

### County Government of Wajir

Department of Lands, Public Works, Housing & Urban Development



FINAL PLAN REPORT



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## **PLAN APPROVAL**

### **CERTIFIED**

I certify that the Plan has been prepared as per section 45 of the Physical and Land Use Planning Act, 2019 and physical planning standards and guidelines.

Circustoms	Data
	Date
COUNTY DIRECTOR OF PHYSICAL	PLANNING
RECOMMENDED	
Signature	Date
COUNTY EXECUTIVE MEMBER PLANNING	OF LANDS, HOUSING AND PHYSICAL
APPROVAL	
Hansard No	Date
COUNTY ASSEMBLY	
ENDORSED	
Signature	Date
H.E. GOVERNOR	

## **FOREWARD**



Physical and land use planning are functions assigned to county governments as outlined by the constitution of Kenya, 2010. This function bestows counties to prepare County Integrated Development Plans (CIDPs), County Physical and Land Use Development Plans, and Local Physical and Land Use Development plans, among others. This comes with the need to control development, spur economic development

and guide the provision of robust infrastructure and services.

Given this context, preparing the Local Physical and Land Use Development Plan for Khorof Harar Town is an earnest step toward achieving the county vision of being "A peaceful, cohesive and prosperous county, affording quality life for its citizens". The plan focuses on improving residents' living conditions and livelihood and spurring economic development.

The plan is supported by strategic interventions in transportation, housing, governance, physical and social infrastructure provision and environmental conservation. These interventions are supported by a raft of projects and programmes that aim to improve the living conditions in the town.

The plan has been prepared in consultation with the public at the town/grassroots level. Public participation was inclusive and involved extensive stakeholder engagement throughout the plan preparation process. The contribution of stakeholders exemplifies the spirit and vision through which this plan is anchored. This plan fits into the county's development priority and proposals for incorporating into future county-integrated development plans. The achievable benefits of the plan are only as good as its implementation.

I desire to give my commitment to the process of implementing this plan. Lastly, I call upon all stakeholders and the county's development partners to take up active roles in achieving the vision articulated in this Plan and making the Khorof Harar Town dream of being "A sustainable town that is secure, well planned, connected, and economically vibrant with adequate and efficient infrastructure" a reality.

H.E. FCPA AHMED ABDULLAHI, GOVERNOR.

## **ACKNOWLEDGEMENTS**

The preparation of this plan was made possible by the earnest effort of the Governor, H.E. Ahmed Abdullahi, and his Deputy, H.E. Ahmed Muhumed Abdi. The Department of Lands, Housing and Physical Planning prepared the plan. At this moment, I thank the governor and his deputy for entrusting the department with successfully delivering this plan.

A special thanks go to the Lands Committee and the County Assembly for discussion and approval of this plan. I also appreciate the role played by the county executive committee members in not only providing their input and aligning their departmental aspirations to this plan but also in validating the plan. This sets a rightful tone for more straightforward implementation.

Additional gratitude goes to the planning team comprising the office of the Director of Lands, Mr Abdullahi Adan, the county physical planner, Mr Edward Mucheru and the consultant, Mr David Gichuki, who was the lead consultant in preparing the plan.

I hold special gratitude to the residents of Khorof Harar Town, especially the elders, who provided understanding and leadership to enable the preparation of the plan. The residents' input throughout the plan preparation process has made the plan wholesome. With this in mind, policing of its intentions will be forthcoming during implementation.

I also wish to express my appreciation for the efforts of the town, ward administrators, and area chiefs in fully mobilizing the community and participating during the plan preparation period.

The preparation of the plan was a lengthy and intensive process that involved many other institutions and individuals at a personal level. We appreciate all those involved for their contribution and input to the Plan.

SAADIA AHMED ABDI
COUNTY EXECUTIVE COMMITTEE MEMBER,
DEPARTMENT OF LANDS, HOUSING AND PHYSICAL PLANNING.

## **EXECUTIVE SUMMARY**

Khorof Harar Town Local Physical and Land Use Development Plan (2023-2033) has been prepared in line with the provisions of the Constitution of Kenya, 2010, Physical and Land Use Planning Act, 2019, Urban Areas and Cities Act, 2011 and its Amendment of 2019, County Governments Act, 2012 and the Government's Development Blue Print outlined in The Kenya Vision 2030, as well as the National Spatial Plan.

This plan shall guide and coordinate the development of infrastructure and land use in the town and its environs for ten (10) years. The plan covers an area of approximately 37.78 km<sup>2</sup>.

Khorof Harar Town is the headquarters for Wajir East Sub County. The town is approximately 116km from Wajir Town via Wajir Bor through the Wajir Khorof (G5360) road. It is approximately 27km East of the Kenya-Somalia border and forms a major security base within the region.

In preparation for the plan for the town, participatory planning was carried out through extensive stakeholder engagement with county government officials, residents, and other relevant stakeholders (drawn from various sectors and interest groups). The result of these engagements offered a deeper understanding of the town as well as the development aspirations of its citizenry.

