registration. This was crucial for securing tenure and facilitating future development.

v. Planning Principles

The plan alternatives for Sipili A settlement adhered to key planning principles and approaches, focusing on informal settlement upgrading and urban regeneration. These strategies aimed to improve existing conditions without displacing residents, ensuring that development enhances the quality of life for current inhabitants while revitalizing neglected areas to promote sustainable urban growth. The plans also integrated core principles such as participatory planning, environmental protection, land-use integration, and effective land management. Additionally, they emphasized enhancing economic potential, sustainable connectivity and mobility, provision of public services, and gender equity and social inclusion. By incorporating these elements, the plans sought to create a more equitable, resilient, and sustainable urban environment that benefits all members of the community.

vi. Opportunities and Constraints of the Settlement

The situational analysis established a clear understanding of the physical, social, and economic environment, serving as a foundation for informed decision-making and prioritization of actions. This process enabled planners to address challenges effectively and capitalize on potential opportunities. Key aspects of the analysis included:

- Physical and environmental characteristics: Topography, soil types, climate, vegetation cover, and potential environmental risks.
- Population and demographics: Age distribution, household sizes, marital status and PWDs.
- Economic profiles: Income levels, employment sectors, and local economic activities.
- Settlement structure and housing typologies: Types of dwellings, density, and spatial organization.
- Infrastructure Provision: Transportation, water supply, sanitation facilities, and social infrastructure.

vii. Community Needs and Aspirations

The plans were informed by a socio-economic survey that captured the needs and aspirations of the community. Participatory planning sessions and stakeholder meetings were held so that the development strategies would align with local priorities and values. Community input helped identify key areas for improvement, such as access to basic services, employment opportunities, and community facilities.

By integrating these considerations, the plan alternatives for Sipili A settlement aimed to create a more sustainable, equitable, and livable environment that respects both the needs of the community and the broader urban planning principles.

5.5.2 Alternative 1: Nil Intervention

This alternative implies that there will be zero intervention in the settlement with the existing trends maintaining a status quo. Under this scenario, transportation land use

will continue to dominate, spatial organization will remain unstructured, access roads will still vary irregularly in width, with some being extremely narrow. Additionally, ongoing land use conflicts are expected to persist. The settlement will therefore be issued with one community title, while maintaining the current settlement structure. The advantages and disadvantages of this alternative are analyzed below:
Opting for the Nil alternative presents certain advantages. One of its key benefits is that it avoids the demolition of existing structures or the relocation of residents. This approach also preserves established social networks within the settlement and ensures that community ownership of the area can be formally registered.

However, these gains come with notable drawbacks. As the population grows within this unplanned environment, unresolved land disputes may intensify, leading to more frequent boundary conflicts among residents. The lack of structured planning perpetuates spatial disorder, resulting in a chaotic urban form that is vulnerable to urban decay. Over time, such deterioration risks making parts of the settlement uninhabitable.

Without regulated growth, there is also the danger of boundaries being informally extended, allowing for unauthorized expansion beyond the settlement's original limits. Poor zoning practices mean that incompatible land uses—such as residential and industrial activities—often exist side by side, exacerbating land use conflicts. Meanwhile, the allocation of land for vital public amenities like parks or clinics becomes almost impossible, as any attempts would necessitate displacing current residents.

Infrastructure challenges will persist as well. The existing road network, drainage, and community facilities will remain inadequate, and while securing tenure provides some stability, it alone does little to improve living conditions or boost local economic prospects. Retrofitting essential utilities, such as water and sewer lines, will be made difficult by the current layout and density of structures. Furthermore, the requirement for unanimous community consent for any significant land transactions or redevelopment plans poses a major barrier, stalling potential upgrades and improvements. Thus, the community turned down this alternative.

5.5.2.1 Land use budget for NIL intervention

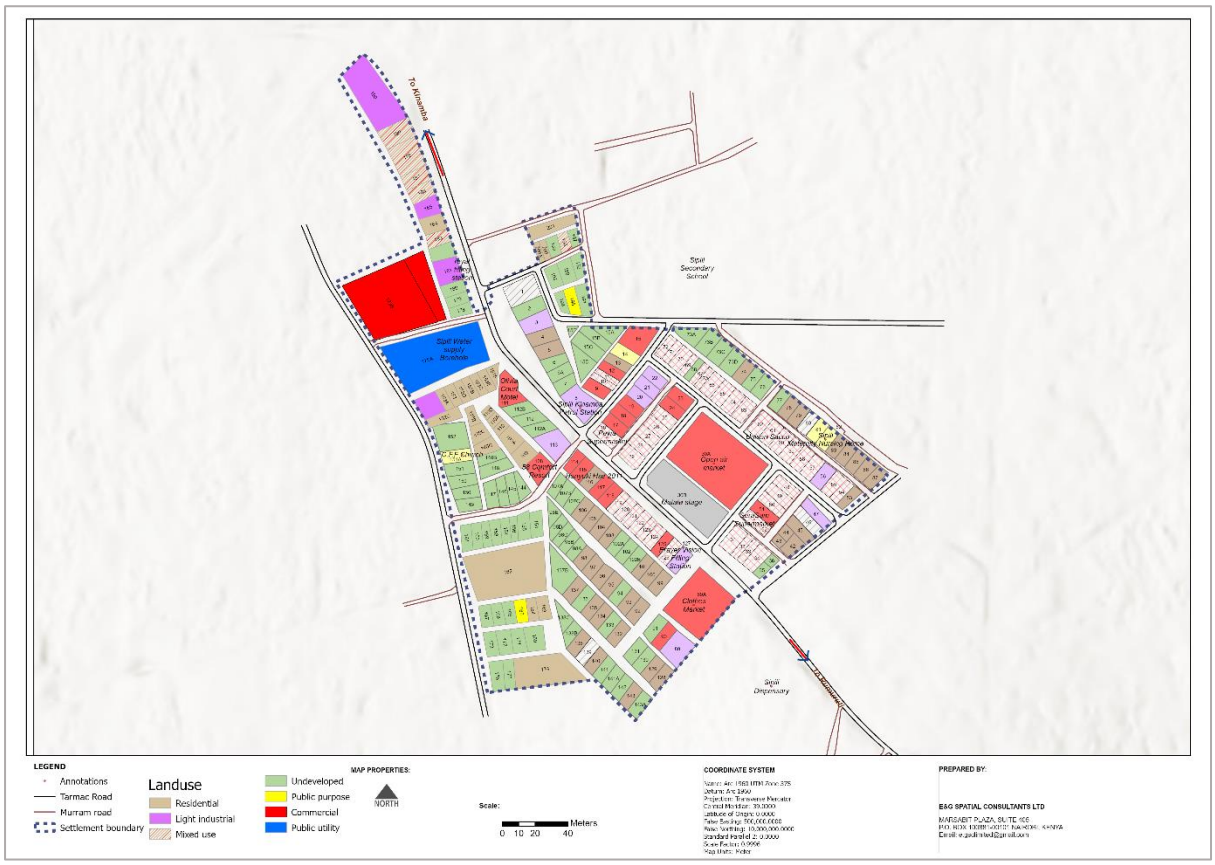
In the land use budget for nil intervention in Sipili A informal settlement, transportation occupies the largest portion at 31.35%. This indicates significant space dedicated to roads and movement corridors, and a bus park, which are essential for connectivity within and around the settlement. Although transportation accounts for 31.35% of land use, these areas are not officially designated roads. Instead, they are spaces informally recognized and utilized by the community for transport purposes. Over time, without clear demarcation or protection, these transportation corridors risk being absorbed into other land uses, potentially disappearing as the settlement evolves.

Undeveloped space accounts for 18.51%, highlighting areas that remain vacant or unused, which are potential sites for future development or green spaces. Residential areas occupy 16.79% reflecting the housing footprint, commercial activities take up 13.11%, while mixed-use areas, combining residential and commercial functions,

represent 10.15%, showing a blend of living and economic activities within the settlement. Light industrial uses cover 5.80%, representing petrol stations and small-scale workshops. Public purpose land, at 1.3%, includes churches and a nursing home, and public utility covering 3% which accounts for Sipili water supply borehole. This distribution underscores the multifaceted nature of land use in Sipili A and highlights opportunities for targeted interventions to optimize space utilization and improve living conditions.

Table 5.1: Land use budget for NIL intervention

Land Use Code	Land use	Area (Ha)	Percentage (%)
0	Residential	3.63751	16.79%
1	Light industrial	1.25583	5.80%
4	Public Purpose	0.28063	1.30%
5	Commercial	2.84064	13.11%
6	Public Utility	0.65061	3.00%
7	Transport	7.45429	31.35%
10	Mixed use	2.1989	10.15%
	Undeveloped	4.01159	18.51%
Total		**22.33**	**100.00%**



Map 5.1: Nil intervention

5.5.3 Alternative 2: Adaptive Option

The adaptive option closely resembles the Nil Intervention approach and aligns infrastructure and parcel layouts with the existing settlement pattern. This strategy

formalizes infrastructure layouts by standardizing road widths, addressing the current variation where some roads are 6–8 meters wide and others 15–18 meters into a uniform standard. This realignment will enhance legibility, connectivity, and safety across the settlement. By aligning parcel and infrastructure configurations with the established urban fabric, the plan minimizes disruption and displacement, a principle emphasized in incremental upgrading frameworks for informal settlements. Additionally, the adaptive plan option introduces more mixed-use zones, fostering a functionally integrated environment that supports both residential and commercial activities, and proposes new recreational spaces and a social hall to improve public amenities and social infrastructure. These interventions align with best practices in informal settlement upgrading enhancing public space, promoting social cohesion, and supporting economic vibrancy while respecting the current nature of the settlement's growth.

The adaptive option presents several distinct advantages for the settlement. Its primary merit lies in preserving the existing structure and spatial layout, ensuring that the daily rhythms of the community face minimal disruption. By realigning road sizes to a uniform standard, the plan enhances the overall functionality and legibility of the area, making navigation and movement throughout the settlement more efficient. Improved connectivity further strengthens ties within the community, fostering greater interaction and ease of access to essential services and amenities.

Importantly, the plan is sensitive to the social fabric of the settlement. It maintains existing community networks, thereby supporting social cohesion and a sense of belonging. The provision of individual land titles for all parcels larger than 100 square meters marks a significant step toward tenure security, empowering residents with formal recognition of their property rights. The introduction of an expanded mixed-use development zone encourages a dynamic blend of residential and commercial activities, allowing for a flexible, integrated urban environment that can adapt to future needs.

Nonetheless, the adaptive option is not without drawbacks. It impacts 47 existing structures, presenting challenges for those affected. Additionally, certain sections of the settlement do not meet minimum planning standards, with service lanes measuring only 4.5 to 6 metres in width in some areas, which may limit accessibility for emergency and service vehicles.

Despite these challenges, the community preferred this option. The adaptive plan strikes a careful balance between modernization and the preservation of established ways of life. Its context-sensitive approach—minimizing disruption, promoting social cohesion, enhancing connectivity, and allowing for incremental improvement—reflects the residents' priorities. Ultimately, the adaptive option was chosen because it fosters a sense of ownership and continuity, supports economic vitality, and aligns with the community's vision for a resilient and inclusive urban future.

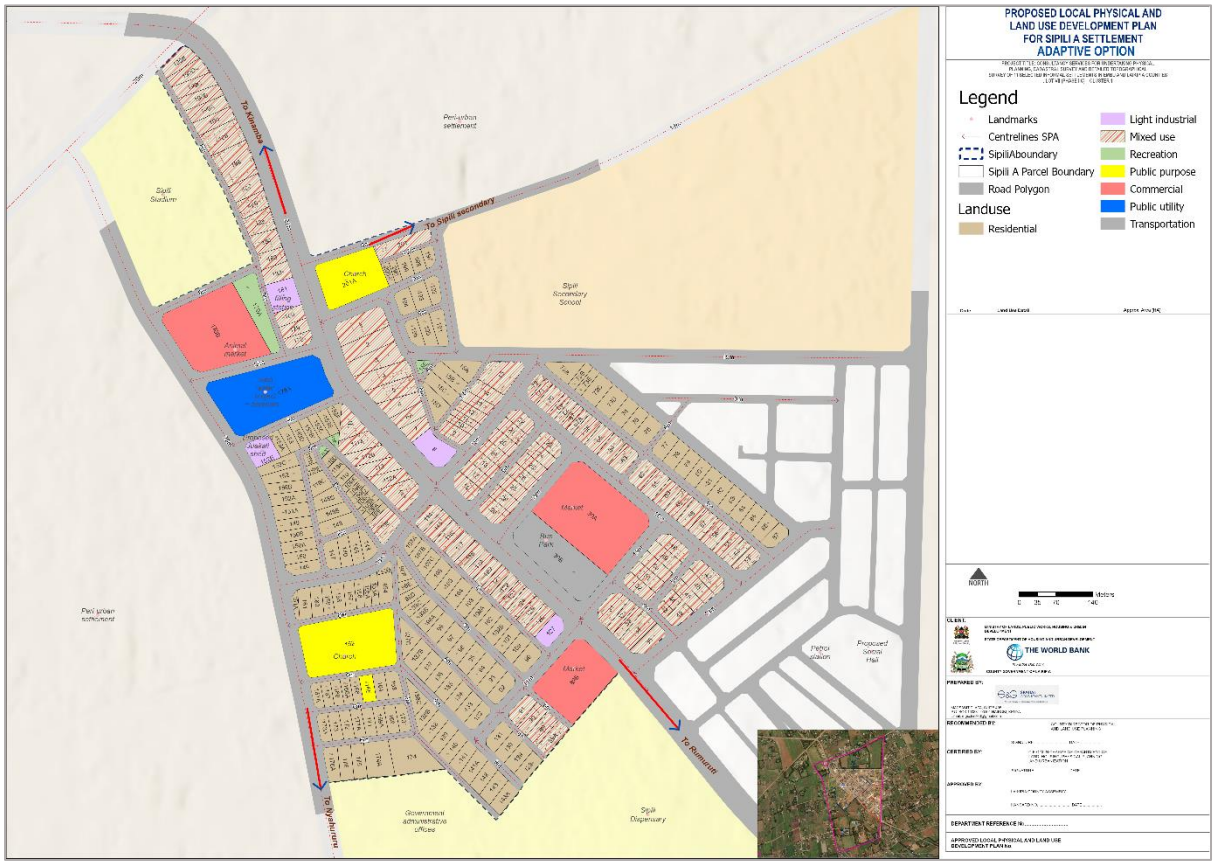
5.5.3.1 Land use budget for the Adaptive Option

In the land use budget for the adaptive option, space is allocated to balance the existing settlement structure with targeted improvements, supporting both current patterns and future community needs. The plan has proposed increment of residential acreage

to 28.31% to offer more housing opportunities. Transportation infrastructure continues to occupy a significant portion (26.84%), reflecting the importance of connectivity and access, while mixed-use zones are expanded to 26.48% of the settlement to encourage a vibrant blend of residential, commercial and light industrial activities. Residential areas are maintained and integrated with these mixed-use spaces, ensuring that housing remains a central component of the settlement. The adaptive plan also introduces new recreational spaces and a proposed social hall, addressing the need for public amenities and social infrastructure that foster community well-being. By standardizing road widths and aligning parcel layouts with the established urban fabric, the adaptive option demonstrates a people-centered, context-sensitive approach that integrates informal land use into formal planning, promoting conformity and minimizing disruption to residents' livelihoods. This strategy aligns with best practices in informal settlement upgrading, emphasizing incremental improvements, community participation, and the integration of social and economic functions within the urban environment. Table 5.2 shows the land use budget for the adaptive option. Unlike nil scenario, one of achievements of this alternative is road designations, so much that they are now well defined, and protected as rights of way.

Table 5.2: Land use budget for the adaptive option

Land use code	Land use	Acreage (Ha)	Percentage (%)
0	Residential	6.14	28.31%
1	Industrial	0.33	1.53%
3	Recreational	0.19	0.88%
4	Public Purpose	0.93	4.29%
5	Commercial	1.86	8.59%
6	Public Utility	0.67	3.07%
7	Transport	6.48	29.01%
10	Mixed Use	5.74	26.48%
Total		**22.33**	**100.00%**



Map 5.2: Spatial representation of the Adaptive Option

5.5.3.2 Impact Analysis of the Adaptive Option

The realignment of the accesses resulted in impacts on various types of structures in Sipili A settlement. Permanent structures were the most impacted with 21 units, while semi-permanent structures were 20, and only 6 temporary structures were impacted. Table 5.3 shows the spatial representation of the impacts of the adaptive option.

Table 5.3: Impact Analysis of the first adaptive option

Nature of Structures	No of structures
Permanent	21
Semi-Permanent	20
Temporary	6
Grand Total	**47**

Examining the types of structures more closely revealed the functional diversity present summarized by Table 5.4. Eaves were the most prevalent, with 13 instances, followed by toilets with 8 occurrences, canopies and canopy plus slabs, which together accounted for 8 structures, 3 makeshift structures. Balconies, staircases and stores were rare, with just a single occurrence of each. As a result of road truncations, 8 structures were affected where one was a main house and another a timberyard.

Table 5.4: Specific types of structures affected

Type of structure	No of structures

Balcony	1
Canopy	6
Canopy + slab	2
Eave	13
Eave + slab	3
Slab	1
Toilet	8
Makeshift structure	3
Staircase	1
Store	1
Truncation	6
Timberyard + truncation	1
Main house + Truncation	1
Grand total	**47**

The map below provides a spatial view of the impacts of the adaptive option.

Map 5.3: Spatial Representation of the Impacts of the Adaptive Option

5.6 Plan Evaluation

5.6.1 Impact Analysis of the Plan Options

The two alternatives (nil scenario and adaptive option) were juxtaposed against each other and analyzed based on their impacts. Table 5.5 below highlights how each approach addressed security of tenure and the consequences for land allocation, particularly with respect to road creation and the provision of public utilities. This contextual linkage allows for a clearer understanding of the practical implications that arise from the structural impacts mapped in the Adaptive scenario, effectively bridging the analysis of physical transformations with the evolving landscape of property rights.

Table 5.5: Impact analysis of the plan options

Criteria	Nil Intervention	Adaptive Planning Option
Security of Tenure	Settlement living conditions shall not have been improved. Community title will be issued.	Better option in the long-term planning period. All community members would attain tenure security at individual levels.
Development control Guidelines	Nonexistent development control guidelines.	Better option in the long-term planning period. Development guidelines provided for long-term planning period.
No of structures affected	No structures affected.	47 structures partially affected.
Transportation	The settlement retains its current transportation networks.	Roads realigned to improve connectivity.
Residential	The settlement retains residential use.	The settlement retains residential use with integration of other compatible land uses.
Education	The settlement will continue to rely on abutting primary and secondary schools.	The settlement will continue to rely on abutting primary and secondary schools, and the plan has recommended their densification.
Commercial	The settlement will continue to rely on commercial areas within the settlement.	More commercial spaces integrated to achieve optimal land use under the proposed mixed-use zone.
Recreational	No recreational areas	Provision of recreational spaces (0.19ha)
Public Utilities	Existing water points will be retained.	Existing water points will be retained. The access roads will accommodate ancillary services such as drainage and waste receptacles.
Public Purpose	Existing public purpose facilities, which include churches, and a private health facility will be retained.	Existing church and private health facility will be retained. A social hall has been proposed.
Mixed-Use Developments	Existing mixed-use zones will be retained.	Mixed use zones (residential, commercial and light industrial) increased to provide more spaces for businesses.

5.6.2 Evaluation of Alternatives (Goals Achievement Matrix)

Besides impact analysis of the two alternatives were also analyzed using the Goal Achievement Matrix (GAM) to determine the most suitable alternative in line with the vision the community members proposed, **'To become a well-connected economic hub.'**

GAM was developed by first identifying the critical project goals. Each goal was broken down into measurable criteria that would allow for objective evaluation. To maintain consistency in the evaluation process, clear definitions were established for each score level. This model provided a transparent and objective framework for decision-making. The criteria considered included the security of tenure, which aimed to ensure that residents had guaranteed and protected land rights. The matrix also targeted the improvement of living and working conditions for the inhabitants, seeking to enhance

their overall quality of life. Compliance with World Bank safeguard provisions (discussed in section 2.3) was another criterion, ensuring that the project would result in zero or minimal displacement of people. Additionally, the framework took into account the opportunities and constraints of the settlement, aligning the plan with the available resources and limitations. Community needs and aspirations were given significant weight, informed by socio-economic surveys, community participatory planning exercises, and various stakeholders' meetings. Lastly, adherence to planning standards was emphasized to ensure that the plan was in line with established guidelines and best practices. Table 5.6 below presents the findings on the evaluation of various plan alternatives, which were either attained or not.

Based on the evaluation of the performance of various planning alternatives against the project objectives and goals, the Adaptive planning option emerged with the highest score (8.7).

Table 5.6: Goal Achievement Matrix

Evaluation Criteria		Planning Alternative	
		Nil Alternative	**Adaptive Option**
1.	Security of Tenure	1	1
2.	Improved Living and working conditions of residents	0	1
3.	World Bank Safeguard provisions (Zero/Minimal PAPS)	1	1
4.	World Bank Safeguard provisions	0	1
5.	Factoring Opportunities and Constraints of the settlement	0	1
6.	Community needs and aspirations (as dictated through socio-economic survey, community participatory planning exercise and through the various stakeholders' meetings	0	1
7.	Planning standards	0	0.7
8.	Requirements for land registration by the Ministry of Lands and Physical Planning	1	1
9.	Planning principles	0	1
TOTAL SCORE		**3**	**8.7**

5.6.3 Selection of Best Alternative

After the analysis of the performance of the various elements against the various plan options, the adaptive plan option has the highest score. This option aligns with the community's preference, as expressed during the presentation of draft plan. At that time, the community selected the adaptive option, albeit with some modifications aimed at enhancing connectivity within the settlement. The community also had an opportunity to validate and adopt the final plan, which had incorporated the proposed modifications. This alternative, affects 47 structures and planning strategies, including improvement of transportation networks. The alternative will achieve individual titles since all resultant parcels are above 100sqm.

Acquisition of tenure security for the current parcels will open numerous avenues and opportunities for future improvements of the settlement. However, in the long-term, the settlement may not be able to adequately accommodate the pressure of the bulging populations and its corresponding requirements that would make the settlement habitable. As a result, it is recommended that the development control authority (Laikipia County Planning Committee) should condition developers in the sections

that have not attained standard roads to surrender 1.5m as road reserve and that they should observe building line to the latter.

5.7 Sipili A Settlement Plan

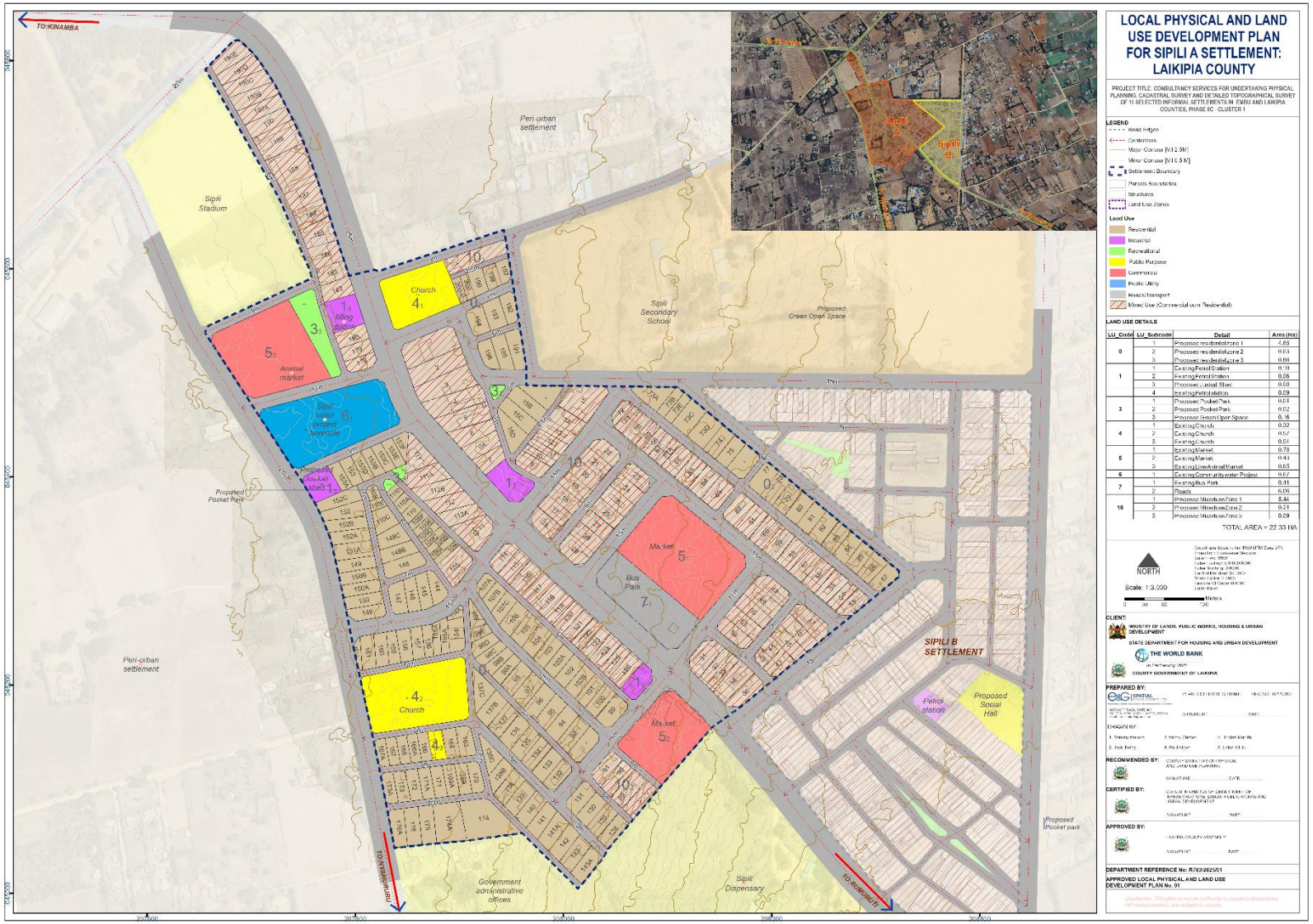
5.7.1 Land Use Budget

Table 5.7 presents the land use budget for the final plan. The largest portion of land is designated for transportation covering approximately 5.82 hectares or 26.84% of the total area, reflecting a significant emphasis on transport infrastructure and mobility. This is followed by residential, covering 6.14 hectares (28.31%) then mixed use covering 5.74 hectares (26.48%) indicating balanced development between living spaces and multifunctional zones.