Plan preparation was based on a process that broadly included the identification of planning issues, which gave a profile of the development issues in the town, development of land use & zoning plans, preparation of a land cadastre and development of an implementation strategy having the projects/programmes, actors, timelines and a capital investment framework.

An assessment of development potentials, opportunities, and constraints for Khorof Harar Town was performed during the identification of issues. The town faces security challenges due to its proximity to the volatile Republic of Somalia, lack of land ownership documents limiting investment, and a general lack of basic services such as electricity, water and sewer reticulation, among other challenges. The growth of the town has subsequently been inhibited as a result. Great potential lies in its hinterland, given the presence of trees that produce gums and resins that can be harnessed for industrial leather tanning. Additionally, given its location, the town can serve as a base for security functions in the county.

#### Khorof Harar Town Local Physical and Land Use Development Plan, 2023 - 2033

The **Proposed Plan** describes the long-term (10-year) development framework for Khorof Harar Town. The plan is informed by structuring elements of the town, stakeholder affirmations, and the needs of the town's population, including its function as a sub-county headquarters.

A **Zoning Plan** accompanies the Structure Plan to provide detailed land use regulations for specific zones within the Core Urban Area, ranging from permitted uses, minimum plot sizes, setbacks (front, side and rear), levels (building heights) and plot coverage. A subdivision scheme plan has also been provided, highlighting both institutional and individual plot ownership. This shall assist in surveying and ultimately providing residents with land ownership documents afterwards.

Additionally, **sector-specific development strategies** have been proposed for the Transportation, Housing, Local Economic Development, Infrastructure and Governance sectors. These strategies outline the specific projects that will be put in place to achieve the plan's objectives. An Implementation framework names the actors and specifies project actualisation timelines. It is intended to ensure smooth, well-coordinated and result-oriented implementation of this LPLUDP.

Adopting the proposed plan coupled with the timely and coordinated implementation of the proposed strategies will act towards reversing the current trend, improving the living conditions of Khorof Harar Town residents, and above all, helping achieve the community's vision and subsequent growth of the county.

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## **ACRONYMS**

ABTC Appropriate Building Technology Centre

ACC Assistant County Commissioner

AP Administrative Police

ASALs Arid and Semi-Arid Lands

BOM Board of Management

CBD Central Business District

ECDE Early Childhood Education

EARC Education Assessment and Resource Centre

FGD Focus Group Discussion

GIS Geographic Information System

ICT Information Communication Technology

KDHS Kenya Demographic and Health Survey

KeNHA Kenya National Highways Authority

KeRRA Kenya Rural Roads Authority

KPLC Kenya Power and Lighting Company

KURA Kenya Urban Roads Authority

LPLUDP Local Physical and Land Use Development Plan

NG-CDF National Government Constituency Development Fund

NLC National Lands Commission

NMT Non-Motorized Transport

REA Rural Electrification Authority

SDGs Sustainable Development Goals

TOR Terms of Reference

TSC Teachers Service Commission

TV Television

TVET Technical and Vocational Training

UACA Urban Areas and Cities Act

VIP Ventilated Improved Pit Latrines

WHO World Health Organization





economic growth, and guide the provision of robust infrastructure and services.

Preparing the Local Physical and Land Use Development Plan for Khorof Harar Town is an earnest step toward achieving the county's vision of being "A peaceful, cohesive and prosperous county, affording quality life for its citizens." The plan focuses on improving residents' living conditions and livelihood and spurring economic development.

The growth of Khorof Harar Town has been uncontrolled and unregulated/organic over the years despite having a development plan. The result is the uncoordinated and unchecked division of land, inadequate access roads, increased insecurity issues, inefficient solid waste management, inadequate infrastructure and encroachment of public spaces, and inefficient and ineffective natural resource conservation and management, among others.

Khorof Harar Town Local Physical and Land Use Development Plan (LPLUDP) is directed and guided by an assortment of legislations (sectoral policies and laws) as well as the population's needs in terms of infrastructure and services. The plan is a long-term plan and shall span ten (10) years, 2023-2033, to guide the town's overall development regarding land use sustainability and coordinated growth.

### 1.2 Purpose of the Plan

The purpose of the Local Physical and Land Use Development Plan (LPLUPD) is to:

- i. Guide and coordinate the development of infrastructure
- ii. Regulate the use of land and land development;
- iii. Provide zoning standards and promote urban renewal
- iv. Provide a framework for coordinating various sectoral agencies, including transport, housing,
- v. Provide a framework and guidelines for building and work development in the town.

### 1.3 Vision and Objective of the Plan

During the visioning process, stakeholders gave vision statements on how they want the town to develop. Below are the suggestions the agreed suggestions resulting from group work activities with residents:

- i. A beautiful and clean town
- ii. A well-planned town with an integrated transport system
- iii. An inclusive, secure, accountable governance system
- iv. Conservation of the town's rich hinterlands
- v. Creation of livestock corridors and grazing areas

Plate 1-1: Visioning in Khorof Harar Town



The overall formulated town vision is:

A sustainable town that is secure, well-planned, connected, and economically vibrant with adequate and efficient infrastructure.