The allocation to commercial land use at 1.86 hectares (8.59%) supports local economic development, providing space for shops, markets, and services that sustain livelihoods and serve daily needs. Public purpose areas, spanning 0.93 hectares (4.29%), are essential for community infrastructure such as schools, health centers, and administrative facilities, fostering social well-being and service accessibility. The provision for Light Industrial use at 0.33 hectares (1.53%) offers opportunities for small-scale manufacturing and workshops, promoting employment and economic diversification within the settlement. Public utility space, covering 0.67 hectares (3.07%), ensures the integration of necessary infrastructure, including water, electricity, and waste management facilities, which are critical for a healthy and resilient urban environment. The least area is assigned to Recreational use, with only 0.19 hectares (0.88%), suggesting limited space for leisure or green areas within this plan.

Table 5.7: Land use budget for draft final plan

Land use code	Land use	Acreage (Ha)	Percentage (%)
0	Residential	6.14	28.31%
1	Industrial	0.33	1.53%
3	Recreational	0.19	0.88%
4	Public Purpose	0.93	4.29%
5	Commercial	1.86	8.59%
6	Public Utility	0.67	3.07%
7	Transport	6.48	29.01%
10	Mixed Use	5.74	26.48%
Total		**22.33**	**100.00%**



Map 5.4: Final draft plan

5.7.2 Land use proposals under the plan

Land is the most critical resource in planning since all the activities consume space. The final draft plan for the settlement presents a series of planning proposals that integrate community input from the visioning and participatory planning exercises, contributions from key stakeholders, as well the Consultant's recommendations. This section outlines how the various land uses have been designated under the preferred plan option.

5.7.2.1 Residential Land Use Development

Residential land use, designated by code 0 in the LPLUDP, occupies the largest share of the settlement, approximately 6.14 hectares (28.31%) of the total settlement area. This pattern is shaped by Sipili A's role as a vibrant trading centre serving surrounding communities. With the current population density expected to rise, it is anticipated that most existing residential structures will persist, but the area will experience gradual vertical densification. There will be a transition from single-story to multi-story buildings to accommodate future growth. The issuance of land titles and access to financing will further encourage property owners to invest in modern, permanent structures, supporting a shift toward a more compact and efficient urban form. The LPLUDP is designed to ensure that Sipili A evolves into a well-organized, resilient, and economically dynamic settlement, capable of meeting the needs of its growing and diverse population. Development guidelines for future residential growth are detailed in section 6.2.1.

Figure 5-8: Snippets of residential land use in the plan

5.7.2.2 Recreational Land Use

Recreational land use, represented by land use code 3 in the development plan, accounts for approximately 0.88% of the total settlement area. Although this is a relatively small proportion, the inclusion of green spaces is a critical component of sustainable urban planning. Green spaces in urban areas provide numerous benefits, such as improving air quality, offering residents opportunities for relaxation and social interaction, supporting mental and physical well-being, and enhancing the aesthetic appeal of the settlement. Additionally, these areas help mitigate urban heat, manage stormwater, and promote biodiversity. By allocating land for recreation, the plan aims

to create a healthier, more livable environment for Sipili A's residents, supporting both current needs and future growth.

Figure 5-9: Snippet of recreational land use

5.7.2.3 Public purpose

Public purpose land use occupies a vital position in the overall development framework for Sipili A, serving as the spatial foundation for essential community services and infrastructure that enhances the quality of life. The inclusion of public purpose land is guided by both current needs and projections for future growth, ensuring that the settlement remains resilient and adaptable as the population expands. The plan has retained the three existing churches within the settlement, for spiritual nourishment of the residents. These facilities account for 0.93 hectares or 4.29% in the final plan. By integrating well-placed public purpose zones into the land use pattern, the plan supports a holistic approach to urban development—one that balances private investment with communal benefits.

Figure 5-10: Snippets of public purpose land use in the plan

5.7.2.4 Commercial Land Use

Commercial land use in the development plan is denoted by land use code 5. Currently, the main commercial areas in Sipili A include a food market covering approximately 0.8 hectares, an open-air clothes market of about 0.4 hectares, a livestock market

covering 0.65 hectares, and multiple individual residential plots that have been used for commercial purposes. This pattern reflects Sipili A's function as a trading centre serving the surrounding rural communities. In the LPLUDP, only the established markets are retained as designated commercial areas, while the multiple small commercial plots have been rezoned as mixed-use (residential and commercial). This shift aligns with contemporary urban planning principles that promote mixed-use development to accommodate a growing population and create more vibrant, walkable communities. Mixed-use zoning allows for the integration of residential and commercial functions within the same plots or buildings, supporting local entrepreneurship, increasing housing options, and enhancing access to services.

The commercial zone, as outlined in the LPLUDP, is expected to continue stimulating local entrepreneurship, generating employment opportunities, and promoting regulated business practices. By concentrating commercial activity in designated markets and encouraging mixed-use development elsewhere, the plan supports economic growth, job creation, and the orderly development of Sipili A as a dynamic trading hub for the region.

Figure 5-11: Snippets of commercial areas in the plan

5.7.2.5 Public utilities

The plan has only one public utility, which is already existing, Sipili water borehole project. The facility accounts for 0.67 hectares equivalent to 3.07% of the settlement and denoted as 6_1 in the plan. A critical component of the settlement's infrastructure is the provision of reliable water supply to support both current and future residents. The plan incorporates a dedicated borehole water supply facility designed to ensure continuous access to clean and safe water. This facility, strategically located to serve the broader community, forms the backbone of the settlement's public utilities network.

The borehole water supply addresses the persistent challenge of water scarcity, which often affects rapidly growing urban and peri-urban settlements. By tapping into underground aquifers, the system provides an independent and sustainable source of water, reducing reliance on external supplies and mitigating the impact of seasonal shortages. The facility is equipped with modern pumping technology and storage tanks, allowing efficient distribution to households, commercial establishments, and public institutions within Sipili A. The plan recommends routine maintenance and

community-based management of the facility, ensuring its sustainability and reliability over time.

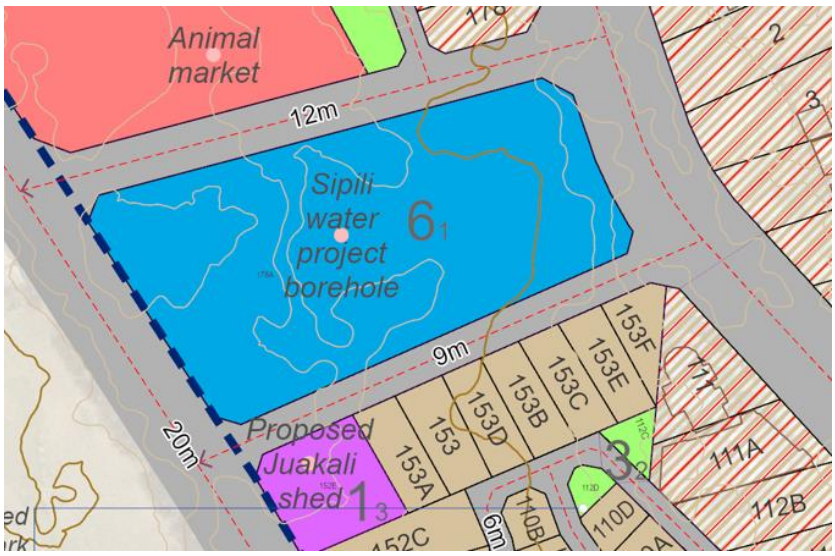


Figure 5-12: Snippet of public utility in the plan

5.7.2.6 Transportation Land Use

Transportation land use, designated by code 7 in the development plan, occupies approximately 26.84% of Sipili A's total land area, reflecting its role as a trading hub connecting surrounding rural communities. Road realignments have introduced standardized widths of 4.5m, 6m, 9m, 15m, 18m, and 25m to enhance connectivity while integrating ancillary services such as drainage channels, solar-powered streetlights, and waste receptacles. These are key components of the area's modernization efforts. The LPLUDP recommends tarmacking all roads in the settlement. By prioritizing transport infrastructure, the plan reinforces Sipili A's position as a strategic commercial node within the regional trade networks, fostering entrepreneurship and sustainable urban growth.

The plan also recognizes the significance of public transport in supporting mobility and economic activities within Sipili A and the wider region. To this end, the existing bus park has been retained as a vital public transport facility. Strategically situated to facilitate easy access for both residents and traders, the bus park serves as the primary hub for matatus, buses, and other public service vehicles operating in and out of the settlement. By maintaining this infrastructure, the plan ensures continued connectivity to surrounding towns and rural areas, supporting daily commuting, the movement of goods, and broadening access to markets and services. The presence of an organized bus park contributes to the orderly flow of traffic, minimizes congestion within the settlement core, and provides a secure and convenient boarding point for passengers. The plan further recommends ongoing improvements in terms of signage, designated loading and unloading bays, and the provision of amenities such as shelter and sanitation facilities, thereby enhancing the overall user experience and efficiency of public transport operations.

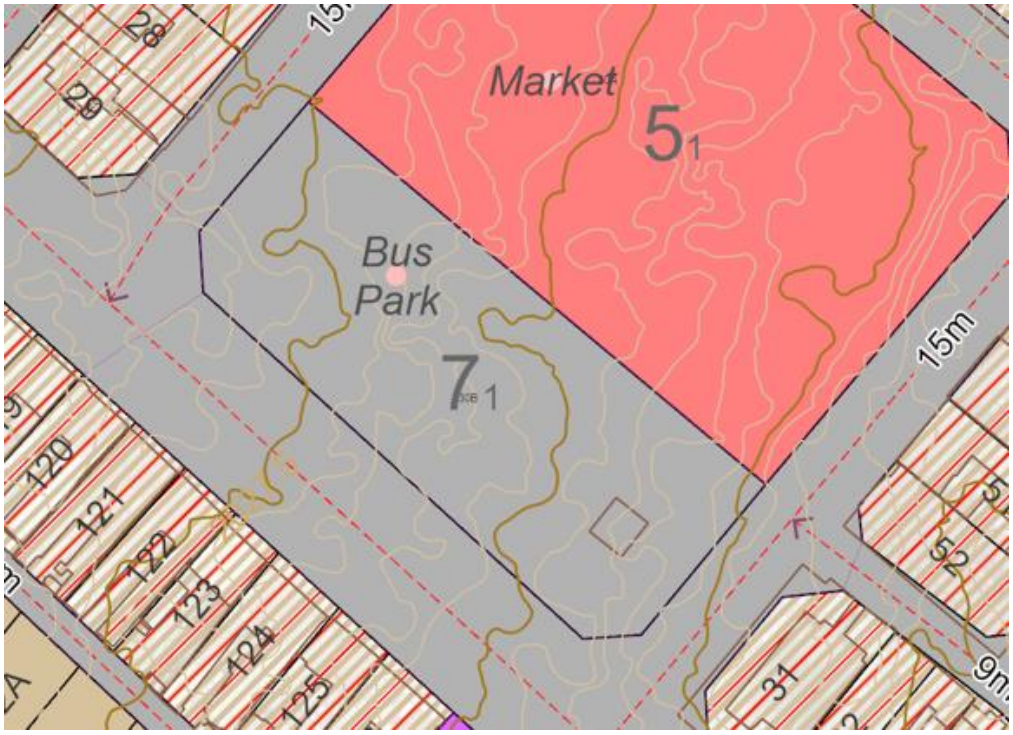


Figure 5-13: Snippet of the bus park within the settlement.

Road length	Shape Length (in meters)
4.5 metres	170.0949644
6 meters	2381.881293
9 metres	1701.957453
12 meters	512.0002178
15 meters	1807.678217
18 metres	265.6302244
20 meters	1247.302472
25 meters	1193.634132

5.7.2.7 Mixed Land Use

Mixed land use is denoted by land use code 10 in the development plan. This is a set-up in which multiple land use types exist together either horizontally or vertically in order to optimize the space use. It is crucial to ensure that the land uses, whether at the structure, plot, or neighborhood level, are compatible with one another. The mixed land use designation was determined based on the sizes of the access ways fronting the proposed mixed-use areas, considering the anticipated traffic flow of both pedestrians and vehicles. During the participatory planning phase, residents expressed a desire for more land to be allocated for commercial use. However, this was constrained by the settlement's size and current development status. To address this, the plan allowed for an increase in mixed-use coverage and proposed vertical densification up to four floors. This zone acts as transition between the commercial and residential zone. This accounts for 28.80% of the total settlement land. In addition to commercial activities, it will also accommodate light industrial uses such as carpentry to enhance local livelihoods. However, it is critical that the county government strictly enforces

regulations to prevent incompatible activities, such as heavy industrial operations, from encroaching on this zone and disrupting the surrounding land uses.

Figure 5-14: Snippets of mixed-use areas in the plan

5.7.2.8 Light Industrial

The light industrial designation in the draft final plan covers 0.33 hectares, representing 1.53% of the total land area. This zone includes three petrol stations and a proposed area for juakali (informal small-scale manufacturing and repair activities), which are vital components for the local economy. Light industrial areas like these are important because they provide essential services and employment opportunities close to residential and commercial zones, supporting economic growth while maintaining compatibility with the surrounding community. By accommodating small-scale industries and service providers such as juakali, the plan will foster entrepreneurship and job creation and promote sustainable urban development. This integration of light industrial uses within the urban fabric helps balance economic activity with livability, ensuring that industrial functions coexist harmoniously with other land uses and contribute to the area's overall vibrancy and resilience.

Figure 5-15: Snippets of light industrial areas in the plan

6 DEVELOPMENT CONTROL GUIDELINES

6.1 Overview

Upon approval, the LPLUDP will become a legal document that will require to be adhered to. To effectively implement the plan according to its intended objectives, development control guidelines are essential. These guidelines will inform the planning authority's decisions regarding development approvals. In contrast to past experiences where plans were prepared and implemented fragmentedly or not implemented at all, this plan offers a comprehensive approach. Subsequently, it will be expected that the various proposals highlighted will be subject to guidelines set out in this section.

According to the Physical and Land Use Planning Act of 2019, complemented by the relevant regulations, the authority for development control is vested in the County Executive Committee Member responsible for physical planning. Effectively, any other applicable written laws also inform planning decisions. Highlights of key sections of the planning Act or regulations will also inform the guidelines under this plan. It is notable that other salient consideration will prevail given the plan is based on an informal settlement that is already developed, and the project is expected to cause minimal impacts if necessary. Therefore, the guidelines for this plan are a culmination of various consideration factors.

6.2 Zoning Ordinance

Zoning is a planning tool applicable in guiding and controlling the development and growth of a planning area. This was applied in the plan through dividing the settlement into sections for purposes of setting clear development restrictions in those zones. The plan has designated the settlement into various zones. Largely they have been conformed to the existing settlement layout. Whereas the zones will apply in the near future, a review of the plan will be required after 5 years to assess their applicability and necessary changes that will be key for the settlement development dynamics. All the permissible, restricted uses and prohibited uses shall be applicable accordingly. Some of the zones that have been achieved in this plan include:

6.2.1 Residential zone

The following land use standards have been proposed for residential plots (zone) within Sipili A. The Laikipia County Government is expected to gradually implement them as the area residents or potential developers begin to redevelop the area over time. Following the issuance of title deeds at the individual level, the consultant recommends a gradual transition from the current development status to more improved and decent developments, as legal ownership of the parcels will have been

secured. The beneficiaries should, therefore, undertake further detailed planning at site level. This should entail preparation of site plans and building plans which should be adhered to. Table 6.1 provides the zoning guidelines.

Table 6.1: Residential zone guidelines

Development Density	Minimum Plot Size (ha)	Maximum Plot Coverage	Plot Ratio	Height (No. of Storeys)
Low Density	0.2	30%	1:3	G+1
Medium Density	0.1	50%	1:3-1:6	G+4
High Density	0.045	70%	1:5-1:8	Max: G+5
Mixed Density	0.1-0.045	50-70%	1:3-1:8	Max: G+5 Min: G+3
Adaptive option (KISIP2 provision)	**0.01**	60%	1:6	Max: G+4

6.2.2 Recreational Land use

In the final draft plan for Sipili A settlement, recreational land use is allocated 0.19 hectares. However, the Physical and Land Use Planning Handbook 2025 stipulates that urban green spaces should be at least 1 hectare in size and provide recreational facilities for urban populations. Given that all plots in Sipili A were already claimed by structure owners and the planning process is occurring post-development, it was challenging to secure additional space for recreational purposes. To comply with the other handbook's provisions, the county government will implement ecological enhancements in the designated recreational area. This will involve strategic tree planting and vegetation integration to improve aesthetic quality. Furthermore, the area will be made accessible to all by incorporating disability-friendly infrastructure, such as ramps and visual/tactile aids, ensuring inclusive access for the community.

6.2.3 Public Purpose

The public purpose zone in Sipili A comprises of three existing churches (0.93ha). The existing churches currently meet the settlement's basic needs but face compliance challenges under the Physical and Land Use Planning Handbook 2025 since planning is occurring post-development. The handbook stipulates that the minimum site requirements for religious facilities is 0.1ha. To comply with the other handbook provisions, developers must adopt acoustic materials (e.g., soundproofing) to mitigate noise pollution as stipulated.

For future expansions or upgrades, developers are required to seek formal approval from the County Government of Laikipia to ensure alignment with zoning regulations. Adaptive solutions, such as compact multi-functional designs, may help address spatial limitations. The current facilities are deemed adequate for the settlement's population size, provided noise-reduction measures and phased improvements are implemented to harmonize regulatory compliance with community demands.

6.2.4 Commercial zone

The essence of commercial developments is to ensure a complete community by ensuring that the residents have places to shop essential commodities close to where they live. In addition, they also ensure economic development by providing areas of employment for the local community while contributing to the settlement's revenue base. The LPLUDP has taken into consideration various consumer needs as well as the interests of the residents at different levels. It has also considered the current and future needs, such as transportation needs as customers increase as well as vertical densification.

To meet the residents desire of having a commercial area within the settlement, the settlement plan has retained the existing 3 market zones (General market area, open air market and livestock market). In these commercial zones, plot coverage outlined in section 5.32 of the Physical and Land Use Planning Handbook 2025 should be adhered to. In addition, the following guidelines should inform such developments:

i. There should be multiple entry and exit points.
ii. Circulation routes should be both vehicular and pedestrian friendly.
iii. Controlled and sufficient parking should be provided for all users.
iv. The minimum plot size should be 0.045 Ha which should cater for the architectural design, natural lighting.
v. Should provide for an onsite parking.
vi. Should have a well-defined and sustainable onsite waste management strategy.
vii. The designs for such developments should be subjected to Laikipia County Government for approval.

Any extensions and external alterations to commercial developments will require planning permission. Changes in use from commercial to any other land uses and vice versa will also require planning permission. Submission of commercial development proposals and subsequent approval shall not affect the need to get any other permissions, consents, or licenses which may be required by Laikipia County Government or any other Government Agency exercising its legal mandate.

6.2.5 Transportation Land Use

Planning principles guiding transportation infrastructure include:

i. Hierarchy: An efficient transport system is a key requirement for any well-planned area. Town and transport planning processes must take into consideration the hierarchical nature of best-in-class urban transportation systems, creating a sense of order and enhancing functionality. Hierarchy is guided by the required function of a street or road, and the movement needs of the users. Subsequent speed, carriageway widths, as well as other functions are adapted to suit the way they work.

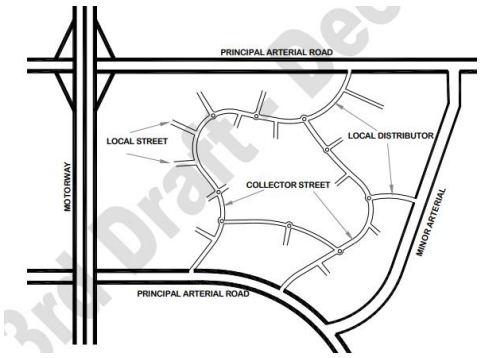


Figure 6-1: Example of Typical Urban Road Classification

ii. Connectivity: This is the density of connections in path or road networks, and the directness of links. A well-connected network has many short links, numerous intersections, and minimal dead-ends (cul-de-sacs). As connectivity increases, travel distances decrease and route options increase, allowing more direct travel between destinations, creating a more accessible and resilient system. Connectivity can apply both internally (streets within that area) and externally (connections with arterials and other neighborhoods).

iii. Inclusivity: Inclusive designing of roads or streets is an approach that aims at creating environments that are not only suitable for motorists but also provides all necessary features which can cater to the needs of all types of end users, regardless of their age, gender, ability, or any other factor.

iv. Relationship with land use: Transportation systems and land use are interdependent, shaping each other's efficiency and sustainability. Effective integration ensures transportation networks align with land use patterns, such as locating transit hubs near high-density areas to reduce car dependency. Poor coordination risks sprawl, traffic congestion, and inequitable access to services. By prioritizing mixed-use zoning and transit-oriented development, planners foster walkability, lower emissions, and create resilient, inclusive communities.

6.2.5.1 Road reserves

The physical and land use planning (development permission and control) (general) regulations, 2021 provides that a minimum road width of 12m shall be provided for a road reserve for a public through road. However, since the planning of Sipili A settlement is happening post development, the LPLUDP has achieved a series of road sizes ranging from 4.5m, 6m, 9m, 15m, 18m, to 25m. These road reserves will be clearly demarcated during the cadastral surveying, with the expectation that the County Government will observe the same standards during implementation of the plan. Figure 6-2 shows various road capacities.

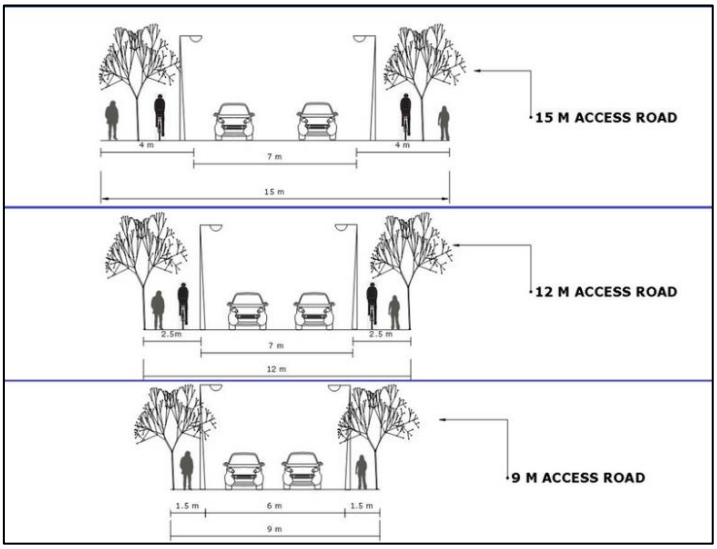


Figure 6-2: Road capacities

6.2.5.2 Truncations

Visual truncations are necessary to enhance road safety. Adequate sight lines should therefore be maintained when a vehicle navigates or egresses from a property onto a roadway, hence controlling black spots within the settlement. The physical and land use planning (development permission and control) (general) regulations, 2021, provide that where public roads intersect, a truncation of half the width of the lower hierarchy road shall be provided. The preferred plan alternative has truncated all accesses, which will be enforced during the cadastral survey. Impacts generated from the provision of the truncations will be considered in the ESMP. Figure 6-3 is a sample of a truncated plot and road.

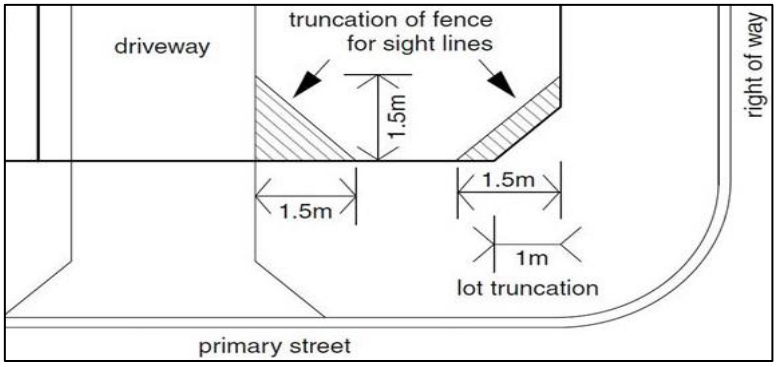


Figure 6-3: Illustrations showing truncations and reduced fence height

6.2.5.3 Streets and Non-Motorized Transport (NMT)

The plan has endeavored to motorize all the roads in Sipili A with the recommendation for integration of NMT on the roads. Further, developments should relate positively with abutting streets through orienting active fronts to the street and avoiding blank facades along the street. This contributes to natural surveillance of street, consequently improving security. Additionally, the following measures will be factored for NMT infrastructure:

i. Streets will provide for barrier free flow of pedestrian movement. This will be clearly separated from the vehicular lane by use of double white line markings.
ii. Placement of the elements of the street such as vegetation, furniture and structures should be aligned and well-coordinated to avoid creating visual clutter and physical barriers along the street.
iii. Areas of pedestrian and vehicular movement along the street should be physically separated for safety and convenience of pedestrians.
iv. New developments should take into consideration the pedestrian desire lines and hot spots to accommodate and enhance pedestrian movement in the settlement.
v. The type, form and size of vegetation planted on the street should take into consideration the building and pavement structure, and functions of the street on which they are located to avoid disrupting functions of the building or street itself.

Figure 6-4 below is an illustration of a typical cross section of well enhanced NMT along the roads. It has designated an exclusive space for bicyclists using pavement markings and optional signs. A bike lane is located directly adjacent to motor vehicle travel lanes and follows the same direction as motor vehicle traffic.

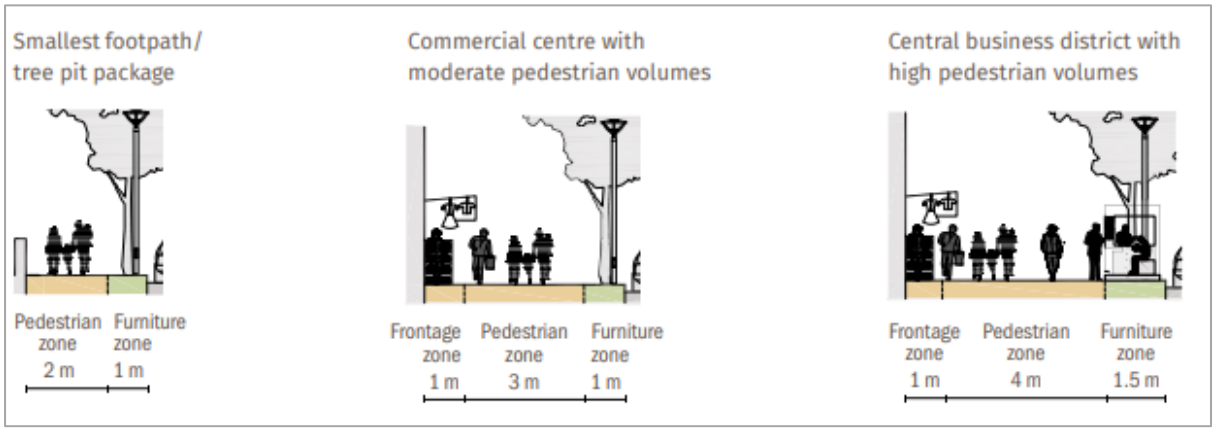


Figure 6-4: Various NMT provisions

6.2.6 Mixed Use Zone

Emerging as a time, space and energy saving trend concept, mixed use zones address the growing societal need to optimize land utilization through multifunctional space integration. This is a deviation from conventional planning approaches where single land use zones are prevalent.