The objective of the strategic urban development plan is: To create a secure town having requisite infrastructure that shall create an enabling environment for commerce and human



## 1.4 Description of the project

The preparation of the LPLUDP for Khorof Harar Town was guided by the Terms of Reference (TORs). They are summarized as follows:

- i. Preparation of a participatory framework to guide stakeholder engagement throughout the plan-making process and implementation. The output of this is a general vision for the town and the identification of the current development challenges and the future development aspiration for the town.
- ii. Production of an inventory of the current situation experienced in the town in different sectors, including land suitability and availability, analysis of current and future urban development trends, socio-economy of the town, infrastructure and services and environment.
- iii. Develop an interactive GIS-based plan for the town, showing the current situation and the proposed cadastral layer and plan in a digitally interactive format.
- iv. An integrated urban development plan that addresses the town's existing and future challenges.

## 1.5 Guiding Principles/ Values

The following principles guide the preparation of Khorof Harar Town LPLUDP:

- Effective Public Participation/Engagement: The plan has complied with the terms of
  reference that outlined the formulation and operationalization of a participatory
  framework to guide engagement with community members throughout the project.
  Consultative engagement forums are necessary as they offer a way to engage
  stakeholders effectively.
- 2. **Minimal disturbance:** The Plan has been prepared considering minimal impact or change to the existing developments within the town.
- 3. **Urban containment/Compact urban areas:** The plan shall strive to limit and control urban growth within the set urban boundaries to protect the town's hinterland. This aims to mitigate urban sprawl, reduce the cost of infrastructural provision and contain service provision to planned areas.

- 4. **Livability:** The planning of Khorof Harar Town is guided by the need to enhance the community's quality of life through improved service provision, distinct zones of activity and recreation, and transportation.
- **5. Sustainable development:** The LPLUDP is guided by the need to harmonize social, economic and environmental aspects of development to cater for current and future generation needs of the people of Khorof Harar Town.
- **6. Promotion of ecological integrity:** The Plans promotes the protection and conservation of the town's rich hinterland that is endowed with gums and resins.

## 1.6 Methodology

The planning process for formulation of the LPLUDP for Khorof Harar Town was a deliberate, systematic and structured action to develop a vision for the spatial development as well as the specific policies, strategies and measures for achieving the spatial vision. The preparation of the plan entailed an all-inclusive, multidisciplinary, multi-sectoral and participatory approach involving views and expert opinions collected and collated through a structured and consultative process that brought together stakeholders drawn from the public, private and civil society organizations. The broad-based process of consultations was carried out around identified thematic areas that formed the basis of stakeholder engagement and consensus building conducted through workshops and seminars. The following processes informed the preparation of the plan;

Table 1-1: Methodology

NO.	STEP	KEY ACTIVITY
1.	Project Inception	➤ Notice of intention to plan
		> Start-up meetings
		> Identification of stakeholders
		<ul> <li>Developing mode of Operation/Action Plan</li> </ul>
		> Appraisal of project area/reconnaissance
2.	Scoping of context	➤ Launch and preliminary Visioning
		➤ Urban Study:
		Literature review
		Key Informant interviews

NO.	STEP	KEY ACTIVITY
		Stakeholder consultations/FGDs
		<ul> <li>Observation (including photography)</li> </ul>
		<ul> <li>Administering questionnaires</li> </ul>
		> Stakeholder consultations;
		Aligning the results thematically.
3.	Mapping	<ul> <li>Acquisition of high-resolution satellite image for the planning area;</li> <li>Acquisition of digital topographical maps;</li> <li>Preparation of thematic maps;</li> <li>Digitization and compilation of the digital information.</li> </ul>
		<ul><li>Preparation of a cadastral layer</li></ul>
		> Creation of a GIS database.
4.	Identification of planning	Analysis of the baseline information;
	issues	> Sector consultations;
		➤ Validation of situational analysis findings and the planning
		issues identified;
		Visioning;
		Realigning /reaffirming the preliminary vision established
		<ul><li>at the launch of the project.</li><li>Incorporating stakeholder's concerns and comments.</li></ul>
		incorporating stakeholder's concerns and comments.
5.	Land optimization for Urban Development	Projection of Land requirements based on population needs;
6	Preparation of Land use /Zoning plan	Preparation of a zoning/land use Plan
7	Formulation of Land Use and	> Formulation of Land use and Land Management
	Land Management	Policies /Guidelines based on zoning
	Policies.	