The plan proposes a mixed-use development zone combining residential, commercial, and light industrial activities, with a specific focus on prioritizing commercial use to align with residents' vision for the settlement. The county government should strictly limit the zone to these three compatible land uses, emphasizing existing woodworking as the primary light industrial activity due to its established presence. To maintain harmony between these elements, the county must rigorously enforce zoning regulations that explicitly prohibit heavy industrial operations, which would otherwise create conflicts with the residential and commercial character of the area through

excessive noise, pollution, or incompatible traffic patterns. The permitted commercial uses should be compatible to residential use. Such developments include supermarkets, wholesale and retail shops, grocery stores, barber shops, salons, among others, to promote livable communities.

6.3 Infrastructure and Service Utilities

Guiding principles for infrastructure and public utilities will include:

i. Service delivery
ii. Accessibility
iii. Inclusivity

6.3.1 Water Supply

When connecting an area to water supply, the supplier should consider the catchment population and per capita consumption in relation to the available water resources. Considerations include:

i. Population size.
ii. Distance from intakes.
iii. Land ownership for wayleave.
iv. Quality of water (pollution levels).
v. Gradient of flow.
vi. Piping diameter.

Table 6.2: Water Connection Regulations

Occupancies	Unit	High-class Housing	Medium-class Housing	Low-class Housing
People with individual connections	l/m²/day	250	150	75
People without connections	l/m²/day	-	-	20

Source: Nairobi city county development control policy, 2016

a) **Connections to Public Water Mains**

Where a public water main becomes available for the connection to a premise, the owner of such premise shall, with the written approval by both NYAHUWASCO and Laikipia County Government and at their own cost, make the connection in an approved manner.

b) **Private Water Sources**

Developers must obtain permits from the Water Resources Authority (WRA) and the National Environment Management Authority (NEMA) before drilling boreholes or wells. This requirement is outlined in the Water Resources Regulations, 2021 (L.N. 170/2021) and the Environmental Management and Coordination Act (EMCA). For water storage projects, additional compliance is needed under the Water (Harvesting and Storage) Regulations, 2025 (L.N. 57/2025). Licensing and infrastructure standards are governed by the Water (Services) Regulations, 2025 (L.N. 54/2025).

To sell or supply water to the public, developers need permits from the Laikipia County Government. Approval must also come from WRA and NYAHUWASCO. Water quality

must meet the Water Quality Regulations, 2006 (L.N. 121/2006) and the Water Safety Planning Guidelines (2025). Discharge limits are set by the Water Resources Regulations, 2021. Recent updates include mandatory water use premium payments for regulated sources. Packaging materials require Extended Producer Responsibility (EPR) compliance under the Sustainable Waste Management Act, 2022. The Water Services Regulatory Board (WASREB) oversees tariffs and performance through the 2025 Service Regulations.

c) **Booster pumps**

Where pressure on the main water distribution network is deemed inadequate to convey water to units on a high-rise development, a developer will be required to install a storage tank (preferably underground concrete tanks) and approved booster pump for water supply within the development, as mandated by the 2024 Building Code. The code specifically addresses water supply and sanitation requirements for all buildings. It mandates that developers provide adequate water supply systems, including proper plumbing, drainage, and storage solutions. These provisions are designed to maintain public health, safety, and functionality in modern construction. Water Services Regulations, 2021 (L.N. 168/2021) under the Water Act, 2016 (Section 77) requires water service providers (e.g., NYAHUWASCO) to approve infrastructure designs, including booster systems, to ensure compliance with service standards.

6.3.2 Sanitation Systems

This section establishes sanitary systems and wastewater disposal regulations under Kenya's Environmental Management and Coordination Act (EMCA), which must be met prior to planning permission. Prohibited practices include designs harmful to waste management systems, enforceable through abatement measures under EMCA's Waste Management Regulations, 2024. The settlement does not have a sewer connection, so applicants must submit on-site sewage treatment system proposals to Laikipia County Government, including site suitability evidence (e.g., soil percolation tests and professional certification per WASREB's Urban Sanitation Guidelines). Long-term integration into the county sewer network is recommended and prioritized under KESHP 2016–2030, with Laikipia County's sewerage infrastructure plans guiding phased upgrades.

Table 6.3: Standards for Sanitation facilities

Fittings	Permeable Soils	Impermeable Soils
Sink waste, waste closets & servant quarters waste	Septic tank or soak pit or radial arms or French drains.	Conservancy tank
Baths, lavatory basins and showers	As indicated in 1 but with a separate wastewater storage tank.	As indicated above but a separate wastewater storage tank may be permitted with an overflow into the main system of disposal.

Source: National Building Regulations (2014)

a) Bio Digester

A bio-digester is a waste treatment system that uses microorganisms to break down organic waste anaerobically. The Physical and Land Use Planning Handbook 2025 recommends that biodigesters be located on the sloping side of the property to allow for the discharge of sludge and effluent. Additionally, they should be located at the rear

of the property where the area is free of activity. Bio-digesters will be approved as an on-site waste management strategy if they satisfy the following legal and technical requirements:

i. Professional Certification

- Designed and certified by a registered Wastewater Engineer under National Construction Authority (NCA) Regulations, 2014, which mandates licensed professionals for sanitation infrastructure.
- Compliance with KS 2566-1:2015 (domestic biogas) or KS 2951:2022 (commercial biogas) design standards, as enforced by EPRA for biogas systems exceeding 12 m^3/day.

ii. Location Standards

- Located away from flood-prone areas, per NEMA's Environmental Impact Assessment (EIA) Guidelines and KESHP 2016–2030 site suitability criteria.
- Minimum 15m setback from water sources under Water Quality Regulations, 2006 (L.N. 121/2006).

iii. Construction Materials

- Concrete, metal, or polyethylene plastic must comply with Kenya Bureau of Standards (KEBS) material certifications (e.g., KS 2951:2022 for commercial plants).
- EPRA's Biofuel Guidelines require materials to withstand chemical/weather conditions for biogas plants.

iv. Gas Safety Systems

- Air-tight gas collection with pressure relief valves and flame arrestors, as per KS 2566-1:2015 safety protocols.
- Fire certificates from county governments mandated under Energy Act, 2019 for commercial biogas systems.

v. Residual Sludge Management

- Disposal plans must align with NEMA's Waste Management Regulations, 2024 (L.N. 178/2024) for hazardous sludge handling.
- Standby mechanisms (e.g., secondary containment) required under EMCA's Waste Control Regulations to prevent environmental contamination.

Additional Compliance:

- EPRA Approval: Required for biogas plants producing >12 m^3/day (includes feasibility studies, ESIA licenses, and county planning approvals).
- KEBS Certification: Biogas appliances must meet KS 2566-1:2015 efficiency and safety standards.
- For systems under 12 m^3/day, Laikipia county bylaws may apply additional localized requirements.

b) Waste Water Storage Tanks

Where approval is granted by Laikipia County Government for wastewater storage in a premise, such a tank will be required to have capacity limited to 3,000 litres unless mixing mechanisms or other approved means are available to prevent it from turning septic, as guided by KESHP 2016–2030 sanitation standards and NEMA Waste Management Regulations, 2024 (L.N. 178/2024) on stagnation prevention. NYAHUWASCO will enforce this through site-specific permits aligned with WASREB's Urban Sanitation Guidelines. Compliance with KEBS KS 2951:2022 material standards will ensure structural integrity, and mixing mechanisms require certification by NCA-licensed engineers under National Construction Authority Regulations, 2014.

6.3.3 Storm Water Drainage

The design of road drainage systems, whether open or canalized, should ensure that stormwater drainage systems from developers' discharges are sized to handle at least a 10-year flood event. Additionally, these systems must be designed for ease of maintenance. The Roads Authority responsible for design and construction of road drainages should ensure compliance to design standards as stipulated in the *Kenya Road Design Manual,* 1987. Furthermore, given the size of the proposed roads, it is advisable for designers to adopt a covered drainage system. This approach provides a safe and secure drainage solution for road users. Figure 6-5 is an illustration of a covered drainage system. This type of drainage is easy to clean in case of blockage as the covering lid is movable.

Figure 6-5: Sample of a covered roadside drainage system

6.3.4 Solid Waste Management

Waste collection will be conducted at the plot or household level, with the County Government of Laikipia retaining overall responsibility for garbage consolidation, transportation, disposal, and solid waste management under the Environmental Management and Co-ordination (Waste Management) Regulations, 2024 (L.N. 178/2024). For hazardous substances, the prohibition against discharging chemicals, oils, or hazardous mixtures into water systems or the environment now requires compliance with:

- Water Quality Regulations, 2006 (L.N. 121/2006) for legacy water quality standards.
- Water Resources Regulations, 2021 (L.N. 170/2021 as amended) for water use permits and discharge controls under the Water Act, 2016.
- Sustainable Waste Management Act, 2022 and its Extended Producer Responsibility (EPR) Regulations, 2024 (L.N. 176/2024) for product lifecycle management, which mandate producer responsibility for hazardous material containment and disposal.

The 2024 Waste Management Regulations introduced a national color-coding system for waste, enhanced licensing requirements, and integrated EPR obligations for producers.

Plate 6.1: Waste collection bins

6.3.5 Street lighting

This plan proposes security enhancement and personal safety through installation of streetlights along the access roads and/or flood lights.

Table 6.4: Security lighting installation

Category	*Physical and Land Use Planning Handbook 2025 – Coverage*	Coverage
High mast	-	• 20 metres high mast; 80metres radius = 1 in 5 acres (1 in 2ha) • 30m high 150m radius= 1 in 17 acres • 40 metres high mast; 230 metres radius= 1 in 41 acres (1 in 16 ha)
Streetlights		1 in every 30-40m

6.3.6 Electricity supply networks

As evidenced in the settlement, there are low and medium voltage lines of overhead cables. The power lines networks are largely placed along the access routes. It is notable that if not well placed, electricity lines can cause great safety risks. Therefore,

the following basic guidelines will be crucial in ensuring safety of the residents against power network hazards. Figure 6-6 presents the prototype illustration.

Table 6.5: Overhead powerline cables standards

Voltage (kv)	Height (M)	Clearance from buildings (m)
Low voltage	4.5	2.0
11	5.5	2.7
33	6.1	2.9

Source: Extracted from Street Design Manual for Urban Areas in Kenya, 2022

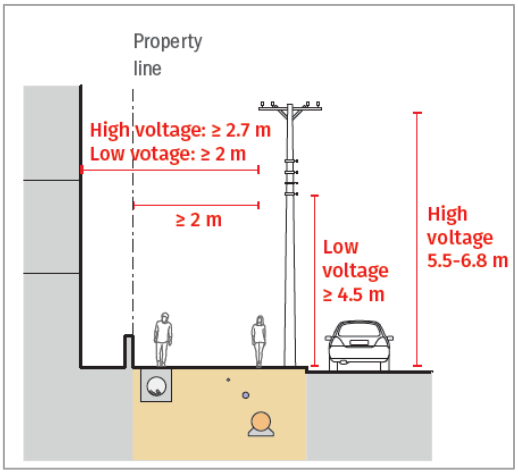


Figure 6-6: Overhead powerline cables installation illustration

Source: Street Design Manual for Urban Areas in Kenya, 2022

6.4 Building Setbacks Building Lines

The setbacks refer to the minimum required distances between a building (or any structure) and the property boundaries (front, rear, or sides). Setbacks aim to ensure privacy, fire safety, and adequate space for infrastructure installations such as drainage and water reticulation. However, setbacks are not uniform, i.e., they differ in size depending on whether they are from the frontage, rear, or other sides. The recommended minimum setbacks (Physical and Land Use Planning Handbook 2025) are presented in Table 6.6. This promotes compliance with zoning regulations, balancing aesthetic and functional aspects.

Table 6.6: Minimum setbacks

	Low Density (m)	Medium Density (m)	High Density (m)
Front	6	6	3
Side	3	2	2
Rear	6	4	2

The building lines are defined as lines prescribed by the approving authority on either side of a road beyond which no building abutting the side shall traverse (Building

Code, 2024). Building lines enhance safety, provide room for road expansion, among other benefits. The code provides that:

a) Where roads range between 6m-18m in width, the building line shall be 6m.
b) For an existing road with less than 6m wide. Where the width of an existing street in front of any new building is less than 6m, no part of such building shall be nearer to the centre line of the street than 3m.

This project is being carried out in an informal settlement, whereby the conventional standards cannot be fully applied due to the uneconomical nature of parcels. However, in this case, this project has achieved road widths of between 4.5m, 6m, 9m, 12m and foot paths of 3m. Therefore, the project proposes the following access frontages:

a. 4.5m wide, a building line of 1.5m is observed.
b. 6m wide, a building line of 2m is observed.
c. 9m wide, a building line of 3m is observed.
d. 18m wide, a building line of 6m is observed.

6.5 Development Applications

Given that the plan has designated various zones, it is anticipated that some beneficiaries would make various development applications, i.e., change of use, extension of use, renewal of lease, subdivision, and amalgamation

6.5.1 Subdivision and Amalgamations

This plan does not advocate for subdivision in the future, considering the uneconomical nature of a significant number of parcels. However, relatively economical parcels will be permissible for subdivision, with the subplots having a minimum of 450 square metres. Amalgamation of contiguous plots will be encouraged to promote development on economically viable plots. Where applicable, the surrender (e.g., access road) of land for public use will necessitate a transfer from private to public. The developer shall prepare a subdivision or amalgamation scheme in accordance with the provisions of the Third Schedule (7) to the Physical Planning and Land Use Act, 2019.

6.5.2 Change of use

Since the plan has established various zones, it is expected that some beneficiaries may wish to alter the designated uses of the plan. Consequently, this will necessitate the submission of a change of use application to the County Government of Laikipia. The application will need to be considered in accordance with the provisions of the plan. It is important to ensure that the change of use process is completed, resulting in the issuance of a new lease certificate that reflects the new use. Notifications regarding the application and feedback from any interested parties will be crucial in the approval process for the change of user application.

6.5.3 Extension of use

The extension of user of land refers to the process by which land use rights are expanded or modified to accommodate new activities or developments. This can involve changes in zoning laws, or the development of infrastructure that allows for more efficient use of land resources. As urban areas grow and populations increase,

the need for effective land management becomes crucial. Stakeholders, including government agencies, landowners, and community members, must collaborate to ensure that land use extensions are sustainable and beneficial for all parties involved. This approach enhances land productivity. In this plan, this will be applicable within the residential area where some owners may want to extend use of their parcels to commercial. Such shall apply for approval from the County Government of Laikipia.

6.6 Tenure options

The plan proposes Adaptive Option as the best planning option towards provision of security of tenure in Sipili A settlement. Under this option, and as extensively elaborated in the preceding sections, the current settlement structure has been retained, with minimal physical improvements that include realignment of the roads network. In the context of tenure regularization in Sipili A, the Land Act 2012, sec. 9 provides for conversion of land categories from one form to another and the KISIP2 project aims facilitating of conversion of this Public Land to Private land rights under Leasehold to individual proprietors.

Based on this option, the tenure option to be applied is individual title as all resultant parcels are above 100m². Leasehold tenure involves granting occupants the right to use the land for a specified period, often long-term (99years), while recognizing their right to transfer, sublease, or mortgage the land within the terms of the lease.

Table 6.7: Leasehold Tenure Pros and Cons

Type	• Advantages	• Disadvantages
Certificate of Lease	• Proprietor can apply for extension or renewal of lease before the lease term expires. • Under special cases, the leaseholder can have 'Peppercorn' rent terms.	• Property owned within the registered specific period of time. • Comes with conditions such as the land rate or rent payment and land use permitted. • The lessor retains the rights to renewal or extension of lease.

6.6.1 Individual Title

The parcels registerable for individual titling under this project must attain a minimum of 100 square metres. Section 24 of the Land Registration Act 2012 provides that a person can be registered as a proprietor of a parcel of land and will be conferred the applicable interest (freehold or leasehold). Further, Section 91 states that two or more people can own land under joint tenancy. This will apply to spouse registration, family, or individuals with common interests. Under ***joint tenancy***, no tenant will be entitled to any separate share in the land. Dispositions on the subject parcel will only be made by all the joint tenants. On the death of a joint tenant, that tenant's interest shall vest in the surviving tenant(s) jointly.

6.6.2 Group Titling

In cases of uneconomical parcels that are unregistrable, they will be consolidated with abutting parcels to meet the minimum acreage for titling under this project. This will be done in line with section 91 of the Land Registration Act 2012, which provides for registration of land under ***tenancy in common***. Under the group titling option, each

tenant (beneficiary) shall be entitled to an undivided proportionate share of the whole consolidated property. The Act further provides that upon the death of a common tenant, the deceased's share shall be treated as part of their estate. On the proof of registration documents, section 92 provides that each co-tenant (beneficiary) of land will be entitled to receive a copy of the certificate of title of that land.

6.6.3 Conclusion

The viable tenure option in Sipili A is individual titles since all the resultant parcels in Sipili A are above 100m² as per KISIP2 standards.

Table 6.8 has detailed the tenure options application in Sipili A.

Table 6.8: Sipili A Titling Options

Titling Option	Form of tenure	Number of Parcels	Remarks
Individual	Private Ownership	190	These will be registered to the respective individuals as per resultant LoB
	Public	1	This will be registered under the county government
	Organization/church	3	This will be registered under the respective organizations
	Unenumerated parcels	48	This will be registered under the county government
Joint tenancy (couples, siblings etc.)		29	These will be registered to the respective individuals (Maximum of four per parcel) as per resultant LoB

7 STRATEGIC ACTIONS FOR REGULARIZATION

7.1 Immediate Strategic Actions

This chapter outlines the strategic actions to operationalize the Sipili A LPLUDP. The plan was adopted by the community, the County Executive Committee, and the Assembly committee in charge of lands and physical planning, the County Government of Laikipia. Consequently, the plan will be approved by the Members of the County Assembly of Laikipia County. Each strategic action is aligned with relevant legal frameworks and policy guidelines.

7.1.1 Verification of Structure Owners

The primary objective of the project is to facilitate tenure regularization for residents within the settlement. Following the physical mapping and socio-economic survey carried out in January 2025, a preliminary list of beneficiaries was generated. This list has undergone preliminary and final verification processes as discussed in sections 3.10 and 3.16 respectively. During the final phase, verified beneficiaries were issued project identification cards containing their name, national ID number, and corresponding structure number. Upon project completion, KISIP and NLC will conduct an independent verification to authenticate the beneficiaries who will be issued with land rights.

7.1.2 Land Survey

The aim of this exercise will be to implement the approved Sipili A plan through cadastral surveying process which shall involve beaconing of the resultant plots. This will be a crucial exercise towards tenure regularisation through titling process.

The cadastral survey process shall begin with the placement of beacons on the resultant parcels and proposed roads within the settlement. This is to ensure that all boundary markers are accurately positioned in compliance with the approved plan. Beneficiaries shall participate in the verification of the beacon placements through physically inspecting the locations and signing beacon certificates to confirm acceptance and accuracy of the fieldwork. Survey field notes, computations, and survey plans shall be carefully compiled after the beaconing process so as to ensure that all relevant data is organized for submission and further processing.

The compiled survey data shall be submitted to the Department of Surveys (DoS) for authentication. This shall involve review and validation in accordance with the provisions of the Survey Act and its regulations. Once authenticated by the DoS, the survey plans shall be integrated into the Registry Index Map (RIM). This amendment

shall solidify the updates, ensuring all parcels and roads are officially recorded as per the approved plan.

7.1.3 Structures Affected by Plan and Project Affected Persons (PAPs)

Effects on structures were largely caused by realignment of roads. In an attempt to motorize and open up the settlement, 47 structures were partially affected. Further details of these structures will be provided in the ESMP report. KISIP2 project aims at creating zero or minimal number of PAPs. However, with the project taking place post development, it is impossible to avoid creating PAPs. The owners of the structures affected by the prepared plan became the Project Affected Persons (PAPs), and they will be subjected to a census survey by the ESMP/RAP expert.

7.1.4 Valuation of Structures and Evaluation of Losses

A comprehensive evaluation of the affected structures will be undertaken, including the usability of the structure, to assess the nature of losses that will be caused to the structure owner. For example, if the structure affected is rental property, it will be evaluated on the expected rental income loss to the structure owner and if for commercial purposes, the loss of income that will be incurred. This final ESMP report will be handed over to the County Government of Laikipia for implementation as stipulated in the KISIP2 participatory agreement.

7.1.5 Facilitation Strategy

The project's implementation on public land negates land value compensation. However, affected persons will receive a facilitation amount calculated through detailed valuation to cover structure readjustment or removal costs. This includes material and labor expenses for reconstruction, as well as income loss restitution where applicable.

7.1.6 Recession of Affected Structures

During the cadastral surveying, beacons will be placed as per the approved settlement plan. Thus, upon payment of the required facilitation as per the ESMP/RAP recommendation, the PAPS will be given a period of time upon which they will be required to do all the recession as informed.

7.2 Transportation Improvement Strategy

Generally, Sipili A has a well-structured transport network comprising main access roads ranging from 9 to 25 meters wide and rear service lanes about 6 meters wide. Some of the access roads on the eastern side are already tarmacked, contributing to generally good motorability throughout the settlement. These access corridors serve multiple secondary functions beyond transportation. They accommodate utility infrastructure such as water, sewer, and electricity lines, and also hold drainage channels. Some roads already support roadside auxiliary services, reflecting an integrated approach to infrastructure within the settlement. However, some dirt access roads or service lanes are narrow, and some have irregular widths.

As part of this project's objectives, the plan has enhanced connectivity through realignment and improvement proposals for the transport networks. Similar projects have shown that realigning access roads can have a significant impact on informal settlement planning. However, this process was complicated by irregular construction of structures along some access roads. To address these challenges, creating an accessible settlement was essential, and the related impacts will be mitigated through the preparation of an Environmental and Social Management Plan (ESMP).

7.3 Physical Infrastructure Strategy

The LPLUDP has established an accessible settlement framework, prioritizing the realignment of accesses to enhance connectivity. The plan recommends strategic actions such as coordinated placement of stormwater drainage systems, non-motorized transport (NMT) lanes, and bus stops along the access roads, alongside greening of road reserves and installation of streetlights to improve transport efficiency and safety. For adequate water provision, the plan recommends installation of a piped water reticulation system by NYAHUWASCO to minimize overreliance on ground water. For sanitation, onsite waste management plans (with bio-digesters as the preferred solution) are recommended, while a conventional sewer system is proposed for long-term sustainability. Energy transition strategies emphasize solar power adoption and cleaner cooking fuels to align with climate-resilient urban development goals.

7.4 Social Infrastructure Strategy

Social infrastructure provision is fundamental to ensuring a livable settlement. The existing public primary and secondary schools located outside Sipili A's boundaries serve as a vital foundation, but anticipated population growth among school-age children necessitates forward-looking strategies. To address this, Sipili A's development plan proposes: vertical densification of existing classrooms to optimize space efficiency, construction of additional classrooms to expand capacity, and recruitment of more teachers to maintain quality education standards. The plan also prioritizes upgrading sanitation facilities to meet health requirements and enhancing the school playground to improve recreational infrastructure. Together, these measures aim to sustainably accommodate future educational demands while fostering a safe and enriching environment for students.

Majority of the residents of Sipili A currently rely on the public Sipili Health Centre, located outside the settlement's boundary for health services. The LPLUDP recommends vertical expansion of the healthcare facility to optimize space, alongside increased drug supplies, additional staffing, improved sanitation infrastructure and improved maternity and pediatric services. The plan has enhanced accesses to facilitate efficient transportation networks for ambulances and medical supply chains, ensuring reliable service delivery. For recreational purposes, the plan has provided designated recreational areas.

7.5 Housing Strategy

The plan has designated residential use as the third largest portion of land within the settlement, reflecting the need to accommodate the growing population of Sipili A. Upon tenure regularization, beneficiaries will have the flexibility to redevelop their parcels either individually or collectively, depending on the tenure arrangements for each parcel. Section 6.2.1 of the report outlines potential building densities for vertical housing developments, which aim to increase housing units without encroaching on land allocated for other uses. Vertical expansion is a key strategy for optimizing limited space while addressing housing demand.

To ensure functionality and sustainability during redevelopment, developers are required to provide onsite parking within their parcels, minimizing congestion and improving accessibility. Additionally, the LPLUDP recommends that they explore sustainable housing solutions that incorporate environmentally friendly construction methods, such as the use of low-carbon materials and circular economy approaches, to reduce environmental impact while ensuring affordability for low-income households. The plan also emphasizes the importance of incremental housing improvements, allowing residents to build and upgrade their homes gradually based on their financial capacity. In addition, the plan endorses integrating infrastructure improvements, such as a conventional sewer system and bio-digesters for waste management, alongside sustainable energy sources like solar power and cleaner cooking technologies.

There is a zone experiencing groundwater seepage in Sipili A, as illustrated is section 4.2.3. The LPLUDP recommends that development be prohibited in zones with groundwater seepage due to their environmental sensitivity and the significant risks posed to both people and water resources. However, recognizing that immediate evacuation is not feasible because of existing settlement, the LPLUDP sets out a series of pragmatic guidelines to manage land use and development in these areas.

First and foremost, the LPLUDP requires that any major development, including buildings and infrastructure such as roads, must be preceded by a comprehensive hydro-geotechnical survey. This survey is essential for understanding subsurface conditions, groundwater flow, and soil characteristics, and must inform all responsive engineering designs. The results of these surveys will ensure that areas with the highest risk of seepage are clearly identified and that development in these zones is minimized or carefully controlled. Construction in these zones should incorporate specific engineering measures such as damp-proofing and the use of raised foundations, with the exact specifications determined by site-specific geotechnical data. Subsurface drainage systems are also strongly advised, including the installation of French drains along building foundations, interceptor drains upstream of vulnerable areas, and vertical drainage wells due to the high-water table. These measures help intercept and redirect groundwater, reducing the risk of dampness and structural instability. Additionally, the LPLUDP emphasizes the importance of training and capacity building for local residents and construction workers. By equipping them with knowledge of building techniques that address dampness and

enhance drainage, the community can better manage the challenges posed by groundwater seepage.

7.6 Livelihood Improvement Strategy

To improve the livelihoods of the people of Sipili A, the plan has proposed a commercial zone and mixed-use zone, establishing formalized spaces within the settlement for vendors to operate to improve their working conditions and attract more customers. In the proposed mixed used development zone, permittable commercial and light industrial uses should be compatible with residential function. This would include supermarkets, wholesale and retail shops, salons & barber shops, grocery shops, milk bars, wood workshops, among others. Uses that are incompatible with residential function such as noise generating businesses are considered to be in conflict with the social and human well-being of the residents and should therefore be prohibited. This would enable integration of commercial with other compatible land uses to revitalize the economic activities within the settlement. The plan also improves the livelihoods of the residents by outlining strategies to provide basic infrastructure such as water, electricity, and sanitation in areas where businesses operate to enhance productivity and ensure compliance with health standards.

7.7 Environmental Protection Strategy

The development plan for Sipili A Settlement proposes a comprehensive environmental management strategy. One key aspect is the adoption of an onsite liquid waste management system, focusing on the installation of biodigesters as a sustainable alternative to pit latrines. Pit latrines pose significant risks to underground water sources through pollution, particularly in densely populated areas. Biodigesters not only mitigate contamination but also promote environmental sustainability by converting waste into usable biogas. To address the issue of indiscriminate solid waste disposal, the plan proposes a comprehensive solid waste management system, including strategic placement of waste receptacles and regular collection of waste by the county.

The lack of proper stormwater drainage systems along the service lanes has led to the formation of natural waterways that damage structures and degrade the environment. Stagnant stormwater also contaminates groundwater, resulting in waterborne diseases. To address these challenges, the plan has realigned access roads to improve connectivity and facilitate the installation of stormwater drainage channels. These channels will manage runoff effectively, reducing the risk of flooding and environmental damage. Furthermore, greening initiatives along roads are proposed to enhance urban aesthetics and improve environmental quality. Developers are encouraged to incorporate green spaces within their plots to support ecological balance and mitigate the urban heat island effect.

The prevalent use of charcoal for cooking poses threats such as deforestation and harmful indoor air pollution. As part of a sustainable energy strategy, the plan advocates for integrating cleaner energy technologies, such as solar cookers, biogas, and improved stoves. These measures aim to enhance public health outcomes while

reducing environmental degradation. By promoting cleaner energy sources, the plan aligns with global efforts to combat climate change and improve air quality in urban areas.

A persistent challenge in Sipili A settlement is groundwater seepage that is most severe during the rainy season. The high-water table leads to the infiltration of water into homes, creating damp conditions and affecting the quality of life. This challenge also impacts sanitation, causing pit latrines to fill rapidly, becoming unsanitary and threatening groundwater quality. To address the sanitation challenge, the plan proposes onsite sanitation methods such as biodigesters to improve living conditions and public health. To tackle the issue of groundwater seepage, the plan proposes strategies such as diverting surface water away from the foundation using channels or berms and installing drainage systems to redirect water from the seepage area. However, these measures only provide temporary relief and may necessitate long-term solutions, such as comprehensive foundation waterproofing or upgrades to the drainage system, to fully resolve the problem. Furthermore, the plan recommends a hydro-geotechnical survey to determine the optimal foundation depth for the houses, thereby ensuring stability and structural integrity.

8 IMPLEMENTATION FRAMEWORK

8.1 Overview

The implementation of Sipili A's LPLUDP has been bestowed on Laikipia County Government. However, the successful implementation of the plan and its associated strategies is highly dependent on the goodwill and ability of the County Government, private entities, government agencies and the settlement's residents to adapt and adhere to the development management strategies and standards. This includes coordination among institutions with sound legal frameworks and financial frameworks with resources to facilitate the implementation process. This chapter highlights the objectives of implementing the plan, possible implementation opportunities and challenges. It further details out the actors required for the implementation of the plan and the roles each actor would play. The chapter finally gives an implementation matrix which details out what needs to be done, who needs to do it (actors) and suggests an implementation time frame of the proposed projects and programs.

8.2 Implementation Objectives

i. To lay out clear measures for dissemination of plan information, capacity building, public participation and monitoring & evaluation.
ii. To establish an effective planning implementation system for the proposed projects and programs.
iii. To assign roles to the various stakeholders including the National and County government departments, CBOs, the community and other stakeholders in implementing the plan.

8.3 Implementation Opportunities

(i) Goodwill from the key stakeholders (National Government, Laikipia County Government, local political and administrative leaders and the community of Sipili A settlement) are in support of the objective of this project.
(ii) Issuance of tenure security would attract potential investors.

8.4 Possible Implementation Challenges

i. The project has taken place post development, therefore, the built-up nature of the settlement limits planning interventions.
ii. Resources and funding in the event of future redevelopment.

8.5 Projects Classification

8.5.1 Quick Wins

Quick wins are defined as projects/programmes to be achieved immediately after plan approval. These will act as catalyst with high visibility and impact using minimal

resources to trigger the confidence/trust of the executive in the eyes of the citizens and stakeholders. They also require low up to zero funding. Some of the proposed projects considered as quick wins in this Plan include:

i. Implementation of the plan through cadastral surveying process
ii. Implementation of the ESMP and RAP
iii. Opening up of roads and access to properties
iv. Issuance of ownership documents (titles) to the beneficiaries.
v. Setting of up plan implementation committees within the settlement.
vi. Training of staff on the details of the plan for decision making.
vii. Sensitizing the public on the plans.
viii. Enhancing neighbourhood security through quick measures as stipulated in the implementation matrix.
ix. Formulation of waste collection schedules.
x. Provision of sizable waste receptacles within the settlement.
xi. Preparation and maintenance of updated water, sanitation and energy demands and supply inventories.
xii. Establish a system of scrutinizing development applications for approval, supervision and enforcement of development. The LIS system will be very instrumental in development applications.

8.5.2 Continuous Projects

Continuous projects include those developments/actions that are routine and, therefore, require continuous implementation**.**

i. Monitoring and evaluation of plan implementation progress.
ii. Sensitizing, creating awareness and public education to the community on matters of the plan and planning in general.
iii. Scrutinizing of building applications.
iv. Daily sweeping, street cleaning and emptying of waste receptacles in the settlement.
v. Promote use of sustainable source of energy such as solar in the house holds.
vi. Development control within the settlement.
vii. Ensure approval of developments that conform to the proposed land use zones.

8.5.3 Short-term projects

The short-term projects comprise of those that are to be implemented within a year to 3 years. These projects are based on stated preference/importance from the situational analysis. In most cases, these projects act as catalysts paving way for other lengthy projects (mid-term and long term) to take effect. Short term projects in here, will include:

i. Issuance of security of tenure
ii. Planting of greeneries for aesthetics
iii. Siting of waste receptacles at strategic places within the settlement
iv. Removal of structures off the access paths.

8.5.4 Midterm Projects

Medium term projects are those projects that are intended to be achieved between 3-5 years. They require more time, financial, human and material resources to implement, than short term plans. The five-year maximum period has been used as a reference which signifies the lifespan of single term under county government jurisdiction (before any substantive management structure changes) according to the Constitution of Kenya (2010). Therefore, most of the projects phased under short and medium terms can be implemented within one tenure of a county government. Medium term projects in here, will include:

i. Improvement of infrastructure and utility services i.e. sanitation, water and drainage systems
ii. Paving of internal roads (use of Cabro)
iii. Installation of flood and streetlights to boost security.

8.5.5 Long Term Projects

According to this plan, the long-term projects will last more than five years until the end of the planning period, which is up to the year 2035. These are largely construction and infrastructural projects that require heavy financial investments. Thus planning, budgeting, undertaking feasibility studies, laying out of design work and sourcing for funds require relatively lengthy time compared to other proposed projects. In this project, this will include:

i. Densification of the neighbouring social facilities
ii. Total redevelopment of the settlement.

8.6 Mechanisms for Implementation

8.6.1 Creation of Awareness

Plan development and implementation require public awareness to foster adoption and acceptability of the plan. Therefore, creating awareness of Sipili A Settlement Adaptive Plan will be a strategic measure to communicate, disseminate information, publicize the plan and make it accessible to the public for readership, review and comments. So far, from the inception stage community mobilization has always been undertaken to foster awareness at all stages of this plan. The law requires that the CECM in charge of physical planning at the county government advertises the plan in local media before the preparation begins and upon its completion for comments.

The following measures were used during this process;

i. Promoted and ensured access to public platforms or meeting venues - from the outset, community mobilization was conducted to raise awareness at every stage of this plan through posters, public announcements in the settlement, door-to-door outreach by the SEC team, SMS, direct phone calls, and emails to the technical teams.
ii. Conducted public meetings through “Barazas” and workshops for information dissemination - several public Barazas were organized with the community

during presentation of socio-economic findings, visioning, participatory planning, presentation of draft plans and the plan adoption. In addition, numerous technical meetings with county officials were held at every phase of the planning process.

iii. Utilized Media Coverage to promote the plan; the CECM in charge of Physical Planning ensured that notices of intention to plan and of the plan's completion were published in at least two local newspapers with national circulation and in the Kenya Gazette.

As a posterity measure:

iv. Plans shall be shared with the community for continued reference and safe keeping.

v. The community shall be mobilized to participate in implementation activities such as cadastral survey and ESMP/RAP implementation

8.6.2 Participatory Plan Implementation

This entails stakeholder involvement, to assist practitioners in the plan implementation. It focuses on maintaining the stakeholder's involvement and organizing joint decision-making throughout the whole delivery process of policies and action plans, to ensure the successful delivery of the Sipili A settlement plan.

(i) Popularize the Sipili A settlement plan.
(ii) Build collaboration with monitoring and evaluation processes.
(iii) To ensure accountability and transparency in resource mobilization for the proposed projects.
(iv) Develop partnerships for plan implementation.
(v) Play public watchdog role.

8.6.3 Capacity Building

Capacity building entails the course of mounting, enhancing and strengthening the skills, instincts, abilities, processes and resources that organizations and communities need to survive, adapt, and blossom in the fast-changing environments. Capacity building unwraps capacity obstacles that might inhibit plan implementation overtime and polishes them in enabling achievement of measurable and sustainable results from plan proposals.

8.6.3.1 Measures of approach

A. **Individual level:** Sensitizing, creating awareness and public education to the Sipili A community to educate them more about the importance of the plan and proposals therein. So far, from the project inception phase to the adoption of the LPLUDP, the Consultant has ensured that the process has been very transparent, consultative and participatory by all the stakeholders, and especially the affected community.

B. **Institutional level:** Training of Laikipia County staff on the use of the plan for decision making; and equipping the service departments with tools deemed necessary to implement the plan proposals.
C. **Societal level:** Establishment of settlement upgrading planning committees and residential development committees/associations.

8.7 Development Control and Land Use Regulations

Development of local planning policies and the determination of individual planning applications are important, in the implementation of this plan. The plan gives broad zoning standards and guidelines that ought to be supported by the county bylaws. The following three key sectors are important in this undertaking:

A. Land Information System
B. Enforcement and execution sector – Sub County Planner
C. Policy sector – CEC and CEO

a. Land Information System

(i) Store and manage digital land information of the settlement. The LIS to be prepared packaged will contains all the settlement's raw data with all fields as per the Client provided data dictionary. This will be important information in development control, sharing of settlement information with other project components and in facilitating efficient and accurate access to land information.
(ii) The LIS will also contain an updated physical address system in the settlement to enhance revenue collection.

b. Enforcement and execution sector

This sector should oversee the following aspects in the settlement:
(i) Enforcement of planning standards and regulations.
(ii) Building database on information generated from sites and buildings inspection.
(iii) Site inspection.
(iv) Receiving and processing development applications.
(v) Ensure adherence to the land use plans and any other regulations.
(vi) Inspection of buildings.
(vii) Coordinate land and development related dispute resolutions.

c. Policy sector

This sector will be in charge of the following aspects in the settlement:
(i) Undertake research and development in land use matters.
(ii) Undertake internal monitoring and evaluation.
(iii) Formulate / update settlement specific policies in land use planning.
(iv) Preparation and implementation of action plans.
(v) Coordinate formulation of settlement specific land use laws and by-laws.

8.8 Actors and their roles in Implementation of Sipili A Settlement Plan

This section enlists various actors and their roles in financial and technical inputs for successful implementation of proposed projects and programs entitled proposed in this plan. Specific actors and their respective roles include:

Table 8.1: Actors and their roles

No	Category	Actor	Role of the Actor
1:	Ministry of Lands, Public Works, Housing and Urban Development	KISIP NPCT	• Take lead role in processing and issuance of title deeds • Take a lead role in the plan implementation through cadastral survey and oversight on ESMP/RAP implementation
		National Director of Physical Planning	• Undertake capacity building and technical support to the county on planning matters
		Director of Surveys	• Authentication and Approval of the settlement survey plan • Produce and maintain plans of the property boundaries in support of land registration • Amending the Registry Index Maps and preparation of area lists.
		Land Registrar (Department of Land administration and Land registration)	• Processing and issuance of ownership documents of the surveyed and verified plots within the settlement • Custody and maintenance of Land information system of the cadastre - responsible for recording
		National Land Commission (NLC)	• The constitution mandates the National Land Commission to monitor and undertake oversight roles over land use planning in the country. This would include the planning area • Review the List of Beneficiaries • In liaison with the county government of Laikipia, manage resultant public subplots on behalf of the County government.
2:	County Government	County KISIP Coordinating Team	• Implementation of the plan • Updating the plan on the GIS platform • Ensure timeframe provided in the planning framework is adhered to
		County Executive Committee Member	• Publication of the intention to plan

			• Publication of notice completion of plan • Forwarding the plan for approval by the county assembly • Responsible of amending and review of the plan
		County Director of Lands & Physical Planning	• Ensuring adoption and implementation of the approved LPLUDPs by the County • Communicate the decisions of the county governments on development applications • Issuance of development permission and other development control permissions
		Sub County Planners	• Implementation of the resultant LPLUDPs • Vetting, verifying and approval of development application plans (building plans, subdivisions); site inspection to establish suitability of proposed development; development control. • Facilitation and coordination of citizen participation in the development of policies and plans; responds to relevant county chief officer (County Government Act, 2012 sec. 50).
		Sub County Environmentalist	• Shall enforce environmental regulations within the settlement. • Shall ensure protection of natural resources within the settlement. • Shall provide an enabling environment for the implementation of the proposed environmental projects. • Shall supervise and advise on applications for environmental impact assessments and environmental audits as provided in EMCA, 1999.
		County department of public works	• Shall oversee infrastructure projects such as roadworks and public transport systems

		County department of housing and urban development	• Shall manage housing developments • Shall act as facilitators, linking resources and expertise to the implementation of the plan
3:	Area local leaders	Ward Administrator, Chief and Sub-chief	• Take lead watchdog role of implementation of the plan on behalf of the community • Ensure local mobilization for plan implementation • Safeguarding public land and public facilities • Disseminate planning information to the locals through village Barazas
4:	The Public	The people/residents of the settlements	• Take overseer role to ensure implementation of the plan takes care of their proposals and addresses their plan vision • Monitor developments within their neighbourhood • Comment on public notices on proposed developments • Participate in voluntary services and planning • Safeguarding parcels designated for public use

8.9 Capital investment plan

The Capital Investment Plan (CIP) is designed to guide the allocation of resources towards infrastructure and development projects that will drive economic growth and improve the quality of life for residents of Sipili A. The plan prioritizes projects that align with the county's long-term vision of sustainable development, with a focus on enhancing public services, expanding economic opportunities, and promoting environmental sustainability. The CIP aims to lay a solid foundation for the settlement's future prosperity by systematically investing in key areas.

The CIP entails the proposals made within this plan and discussed throughout this report. These projects are in line with the community's desired vision, ***'To become a well-connected economic hub.'***

To implement these projects effectively, the CIP recommends resource mobilization and strategic partnerships. Recognizing that the available county funds may be insufficient to fully realize the proposed projects, the plan advocates for leveraging additional funding sources, including Public-Private Partnerships (PPPs), grants, and donor funds. This approach shall help bridge the resource gap and ensure the successful execution of the CIP, ultimately leading to the achievement of the settlement vision. The projects include:

Table 8.2: Capital investment plan

Sector	Project	Project Location / Site	Project Unit / Quantity	Estimated Total Costs (Ksh.)	Actors
Public utilities	Procurement and placement of waste receptacles	Designated areas within the settlement	5 receptacles	250,000	County government of Laikipia
	Installation of security lights	Along the main roads	186 posts (At an interval of 50m)	9,300,000	County government of Laikipia
	Development of water infrastructure	Along the main roads	6728.2m (total length of the 9, 12, 15, 18, 20 and 25m roads)	5,000,000	County government of Laikipia
Transport	Removal of structures obstructing access paths.	Along the proposed roads	9280m (total length of all roads within the settlement)	500,000	Sipili A community County government of Laikipia
	Paving of internal 4.5m and 6m roads using Cabro	Along the 4.5m and 6m roads	2551 (Total length of the 4.5m and 6m roads)	127,550,000	County government of Laikipia
	Tarmacking of the 9, 12, 15, 18, 20 and 25m roads	Along the proposed 9, 12, 15, 18, 20 and 25m roads	6728.2m (total length of the 9, 12, 15, 18, 20 and 25m roads)	175,637,267	County government of Laikipia
Commercial	Construction of the open-air market	Construction of the open-air market	0.43 ha	2,000,000	County government of Laikipia Investors
Total				**320,237,267**	

8.10 Plan Implementation Matrix

Table 8.3: Plan Implementation Matrix

1. Residential						
Problems	**Objectives**	**Strategy**	**Projects**	**Actors**	**Phasing**	**Time lines**
Settlement Informality	-To upgrade and improve the living conditions. -To enhance livability in the settlement.	-Enhancing security of tenure. -Preparation of a development plan. -Enforcement of planning standards.	-Issuance of title deeds.	KISIP NPCT Plot Owners Donors Laikipia County Government Community	Quick win/ Short term	0-5 years
			Improve infrastructure (sanitation, water and drainage connections).		Medium to long term	5-10 years
Low rise developments	-To improve the living conditions of the inhabitants.	-Incremental housing redevelopment.	-Building of new houses (Adopt better housing typologies). -Mixed use developments.	-Plot Owners/Developers -Laikipia County Government	Long term	5-10 years
2. Transportation Sector						
Problem	**Objectives**	**Strategy**	**Projects**	**Actors**	**Phasing**	**Timelines**
Narrow service roads and roads with irregular widths	To improve connectivity in the settlement.	-Realignment of roads.	-Realignment and opening up of the existing informal accesses. -Removal of structures encroaching into these accesses.	– Local Community – Laikipia County Government	Short Term	0-5 years
Unpaved roads	To upgrade the road infrastructure.	-Upgrading of the roads.	-Tarmacking of all roads. -Improve roadside drainage systems. -Integration of NMT. -Installation of street lighting.	– Local Community – Laikipia County Government – Kerra – KURA	Medium-long term	5-10 years
3. Economic Sector						
Problem	**Objectives**	**Strategy**	**Projects**	**Actors**	**Phasing**	**Timelines**
Overreliance on informal and subsistence economy	To improve the community livelihoods.	Creation of employment and income generating opportunities.	Entrepreneurial and technical skills training.	Investors/Business community Laikipia County Government Community groups	Short-long term	0-10 years

			Encourage labour intensive community works. Establish mixed use developments.			

4. Physical Infrastructure						
Problem	**Objectives**	**Strategy**	**Projects**	**Actors**	**Phasing**	**Timelines**
Lack of sewerage system	To enhance waste water disposal mechanisms	Encourage the use of sustainable onsite sanitation.	-Installation of onsite sanitation mechanisms.	Developers Community groups Laikipia County Government	Short - medium term	0-5 years
		Development of trunk sewer system.	-Undertake feasibility study for incorporation into the sewerage trunk system. -Layout sewer network to plot levels.	Laikipia County Government Laikipia Municipal Board Community groups	Medium- long term	5-10 years
Inadequate solid waste management	To sustainably manage solid waste.	Apply Reduce, Reuse and Recycle methods of waste management.	-Siting of waste collection receptacles within the settlement. -Using community groups for waste collection.	-Community -Laikipia County Government -Youth groups	Short - medium term	0-5 years
Inadequate water supply	-To ensure availability and sustainable water supply.	- Augmentation of the existing water supply.	Installing water reticulation to plot/household level.	-Community/ developers - NYAHUWASCO -Laikipia County Government -Donors	Short-medium	0-5 Years
5. Social Infrastructure						
Problem	**Objectives**	**Strategy**	**Projects**	**Actors**	**Phasing**	**Timelines**
Insecurity	To curb insecurity in the settlement.	-Illuminating the streets and other dark areas within the settlement.	-Provision of street lights. -Installation of a flood light.	-Financiers -Laikipia County Government -Community	Short-long	0-10 years

		Neighbourhood policing.				
Lack of health facilities within the settlement	Continued reliance on the neighbouring facilities.	Densification of the existing facilities.	Vertical expansion. Upgrade sanitation facilities. Increase medication. Increase staff. Introduce specialized services.	-Laikipia County Government Ministry of Health -Ministry of Education -Community -Private developer -NGO's and other Financiers	Medium-long	5-10 years
Reliance on neighbouring primary and secondary schools	Continued reliance on the neighbouring facilities.	Densification of existing facilities	Vertical expansion. Addition of classrooms and teachers. Upgrading sanitation facilities.			
6. Land use Management						
Problem	**Objectives**	**Strategy**	**Projects**	**Actors**	**Phasing**	**Timelines**
Uncoordinated land use management	To have a sustainable land use plan	Application of Planning standards in future developments. Livable neighbourhood concepts. Participatory planning.	Preparation and approval of the development plan. Observation of development guidelines (building lines, plot ratios and coverages).	Laikipia County Government Community Donors	Medium-long term	5-10 years
7. Environmental						***8.***
Problem	**Objectives**	**Strategy**	**Projects**	**Actors**	**Phasing**	**Timelines**
Degradation	To conserve and protect the environment.	-Restoration of the lost vegetation cover. -Preparation of EIAs for proposed projects.	-Planting of greeneries along the road reserves and the proposed green belt.	Laikipia County Government -Community NGOs NEMA	Medium-long term	0-5 years
Groundwater seepage	To increase the settlement's resilience against groundwater seepage.	Implement nature-based solutions and infrastructure improvement.	Using waterproof materials and designs. Install drainage systems.	Laikipia County Government Community NGOs NEMA	Medium-long term	0-5 years

		Preparation of EIAs for proposed projects.	Build structures on elevated foundations to protect against seepage.			
9. Recreational						
Problem	**Objectives**	**Strategy**	**Projects**	**Actors**	**Phasing**	**Timelines**
Lack of designated recreational areas	To have a recreational site for the community	-Creating public recreation sites within the settlement	Sharing of spaces with other social facilities such as schools and churches Enhance the designated recreational area e.g. incorporating disability-friendly infrastructure	Laikipia County -Government Community NLC	Short-Medium term	0-5 years

e&G SPATIAL CONSULTANTS LTD
Physical/Spatial Planners | Land Surveyors | Environmental Auditors | GIS Experts

8.11 Monitoring and Evaluation

It's a project management tool to ensure that the developed Local Physical and Land use Development Plan realizes its objectives and the desired end state. M&E will provide response and views from the local community and key government and private sector stakeholders on the extent to which the plan is achieving its objectives and set goals. The table below highlights the main objectives of expected to be realized with M&E tools:

Table 8.4: Monitoring and Evaluation Matrix

Monitor	Evaluate
a) The plan's objectives are understood and clearly spelled out by all the stakeholders.	a) Analyses plans achievements as well as inform why proposed results were not achieved.
b) Links activities, identified actors and their resources to plan's objectives.	b) Assesses specific causal contributions of activities to results.
c) Monitoring will help interpret plan's objectives into performance indicators and set viable targets.	c) Scrutinizes the entire implementation process in totality.
d) Routinely collects data on these indicators, compares actual results with targets.	d) Explores and suggests actions for unplanned eventualities likely to affect the plan's results.
e) Reports progress to managers and alerts them to problems.	e) Delivers lessons, highlights substantial successes or program potential, and offers recommendations for improvement.

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Annexes

Annex 1: Statutory Notices

Notice of Intention to Plan

Gazette notice dated 17th January 2025

128 THE KENYA GAZETTE 17th January, 2025

Total units purchased from hydropower plants with capacity equal to or above 1MW = 279,364,836 kWh.

Total units generated and purchased (G) excluding exports in December 2024 = 1,171,676,722 kWh.

DANIEL KIPTOO BARGORIA,
Director-General.

MR/6520389

GAZETTE NOTICE NO. 507

ENERGY AND PETROLEUM REGULATORY AUTHORITY

SCHEDULE OF TARIFFS 2023 FOR ELECTRICITY TARIFFS, PRICES, CHARGES AND RATES

INFLATION ADJUSTMENT

PURSUANT to Clause 3 of Part III of the Schedule of Tariffs 2023, notice is given that all prices for electrical energy specified in Part II of the said Schedule will be liable to an Inflation Adjustment of plus 40 Cents per kWh for all meter readings taken in Jan-June, 2025.

	INFA Kengen	*INFA IPP*	*INFA KPLC*	*Last Half-Year Period Inflation Costs Under/Over Recovery*	*Total*
Escalated cost	531,563,873.10	704,972,052.05	1,158,361,978.40	(32,276,839.10)	2,362,621,064.96

Total Projected Units Generated or Purchased by the Company (Gp) = 7,201,974,843 kWh

DANIEL KIPTOO BARGORIA,
Director-General.

MR/6520389

GAZETTE NOTICE NO. 508

THE CONSTITUTION OF KENYA

THE COUNTY GOVERNMENTS ACT

(*No.* 17 *of* 2012)

COUNTY ASSEMBLY OF KAKAMEGA STANDING ORDERS

COUNTY ASSEMBLY OF KAKAMEGA

A HYBRID SPECIAL SITTING OF KAKAMEGA COUNTY ASSEMBLY

NOTICE is given to all Members of the County Assembly of Kakamega and the general public that pursuant to Standing Order No. 26 of the County Assembly of Kakamega Standing Orders, a hybrid special sitting of the County Assembly shall be held at the County Assembly Buildings, Kakamega, on Tuesday, the 21st January, 2025, at 2.30 p.m. for the purposes of considering the Kakamega County Draft Valuation Roll, committing papers and reports that have been received from the County Executive and any other message(s) that may arise.

Dated the 13th January, 2025.

JAMES W. NAMATSI,
Speaker, County Assembly of Kakamega.