NO.	STEP	KEY ACTIVITY
9	Formulation of sector	Formulating sector development strategies;
	development strategies	Identifying strategic actions and measures;
		> Identification of programs and projects to be implemented
		to realise the strategies.
10	Implementation	> Identification of Capital Investment Projects.
	Framework	> Preparation sector of implementation strategy
11	Stakeholder engagement	> Presentation of the Draft Plan
	(Validation Workshop for the	> Collection of comments from the stakeholders.
	Draft Plan)	
12	Preparation of the Final Draft	> Incorporation of the comments as raised by stakeholders;
	Plan	> Packaging the reports for final submission.
13	Submission of the Plan for	> Submitting the Final Plan to the office of the County
	the purposes of approval and	Executive Member in charge of Lands, Housing and
	adoption.	Physical Planning
		> Submission of the Final Plan to the county executive so as
		to follow the legal process for approval.

## 1.7 Organization of the Report

This report is organized into the following sections:

- The Background of the plan incorporates its purpose, vision and objectives, a
  description of the terms of reference, the methodology used in preparing the plan and the
  organization of the plan report;
- ii. **The Planning Context** outlines the project location and its physiographic characteristics in terms of climatic conditions and geological attributes, the previous planning efforts in the town and its existing functions and potential. Additionally, a review of the policy and legal background guiding the development of the plan is provided;
- iii. An analysis of the **Existing Development Situation** that highlights the population and its needs assessment, land use and suitability analysis, housing, physical and social

- infrastructure provision, transport, and local economic development while highlighting key issues in each sector;
- iv. The **Planning Proposals** presented as sector-based development strategies, a zoning plan and regulations, and an implementation framework;
- v. A **Capital Investment Plan** outlining the key projects that will spark transformation and socio-economic development.





# 2 PLANNING CONTEXT

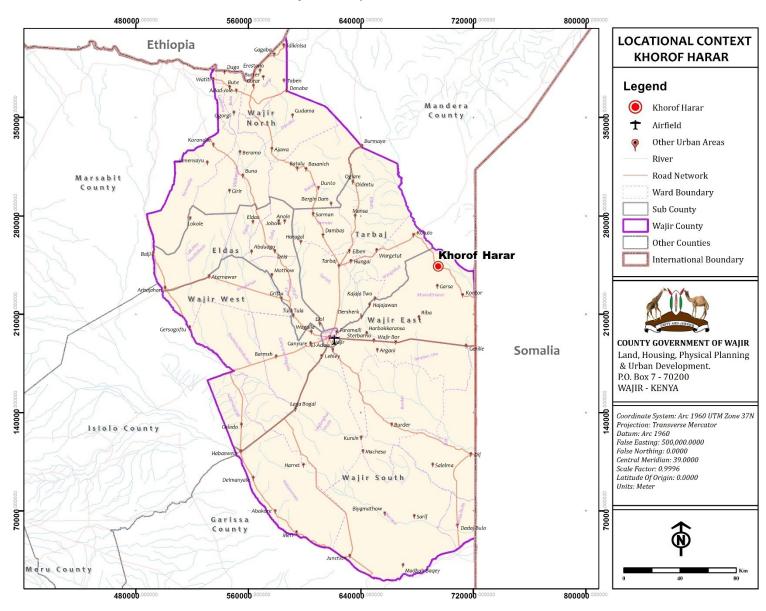
#### 2.1 Overview

The planning of Khorof Harar Town takes cognizance of different legal provisions that guide the plan's development and the expected output. This section presents an overview of the town's location and physiographic characteristics. Additionally, a review of the previous planning effort in the town is presented alongside the existing functions. Lastly, a review of existing legislation regarding policies and laws guiding the plan is presented.

#### 2.2 Location of the Town

Khorof Harar is a town in Wajir County. It is located along Diff-Kotulo (B93) road off the Wajir-Mandera (A13) highway. It is situated at 2° 13′16.61" N and 40° 45′ 24.43′E and approximately 116km from Wajir Town via Wajir Bor through the Wajir Khorof (G5360) road. The town is approximately 27km East from the Kenya-Somalia border. This is as represented in Map 2-1.