MR/6520709

GAZETTE NOTICE NO. 509

THE PHYSICAL AND LAND USE PLANNING ACT

(*No.* 13 *of* 2019)

COUNTY GOVERNMENT OF LAIKIPIA

DEPARTMENT OF INFRASTRUCTURE, LAND AND PHYSICAL PLANNING, ENERGY AND URBAN DEVELOPMENT

INTENTION TO PREPARE LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLANS

PURSUANT to the provisions of section 47 of the Physical and Land Use Planning Act, notice is given that the County Government of Laikipia in conjunction with the Ministry of Lands, Public Works, Housing and Urban Development intends to commence preparation of local physical and land use development plans for Maina (Nyahururu), African Location (Rumuruti), Kanyoni and Kwa Mbuzi (Nanyuki), and Umande and Sipili Settlements under the Second Kenya Informal Settlement Improvement project (KISIP2).

The purpose of these plans is to facilitate the conferment/formalization of land tenure for the above-mentioned settlements within Laikipia County through planning and surveying.

The objectives of the plans are to—

(i) facilitate regularization of land tenure security within the selected settlements;

(ii) provide a framework for provision of requisite infrastructure and services; and

(iii) provide basis for development control.

The planning exercise will involve review of relevant policies, regulations and institutional frameworks, community mobilization, sensitization and stakeholder engagement, basemaps preparation, undertaking socio-economic surveys and physical mapping of the settlements, undertake environmental and social impact assessment (screening), preparation of local physical and land use development plans for the respective informal settlements, prepare a social management plan and or a resettlement action plan (RAP), surveying of resultant plots and preparation of survey plans, preparation of detailed topographical survey for engineering designs and preparation of land information system (LIS). This will form the basis for preparation of the plans which aims at improving living conditions in Laikipia County through regularization of land tenure.

The plan preparation will be participatory and the County invites all Stakeholders to the planning process. Stakeholders who wish to make comments or suggestions on the same may do so in writing within 21 days of publication of this notice. Comments or views should be addressed to:

The County Executive Committee Member (CECM),
Infrastructure, Land and Physical Planning, Housing, Energy and Urban Development,
County Government of Laikipia,
P.O. Box 1271–10400, Nanyuki.

Dated the 26th November, 2024.

EKWAM NABOS,
CECM, Infrastructure, Land, Housing and Urban Development,
County Government of Laikipia.

MR/6524441

Standard Newspaper and Taifa Leo dated 19th December 2024

FORM PLUPA L_1 (r.9)

REPUBLIC OF KENYA
COUNTY GOVERNMENT OF LAIKIPIA
DEPARTMENT OF INFRASTRUCTURE, LAND& PHYSICAL PLANNING, ENERGY AND URBAN DEVELOPMENT

PUBLIC NOTICE

THE PHYSICAL AND LANDUSE PLANNING ACT (No. 13 of 2019)
NOTICE OF INTENTION TO PREPARE LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLANS

Pursuant to the provisions of section (47) of the Physical and Land Use Planning Act, 2019, NOTICE is hereby given that the County Government of Laikipia in conjunction with the Ministry of Lands, Public Works, Housing and Urban Development intends to commence preparation of Local Physical and Land Use Development Plans **for Maina (Nyahururu), African Location (Rumuruti), Kanyoni and Kwa Mbuzi (Nanyuki), Umande and Sipili Settlements under the Second Kenya Informal Settlement Improvement project (KISIP2)**

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The objectives of the plans are;
I To facilitate regularization of land tenure security within the selected settlements.
II To provide a framework for provision of requisite infrastructure and services.
III To provide basis for development control.

The planning exercise will involve review of relevant policies, regulations and institutional frameworks, community mobilization, sensitization and stakeholder engagement, basemaps preparation, undertaking socio-economic surveys and physical mapping of the settlements, undertake environmental and social impact assessment (screening), preparation of local physical and land use development plans for the respective informal settlements, prepare a social management plan and or a resettlement action plan (RAP), surveying of resultant plots and preparation of survey plans, preparation of detailed topographical survey for engineering designs and preparation of land information system (LIS). This will form the basis for preparation of the plans which aims at improving living conditions in Laikipia County through regularization of land tenure.

The plan preparation will be participatory and the County invites all Stakeholders to the planning process. Stakeholders who wish to make comments or suggestions on the same may do so in writing within 21 days of publication of this notice. Comments or views should be addressed to:

The County Executive Committee Member (CECM)-Infrastructure, Land & Physical Planning, Housing, Energy and Urban Development
County Government of Laikipia.
P.O Box 1271-10400, Nanyuki.

Dated this 26th day November 2024

Ekwam Nabos
The County Executive Committee Member
Infrastructure, Land, Housing and Urban Development,
County Government of Laikipia.

JAMHURI YA KENYA

SERIKALI GATUZI YA LAIKIPIA
MIDARA YA MIUNDO MBINU, ARDHI NA UPANGAJI WA MIJI, NISHATI NA MAENDELEO YA MIJI
SHERIA YA MIPANGO WA MATUMIZI YA ARDHI, 2019

ILANI YA NIA YA KUPANGA

Maeneo ya Mradi: Viijii vya Maina (Nyahururu), African Location (Rumuruti), Kanyoni na Kwa Mbuzi (Nanyuki), Viijii vya Umande na Sipili

Ilani inatolewa kwa wakazi wa Gatuzi la Laikipia na maeneo mengine, kwamba, kulingana na kifungu 47 cha sheria ya mipango ya matumizi ya ardhi, 2019, Serikali ya Gatuzi la Laikipia pamoja na Serikali ya Kitaifa, kupitia Wizara ya Ardhi, Mijengo ya Umma, Makazi, na Ustawi wa Miji, zinanuia kuandaa mipango ya muundo na matumizi ya ardhi ya maeneo yaliyotajwa hapo juu, ikiwa ni awamu ya pili ya mradi wa kitaifa wa kuboresha vitongoji visivyo rasmi (KISIP2).

Mradi huu unanuia kuhalalisha na kuimarisha hudumaza kimsingi na usalama wa umiliki wa ardhi kwa wakazi wa vitongoji vilivyochaguliwa katika Gatuzi la Laikipia kupitia upangaji na upimaji wa ardhi.

Malengo ya mipango hiyo ni;
i. Kuwezesha kuhalalisha umiliki wa ardhi ndani ya vitongoji vilivyochaguliwa.
ii. Kutoa mfumo wa ujenzi wa miundo msingi na utoaji wa huduma za kimsingi.
iii Kuweka msingi wa udhibiti wa maendeleo.

Zoezi la kupanga litahusisha matumizi ya sera husika, kanuni na mifumo ya kitaasisi, uhamasishaji wa jamii, na ushirikishwaji wa wadau, utayarishaji wa ramani za msingi, kufanya utafiti wa kijamii na kiuchumi, uchoraji wa ramani ya makazi, kufatithmini athari za kimazingira na kijamii (uhakiki), maandalizi ya mipango ya kimaendeleo ya matumizi ya ardhi ya maeneo husika kwa makazi yasiyo rasmi, kuandaa mpango wa usimamizi wa kijamii na/au mpango wa utekelezaji wa makazi mapya (RAP), upimaji wa matokeo, viwanja na utayarishaji wa mipango ya upimaji, maandalizi ya uchunguzi wa kina wa topografia kwa miundo ya kihandisi na utayarishaji wa mfumo wa kutaarifu mambo ya ardhi (LIMS). Huu utakuwa msingi wa maandalizi ya mipango ambayo inalenga kuboresha hali ya maisha katika gatuzi la Laikipia kwa kuhalalisha umiliki wa ardhi.

Maandalizi ya mipango hii yatakuwa shirikishi kwa hivyo wadau wote wanaalikwa. Maoni, maswali na/au mapendekezo yoyote kuhusu ilani hii yanawezs kuwasilishwa kwa maandishi **ndani ya siku ishirini na moja (21)** baada ya kuchapishwa kwa ilani hii kwa:

Waziri wa Miundo Mbinu, Ardhi na Upangaji wa Miji, Nishati na Maendeleo ya Miji
Gatuzi la Laikipia
P.O Box 1271, Nanyuki

Imetolewa: Novemba 26, 2024

Ekwam Nabos
Waziri wa Miundo Mbinu, Ardhi na Upangaji wa Miji, Nishati na Maendeleo ya Miji
Gatuzi la Laikipia

Notice of Completion

Taifa Leo and Standard Dated 7th April, 2025

FORM PLUPA L-2 (r.10)

SERIKALI YA KAUNTI YA LAIKIPIA
IDARA YA MIUNDOMBINU, ARDHI NA MIPANGO YA FIZIKIA, MAKAZI, NISHATI NA MAENDELEO YA MIJI
S.L.P 1271-10400, NANYUKI

SHERIA YA MIPANGO YA FIZIKIA NA MATUMIZI YA ARDHI (NA. 13 YA 2019)

TAARIFA YA KUKAMILIKA KWA MPANGO WA MAENDELEO YA MATUMIZI YA ARDHI

KICHWA CHA MPANGO WA MAENDELEO:	MIPANGO YA KIENEO YA MATUMIZI YA ARDHI KATIKA VIJIJI VYA MAINA (NYAHURURU), AFRICAN LOCATION (RUMURUTI), SIPILI, KANYONI NA KWA MBUZI (NANYUKI)

Kwa mujibu wa masharti ya kifungu cha 49 (1) cha Sheria ya Mipango ya Matumizi ya Ardhi, 2019, TAARIFA inatolewa hapa kwamba maandalizi ya Mipango hizo hapo juu chini ya awamu ya pili ya mradi wa kuboresha vitongoji duni nchini Kenya (KISIP2) yalikamilishwa tarehe **28 Machi 2025**.

Nakala za mipango hizo kama zilivyoandaliwa zimewekwa kwa ukaguzi wa umma katika Ofisi za Mjumbe wa Kamati ya Utendaji ya Kaunti (CECM) wa Miundombinu, Ardhi na Mipango ya Fizikia, Makazi, Nishati na Maendeleo ya Miji pamoja na Ofisi ya Mipango ya Fizikia ya Kaunti katika Miji ya Nanyuki na Rumuruti, Kaunti ya Laikipia. Nakala hizi zinapatikana kwa ukaguzi bila malipo kwa watu wote wanaopenda kati ya saa 8:00 asubuhi – 5:00 jioni, katika siku za kazi rasmi.

Mtu yeyote, mashirika au taasisi zinazopenda kutoa maoni yoyote au pingamizi kuhusu mipango hii wanahimizwa kutuma maoni yao kwa maandishi kwa Mjumbe wa Kamati ya Utendaji ya Kaunti (CECM) ya Miundombinu, Ardhi na Mipango ya Fizikia, Makazi, Nishati na Maendeleo ya Miji, Kaunti ya Laikipia, S.L.P 1271-10400, Nanyuki ndani ya siku sitini (60) tangu tarehe ya kuchapishwa kwa tangazo hili. Pingamizi lolote linapaswa kueleza sababu za kupinga mpango husika.

Imetolewa tarehe 28 Machi 2025.

Ekwam Nabos

Mjumbe wa Kamati ya Utendaji ya Kaunti Idara ya Miundombinu, Ardhi na Mipango ya Fizikia, Makazi na Maendeleo ya Miji Kaunti ya Laikipi

FORM PLUPA L -2 (r.10)

COUNTY GOVERNMENT OF LAIKIPIA
DEPARTMENT OF INFRASTRUCTURE, LAND & PHYSICAL PLANNING, HOUSING, ENERGY & URBAN DEVELOPMENT
P.O Box 1271-10400, NANYUKI
THE PHYSICAL AND LANDUSE PLANNING ACT (NO. 13 OF 2019)

NOTICE OF COMPLETION OF LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLANS

TITLE OF PLANS	**LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLANS FOR MAINA (NYAHURURU), AFRICAN LOCATION (RUMURUTI), SIPILI, KANYONI AND KWA MBUZI (NANYUKI)**

Pursuant to the provisions of section 49(1) of the Physical and Land Use Planning Act, 2019, NOTICE is hereby given that preparation of the above - mentioned Local Physical and Land Use Development Plans under the Second Kenya Informal Settlement Improvement project (KISIP2) were completed on 28th March 2025. The Plans relate to lands situated within **Maina (Nyahururu), African Location (Rumuruti), Sipili, Kanyoni and Kwa Mbuzi (Nanyuki)** in **Laikipia County.**

Copies of the plans have been deposited for public inspection free of charge at the office of the **County Executive Committee Member (CECM) Infrastructure Land & Physical Planning, Housing, Energy & Urban Development and the County Physical Planning offices in Nanyuki and Rumuruti.** The copies so deposited are available for inspection free of charge by all persons interested at the above-mentioned address between the hours of **8.00 am** and **5.00 pm** during official working days.

Any interested person (s), organizations or entities who wishes to make any representation in connection with or objection to the above plans may send the same in writing to be received by the **County Executive Committee Member (CECM) Infrastructure, Land & Physical Planning, Housing, Energy & Urban Development, Laikipia County, P.O Box 1271-10400 Nanyuki** within **sixty (60)** days from the date of publication of this notice and any such representation shall state the grounds on which they are made.

Dated the **28th March 2025.**

Ekwam Nabos
COUNTY EXECUTIVE COMMITTEE MEMBER
DEPARTMENT OF INFRASTRUCTURE, LAND & PHYSICAL PLANNING, HOUSING AND URBAN DEVELOPMENT
LAIKIPIA COUNTY

THE CONSTITUTION OF KENYA

THE COUNTY GOVERNMENTS ACT

(*No.* 17 *of* 2012)

MANDERA COUNTY GOVERNMENT

DEPARTMENT OF HEALTH SERVICES

HEALTH CENTRES

IT IS notified to the residents of Mandera County and the general public that the following health facilities within Mandera County are now upgraded from dispensaries to health centres.

GAZETTE NOTICE NO. 8906

THE PHYSICAL AND LAND USE PLANNING ACT

(*No.* 13 *of* 2019)

COUNTY GOVERNMENT OF LAIKIPIA

COMPLETION OF LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLANS

Title of Plans	Local Physical and Land Use Development Plans for Maina (Nyahururu), African Location (Rumuruti), Sipili, Kanyoni and Kwa Mbuzi (Nanyuki)

PURSUANT to the provisions of section 49 (1) of the Physical and Land Use Planning Act, 2019, notice is given that preparation of the above - mentioned Local Physical and Land Use Development Plans under the Second Kenya Informal Settlement Improvement project (KISIP2) were completed on 28th March, 2025. The Plans relate to lands situated within Maina (Nyahururu), African Location (Rumuruti), Sipili, Kanyoni and Kwa Mbuzi (Nanyuki) in Laikipia County.

Copies of the plans have been deposited for public inspection free of charge at the office of the County Executive Committee Member (CECM) Infrastructure Land & Physical Planning, Housing, Energy & Urban Development and the County Physical Planning offices in Nanyuki and Rumuruti. The copies so deposited are available for inspection free of charge by all persons interested at the above-mentioned address between the hours of 8.00 am and 5.00 pm during official working days.

Any interested person (s), organizations or entities who wishes to make any representation in connection with or objection to the above plans may send the same in writing to be received by the County Executive Committee Member (CECM) Infrastructure, Land and Physical Planning, Housing, Energy and Urban Development, Laikipia County, P.O Box 1271–10400, Nanyuki in the Republic of Kenya, within sixty (60) days from the date of publication of this notice and any such representation shall state the grounds on which they are made.

Dated the 28th March, 2025.

EKWAM NABOS,

CECM, Infrastructure, Land and Physical Planning, Housing and Urban Development.

MR/7783490

GAZETTE NOTICE NO. 8907

THE PROCEEDS OF CRIME AND ANTI-MONEY LAUNDERING ACT

(*No.* 9 *of* 2009)

5. Motor Vehicle Registration No. KBS 680D, Toyota Saloon, Corolla Model, Engine No. 1NR0311345, Chassis No. 1HTLTS2E506023218 Registered in the name of Geofrey Monyancha Nyabira.

6. Motor Vehicle Registration Number KBN 474P, Toyota Corolla, Saloon, Engine Number 1NZ- A761451, Chassis Number NZE121-3190722 Registered in the name of Geofrey Monyancha Nyabira.

7. Motor Vehicle Registration Number KBL 149M, Toyota, Saloon, Engine No. 1ZRU243937 Chassis No. AHTLB52E803048571 Registered in the name of Geofrey Monyancha Nyabira.

8. Motor Vehicle Registration Number KCJ 181C, Bwm Saloon, Model ABA-VA20, Engine No. N46B20B-A5241450, Chassis No. WBAPG56080NM14593 Registered in the name of Geofrey Monyancha Nyabira.

9. Motor Vehicle Registration No. KBU 360W, Toyota Corolla, Station Wagon, Engine No. 2ZR-00064461 Chassis No. ZRE142-9000990 Registered in the name of Geofrey Monyancha Nyabira.

10. Motor Vehicle Registration No. KAB 271K, Mitsubishi Station Wagon, L200 Model, Engine No. 8757, Chassis No. 370183 Registered in the name of Geofrey Monyancha Nyabira.

11. Motor Vehicle Registration No. KCW 852J, Hino Lorry/Truck, Dutro Model, Engine No. N04C-UP23432, Chassis No. XZU710-0005313 Registered in the name of Geofrey Monyancha Nyabira.

12. Motor Vehicle Registration No. KBW 064K, Subaru, Station Wagon, Engine No. EJ20-3284110 Chassis No. SG5- 106733 Registered in the name of Geofrey Monyancha Nyabira.

13. Motor Vehicle Registration No. KMEN 060F Bajaj, Boxer Model, Engine No. PFZWJA71646 Chassis No. MDA2A21BY4WJWA94824 Registered in the name of Geofrey Monyancha Nyabira.

BETWEEN

ASSETS RECOVERY AGENCY—(*Applicant*)

VERSUS

e&G SPATIAL CONSULTANTS LTD
Physical/Spatial Planners | Land Surveyors | Environmental Auditors | GIS Experts

Annex 2: Minutes

Minutes of Final Draft Plan Presentation

MINISTRY OF LANDS, PUBLIC WORKS, HOUSING, AND URBAN DEVELOPMENT
KENYA INFORMAL SETTLEMENT IMPROVEMENT PROJECT (KISIP)

PLANNING, CADASTRAL AND TOPOGRAPHICAL SURVEY OF ELEVEN (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES: LOT VII PHASE IIC, CLUSTER 1

Project By:
E&G Spatial Consultants Ltd

MINUTES FOR THE PRESENTATION OF FINAL DRAFT PLANS FOR SIPILI INFORMAL SETTLEMENT HELD AT OLIVIA HALL ON THURSDAY 25TH JUNE 2025

Members Present

Find the lists of attendance attached

Agenda

1. Introduction and Opening Remarks
2. Presentation of Final Draft Plans
3. Question and Answer Session
4. Adoption of the Final Draft Plan
5. Closure and Adjournment of the Meeting

SPL/ MIN/ 001; Introduction(s) and preliminaries

The meeting began at 9:00 a.m. with an opening prayer led by a local religious leader. The Project Sociologist welcomed participants, thanked the community and local leaders for their hospitality, and encouraged active engagement during the plenary session. She then invited key stakeholders to give brief remarks before proceeding with the main agenda.

SEC Chairman

The Chairman thanked attendees and acknowledged the presence of key stakeholders. He outlined the meeting's purpose—to present the final draft plan based on community proposals, including roads, public facilities, and an industrial zone. He urged active participation and introduced the Settlement Executive Committee (SEC) and Grievance Redress Committee (GRC), highlighting their roles in representation and conflict resolution.

Area Chief, Sipili Location

The Area Chief commended the community for their strong turnout and expressed appreciation for the cooperation extended to the consultant team. She acknowledged that many grievances submitted to the Grievance Redress Committee (GRC) had already been resolved, but urged those with pending, particularly family-related, disputes to work closely with the GRC to ensure timely resolution. She emphasized that this was the final meeting and that the Final Draft Plan—reflecting the community's recommendations—would be presented. She encouraged members to ask questions and seek clarification, and once satisfied, to formally adopt the plan.

Chief Officer of Lands

The Chief Officer of Lands acknowledged all those present and commended the community for turning out in large numbers. He thanked them for their cooperation and support throughout the project and encouraged continued collaboration with the consultant team to successfully complete the remaining project milestones.

Area MCA

The MCA expressed his heartfelt gratitude to all attendees and commended the various stakeholders for their commitment to the smooth progress of the project. He specifically acknowledged the Settlement Executive Committee (SEC) and the Grievance Redress Committee (GRC) for their fair and balanced handling of disputes, noting that their efforts had maintained harmony within the community despite challenges and criticism.

He praised the committees for their diligence and emphasized that although the settlement joined the project later—after others had withdrawn—it has experienced steady progress without major setbacks. He reaffirmed that the ultimate goal of acquiring title deeds remains central to the community's development.

The MCA also extended his appreciation to the KISIP National Team, the Consultant Team, and the County Government representatives for their responsiveness and professionalism throughout the process. He noted that both the MCA's office and the County Executive Committee in Laikipia had already been briefed on the contents of the Final Draft Plan, and it was now up to the community to formally adopt it before submission to the Senate for approval—marking the final step toward issuance of title deeds.

Lastly, he applauded the community for adhering to the consultant's request not to erect new structures during the project period, and encouraged the consultant team to consider replicating such development initiatives in neighbouring settlements in need of similar support.

County Planner, Laikipia West Sub-County

The County Planner thanked the community for their cooperation and praised the consultant team for their swift efforts in aligning Sipili's progress with that of other settlements in the county. He urged residents to review the Final Draft Plan carefully, ask questions for clarification, and ultimately adopt it. He emphasized that this plan would serve as the foundation for the next stages of the project, including the issuance of title deeds, and encouraged the community to consider the needs of future generations in their decision.

KISIP National Officials

The KISIP Liaison Officer expressed his appreciation for being in Sipili and acknowledged the community's strong cooperation, which enabled the project—despite starting three months late—to catch up with other settlements within just five months. He emphasized the value of active community participation, urging members to listen attentively, understand the contents of the Final Draft Plan, and seek clarification on how their proposals had been incorporated before adopting the plan. He concluded by inviting his colleagues to introduce themselves to the community.

SPL/MIN/002: Presentation of Final Draft Plan

The Project Director opened the meeting by welcoming all attendees and expressing appreciation for their presence. She introduced her team and then invited the consultant planner to present the Final Draft Plan to the community.

The planner reminded the community that the project was part of the Kenya Informal Settlements Improvement Project (KISIP), which operated under two key components. The first component focused on tenure regularization and was being implemented in Sipili by the consultant, E&G Spatial Consultants. It involved the planning of the settlement, securing access roads, identifying

locations for public facilities, and ultimately issuing title deeds to structure owners. The second component dealt with infrastructure upgrading, which included improvements to roads, drainage, and water supply. However, this could only proceed after successful completion of the tenure regularization process.

She outlined the stages that had already been completed. These included the introduction of the consultant to the community, official project launch, and the formation of the Settlement Executive Committee (SEC) and the Grievance Redress Committee (GRC). She commended the GRC for resolving the majority of disputes and encouraged those with pending issues to work closely with the committee. She emphasized that disputes under litigation were outside the project's scope and advised parties involved to consider resolving them through the GRC.

The Planner explained that drone mapping had been conducted to obtain an accurate aerial image of the settlement. This helped define plot boundaries, identify structures, and guide physical planning. This was followed by ground picking and demarcation of parcel boundaries, which was carried out by surveyors and planners. A socio-economic survey and physical mapping exercise were also undertaken to gather household data and assess land use, infrastructure, and existing community facilities. These findings informed the development of the draft plan.

She stated that the socio-economic data and other inputs were presented to the community during visioning and participatory planning sessions. Community members proposed locations for roads, schools, health facilities, and other amenities. These priorities were incorporated into the draft plan, which was presented during the meeting for final review. The community was encouraged to provide any remaining feedback before adoption.

The Planner explained that, in line with legal requirements, a Notice of Completion would be published in both local newspapers and the Kenya Gazette, after which the plan would be available for a 60-day public review. A copy of the plan would also be handed to the Settlement Chairman to ensure accessibility. Relevant feedback collected during this period would be shared with the consultant for further revision. Once finalized, the plan will be submitted to the County Assembly for approval and adoption. It would then serve as the legal framework for cadastral surveying and placement of boundary beacons.

She clarified that tampering with or building outside of the beaconed boundaries would be considered unlawful. She emphasized the importance of the community's cooperation throughout this final phase. The Director confirmed that the settlement had been divided into two sections, Sipili A and Sipili B—with all activities progressing concurrently. Out of the 271 identified parcels, 256 had been successfully surveyed, and the 15 that remained were scheduled for enumeration.

She gave a breakdown of parcel sizes, noting that all met the KISIP threshold of 100 square meters: 163 parcels measured between 102–200 square meters, 104 parcels were between 200–450 square meters, and another 104 exceeded 450 square meters. However, she warned that a few smaller parcels could be affected by road standardization efforts.

The Planner highlighted the presence of key social facilities, including an ECDE center, places of worship, and a nursing home. She stated that these had been integrated into the Final Draft Plan. Had they been lacking, the community would have been required to propose locations for them. She emphasized that accessible and well-distributed social amenities were essential for improving the quality of life and reducing the need to travel for basic services.

She acknowledged the large youth population and its potential for contributing to the settlement's economic development. However, she noted that most residents relied on informal and low-productivity economic activities, resulting in widespread unemployment. The proposed industrial and commercial zones were intended to support local enterprise and employment.

The Planner noted that the current settlement layout had been influenced by a 1999 Part Development Plan (PDP), which had led to irregular road widths. She clarified that the new draft plan had corrected these inconsistencies by standardizing road widths to support proper drainage, pedestrian movement, and vehicle access. She explained that the new draft plan

adopted strict planning standards, including the development of well-aligned roads ranging from 9 to 15 meters in width.

The community selected Option 1 of the planning alternatives, citing multiple benefits. These included improved road networks and increased accessibility, which were expected to spur economic development by facilitating the movement of goods and services, attracting investment, and supporting local businesses. They also noted that an improved sewage system would enhance sanitation and public health, reduce the risk of waterborne diseases and contribute to a cleaner, safer environment. Furthermore, improved infrastructure would lead to better service delivery, enhanced connectivity, and an overall higher quality of life. Planning for the future was also seen as essential for orderly development, guided land use, and the settlement's ability to accommodate population growth and infrastructure needs sustainably.

The Planner assured the community that her team would incorporate all proposals and feedback into the final draft plan. This revised plan would then be brought back to the community for review and formal approval. Once approved, it would be forwarded to the County Assembly for discussion, possible amendment, and eventual adoption into law. She added that the plan would be published in both Kiswahili and English in local newspapers and featured in the Kenya Gazette in the following week. It would remain publicly accessible for 60 days to allow individuals to submit comments or suggested amendments to the County Assembly for consideration.