Map 2-1: Khorof Harar Town Local Context

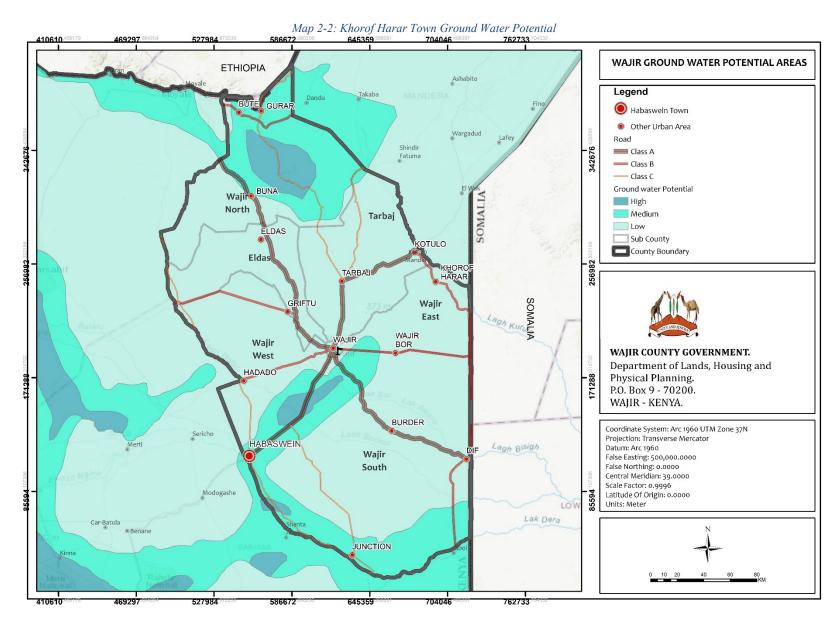
### 2.3 Physiography

Khorof Harar Town is located in a semi-arid area with a relatively hot and dry climate throughout the year, with temperatures ranging from 21°C to 42°C. The average annual precipitation received in the county is 240 mm. Khorof Harar Town is located on loamy soils, with the hinterlands having sandy soil characteristics. The deep brown soils are ideal for crop cultivation.

The town experiences an average wind speed of approximately 4.4- 4.8 M/S at 50 m high above ground. The range effectively falls above the minimal grid requirement of 4.5 meters per second for a grid connection system.

The town lies in a zone of low groundwater potential. However, the town gets its water from boreholes. Groundwater extraction around this area reaches high depths. The town's groundwater potential is traceable in three geological terraces within the sedimentary basin. Water is traceable within the third terrace (preceded by overlying Quaternary and Pliocene layers). The third geologic terrace comprises limestone and gypsum beds, which generally contain saline water (largely calcium sulphate) (Krhoda, 1989), forming the underground water potential for Khorof Harar. This is shown in Map 2-2.





Source: Kenya Data

#### 2.4 Function and Potential of the Town

#### **2.4.1** Functions of the Town

#### Commercial and Service Functions

The town hosts a mix of commercial activities, including small-scale retailing, auto repair and fueling, and a fresh produce market. Services such as education, health and administrative services are offered. The town has an airstrip that can be used during emergencies and for security. These services are, however, limited owing to the inaccessibility of the town (poor roads) and the general inadequacy of infrastructure, including water and electricity.

#### Administrative functions

The town is the sub-county headquarters of Wajir East. It hosts several administrative offices, including town and ward administrator, chief, and Kenya Police. This administration function forms the basis for reinforcing the existing institutions within the town to offer adequate services and reinforce security within the area.



#### 2.4.2 Potential of the Town

#### Commercial and service potential

The town has commercial and service potential based on its population and administrative function. In anticipation of population increase and service to its surrounding hinterland, the town has the potential to offer varied commercial, health, and educational services.

#### Industrial potential

Khorof Harar and its hinterland is endowed with trees that produce gums and resins that can be exploited for industrial gain.

Livestock production in the town and its hinterlands provides an opportunity for livestock-based industrial activities such as slaughtering hides, skins, meat, and milk.

#### Gateway Town Potential

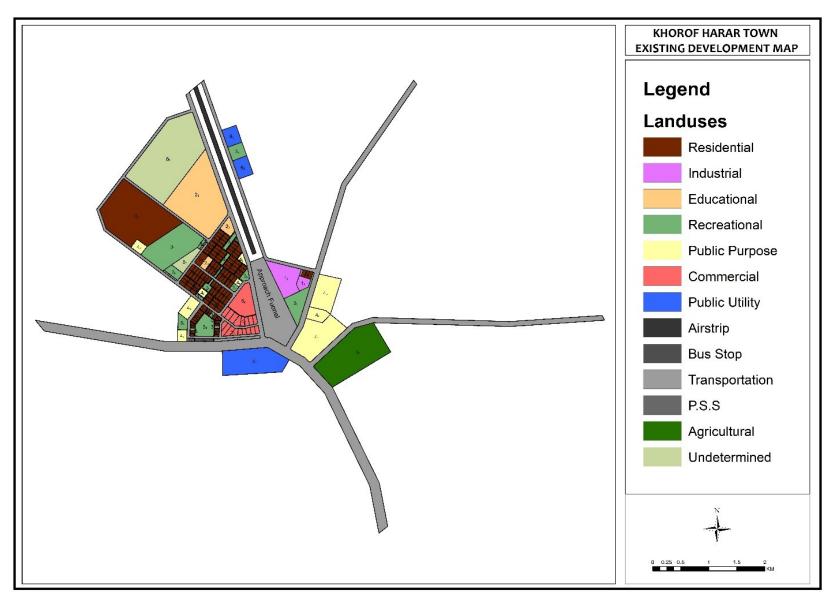
The town has the potential to serve as a gateway town due to its proximity to the Somalia border (approx. 27km) and its hierarchy as the headquarters of Wajir East. The town can be reinforced to offer efficient services related to security due to the volatility of the Republic of Somalia, as well as transport, customs, and foreign trade in the future.