In closing, she informed the community that the next meeting would focus on the surveying process, beaconing of plots, verification of the List of Beneficiaries, and an outline of the project's winding-up procedures.

SPL/MIN/003: Question and Answer Session

Issue/Concern	Response
A community member sought clarification on why parcels SPL/149 to SPL/152 had not been subdivided into ten separate parcels as proposed by the residents living there.	The Project Director explained that parcels SPL/149 to SPL/152 had not been subdivided into ten parcels because the proposed subdivision did not meet the minimum planning standards and regulations. He noted that any subdivision must comply with legal plot size requirements, access road provisions, and proper service allocation. Adjustments to the layout were therefore made to ensure compliance with planning guidelines and to facilitate approval by the relevant authorities.
A community member sought clarification on why the consultant chose not to use the existing Part Development Plan (PDP) and instead opted to develop a new plan, which, if implemented, would have significant negative impacts on existing structures for plot owners. The member questioned the need for the new plan and expressed concern about its implications for the community.	The Planner clarified that the Final Draft Plan is not just a technical document, but a community-driven plan that reflects the ideas, priorities, and proposals shared by residents during the planning process. It includes aspects such as road layouts, land use allocations, and provisions for public amenities, all shaped by community input. He emphasized that once the community formally adopts the plan—signifying their agreement and approval—it will be submitted to the Senate as part of the legal and administrative process. Senate approval is necessary to formalize the plan and allow the next steps to proceed, including land surveying, beaconing, preparation of the Resettlement Action Plan (RAP) where necessary, and ultimately, issuance of title deeds.

A member had proposed exchanging his parcel outside the settlement for the slaughterhouse site, suggesting the facility be moved outside the settlement to prevent potential health and environmental risks in the town center.	In response to concerns about the slaughterhouse's location, the Planner explained that it had been relocated outside the settlement. She added that the site where the slaughterhouse currently stands has been proposed for the construction of a social hall.
A community member asked if the consultant could designate an area within the settlement to be used as a cemetery for the community members, ensuring there is a proper and dedicated space for such needs.	The Planner stated that the County Team would allocate a parcel of land outside the settlement for the cemetery. This new site would be strategically located to serve both the current settlement and neighboring ones, ensuring it meets wider community needs without posing health risks to residents. She further emphasized that a cemetery should not be located close to residential areas due to the potential health hazards.

SPL/MIN/004: Adoption of the Final Draft

In closing, the KISIP representative guided the community through the formal adoption of the Final Draft Plan and invited them to take a group photograph to signify their endorsement. He explained that the plan would next be forwarded to the County Assembly for approval. He added that the final verification of the List of Beneficiaries (LOBs) would take place after the meeting, while the remaining activities, including surveying and beaconing, preparation of the Environmental and Social Management Plan (ESMP), and the Resettlement Action Plan (RAP)—would be scheduled and communicated in due course.

SPL/MIN/005; Meeting closure and Adjournment

The meeting ended at 2:30pm with prayers from a community member.

Minutes Confirmed by:

Consultant

Name: .... Designation: .....

Signature: ..... Date: .....

KISIP National Representative

Name: ..... Designation: .....

Signature..... Date: .....

County Representative

Name: .....Designation: .....

Signature: ..... Date: .....

SEC Representative

Name: .....Designation: .....

Signature: .....Date: .....

Minutes of Draft Plan Presentation

MINISTRY OF LANDS, PUBLIC WORKS, HOUSING, AND URBAN DEVELOPMENT
KENYA INFORMAL SETTLEMENT IMPROVEMENT PROJECT (KISIP)

PLANNING, CADASTRAL AND TOPOGRAPHICAL SURVEY OF ELEVEN (11) SELECTED INFORMAL SETTLEMENTS IN LAIKIPIA AND LAIKIPIA COUNTIES: LOT VII PHASE IIC, CLUSTER 1

Project By:
E&G Spatial Consultants Ltd

MINUTES FOR THE PRESENTATION OF DRAFT PLANS FOR SIPILI INFORMAL SETTLEMENT HELD AT OLIVIA HALL ON THURSDAY 26TH MARCH, 2025 AS FROM 2:00PM.

Members Present

Find the lists of attendance attached

Agenda

1. Introduction and Opening Remarks
2. Summary of presentation of Socio-Economic Findings
3. Community Vision and Proposal
4. Presentation of Draft Plans
5. Final Resolution
6. Closure and Adjournment of the Meeting

SPL/ MIN/ 001; Introduction(s) and preliminaries

The meeting was called to order at 2:00 p.m. by the Project Sociologist, followed by an opening prayer led by a local religious leader. The Project Sociologist expressed her sincere appreciation for the warm welcome extended to the consultant team by both the community and local leadership. She encouraged participants to remain attentive throughout the proceedings, noting that a plenary session would be held to allow community members to share their views, concerns, and questions. Following her remarks, she invited key stakeholders to deliver brief statements prior to the commencement of the main agenda.

SEC Chairman

The Chairman extended his gratitude to all community members who made time to attend the meeting. He also acknowledged the presence of the Consultant Team, the KISIP National Team, the County Government representatives, and the local leadership—including the area chief—who were all in attendance.

He emphasized that the primary agenda of the meeting was to present the draft plans to the community, reflecting proposals previously made by residents. These include the layout of access roads, allocation of land for public facilities, and the designation of an industrial zone aimed at creating employment opportunities within the settlement. The Chairman urged community members to actively participate in the discussions and remain attentive, as their input is essential in shaping the future of their settlement.

He proceeded to introduce the Settlement Executive Committee (SEC), noting that it comprises representatives from various interest groups, including youth, religious leaders, widows, and persons with disabilities. Additionally, he introduced the Grievance Redress Committee (GRC), responsible for addressing grievances and resolving disputes at the settlement level.

Area Chief, Sipili Location

The Area Chief expressed her satisfaction with the community members who responded positively to the call to attend the meeting. She specifically inquired whether plot owners had brought along the three tenants she had previously requested to join them, so they could also be informed about the meeting discussions. She was pleased to receive confirmation that some tenants had indeed attended.

The Area Chief further noted that a significant number of grievances had been submitted to the Grievance Redress Committee (GRC), most of which had already been successfully resolved. However, she urged the remaining few parcel owners with unresolved disputes—particularly those involving family-related issues—to work collaboratively with the GRC to address them in a timely manner. She emphasized the importance of resolving these matters to avoid being excluded from the project due to pending disputes.

Area MCA, Ol-Moran Ward

The MCA expressed his gratitude to everyone who attended the meeting and further appreciated all the stakeholders who have taken the initiative to ensure the project is progressing smoothly. He especially thanked the SEC and GRC committees for the way they have handled disputes brought before them, noting that their judgments were fair and balanced, leaving no one feeling dissatisfied.

He commended the committees for carrying out their responsibilities with diligence, despite facing negative remarks. Their efforts have helped hold the community together. He highlighted that although the settlement was included in the project after others had dropped out, he is proud that there have been no major issues that could have stalled progress. He emphasized that the main goal—obtaining title deeds—remains a key driver for development within the settlement.

He also extended his thanks to the County Team for being available to answer all questions raised during the process and for handling each issue with great care and professionalism, which made the process smoother and more efficient.

Additionally, he offered apologies on behalf of the Chief Officer for Lands and the CECM, who were unable to attend the meeting due to other county engagements. However, he assured the community that they have promised to attend the next meeting to show their continued support for the project.

Finally, he commended the community for respecting the consultant's request not to erect new structures until the end of the project and acknowledged their cooperation. He also urged the consultant to consider extending similar development efforts to neighboring settlements that are also in need of such support.

County Planner, Laikipia West Sub-County

The County Planner also expressed his gratitude for the cooperation demonstrated by the community and commended the consultant for their swift efforts in bringing Sipili up to speed with the progress made in other settlements within the county. He encouraged residents to adopt a selfless approach to planning, keeping in mind the needs of future generations.

He emphasized the importance of considering the bigger picture when making planning decisions. In particular, he advised prioritizing major infrastructure and service-related issues—such as roads, sanitation, schools, and access to water. Once these foundational elements are addressed, he noted, the smaller issues would be much easier to resolve.

KISIP National Officials

The KISIP Liaison Officer expressed his pleasure at being in Sipili, noting that this was his second visit to the settlement. He recalled that his first visit was during the project introduction and launch meeting, during which the community elected their representatives to the Settlement Executive Committee (SEC) and the Grievance Redress Committee (GRC). During that initial engagement, the community was also introduced to the objectives and scope of the KISIP project.

He further explained that Sipili Settlement was selected for the project following the disqualification of another settlement in Laikipia West that did not meet the required project criteria. He emphasized the importance of active community participation, encouraging members to listen carefully, understand the contents of the draft plan, and ask questions to ensure clarity on how the community's proposals had been incorporated.

In conclusion, he invited his colleagues who had accompanied him to the meeting to introduce themselves to the community.

Director of E&G Spatial Consultant

The Project Director began the session by acknowledging the presence of all attendees and warmly welcoming them to the meeting. She noted that she was accompanied by her team, with the exception of one member who was unable to attend due to illness. She then invited her team members to introduce themselves to the community.

The Project Director reminded the community that the project had been introduced to the settlement through a government initiative known as the Kenya Informal Settlements Improvement Project (KISIP). She explained that KISIP operates under two key sub-components.

The first sub-component focuses on tenure regularization, which is currently being implemented in the settlement by the appointed consultant, E&G. She further explained that the first sub-component focuses on tenure regularization, which is currently being implemented in the settlement by the appointed consultant, E&G. She mentioned that the component includes key activities such as the planning of the settlement, establishment of access roads, and identification of locations for public facilities, all based on proposals made by the community. Ultimately, the goal of this sub-component is to issue title deeds to structure owners, thereby providing them with formal documentation of ownership for their respective parcels.

The second sub-component deals with infrastructure upgrading, which includes the improvement of roads, drainage systems, water supply, and other essential services. However, the Director emphasized that this second sub-component cannot be implemented unless the tenure regularization process is successfully completed. She noted that proper planning of the settlement—particularly securing access roads and allocating space for public amenities—is a crucial prerequisite for any infrastructure upgrades to take place.

The Project Director took a moment to remind the community of the key project stages that had already been completed, including:

- **Introduction of the Consultant to the Community, Project Launch, and Formation of SEC and GRC Committees**
  The Director noted that all the activities were conducted on the same day due to time constraints. The initial engagement involved the formal introduction of the consultant team to the community, marking the official launch of the project. During this session, community members were sensitized on the objectives and scope of the KISIP project. As part of the participatory planning approach, the community elected representatives to the Settlement Executive Committee (SEC) and the Grievance Redress Committee (GRC). These committees were established to ensure inclusive representation of various interest groups and to facilitate effective coordination and grievance resolution throughout the project life cycle.
  The Director went on to commend the Grievance Redress Committee (GRC) for the commendable work it had accomplished in addressing the numerous disputes brought forward since the project's inception. She then directed a question to the GRC Chairman, inquiring about the number of unresolved disputes. In response, the Chairman reported that only two disputes remained to be resolved.
  The Director urged individuals with pending disputes to engage with the GRC and resolve their issues promptly. She emphasized that any disputes currently under litigation would not be accommodated within the scope of the project. However, she expressed her personal view that parties involved in court cases might consider withdrawing those cases and referring them to the GRC for resolution at the community level.
  The Director also emphasized that in the coming weeks, the community will be given a second opportunity to verify their details on the beneficiaries list. She categorically stated that any parcel still under dispute at the conclusion of this verification exercise will, unfortunately, have to be excluded from the project.
  She urged all community members with unresolved disputes to make every effort to resolve them—preferably with the support of the Grievance Redress Committee (GRC)—before the upcoming meeting, which is scheduled to take place within the next month.
- **Drone mapping**
  The Director stated that drone mapping was done to capture an accurate aerial view of the entire settlement. The image captured by the drone was instrumental in validating existing plot boundaries, identifying structures, mapping infrastructure and land use as well as map the settlement boundaries where the KISIP project was to be rolled out.
- **Ground picking and marking of parcel boundaries**
  The Director stated that this stage involved the physical identification and demarcation of individual structures and parcel boundaries within the settlement. The exercise, carried out by a team of surveyors and planners, was designed to accurately capture the dimensions and extent of each plot on the ground.

This process was a critical component of the project, as it helped to confirm ownership claims, inform subsequent planning decisions, and minimize potential boundary-related disputes as the project moves forward.

- **Socio-Economic Survey and Physical Mapping**
  As part of the planning process, a comprehensive socio-economic survey and physical mapping exercise was conducted. The socio-economic survey aimed to gather detailed information on household demographics, livelihoods, income levels, access to services, and other relevant indicators to inform the development of a responsive settlement plan. Concurrently, the physical mapping exercise involved the identification and documentation of existing infrastructure, land use patterns, plot boundaries, and community facilities. These activities provided critical data to guide the preparation of the draft plan and ensure that proposed interventions address the actual needs and priorities of the settlement.
- **Presentation of Socio-Economic Survey Findings, Visioning, Community Participatory Planning, and Verification of List of Beneficiaries**
  The Project Director stated that, following the completion of the socio-economic survey, the consultant team presented the findings to the community to provide insight into the demographic, economic, and social characteristics of the settlement. This presentation helped to contextualize planning decisions and ensured that community needs were well understood and prioritized.
  She further explained that the presentation was followed by a visioning exercise, during which community members participated in a process that articulated their aspirations for the future of the settlement. Through this exercise, key priorities were identified, including the need for improved infrastructure, access to public amenities, enhanced economic opportunities, and secure land tenure.
  Subsequently, community participatory planning sessions were held to translate these aspirations into actionable proposals. During these sessions, community members played an active role in identifying suitable locations for roads, public spaces, schools, health facilities, and an industrial zone. These inputs were instrumental in shaping the development of the draft physical plan.
  In parallel, the verification of the list of beneficiaries was conducted to confirm eligibility for project benefits. This process was designed to promote transparency and accuracy, with the community actively involved in validating names, plot details, and other key information, including the correct recording of national ID numbers and KRA PINs. This exercise was critical in minimizing future disputes and ensuring inclusive participation in the project
- **Presentation of Draft Plans**
  The Project Director noted that the core agenda of the day was the presentation of the draft plans, which had been developed based on the community's input gathered during previous engagements. These included the socio-economic survey, visioning exercises, and participatory planning sessions.
  She explained that the presentation would outline the key features of the proposed development plan, including land use distribution, the proposed road network,

locations for public facilities, designated residential areas, and an industrial zone intended to create employment opportunities for residents of the settlement.
The Project Director further indicated that the consultant would highlight how community priorities had been integrated into the draft plans, with particular emphasis on maintaining a balanced approach between residential development and access to essential services.
She also stressed that any additional proposals or suggestions the community wished to make should be presented on that day, to allow the consultant sufficient time to review and incorporate them where feasible. She clarified that during the next meeting, the consultant would return with the final draft plan, which would be ready for community adoption, marking a key step toward project implementation.

- **Public Notice and Consultation Process**
  The Director emphasized that, in accordance with legal requirements, a Notice of Completion must be published in the local dailies—in both Kiswahili and English—as well as in the Kenya Gazette. She explained that the draft plan will be available for public review for a period of 60 days. During this period, a copy of the final draft plan will also be furnished to the Settlement Chairman to ensure accessibility within the community. The public will be invited to review the plan and submit their comments.
  The Director further clarified that any comments deemed relevant by the County Executive Committee Member (CECM) for Lands and Physical Planning will be forwarded to the consultant. Based on this feedback, the consultant will return to the community for further discussions and possible refinements to the plan prior to its finalization.
- **Submission to County Assembly**
  Once the plans have been finalized, they will be submitted to the County Assembly for review, discussion, potential amendments, and eventual adoption. Upon approval, the plans will attain legal status and serve as the official guiding framework for the cadastral surveying process and the placement of boundary beacons within the settlement.
  The Director clarified that the existing Part Development Plan (PDP) currently in the settlement will not be used, as it was never approved by the County Assembly and therefore does not have the force of law.
- **Beacon Placement and Certificates**
  Upon finalization of the plan, she clarified that the plan will serve as a guide for the surveyors in the placement of parcel boundary beacons, with beacon certificates being issued to each parcel owner. The Project Director emphasized that for parcels not affected by road network expansion, beacons will be placed based on existing boundaries, and beacon certificates will be issued only upon the owner's consent. However, for parcels affected by road expansion, the surveyors will place beacons strictly in accordance with the finalized plan, regardless of the previous boundaries.

She further stated that it will be unlawful for any individual to construct outside the beaconed boundaries or to remove or tamper with the placed beacons, and such actions would be subject to legal consequences.

SPL /MIN/002; Summary of Socio- Economic Survey findings

The Director began by explaining that the implementation of the KISIP project is expected to conclude by June, highlighting the urgency and importance of community cooperation with the consultant team in order to successfully achieve the project's primary goal — the issuance of title deeds to eligible structure owners.

The Director clarified that the County Government had initially allocated one portion of the settlement for the project. However, an additional portion was subsequently included, resulting in the designation of two sections: Sipili A and Sipili B. She emphasized that there is no major difference between the two portions, noting that meetings for both sections are being held concurrently and at the same venue, with all activities progressing in tandem. She informed the community that all individuals affected by the road network expansion will be invited to a separate meeting with the Resettlement Action Plan (RAP) expert to explore appropriate ways of assistance, where applicable.

The Director stated that a total of 271 parcels (both Sipili A and B) were identified during the ground picking exercise. Out of these, only 256 parcels were successfully enumerated during the socio-economic survey. She further noted that the remaining 15 parcel owners who have not yet been enumerated should remain behind after the meeting to receive information on when their enumeration will be conducted.

She also took note of the existence of two market centers within the settlement, emphasizing their significant role in supporting economic growth and enhancing livelihood opportunities for the community. She highlighted that such centers are vital for promoting local trade, creating employment, and fostering entrepreneurship within the settlement.

The Project Director noted that while the standard minimum parcel size eligible for titling under national guidelines is 460 square meters, the KISIP project accommodates the unique context of informal settlements by allowing a reduced minimum parcel size of 100 square meters.

She further provided a breakdown of the parcel sizes within the settlement:

- 163 parcels measured between 102 and 200 square meters,
- 104 parcels fell within the range of 200 to 450 square meters, and
- 104 parcels exceeded 450 square meters.

As such, she affirmed that all parcels in the settlement meet the minimum size requirement for titling under KISIP guidelines. However, she cautioned that due to road standardization efforts, a few structures situated on smaller parcels may be affected by road network expansion, which will require community cooperation and understanding moving forward.

She also observed that some areas within the settlement remain undeveloped and emphasized the critical importance of having a proper physical plan in place to guide future development. This, she noted, would help prevent haphazard construction, particularly the encroachment of structures onto road reserves and other designated public spaces. She further highlighted that, with the issuance of title deeds, the community will have increased confidence to invest and build within their parcels. This security of tenure, she added, will play a key role in facilitating the orderly growth and transformation of the settlement into a well-planned urban center.

The Director also highlighted the presence of various social facilities within the settlement, including places of worship, an Early Childhood Development Education (ECDE) center, and a nursing home. She emphasized the critical role such facilities play in the daily lives of residents, noting that integrating social amenities into the settlement is essential to improving the quality of life, as it allows residents to access key services within close proximity, reducing the need to travel long distances to meet basic social and health needs.

She further emphasized that, had social facilities been lacking within the settlement, the community would have been requested to propose and allocate suitable spaces for their inclusion. She categorically stated that the integration of social amenities into the physical plan is vital to ensure that these facilities are accessible, convenient, and equitably distributed throughout the settlement. By doing so, she noted, the plan not only responds to the current needs of the community but also supports sustainable development and enhances the overall livability of the area.

The Director stated that the larger youth population constitutes the majority of the working-age group, offering significant potential for labor supply. However, she noted that the economy is predominantly informal, with a heavy reliance on low-productivity economic activities. As a result, unemployment remains a major challenge.

The Project Director noted that the structural layout of the settlement is based on the existing Physical Development Plan (PDP), which has influenced residents to adopt predominantly single-story structures. She explained that these comprise a mix of permanent, semi-permanent, and temporary buildings, reflecting the community's diverse socio-economic capacities and construction practices. She also highlighted the presence of a well-defined access network, attributing its development to the guidance provided by the PDP.

SPL/MIN/003: Community Vision and Proposal

a) Community Vision

The Vision was to transform Sipili into a well-connected economic hub

b) Community Proposals

- Have sustainable sanitation systems.
- Promote youth development through culture and sports.

- Promote value addition of produce through industrialization.
- The proposal to secure and well-lit settlement.
- Enhanced Interconnectivity and mobility.

SPL/MIN/004: Presentation of Draft Plan

The Director began the session by noting that three out of five community proposals were incorporated into the draft plan. However, she urged community members to either identify a suitable site within the settlement or for a willing member to donate a parcel of land to accommodate the remaining two proposals: one for promoting youth development through culture and sports, and another for establishing sustainable sanitation systems.

Community members were then invited to review the draft plans to confirm whether their proposals had been adequately addressed. The director highlighted that most of the plots within the settlement are residential in nature, with a few exceptions including:

The Project Director also mentioned that mixed-use plots do not necessarily have to be used for both residential and commercial purposes. She explained that for such plots, it is easier for a structure owner to obtain permission from the county to convert the use entirely to either residential or commercial, without having to go through many approval stages.

The options were:

Nil Intervention/ Business AS Usual

Retaining the status quo. No plan proposals and letting the settlement development continue without any regularization guidelines.

Advantages

- Zero PAPs (Project Affected Persons)
- Existing social ties will be maintained

Disadvantages

- Possible erosion of the current structured layout.
- Lack of tenure ->disinvestment ->potential urban decay.
- Continued inadequacy of infrastructural services.
- Potential land use conflicts (incompatible land uses) within the settlement.
- Livelihoods and living conditions will deteriorate.
- Overstretch of available facilities and resources over time.

Conventional/Ideal option

This option is a presumed plan development with strict application of conventional planning standards.

Advantages

- The settlement will be more organized in a regular spatial pattern
- A clear road hierarchy will be achieved and allow for efficient accessibility and connectivity within the settlement.
- Improved living conditions.
- Optimal space utilization.
- Allows for intensification and densification of development
- Best for futuristic development.
- Vertical developments and horizontally aligned layouts would enhance economies of scale in utilities reticulation and space use.
- Security of tenure secured at individual parcel level Integrated & sustainable development

Disadvantages

- PAPs (Project Affected Persons)
- Costly implementation
- Might require institutional realignment
- Full Implementation is not immediate- takes time.

The Director noted that the current development pattern within the settlement has been largely influenced by a Part Development Plan (PDP) that was prepared in 1999, which was subsequently used to allocate parcels within the area. However, she pointed out that the road network implemented based on that PDP were not standardized. For instance, one road may begin at 5 meters in width and expand to 15 meters by the end, while another might start at 9 meters and extend to 12 meters inconsistently. She emphasized that her team has carefully ensured that the road widths proposed in the draft plan are the most appropriate fit to accommodate a range of essential infrastructure. These include provisions for vehicular accessibility, pedestrian walkways, and a well-structured drainage system, all aimed at supporting a safe, efficient, and sustainable urban environment within the settlement.

The Director noted that there is a main tarmac road located just outside the settlement, which is maintained by the Kenya Urban Roads Authority (KURA) and has a standard width of 25 meters. She further clarified that her team does not interfere with government-maintained roads, emphasizing that reducing their width is not permitted.

To address these inconsistencies, the Director explained that the current draft plan has standardized the access road networks as proposed by the community, ensuring that each road maintains a uniform width from beginning to end, thereby improving planning efficiency and future infrastructure development.

The Project Director noted the presence of an existing market center within the settlement and highlighted a proposed site for a bus stage adjacent to it. She invited the community to share their views on the suitability of the proposed location and encouraged them to suggest an alternative site if they were not comfortable with the current placement.

The Director also raised concern regarding the location of a slaughterhouse situated in the middle of the settlement. She suggested that the community should consider identifying an alternative use for the space, especially in light of future development plans such as the construction of apartment buildings, which will lead to an increase in population density. She noted that maintaining a slaughterhouse in such a central location could potentially pose health risks and contribute to environmental pollution,

		Existing (Nil Intervention)	Option 1
Land Use	Residential	19%	28.9%
	Educational	-	-
	Industrial	9%	2.5%
	Recreational	-	0.5%
	Public purpose	1.2%	1.3%
	Commercial	12.4%	5.3%
	Public facility	-	-
	Transportation	39.9%	32.2%
	Mixed Use	21.79	29.5%
	Transportation (Main Structuring Element)		Regularized Accesses

making it unsuitable for a high-density residential area. The Director also mentioned that her team had designated three recreational areas within the settlement. However, due to their small sizes, they have been referred to as "pocket parks." She clarified that not all three spaces must necessarily serve as recreational areas. Instead, she suggested that at least one of them could be used for tree planting to contribute to environmental conservation and enhance the settlement's green space. Additionally, she noted that it would be ideal to have a recreational space adjacent to the market center, but the available space in that area appears to be quite limited.

The Project Director emphasized that, as a result of the road realignment and the increase in proposed road dimensions, a number of parcels will be affected. Specifically, a total of 111 structures are expected to be impacted—comprising 58 permanent structures, 34 semi-permanent structures, 18 temporary structure and 1 structure under construction. The extent of the impact on these structures varies, ranging from 1.12 to 76.71 square meters.

Comparative Analysis of the Planning alternatives

SPL/MIN/005: Deliberations on the Draft Plan Presentation

A number of key issues were also raised:

Issue/Concern	Response
A community member sought clarification on why two separate plots had been assigned the same parcel number, SPA/150.	The Project Director clarified that the original parcel had been subdivided into two separate plots: Parcel SPA/150 and Parcel SPA/150A. She explained that the naming was done to reflect the subdivision, and both parcels would be treated as distinct entities in the final records to avoid any confusion.
A community member asked for clarification on the variation in road alignment shown in two different draft plans. In one version, the six-meter access road extended up to Parcel SPA/143, while in the other version, it continued further to reach Parcel SPA/143A.	In response, the Project Director explained that the discrepancy in the road alignment was due to a slight oversight during the preparation of the draft plan. She assured the community that the issue would be corrected as soon as possible to reflect the accurate road alignment.
A community member sought clarification on why the consultant chose not to use the existing Part Development Plan (PDP) and instead opted to develop a new plan, which, if implemented, would have significant negative impacts on existing structures for plot owners. The member questioned the need for the new plan and expressed concern about its implications on the community.	The KISIP official explained that the plan being discussed was a draft plan and that the road placements and road widths shown on the map were proposals based on input from the community members. He clarified that in the event of infrastructure expansion, the affected structures might not necessarily be the main houses of the plot owners but could involve verandas, toilets, or even fences. He assured the community that such impacts would likely be minimal and would not significantly affect the livelihoods of the plot owners. The official further mentioned that if the infrastructure upgrade were to affect a larger proportion of structures, the consultant might need to adjust the road sizes to minimize the impact on residents. Additionally, a Resettlement Action Plan

	(RAP) Expert would meet with the owners of affected structures to conduct a valuation of the impact and determine appropriate compensation. He concluded by emphasizing that the KISIP Project was designed to improve the lives of the community members, not to make their situation worse.
A community member suggested that, given the potential large number of structures that could be affected by the infrastructure expansion, he believes it would be better for the settlement to remain as it is rather than implementing the proposed changes.	In response, the Project Director acknowledged the concern raised by the community member about the potential impact on the settlement. She emphasized that the goal of the KISIP Project is to improve infrastructure while minimizing disruptions to the community. She said the consultant team would thoroughly evaluate the extent of the impact and work to mitigate any negative effects on residents. She further emphasized that the roads agreed upon by the community would need to meet standard specifications and maintain a consistent width to ensure proper infrastructure development and long-term sustainability. She reassured the community that their input would be taken into account, and adjustments would be made where possible to preserve the integrity of the settlement while still advancing the project's goals. She further mentioned that the RAP Expert would work closely with affected property owners to ensure that appropriate compensation or support is provided, should their structures be impacted by the proposed infrastructure upgrades.
A community member asked whether the slaughterhouse would remain in its current location or if it would be moved to a different area within the settlement. Another community member raised a concern about plots that are close to or	In response to concerns about the location of the slaughterhouse, the County Planner requested that any community members who are directly affected by the slaughterhouse's location remain behind after the meeting. They were invited to

even adjacent to the slaughterhouse, asking what would happen to these parcels if the slaughterhouse remains in its current position. A third community member expressed concern about the slaughterhouse being a health hazard within the settlement. He requested that the consultant explore the possibility of finding an alternative location for the slaughterhouse to reduce any potential risks to public health. Another community member proposed the possibility of exchanging his parcel, which is located outside the settlement, for the parcel designated for the slaughterhouse within the settlement. He suggested that the slaughterhouse be moved outside the settlement to avoid the potential health and environmental issues it could cause in the town center.	participate in a separate discussion to find a solution to the issue, ensuring that the concerns of those impacted would be addressed and considered as part of the planning process. However, the Project Director referenced the 1999 PDP Plan for Sipili, explaining that the original intention of the planner was to grow and develop the settlement, which is why the slaughterhouse was proposed within the settlement area. Nevertheless, she acknowledged that it might not be appropriate to have a slaughterhouse in the middle of a town due to potential health and environmental concerns. The Project Director suggested that, in her opinion, the slaughterhouse could be replaced with a food processing zone, an idea proposed by the community but not yet incorporated into the plan. She also mentioned that the green area suggested by the community could potentially be integrated into the settlement, offering a more sustainable and community-friendly alternative.
A community member asked if the consultant could designate an area within the settlement to be used as a cemetery for the community members, ensuring there is a proper and dedicated space for such needs.	The County Planner responded positively to the suggestion, stating that it was a very good idea. The county would designate a parcel of land outside the settlement to accommodate the cemetery. This new location would not only serve the current settlement but also be strategically positioned to serve neighboring settlements, ensuring the facility meets the needs of a larger area without compromising the health and well-being of the community within the settlement.

SPL /MIN/006: Final Resolution

Following the presentation of the draft plan and subsequent deliberations, the KISIP Liaison guided the residents of Sipili Settlement through the process of selecting the most suitable planning option for their area. Each alternative was thoroughly explained to

ensure the community clearly understood the implications of their choice. Residents were given the opportunity to express their views and preferences and the majority overwhelmingly supported Option 1, which advocates for the adoption of strict planning standards, including the development of well-aligned roads ranging from 9 to 15 meters in width.

The community cited several reasons for selecting Option 1, including:

- Improved road networks and increased accessibility are expected to spur economic development within the settlement, facilitating the movement of goods and services, attracting investment, and supporting local businesses.
- Improved sewage system will enhance sanitation and public health within the settlement, reducing the risk of waterborne diseases and contributing to a cleaner, safer living environment.
- Improved infrastructure will lead to better service delivery, enhanced connectivity, and a higher quality of life for residents, laying the foundation for sustainable urban development.
- Planning for the future ensures orderly development, guided land use, and prepares the settlement to accommodate population growth and future infrastructure needs sustainably.

The Director outlined the levels of planning that can take place including:

- **National Spatial Plan**
  The Director explained that this is a long-term framework that guides spatial development across the entire country. It provides overarching direction for land use, infrastructure, and environmental management at the national level.
- **Inter County Spatial Plan**
  This type of plan is developed jointly by two or more neighboring counties to manage shared resources, infrastructure, and services across their boundaries. The Director noted that it helps in coordinating development efforts and addressing cross-border issues such as transport corridors, water catchment areas, and economic zones**.**
- **County Spatial Plan**
  This is a 10-year plan developed by individual counties, focusing on guiding development within the county's boundaries. The plan addresses land use, infrastructure, housing, and environmental management, aligning with national policies while catering to local needs and priorities.
- **Settlement Spatial Plan**
  This plan focuses on the development of specific settlements within a county. It provides detailed guidelines on land use, infrastructure layout, zoning, and public amenities, ensuring that the settlement grows in an orderly and sustainable manner. The plan helps in improving the living standards of residents while accommodating future growth.

The Director further stated that certain proposals, such as the sewage system, cannot be addressed within the Settlement Spatial Plan. Instead, these should be incorporated into the County Spatial Plan, as they involve improvements that affect the entire county rather than a single settlement. She emphasized that the Settlement Spatial Plan is the lowest level of planning and, as such, it cannot accommodate major planning proposals like the sewage system.

She further stated that her team will incorporate all the proposals presented by the community into the final draft plan. This plan will then be presented back to the community for approval. Once approved, it will be forwarded to the County Assembly for discussion, possible amendments, and eventual adoption and approval to be passed into law.

She also mentioned that the plan will be displayed in local newspapers in both Kiswahili and English, and will also be published in the Kenya Gazette in the coming week. It will remain publicly accessible for a period of 60 days, allowing any individuals—including those outside the settlement—who may have comments or proposed amendments to submit them to the County Assembly offices for consideration.

Additionally, she informed the community that in the next meeting, her team will discuss the surveying process, the beaconing of plots, verification of the list of beneficiaries, and finally, outline the process of winding up the project.

SPL/MIN/007; Meeting closure and Adjournment

The meeting ended at 4:30pm with prayers from a community member.

Minutes Confirmed by:

Consultant

Name: ....Designation: .....

Signature: .....Date: .....

KISIP National Representative

Name: .....Designation: .....

Signature.....Date: .....

County Representative

Name: .....Designation: .....

Signature: .....Date: .....

SEC Representative

Name: .....Designation: .....

Signature: .....Date: .....

Attendance

Male: 115
female: 77

ATTENDANCE LIST

Ministry of Lands, Public Works, Housing and Urban Development

e&G SPATIAL CONSULTANTS LTD

KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP 2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR EIGHT (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES PHASE IIC CLUSTER 1

Meeting/ Activity Draft Plan Validation **Date** 26th / 03 / 2024

Venue Olivia Hall

No.	Name	Project Designation	Contact	Email address	Signature
1.					
2.					
3.	[redacted]				
4.	VICTOR SULE	KISIP-NPCT	0722824950	venturimunta@gmail.com	
5.	Samuel Mbum	KISIP- NPCT	0728292612	smbunuf@gmail.com	
6.	FIONA KACHIRA	ENV. SAFEGUARDS OFFICER-CGL	0724073665	fionagatimu@gmail.com	
7.	THUITA MWANGI	LAND SURVEYOR - CGL	0727945858	mwuiri@gmail.com	
8.	Julius Ngundo	SMP/RAP EXG	0722237217	[illegible]	
9.	Jane Kimau	Sociologist	0725254496	[illegible]	
10.	Peter Mogaka	Land Surveyor Rum	0723762046	[illegible]	

05 / 02

1

ATTENDANCE LIST

No.	Name	Project Designation	Contact	Email address	Signature
11.	Peter Mutiep	Ass. Land Surveyor - CGL	0724723057		
12.	Richard Mucholei	Physical planner-CGL	0723657806	[illegible]	
13.	Diana Wangari	Social Impl Officer - CGL	0700634753	dwangari42@gmail.com	
14.	GEORGE KARIUKI	M.C.A	0725222416	[illegible]	
15.	FREDRICK GACHAGUA	Physical planner - CGL	0700402929	gachaguafredrick office@gmail.com	
16.					
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04 / 01

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ATTENDANCE LIST

Ministry of Lands, Public Works
Housing and Urban Development

e&G SPATIAL CONSULTANTS LTD

KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP 2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR EIGHT (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES PHASE IIC CLUSTER 1

County Laikipia **Settlement** SIPILI **Venue** OLIVIA HALL

Meeting/ Activity PRESENTATION OF DRAFT PLANS **Date** 26.3 2025

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
1.	LEAH GITAU		✓		0729997261	
2.	CAROLINE W. GITAU		✓		0702816005	
3.	GP Mwangi	✓			0720813820	
4.	Regia Wairimu Mwangi		✓		0723219887	
5.	Alex Mbue Ndegwa	✓			0723752629	
6.	Denis Mwangi Ndegwa	✓			0797849024	
7.	HAGGAH W. NDEGWA		✓		0722497330	
8.	Susan W. Mbuthia		✓		0741218941	
9.	Jane Wi Gikundi		✓		0728988330	
	Sub -totals Male/female	03	06			

1

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
10.	Virginiah Wangari Kariuki		✓		0723125337	
11.	Grace Wangui Githae		✓		0798281204	
12.	Beatrice Nduta Macharia		✓		0726795482	
13.	Christine Njeri Mwangi		✓		0719829053	
14.	JOHN MBUGUA		✓		3089374	
15.	Peter Kamau Gathoge	✓			0708448343	
16.	Mirriam Wanjeri Kuriki		✓		0724895436	
17.	~~[illegible]~~					
18.	Josep Kirene		✓		0729739317	Kirene
19.	PETER GATHUNI KANKI		✓		0726445060	
20.	BENSON WANGAI NYAMO	✓			0724405195	
21.	Jane Wambui		✓		0729572677	
22.	Caroline Waikuru		✓		0725814647	
23.	Mary Murage		✓		0725325023	
24.						
25.						
26.						
27.						
28.						
29.						
30.						
	Sub Totals Male/Female	02	11			

2

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
31.	BERNARD MBURU MUTUNI	✓			0726296334	
32.	JOSEPH WANJERU	✓			0721743990	
33.	JOSEPH GITONGA IKUA	✓			0727847089	
34.	PURITY W. NJOROGE		✓		0710305491	
35.	SUSAN W MACHARIA		✓		0728279669	
36.	MARGARET NJERI		✓		0115522086	
37.	MARY WAMUCI		✓		0727911870	
38.	JAMES NJUGUNA	✓			0703473989	
39.	PETER NDERITU	✓			0728401049	
40.	ROSEMARY MUHERO		✓		0725320322	
41.	JOSEPH KAMAU THUITA	✓			0714249305	
42.	ELIZABETH WANJIKU KINYAGIA		✓		0710206509	
43.						
44.						
45.						
46.						
47.						
48.						
49.						
50.						
51.						
	Sub-Totals Male/Female	06	06			

3

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
10.	Paul Mwaura Gachigi	✓			0723956856	
11.	Geoffrey Kihara Njoroge	✓			0720804110	
12.	DUNCAN WANYAMBUI MUNYA	✓			0727409115	
13.	JAMES WAINAINA CHAZE	✓			0722353561	
14.	NAFTALI NDERITU NDEGWA	✓			0726698327	
15.	Richard Mwangi Ndichungu	✓			0722754056	
16.	Francis Mapendu	✓			0720119729	
17.	JOSEPH MAIGUA	✓			0720-256-044	
18.	Julius Mwangi Ndirangu	✓			0713069253	
19.	JOSEPH MUCHUNU MBUGUA	✓			0721929446	
20.	Pauline Wanjiku Mugai		✓		0725533004	
21.	JACKSON KIBUGUTH	✓			0722353414	
22.	Coretta Wangui		✓		0720230108	
23.	John Mbugua Kamau	✓			0791671451	
24.	Zacharia Ndirangu	✓			0723139115	
25.	DANIEL KAMAU KABUGI	✓			0720-0063	
26.	John Mburugu Muriuki	✓			0723139185	
27.	Duncan Karuiki	✓			0724664742	
28.	Francis Kariuki	✓			0720912036	
29.	Robert Muriithi Gitahi	✓			0734577023	
30.	MICHAEL KINYANJUI NJEHIA	✓			0711587872	
	Sub Totals Male/Female	19	02			

2

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Physical/Spatial Planners | Land Surveyors | Environmental Auditors | GIS Experts

ATTENDANCE LIST

Ministry of Lands, Public Works
Housing and Urban Development

e&G SPATIAL CONSULTANTS LTD

KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP 2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR EIGHT (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES PHASE IIC CLUSTER 1

County LAIKIPIA Settlement SIPILI Venue OLMA HALL

Meeting/ Activity PRESENTATION OF DRAFT PLANS Date 26. 3. 2025

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
1.	PETER M. KAIZORIA	✓			0725826037	
2.	ROSE WANJIKU KINYITHIA		✓		0723078928	
3.	MOSES muiruri maina	✓			0711994468	
4.	JOHN KAMANGIA NDORIA	✓			0726296438	
5.	SAMUEL THUO	✓			0703 031315	
6.	ROBERT WERU	✓			0727706576	
7.	Ruth Nyambura		✓		0728707948	
8.	Joseph wamuru	✓			0721930733	
9.	JOHN M NJOROGE	✓			0725628097	
	Sub -totals Male/female	07	02			

1

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
31.	KINYATHIA GISTEPHEN	✓		Plot owner	0711488817	
32.	DAVID WANJAU	✓		care taker	0708339902	
33.	JOSEPH MUTGAMA	✓		PLOT OWNER	0712932625	
34.	JAMES K. NJOROGE	✓		PLOT OWNER	0727769161	
35.	REGINA NJERI MACHARIA		✓	PLOT OWNER	0791070419	
36.	ANNE MUTHONI KIRUI		✓	PLOT OWNER	0701906677	
37.	THOMAS MAINA Njoroge	✓		PLOT OWNER	0721578383	
38.	Pauline Wangiku Mugan		✓	Plot owner	0725533004	
39.	JESSE GITHINJI KAMAI	✓		Plot owner	0725778853	
40.	Simon Macharia muiru	✓		Plot owner	0722825922	
41.						
42.						
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49.						
50.						
51.						
	Sub-Totals Male/Female	07	03			

3

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
10.	ESTHER WAMBUI G		✓	GRC member	0797726852	
11.	DAVID WAWIRA		—	~~GRC~~ SEC member	0710846370	
12.	Benjamin mingisa		✓	G.R.C	0728355782	
13.	mary Kiambati		✓	SEC	0790364922	
14.	Daniel Gichuki		✓	SEO	0722227509	
15.	John Kalei			Minority leader	0721518941	
16.		✓				
17.	Leah Wayron Kigma		✓	Plot Owner	0722604103	
18.	Ruth Wambui Gitwora				0721972786	Ruth
19.	Mich NJAMBI		✓	Plot Owner	0712-821751 ~~0712-821751~~	
20.	PETER WACHIRA	✓		Plot owner	0724908680	
21.	Paul Muriithi	✓		" "	0714455689	
22.	Elijah Wachiuri	✓		Owner	0711748289	
23.	Joseph Muiyogomo	✓		Owner	0727706381	
24.	Robert Mwangi Kiragu	✓		Owner	0724859931	
25.	Eunice Wanjiku Kiragi		✓	plot owner Sipili Dairy Farmers	0713729429	
26.	David Mwai	✓			0726965377	
27.	Amos Mwaniki MWAURA	✓		Plot owner	0713354245	
28.	Symon NJORGE MWAURA	✓		owner	0710954604	
29.	JOSEPH KIMANI MWATI	✓		Plot owner	0746038772	
30.	Simon Ruga KIHUTO	✓		" "	0711743214	
	Sub Totals Male/Female	21	08			

2

ATTENDANCE LIST

Ministry of Lands, Public Works
Housing and Urban Development

e&G SPATIAL CONSULTANTS LTD

KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP 2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR EIGHT (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES PHASE IIC CLUSTER 1

County Laikipia **Settlement** Sipili **Venue** Olivia Hall

Meeting/ Activity Presentation of Draft Plans **Date** 26.3.2025

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
1.	Edwin Omondi Oluoch	✓		SEC	0721308553	
2.	Joseph Maina Wachira	✓		G.R.C	0725919726 ~~0725919726~~	
3.	JANE NJOKI GACHAHU		✓	CHIEF	0724788311	
4.	AMOS NJIRANGU NJORDGE	✓		SEC SECRETARY	0722741986	
5.	SHIPHRA WAMBUI KIRUTHU		✓	GRC secretary	0727449846	
6.	JANE MTANGO		✓	SEC organising leader	0785222350	
7.	NJUGI ZACHARY M.	✓		GRC Member	0701256896	
8.	DAVID IRUNGU MWAGAI	✓		PLOT OWNER	0713-662861	
9.	Cecilia Nyambura		✓	SEC	0724947777	
	Sub -totals Male/female	05	04			

1

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
52.	Nicholas M Muro	✓			0728022310	
53.	Amos K Kiroga	✓			0722134468	
54.	Joel N Kiroga	✓			0718585370	
55.	Andrew Karui	✓			0711484833	
56.	Mercy Kamboi	✓	✓		0790963974	
57.	Jeremiah Kagai	✓	✓		0718856264	
58.	Regina Wamuyu		✓		0721398272	
59.	Godfrey Wachira		✓		0726256226	
60.	Joseph G. Kamitha	✓			0726844778	
61.	Lucy Wangari		✓		0718-856264	
62.	Amos Kingori	✓			0743663147	
63.						
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65.						
66.						
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68.						
69.						
70.						
	Sub-totals Male/Female	07	04			

4

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
31.	Peter Macharia Nyangi	✓				
32.	Daniel Njenga	✓			0724883884	Njenga
33.	James Kiyunja	✓			0702481487	
34.	Richard Muturi	✓			0745951112	
35.	Mbuguwa Njenga	✓			0724883841	Njenga
36.	Francis W. Nderitu	✓			0720-237718	
37.	James Nyangi	✓			0729436075	
38.	Joseph Kariuki Wanjohi	✓	✓		0722465389	
39.	Purity Gichu		✓		0720820594	
40.	Gladys Nyambura		✓		0725658947	
41.	John Murata	✓			0722617945	
42.	Harrison Kariuki	✓			0726732087	
43.	Peter Ngugunja	✓			0725653735	
44.	Nancy Ngorogo		✓		0727582775	
45.	Purity Wanjiru Mathenge		✓		0725716969	
46.	Faith Maina		✓		0728477288	
47.	Simon Nyangi	✓			0725266807	
48.	Dan G. Tibi	✓			0723110635	
49.	Kissmaer Kariuki	✓			0723119634	
50.	Kamatha G. Stephen	✓			0711488817	
51.	Leonard Mbugua	✓			0724883884	
	Sub-Totals Male/Female	16	06			

3

e&G SPATIAL CONSULTANTS LTD
Physical/Spatial Planners | Land Surveyors | Environmental Auditors | GIS Experts

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
10.	VINCENT NANYOIKE	✓			0722757067	
11.	REBECCA NYAITHIRA		✓		0726887302	
12.	ANTONY GITHINJI	✓			0715407103	
13.	DORCAS WANJOHI		✓		0711856606	
14.	ALICE KARUNGARI	✓			0726731965	
15.	peter mutua				0724723057	
16.	Peter maina	✓			0729670351	
17.	TESSE GITHINJI KIMI					
18.	Simon Macharia muriu					
19.	FLORENCE W. MUNJAMA		✓		0725608457	
20.	Peter Nkomi	✓			0722460275	
21.	ADAMS KIMANI	✓			0721852517	
22.	DOMINIC N. KIERE	✓			0790810079	
23.	David Kungu Wango	✓			0768550350	
24.	Simon Wanuti Ndungu				0719202314	
25.	MARTIN WAHOME				0729298059	
26.	CHARITY WAMBUI		✓		0112507317	
27.	CAROLINE W. NJOGU		✓		0716519115	
28.	GODFREY KIDONDOH	✓			0723519243	
29.	SIMON KINGOOI	✓			0728591530	
30.	Teresia Kiangui	✓			07	
	Sub Totals Male/Female	11	05			

2

ATTENDANCE LIST

Ministry of Lands, Public Works
Housing and Urban Development

e&G SPATIAL CONSULTANTS LTD

KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP 2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR EIGHT (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES PHASE IIC CLUSTER 1

County Laikipia **Settlement** SIPILI **Venue** OLIVIA HALL

Meeting/ Activity PRESENTATIONS OF DRAFT PLANS **Date** 26.3.2025

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
1.	DAVID MUCHEMI	✓			0724348956	
2.	MARGARET NYAMBURA NJUNGU		✓		0727706365	
3.	DANIEL GATHEGEA	✓			0723790964	
4.	ESTHER NYAMBI		✓		0797220882	
5.	CHARLES KIRUMA	✓			0711791316	
6.	DUNCAN NDEGWA NAIGWA	✓			0714120804	
7.	MATHEW NJARAMBA	✓			0727706570	
8.	GABRIEL KINYANJUI	✓			0720724996	
9.	MARY MWANGI		✓		0727731577	
	Sub -totals Male/female	06	03			

1

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
31.	SIMON GATHWO GICHUGU	✓			0727719645	
32.	MARY WAMUYU		✓		0721615798	
33.	SARAH WAGURA MACHARIA		✓		0726768006	
34.	JAMES KARIUKI WACHIRA	✓			0727329700	
35.	Wilson Mwiti	✓			0720032261	
36.	Naomi Tibi	✓	✓		0718757050	
37.	Eliud Bikonyo	✓			0727855508	
38.						
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	Sub-Totals Male/Female	04	03			

3

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
10.	Peter Muturi Luka	✓			0720445931	
11.	Beth Wambui		✓		0721917[illegible]	
12.	JOSEPH M. THUITA	✓			0720924956	
13.	PAUL WAMWALU	✓			0710703460	
14.	CHARLES NDUNGU	✓			0713774321	
15.	DAVID KUNGU WANGO				0725687065	
16.	PATRICK KIHARA.	✓			0723592053	
17.	MARY MUTHONI MAINA		✓		0722896037	
18.	MARGARET G. NJUKI		✓		0722438407	
19.	ELIZABETH NJERI MUGO		✓		0722927199	
20.	LYDIA WAIRIMU		✓		0721157317	
21.	THOMAS MAINA MGWIRI	✓			0721570383	
22.	BENSON MWAMGI	✓			0729903896	
23.	CATHERINE WACHIRA		✓		0726509296	
24.	WILSON B. GAKUHI	✓			0720289247	
25.	WANJERIGA WAMAITHA		✓		0712192256	
26.	LUCY WAMICHECHI		✓		0716352965	
27.	Daniel Mburu	✓			0728784778	
28.	EMAN MAINA	✓			0708338404	
29.	TITUS MAU MAINA	✓			0723892219	
30.	John Mwangi Waihaiga	✓			0721493557	
	Sub Totals Male/Female	11	08			

2

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Physical/Spatial Planners | Land Surveyors | Environmental Auditors | GIS Experts

ATTENDANCE LIST

Ministry of Lands, Public Works
Housing and Urban Development

e&G SPATIAL CONSULTANTS LTD

KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP 2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR EIGHT (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES PHASE IIC CLUSTER 1

County Laikipia **Settlement** Sipili **Venue** Olina Hall

Meeting/ Activity presentation of draft plans **Date** 26.3.2025

No.	Name	Sex		Project Designation	Phone No.	Signature
		Male	Female			
1.	Kenedy Mwenyi Muiga	✓			0723226945	
2.	Feristina Wanjiku		✓		0742898589	
3.	John Kamau Muchai	✓			0712823470	
4.	SAMUEL KOINANGE	✓			0721870508	
5.	Catherine Njiria		✓		0723731610	
6.	Grace Njoki Gicuri		✓		0720640581	
7.	Ringo Rugara	✓			0710103352	
8.	PETER GICHACHI WACHIRA	✓			0757771094	
9.	John Njoroge Kamau	✓			0720015739	
	Sub -totals Male/female	06	03			

1

Minutes of Validation of Socioeconomic Survey Results Presentation

MINISTRY OF LANDS, PUBLIC WORKS, HOUSING, AND URBAN DEVELOPMENT
KENYA INFORMAL SETTLEMENT IMPROVEMENT PROJECT (KISIP)

PLANNING, CADASTRAL AND TOPOGRAPHICAL SURVEY OF ELEVEN (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES: LOT VII PHASE IIC, CLUSTER 1

Project by:

E&G Spatial Consultants Ltd

Minutes for the Presentation of Socio-Economic Survey Findings, Visioning and Participatory Planning for Sipili Informal Settlement Held at Olivia Hall On Thursday 20th February, 2025.

Agenda

1. Introduction(s) and preliminaries
2. Presentation of socio-economic Survey findings
3. Community Visioning and Participatory Planning
4. Verification of the List of Beneficiaries (LOB) and continued enumeration of structure/parcel owners
5. Meeting Adjournment

Members Present

Find the lists of attendance attached

MIN. SPL 001: 20/2/2025: Introduction(s) and preliminaries

The meeting was called to order at **10.14am** by the project sociologist followed by prayers from a local religious leader. The project sociologist expressed her gratitude due to the warm welcome that the community and the local leadership had extended to the consultant. She then requested the community to be at the forefront to support by showing commitment through turning up for meetings in time and in large numbers. The local leaders and stakeholders also made their remarks as follows:

SEC Chairman: The chairman introduced the Settlement Executive Committee (SEC), stating that in the committee there were representatives of various interest groups such as youth, religious leaders, widows, and persons with disabilities. He also introduced the Grievance Redress Committee (GRC); the committee that handles grievances and disputes at the settlement level. He also elaborated that the area chief, MCA and other local and elected leaders constituted the ex-officio members of the committees by virtue of their offices and were all supportive.

***Area Chief, Sipili Location*:** The area chief was upbeat that Sipili was considered for titling. She noted, however, that there had been very many grievances that had been brought before them as a committee. She thus beseeched the parcels owners who had disputes especially at family level to try and resolve timely at the family level so as not to overwhelm the GRC; noting that the project had a very short duration to complete and any parcels with unresolved disputes would be left out by the project.