## 2.5 Previous Planning Efforts

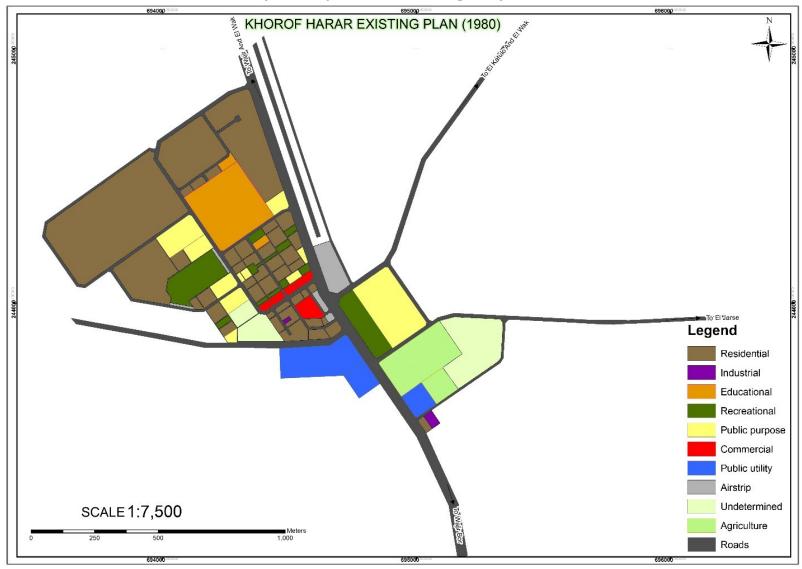
Khorof Harar Town has two previous development plans that were done in 1979 and 1980, both of which were never approved. Both plans focused on development between the airstrip and the Khorof Harar-Kotulo (B93) road. A few land uses in both plans have guided the town's development to its current state. However, part of the town exhibits a different character from what was previously planned. Settlements have occurred to the south of the airstrip owing to the inhibitions caused by the facility and public institutions such as the Khorof Harar Secondary and the Kenya Police camp. The land uses that have maintained the initial proposals in both plans include;

- i. The Airstrip
- ii. The public utility is located at the present-day borehole and pumping site.
- iii. The road configuration (the main Khorof-Harar-Wajir (G5360).and the Diff-Kotulo (B93) road.
- iv. In the 1980 plan, the location of Khorof Harar Sub County Hospital remains to the present day.

Map 2-3: Khorof Harar 1979 Development Plan



Source: Ministry of Lands



Map 2-4: Khorof Harar Town 1980 Existing Development Plan

Source: Ministry of Lands

## 2.6 Policy Direction

#### Vision 2030

Vision 2030 aims to transform Kenya into a newly industrializing, middle-income country that will provide a high-quality life to its citizens by 2030. It is based on three pillars: economic, social, and political.

Specifically, the plan aims to directly achieve the intentions of the economic pillar by promoting value addition, promoting an inclusive wholesale and retail trade sector, and promoting a robust, diversified manufacturing sector and financial services.

In addressing the social pillar, the plan aims to provide a clean, secure, and sustainable environment, adequate and decent spaces for promoting housing development, and infrastructure, including schools, health facilities, water reticulation, and sanitation systems. The plan also aims to promote gender, youth, and vulnerable groups in resource distribution and improve their livelihoods.

#### National Spatial Plan (2015-2045)

The Plan was prepared within the framework of the Constitution. It seeks to achieve promises Kenyans furnished themselves under the new Constitution, such as the right to the economy, the need for balanced development across the country, the right to a clean and healthy environment, and the right to property, among others. The Plan covers the entire country and encompasses all the 47 counties. The Plan recognizes that Kenya has various resources that must be managed concertedly.

The National Spatial Plan addresses land use and socio-economic and environmental issues to achieve balanced and sustainable spatial development and optimal land uses across the country. The Plan provides comprehensive strategies and policy guidelines to deal with rural and urban development issues, modernizing agriculture, infrastructure, energy production, mining and industry, and sustainable human settlements. The NSP forms the basis upon which lower-level plans in the country shall be prepared, including Regional Plans, County Spatial Plans, Local Physical Development Plans, and Urban Plans.

#### National Land Policy

The land policy proposes development control to ensure equitable and sustainable use of land. It recognizes land-use planning as an important tool in land-use management, which can address the current challenges and create new opportunities for sustainable human settlements. The goal of Khorof Harar Town LPLUDP is to strengthen development control, upgrade informal settlements, promote sustainable and equitable use of land, protect fragile ecosystems, ensure efficiency and access to land management system and uphold principles of land policy set out in Article 60 of the Constitution.

#### National Housing Policy

The policy's goal is to facilitate adequate shelter and a healthy living environment at an affordable cost to all socio-economic groups in the country to foster sustainable human settlements. It also aims to minimize the number of citizens living in shelters below the habitable living conditions and curtailing the mushrooming of slums and informal settlements in the major towns and urban centres. Khorof Harar Town LPLUDP respects these housing policy goals by; promoting functional, healthy, aesthetically pleasant and environmentally friendly houses and facilitating the progressive realization of the right to adequate housing by all Khorof Harar Town residents.