Area MCA, Ol-Moran Ward: He was positive that Sipili had finally been considered for the tenure regularization exercise despite it having not been initially selected as part of the settlements to benefit from the project. He thus requested the community to be steadfast in supporting the consultant and the leadership to enhance delivery of outputs ad intended outcomes and enable completion of the project within the stipulated time irrespective of activities beginning a bit late for Sipili compared to other settlements.

County Planner , Laikipia West Sub-County- The county planner was also grateful for cooperation shown by the community and to the consultant for being quick at getting Sipili to par in terms of activities conducted with other settlements in the county. He urged the residents to be selfless when planning and think about the needs of the future generations. On top of that, he advised that it would be best to consider a plan that considered the bigger picture; handling the bigger issues first such as roads, sanitation, schools and water. Once these major issues were tackled, he said, the other smaller matters would be easier to handle. This allegory was based on the *Big stones theory* where once bigger stones are filled in a container, there would still be room for the smaller stones.

MIN. SPL 002; 20/2/2025; Presentation of socio-economic Survey findings

The project planner led this session; beginning with introduction of the consultants' team to the community. Each member of the team also reminded those present of their role in the project. She then reminded the community the project stages that had already taken place including introduction of the consultant to the community and the project launch; activities that were conducted on the same day due to time constraints. Other activities that had already been covered by then included drone mapping and ground picking, the social and environmental screening and analysis, and the socio-economic survey. She then proceeded to elaborate the purpose of the meeting as presentation of socio-economic survey findings followed by visioning and community participatory planning and verification of List of beneficiaries.

The community was requested to pay attention to the findings presented since the findings would form the basis for the visioning and participatory planning that would follow. The findings were presented as follows:

Key Metric	Characteristics Identified
Land tenure status	• 229 out of 271 parcels were enumerated which accoun for (84%) • Of these, 66.9% were owned by men with female ownership accounting for 33.1% • Majority of the owners (53.42%) said that they purchased their plots. A further 26.09% were allocated by the chief and 18% had inherited their plots • Only small percentage (3.11%) lacked ownership documents –the rest either had sales agreements, allotment letters or land rates receipts
Key demographic characteristics	• Estimated total Population of the settlement was 440 with an average household population of 2.5 Persons • Of these, 65% were male and 35% female • 8.6% of the population were persons living with disability

Economic profile	• Majority of the people (60.47%) stated their income as below Ksh.10,000 • 81.1% of the residents worked within the settlement
Settlement structure	Externally, the settlement is defined by: • The Rumuruti-Sipili-Kinamba road to the west • The road to Sipili Secondary School to the North, Dispensary to the east and water borehole to the west Internally, there are: • The slaughterhouse and open air markets and the bus park close to the market as the defining features • The network of service lanes (6m wide) and main access roads (9m-30m wide) that connect the settlement to the broader township. • The settlement exhibits structured parcel and access layout. The current development pattern is influenced by a previous development plan prepared in 1999
Parcel sizes	• The planner sensitized the community about the land sizes that could be titled with the minimum being the 50 by 100ft (460 sq. meters). However, under KISIP, with traits of informal settlements being considered, the minimum land size that can be titled is 100 sq. meters • For Sipili, all parcels met the minimum standards thus having no need for joint titles
Settlement Development Status	• The permanent buildings were 24.5% and semi-permanent 42.2% while a further 33.2% were temporary structures • 37.41% of the area was undeveloped
Land use	• There was mixed land use with both Commercial and Residential uses • There were light Industries characterized by a slaughterhouse in Sipili B which occupies a large piece of land. • There were other light industries including furniture workshops, petrol filling stations and a saw mill
Transport network	• Generally, the settlement had a well- structured and hierarchical access networks that were between four and thirty meters wide **(4m-30m)** • The Primary access road to Sipili settlement is Rumuruti-Sipili-Kinamba road which is **30m** wide • Some roads around the upper market section are already tarmacked
Water supply	• 39.5% of the people get their water from mobile vendors • There was also piped water into the compound and into houses (16.28% and 2.3% respectively) • The piped water source is borehole

Sanitation and hygiene	• 69% of the people use pit latrines • Dominant use of pit latrines is not sustainable due to space limitations • It also poses the risk of groundwater contamination
Energy	• Charcoal is the leading energy source for cooking at 45% followed by LPG (Gas) at about 37% • Electricity is the main source of lighting • Those not connected to electricity cited lack of clarity in the application procedure, lack of electricity in the area and affordability as the main reasons for not being connected
Waste management drainage and storm water management	• Main wastes generated are paper, plastics and organic • with about 35% of the waste being dumped indiscriminately (the statement is not clear • Only about 11% of the residents reported that their waste is collected • There are some individual owned, stone and concrete constructed waste collection points within the settlement • The settlement relies on roadside drainage
Social facilities	The following social facilities were noted within the settlement: • Worship centers (CFF church) • Sipili Maternity Nursing Home • Little Angels ECDE • Open air markets • Olivia hall (private) There were also abutting institutions as follows: • Sipili Secondary School • Sipili Dispensary • Lariak Primary • Administrative offices (MCA office, Chief's office etc. • SDA Church To help guide the planning process, the planner sensitized the community on distance requirements for some social institutions as follows: For a nursery school, it should be within a radius of 500meters, a primary school not more than 2km and a secondary school not more than 3km.

Summary of emerging issues

- Sipili population is expected to increase. It was noted that there were more males than females with a youthful population that can provide labor

- Sipili was characterized by a predominantly informal economy. Unemployment was also found to be a challenge. There was also a heavy reliance on low productivity economic activities
- The settlement exhibited a structured layout due to an existing Partial Development Plan
- It has a mix of permanent, semi-permanent and temporary structures Single story structures
- The settlement has well-defined transportation. However, internal access are narrow dirt footpaths
- The settlement has poorly coordinated waste management with overreliance on pit latrines which is unsustainable
- There is also reliance on health facilities outside the settlement
- The settlement lacks a designated recreational space

Upgrading priorities

20.93% of the residents said that water was their biggest priority when it came to upgrading. This was followed by health, roads, sanitation and lighting all at 13.95%.

MIN. SPL 003: 20/2/2025: Community Visioning and Participatory Planning

a. Community visioning

With the community members having been informed of the state of the settlement based on the socio-economic survey conducted, they were brought to the community visioning session where they were sensitized that it would entail coming up with a clear picture of the way they wanted the settlement to be in the future. The Chief Officer provided a brief that in the past, Sipili used to be referred to as City Carton – a city made of cartons. The founders of the settlement as well had a vision, and within this vision included a desire for assured ownership with security of tenure –where building would be permanent rather than being made of cartons and cardboards- and, one with a proper road network. These visions, he noted, were on course to being fully achieved with planning and issuance of title deeds. He called upon residents to then come up with a vision that would enable them to as well become part of Sipili history as a people that would own the vision and the plan for the settlement.

The community outlined the following vision proposals for their settlement:

1. Sipili to be an economic hub that is well connected to the Surrounding major towns
2. A sipili with major private public partnerships
3. An education institutional hub
4. A Sipili with sustainable sanitation systems
5. A settlement that Promotes youth development through culture and sports
6. A settlement that promotes value addition of produce through industrialization
7. A secure and well lit environment

From these vision proposals, the community came with the following comprehensive vision statement for the settlement:

An well connected economic and social hub characterized by paved and well lit roads and sustainable sanitation systems

b. *community participatory Planning*

Residents noted a need for opening up of roads where they had been blocked. They identified this as the first planning priority. They also expressed a need for a social Hall. It was also noted that there was poor drainage and thus a need for a sewer line.

A number of key issues were also raised:

Issue/Concern	Response
A community member noted that Sipili had two slaughterhouses. He proposed that one could be converted into a social-hall. Another member proposed that one of these two to be converted into a space for *jua kali* sheds.	The Chief Officer Lands responded that there already were sections set aside for jua cali sheds within Sipili town. Besides, he noted that there were amenities within Sipili town that needed not to be duplicated within the project area. These included things such as slaughterhouses, schools, hospitals and animal market
The Laikipia county planner noted that some roads were not of standard width, with a specific one ending in a large open area that was neither a road nor a plot	The Chief Officer also concurred that there w such an area specifically having a section that could neither be made a normal plot nor extended as part of a road. He thus suggested, also as a resident from the locality, that specific part be converted to a bus park to decongest the town.
Regarding these roads, the planner sensitized residents of the standard road widths with the merits and demerits/challenges of each	Residents expressed concerns for **15m** roads especially in cases where permanent buildings had already been put up The consultant was requested to take this to account and come up with options bearing these ramifications in mind
The Chief Officer noted that there was an undeveloped space next to the Cereal Board building that was being utilized as a clothes market – He asked the community if it was comfortable demarcating that section for a social hall	The community unanimously agreed on the proposal
A resident suggested that the social hall needed a bigger space as it ought to be a community center that besides having a social hall it would encompass other social amenities including a children's playground	The Chief Officer responded that there had been already such services within Sipili town. Besides, he noted it would be possible for consideration for several services such as the polytechnic, the library services and other social amenities to be considered for administration under the county government. As a department, he promised it was possible to find what else could be done by the county government even after the conclusion of KISIP project.

	Besides that, the area that would have been sufficient for such a purpose was the plot adjacent to the slaughterhouse – and due to environmental considerations, a slaughterhouse and a community center wouldn't be compatible

MIN SPL 004: 20/2/2025; Meeting closure and Adjournment

The meeting ended at 1.29pm with prayers from a community member followed by a health break. The verification of the list of Beneficiaries and enumeration of parcels that were not captured during the social economic survey exercise then commenced.

MIN. SPL 005; 20/2/2025 A.O.B: -Verification of List of Beneficiaries and enumeration of parcel/structure owners

This exercise was conducted between 2.00PM and 4.00PM. There were 4 new enumerations for Sipili A and 9 new enumerations for Sipili B. This brought the total number of enumerated parcels to 242 out of 271 which was 89.3%. Previously enumerated structure/parcel owners verified the accuracy of their details at the same time.

Minutes Confirmed by:

Consultant

Name: Jack Teddy Designation Physical Planner

Signature: ..... Date 26/03/2025

County (Representative)

Name: RICHARD MUCHOKI Designation SNR PHYSICAL PLANNER

Signature: ..... Date 26/03/2025

SEC (Representative)

Name: GABRIEL MUSIO Designation CHAIRMAN

Signature: ..... Date .....

Annex 2. Photos

a. The area MCA Ol Moran Ward (left) and the area Chief Sipili Location (Right) make their contributions during the meeting

b. The project planner (Right, standing) takes members through the proceedings during presentation of the socio-economic survey findings

	Besides that, the area that would have been sufficient for such a purpose was the plot adjacent to the slaughterhouse – and due to environmental considerations, a slaughterhouse and a community center wouldn't be compatible

MIN SPL 004: 20/2/2025; Meeting closure and Adjournment

The meeting ended at 1.29pm with prayers from a community member followed by a health break. The verification of the list of Beneficiaries and enumeration of parcels that were not captured during the social economic survey exercise then commenced.

MIN. SPL 005: 20/2/2025 A.O.B: -Verification of List of Beneficiaries and enumeration of parcel/structure owners

This exercise was conducted between 2.00PM and 4.00PM. There were 4 new enumerations for Sipili A and 9 new enumerations for Sipili B. This brought the total number of enumerated parcels to 242 out 271 which was 89.3%. Previously enumerated structure/parcel owners verified the accuracy of their details at the same time.

c. *Sipili Settlement residents make their points during the visioning and participatory planning sessions*

d. *County Planner (Left) and the Chief Officer Lands, Laikipia County (Right) make their remarks during the participatory planning session Annex*

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Ministry of Lands, Public Works
Housing and Urban Development

e&G SPATIAL CONSULTANTS LTD

KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR ELEVEN (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES: LOT VII PHASE IIC, CLUSTER 1

County Laikipia **Settlement** Gipili **Venue** Olivia Hall

Meeting/ Activity Presentation of socio economic survey findings **Date** 20/2/2025

No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
1.	PAULINE WANJIKU MUNGAI		✓	community member	0725533004	
2.	CATHERINE WANGU WACHIRA		✓	"	0726509296	
3.	FOSCELLI WAWERU MWANGI		✓	"	0721243990	
4.	JOHN MAULIDI NJOROGE	✓		"	0725628097	
5.	SIMON MBIRANJA	✓		"	0728591530	
6.	Cecelia Pathoni		✓	"	0712194220	
7.	Joseph Kimani Mwati	✓		"	0746038772	
8.	DUNCAN KINYANJUI MUARA	✓		"	0727409115	
9.	John Kamau Muchiri	✓		"	0712 823470	
	Sub-totals Male/Female	5	4			

1

No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
10	PETER MURETHI KHAROBIA	✓		Community member	0725828037	
11	ANDREW WARUI	✓		community member	0711484833	
12	ELIZABETH NJERU MUGO	✓	✓	community member	0722927199	
13	JAMES KARIUKI NJOROGE	✓		" "	0727719161	
14	SARAH NJERI MAINA		✓	" "	0723400083	
15	STEPHEN MWANGI KARIUKI	✓		Community member	0720802435	
16	~~[illegible]~~ PURITY WAMAITHA NJOROGE		✓	community member	0710305491	
17	[illegible] Wanjiku Wanyu	✓		Community member	0727585276	
18	JOHN KAZEI LOCHULHU	✓		SEC	0727518941	
19	Paul Thuku Karanja			Community member	0726878020	
20	Paul N. MWAURA	✓		Community member	0710703468	
21	Walter Nderitu Ndegwa	✓		Community member	0726 698327	
22	Benjamin Minjire Ndiangui	✓		Sec	0728355782	
23	Sabina ~~[illegible]~~ Cecilia Nyambura		✓	sec	0724841777	
24	Johnson Wanjau	✓		Community member	0720826248	
25	Teresia Wangui Mwaing:		✓	" "	0729063092	
26	[illegible]	✓		" "	0729464164	
27	Peter Thom;	✓		" "	0722460275	
28	JOSEPH KARIUKI WAMBUHI	✓		" "	0722405389	
29	Elizabeth Wanjiku Kinyanjui		✓	" "	0710206509	
30	Mary Wamuyu Kiruguma		✓	" "	0723943825	
	Sub-totals Male/Female	14	7			

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No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
31	Rebecca Wanjiru Kamau		✓	Community Member	0725 321 558	
32	DAVID MUCHEMI	✓		community member	0724343956	
33	Rebecca Munbi Muiru		✓	Community Member	0719180184	
34	SAMUEL THUO	✓		Community member	0726296438	
35	Daniel Wahome Maina	✓		community member	0721138915	
36	Raphael Muchiri	✓		community member	0728988158	
37	Jane Wambui Njoroge		✓	community member	0729572677	
38	MOSES MBURU MDEGWA	✓		Community member	0725794970	
39	Grace Wangui Githae		✓	Community member	0798281204	
40	PETER WAMBUGU NJAGA	✓		Community member	0725763907	
41	ANTHONY WAMBUGU	✓		Sec	0721340703	
42	Samuel K Mbogo	✓		Community member	0712052926	
43	Felistar Gacheru Njaga		✓	community member	0724633664	
44	Amos Kamau Kiroro	✓		Community member	0722124448	
45	ROBERT MURIITHI GITAHI	✓		Community member	0734577023	
46	GEORGE NJAGWA	✓		Community member	0720363971	
47	LUCY WANGARI GICHURU		✓	Community member	0702-236089 ~~0710372643~~	
48	FLORENCE WANJIRU MUNJAMA		✓	Community member	0725608457	
49	Susan Wanjiru Mbuthia		✓		0741218941	
50	Daniel G. Titi	✓		Community Sec	0723110635	
51	Geoffrey Kaloma	✓			0721470924	
	Sub-totals Male/Female	13	8			

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Ministry of Lands, Public Works
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KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR ELEVEN (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES: LOT VII PHASE IIC, CLUSTER 1

County Laikipia **Settlement** Sipili **Venue** Olivia Hall

Meeting/ Activity Presentation of Socio-economic survey findings **Date** 20/0/2025

No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
1.	PAUL MUCHIRI WAWERU	✓		SIP12 community	0727839813	
2.	SIMON GATHUO GICHURU	✓			0727719605	
3.	ROBERT B. KIOKI	✓		SIPILI	0711555804	
4.	Robert Mwangi Illaqua	✓		SIPILI	0724857931	
5.	JAMES KIBUNJA KARIUKI	✓		Sipili	0727089571	
6.	PETER NDAUSONI KAMKI	✓			0726445060	
7.	PETER MUTUKU LUKA	✓		SIPILI	0720459216	
8.	Simon Ruga Kihuto	✓		Sipili	0711743214	
9.	Kenedy Mwangi	✓		SIPILI	0723226945	
	Sub-totals Male/Female	9				

No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
52	MARY W. KIAMBATI		✓	SOO	0790364522	
53	Joseph Maina Wadira			GR	0725919726	
54	MARY N. MWANGI		✓	Community.	0727731577	
55	MARY N. NGOBIA		✓	Community.	0722684064	
56	Catherine MJIHI'a		✓	Community	0727731616	
57	Duncan Ndegwa Waigwa	✓		Community.	0714120804	
58	Joseph Gitonga Ikua	✓		Community.	0727347039	
59	Patriciah Muthoni		✓	Community.	0725 46 28 42	
60	Viginiah Wangari Kariuki		✓	Community.	0723125337	
61	LUCY WAKAECHI MAIRA		✓	Community.	0716352965	
62	Paul Mwaura Gachigi	✓		Community	0723956856	
63	Jecintah Wambui		✓	Community.	0792611813	
64	Tessie Githinji	✓			0725178553	
65	Simon Macharia	✓			0722825922	
66	David Mwai	✓			0726965377	
67	Leah Ngunjiri	✓	✓	community member	0720801092	
68	EUNICE NDUTA		✓	" "	0713729429	
69	ROSE WANJIKU KINUTHIA		✓		0728078928	RWK
70	JOEL NGAROIYA KINOGO	✓			0718585370	
	Sub-totals Male/Female	7	11			

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No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
10	[illegible]		✓	Community Member	0728279669	[illegible]
11	Titus Mau Maina	✓		Community Member	0723892249	[illegible]
12	Jane W. Ndungu		✓	SEC	0725222350	[illegible]
13	BENSON MWAURA NJAMBI	✓		Community [illegible]	0724405195	[illegible]
14	HAGGAH WANJIRU MDEGWA		✓	Community [illegible]	0722497350	[illegible]
15	Joseph Ndungu	✓		Community M.	0721479479	[illegible]
16	Zachary Muho NJUNI	✓		SEC	0701256896	[illegible]
17	Purity Gichu		✓	Community member	0726[illegible]	[illegible]
18	John Njoroge Kamau	✓		Community M	0720075735	[illegible]
19	ANN WAIRIMU WARUI		✓	Community	0701906677	[illegible]
20	Lucy Wairiru Mathenge		✓	Community	0725716969	[illegible]
21	Zachary Ndirangu Ndungu	✓		Community.	0723139195	[illegible]
22	EVAN MAINA	✓		Community.	0708338404	[illegible]
23	Simon Wathuta Kanyugo	✓		Community	0714854523	[illegible]
24	Chege Njenga	✓		Community	0716182714	Chege
25	JOHN NJAGA WAMBUI	—		Community	0724099578	[illegible]
26	Duncan Kariuki	✓		Community	0724664743	[illegible]
27	Francis Kariuki	✓		Community	0720912036	[illegible]
28	MIRIAM GICHENGU		✓	Community	0726525643	[illegible]
29	RUTH NYAMBURA		✓	Community	0728707948	[illegible]
30	NICHOLAS MBINGU muho	✓		Community	0728022310	[illegible]
	Sub-totals Male/Female	13	8			

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No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
31	DANI Kingori Gitura		✓	community member	0720214850	
32	EDWARD MURIU MACHARIA	✓			0725414347	
33	JOHN K. KIMAIYO	✓			0726311145	
34	FRANCIS W. NDERITU	✓			0720-237718	
35	Kenneth Kuria Nduati	✓			0727731521	
36	Jackson Njuguna Njagi	✓			0721838478	
37	FRANCIS Mwangi Mbugua	✓			0729900827	
38	Judy Waruingi		✓		0728843551	
39	RINGO Kionjahi Rugara		✓		0710103352	
40	Richard Muiangi Mdirangu		✓		0722754656	
41	Daniel Mburu Kamau	✓			0728784774	
42	LUCY MYAMBURA MGETHES		✓		0726458079	
43	MOSES MWANGI MAINA	✓			0711974169	
44	Stephen Kiachira Nderitu	✓			0716250827	
45	JOSEPH GATUME KAMITHA	✓			0726844778	
46	Caroline Wanjiku Njau		✓		0702816005	
47	Naomi Tibi		✓		0718757636	
48	Margaret Gathoni Njuki		✓		0722438407	
49	Shiphrah Wambui Kiruthu		✓		0727449846	
50	Joseph Kamau Thuita	✓			0714241905	
51	Zachary Kimani	✓			0712825279	
	Sub-totals Male/Female	12	9			

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No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
52	SARAH W. MACHARIA		✓	Community member	0726761506	
53	ELIJAH WAGHUNI	✓		Community member	0711743287	
54	David Komu Kuncau	✓		Community member	0763590350	
55	JOSEPH THIONGO	✓		" "	0725650939	
56	Mary Klanjiku Mwiangi		✓	" "	0741562903	
57	Francis Magondu	✓		" "	0720112329	
58	Thomas Maina Mguire	✓		Community member	0721570353	
59	Lilian Klanjiku		✓	Community member	0727904660	
60	Wairimu Njenga		✓	" "	0717742265	
61	Loretta Wangi		✓	✓	0720230108	
62	DORCAS WAIRIMU		✓	"	0711856606	
63	GABRIEL KIMANJUI	✓		Community member	0720724996	
64	NANCY W. NJOROGE		✓	Community member	0727582775	
65	Jane Wanjiru		✓	Community member	0729988330	
66	Mary Wangui Kabira		✓	Community member	0713782920	
67	Esther M. Munuhe		✓	Community member	0710446087	
68	John Wachira Gichache	✓		Community member	0790717483	
69	ESTHER WAMBUI GITUITHU		✓	SEC	0797220882	
70	RICHARD M. WAITHIRA	✓		Community	0720913367	
	Sub-totals Male/Female	8	11			

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KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP2)

PLANNING, CADASTRAL SURVEYING AND DETAILED TOPOGRAPHICAL SURVEY FOR ELEVEN (11) SELECTED INFORMAL SETTLEMENTS IN EMBU AND LAIKIPIA COUNTIES: LOT VII PHASE IIC, CLUSTER 1

County LAIKIPIA **Settlement** Sipili **Venue** Olinda Hall

Meeting/ Activity Sensitization Survey presentation **Date** 20/2/2025

No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
1.	Mercy Wambui Maina		✓	community member	0790963974	
2.	JOSEPH M. WAWERU	✓		" "	0725380333	
3.	David Kipkoech	✓		" "	0366 76 110	
4.	Paul Wambuyu	✓		" "	0726321342	
5.	REGINA WAMUYU		✓	" "	0721398272	
6.	Consolata W. Gitonga		✓	" "	0727897050	
7.	ALICE KARUNGARI		✓	" "	0726731965	
8.	KAGATHA G. STEPHEN	✓		" "	0711488817	
9.	Joseph Mwangi	✓		" "	0723770638	
	Sub-totals Male/Female	5	4			

1

No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
10	Lucas Mulangi	✓		Community member	0728548987	
11	Joseph Waru	✓		Community member	0724-280462	
12	Timothy Mwangi	✓		" "	0722658804	
13	Margret Nyambura Mdungu	✓		" "	0727706365	
14	John Kanyuhi	✓		" "	0722445240	
15	Wilson Ndiritu	✓		" "	0720032261	
16	Kiongeni Kanyari		✓	Community member	0719693921	
17	Jericca Kamaitha		✓	" "	0713492256	
18	Hannah Kamuki	✓			0726732087	
19	Lucy Muruthi		✓	Community member	0714669116	
20	KELVIN KABUGA	✓		community Member	0792614320	
21	SERAH KIMONDO		✓	" "	0716109983	
22	Leonard Mbugua	✓		" "	0724838841	
23	Fernshina Wanjiku		✓	" "	0742898589	
24	John Mwangi Ignymuiyi	✓		" "	0722465970	
25	Charles N. Kiruma	✓		" "	0711191316	
26	Charles Ndiritu	✓		" "	0714928422	
27	Gabriel Ndirangu	✓		" "	0707075487	
28	Paul Naskoy	✓		" "	0724462487	
29	Catherine Nduta Wangai	✓		" "	0725585615	
30	AMOS MWANIKI	M ✓		" "	0713354215	
	Sub-totals Male/Female	16	5			

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Spill Scoping Presentation

No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
31	Peter M. Mwangi	✓		community member	0727118817	
32	Benard Wachira Maina	✓		community member	0722156498	
33	ROSEMARY MUTHONI MUTERO		✓	" "	0725380338	
34	Grace Nyambura		✓	" "	0728461128	
35	John Mburu Kinyanjui	✓		" "	0720767418	
36	Amos NGIRANGU NJOROGE	✓		" "	0722741986	
37	PETER NGETHE	✓		" "	0722259376	
38	Grace Nzoki Gichiri		✓		0720640581	
39	David Karuiki Ndegwa	✓		" "	0721454085	
40	JOSEPH MAINA THUITA	✓		community member	0720024956	
41	Patrick Kilara			community	0723532053	
42	JANE [illegible]		✓	community	0712356044	
43	JOB NDEGWA	✓			0796915111	
44	Carolyne Githi		✓	Community member	0795358439	
45	SAMUEL WAMBUGU	✓		" "	0727966358	
46	Carolina Wairimu		✓	" "	0727647148	
47	Fredrick M. Maigua	✓			0797925165	
48	Jackson Kahuria	✓			0721644410	
49	David Gatuthia	✓	✓		0724865883	
50	CAROLINE WANJIKU NJOGU				0716517115	
51	William Mathenge Hungu	✓			0711565519	
	Sub-totals Male/Female	13	7			

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No.	Name	Gender		Project Designation	Contact	Signature
		Male	Female			
52	Nancy Wangeci Kamiti		✓	Community member	0717637534	
53	~~Carolin W Kariuki~~ Wilson Boru	✓		" "	0720289247	
54	Raphael Kiratho	✓		" "	0717435086	
55	Mary Muthoni Mono		✓	" "	0722896037	
56	MARTINS MATU KAMAU	✓			0720811792	
57	Rahab muthoni ~~Kimaina~~ Wainaina		✓	" "	0719105284	
58						
59						
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64						
65						
66						
67						
68						
69						
70						
	Sub-totals Male/Female					

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