#### Integrated National Transport Policy

The Policy identifies challenges facing the transport sector in Kenya, as is evidenced in Khorof Harar Town, such as missing links. The policy aims towards attaining an effective transport system in the country. The plan provides for local, regional, national and international connectivity of Khorof Harar Town to attain its vision and efficient movement of the locals and the foreigners. The plan also looks into the objective of the policy, which is to develop an efficient, integrated, balanced, and environmentally sound urban transport system.

#### Draft National Urban Development Policy

This policy aims to ensure orderly, competitive, and sustainable urban development that enhances the urban areas' physical, social, and local economic development.

Secondary towns in Kenya, continue to absorb large numbers of people who migrate from other areas. The Local Physical and Land Use Development Plan will cater to a population greater than expected from natural growth.

## 2.7 Legal Context

Khorof Harar Town LPLUDP has been prepared in the context of different laws, as highlighted in the table below.

Table 2-2: Legal Context to Plan Development

LAW	SECTIONS RELEVANT TO THE PLAN
The County Government Act, 2012	<ul> <li>This act gives effect to Chapter Eleven of the Constitution to provide for county governments' powers, functions, and responsibilities to deliver services and for connected purposes.</li> <li>Section 5 of the act states the responsibilities of the county government, including county planning, as provided in the fourth schedule of the Constitution.</li> <li>Section 49 introduces the urban areas and cities as a tool for managing urban areas and cities.</li> <li>Section 102 stipulates the principles of planning and development facilitation in a county.</li> <li>Section 104 indicates the obligations to plan by the county</li> <li>Section 107 highlights the plans that the county should prepare, including urban plans</li> <li>Section 111 indicates the plans for both a municipality and a city.</li> <li>Section 115 stipulates the process taken to carry out public participation.</li> </ul>
Urban Areas and Cities Act, 2011 and Urban Areas and Cities (Amendment) Act, 2019	This act gives effect to Article 184 of the Constitution to provide for the classification, governance, and management of urban areas and cities; to provide for the criteria of establishing urban areas, to provide for the principle of governance and

LAW	SECTIONS RELEVANT TO THE PLAN
	<ul> <li>participation of residents and for connected purposes</li> <li>Section 5 of the act instructs on the criteria for classifying urban areas and cities.</li> <li>Section 11 provides the governance and management principles of urban areas and cities.</li> <li>Section 34 gives directions on service delivery in towns.</li> <li>Part V of the act gives objectives, contents, the process of adoption, and reviewing of integrated development plans for urban areas.</li> <li>The first schedule of the Act lists the services to be offered by different categories of urban areas in the country.</li> <li>The second schedule highlights the rights of and participation of residents in the affairs of their urban area.</li> <li>The third schedule provides provisions for issues to be dealt with in preparation of an integrated development plan.</li> </ul>
Physical and Land Use Planning Act, 2019	<ul> <li>This act makes provision for the planning, use, regulation, and development of land and for connected purposes.</li> <li>Section 5 of the act stipulates the principles and norms of physical and land use planning.</li> <li>Section 17 stipulates the responsibility of the County Executive Committee Member in charge of Physical planning. Among these responsibilities is the formulation of policy on physical and land use planning and promoting the integration of county physical and land use planning functions and sectoral planning levels.</li> <li>Sections 45-50 intricately describe a local physical and land use development plan: its purpose, preparation process, content, notices of objection and approvals as well as the publication of the LPLUDP.</li> </ul>

LAW	SECTIONS RELEVANT TO THE PLAN
	• Second schedule part A instructs matters that may be dealt
	with in an LPLUDP.



# 3 SITUATIONAL ANALYSIS

## 3.1 Overview

The basis for a plan is based on understanding the area in terms of how communities live and utilize land and land-based resources. Additionally, understanding the condition of facilities that drive their socio-economic development and the capacities of water, electricity, sewerage, and solid waste management infrastructure is fundamental to bridging the development gaps in the urban area. The section below presents the findings on Khorof Harar Town regarding the population, existing land use, transportation, housing, water and energy supply, sanitation conditions, the local economy, and urban governance.

## 3.2 Population

Population is a parameter that provides a basis for planning and decision-making. According to the Population and Housing Census 2019, Khorof Harar had 6,136 persons. The population is projected to grow to 6,556 and 7,737 in 2023 and 2033, respectively, at a county annual growth rate of 1.67%.

### **Population Density and Distribution**

Khorof Harar Town is located in Wajir East Sub-County. The town has an area of 37.78 km<sup>2</sup>. With the current population of 6,556, the town's population density is estimated to be 174 persons per square kilometre, rising to 205 by 2033.

#### **3.2.1** Population Structure

### 3.2.1.1 Age Cohorts

Khorof Harar Town has a youthful population with the majority (82%) between 0 and 35 years old. The population decreases from the age of 35 years in the successive cohorts.

The labour force between 15 and 64 years of age makes up 49.4% of the total population.

The age cohorts reveal that 82% of the population is below 35. About 54% of the population is dependent (aged 0-14 and above 65 years).

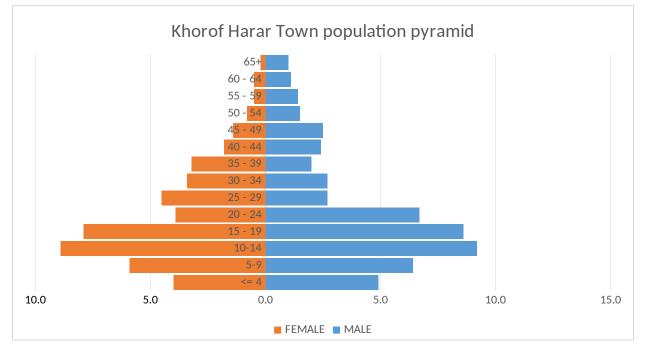


Chart 3-1: Khorof Harar Town Population Pyramid

**Under 5 years**: 8.9% of the population is under this particular category, equivalent to 1,397 persons in the total population of Khorof Harar Town. They require neonatal and post-natal care to reduce infant and maternal deaths. Early childhood development facilities are essential at this age bracket.

**Primary School-Going Age (6-13):** School-going children make up 29.4% of the population in Khorof Harar Town, which is equal to 4,616. They require proper health care and recreational and educational facilities.

**Secondary School Going Age (14-17)**: This population is estimated at 2,591, which is 16.5% of the total population in Khorof Harar. They require proper health care and recreational and educational facilities.

**Youth Population Age Group (15–34):** Youths comprise 40.4% (6,500 persons) of the sampled population. The town requires employment opportunities, skill development, education and recreation facilities.

**Labour Force (15-64):** This records about 59.6% of the town's total population. The town requires employment opportunities, skill development, education and recreation facilities.

**Aged Population (65+):** Only 188 persons are of this age group, only 1.2% of the recorded population of Khorof Harar Town. They require proper healthcare facilities, homes for the aged, and social care.



## 3.2.2 Needs Assessment

The population for the urban centre of Khorof Harar is projected to be 6,556 as of 2023 and is estimated to grow to 7,737 by 2033. This population is assumed to be for the urban centre and the sub-location. The population needs are as per the demand by the end of the planning period, 2033. This is as presented in Table 3-3.

Table 3-3: Population Needs Assessment

Facilities	Catchment Population	Existing Number	Land requirements	Current demand in number (Pop		Total area Required in
	Topulation	1 (diliber	in Ha	6,556)	number (1 op. 1,101)	2033 (Ha)
Police Station	49,999	1	3	1	1	-
Town Halls	49,999	-	1.2	1	1	1.2
Lower court	49,999	-	1	1	1	1
Library	49,999	-	0.4	1	1	1
Primary	4,000	1	3.9	2	2	3.9
Secondary School	8,000	1	4.5	1	1	-
Vocational institution	15,000	1	10.2	1	1	-
Religious institution	15,000	-	0.1	1	1	0.1
Community Centres	20,000	-	0.25	1	1	0.25
Level 2 (Dispensary)	10,000	-	1	1	1	1
Level 3 (Health	30,000	-	3	1	1	3
Centres)						
Level 4 (Sub-County Hospitals)	100,000	1	4	-	-	-

Facilities	Catchment Population	Existing Number	Land requirements in Ha		Projected demand in number (Pop. 7,737)	Total area Required in 2033 (Ha)
Child care facilities	49,999	-	0.1	1	1	0.1
Animal control office	49,999	-	0.1	1	1	0.1
Abattoirs	49,999	-	1	1	1	1
Sports and cultural centre facilities	49,999	-	2 ha	1	1	2
Disaster management office	49,999	-	0.5	1	1	1
Dumping site	49,999	-	2	1	1	1
Total Land Required 16.						16.65

Source: Consultant's Computation, 2023

#### 3.3 Site Analysis

This section looks into the various land use activities occurring in the town. The planning area for the town is 3777.53Ha (37.78 km<sup>2</sup>). The constituent land uses are described below.

#### **Educational Land Use**

Khorof Harar Town has three educational facilities, including the Khorof Harar primary and secondary school and a technical training institute. These facilities cover a total area of 34.88Ha.

## Agricultural Land Use

Agricultural land use in the town is mostly practised on the fringes of the built-up area where livestock are grazed, and an agricultural research institute is based. This land use covers a total area of 3480.14 Ha.

#### Residential Land Use

Residential land use in the town covers a total area of 39.61Ha. Residential land use forms the bulk of developments in the built-up area.

### Public Utility Land Use

This land use comprises the water pumping site, a graveyard and a cattle crash covering a total area of 0.786 Ha.

### Public Purpose

Public-purpose facilities in the town include the Khorof Harar Sub-County hospital, mosques and madrassas, the Kenya Police Camps, and administrative offices. These facilities cover a total area of 9.15Ha.

#### Commercial Land Use

Commercial land use in the town is found along the Diff-Kotulo (B93) road and the Khorof-Wajir (G5390) road. Commercial land use in the town is not pronounced, only covering the strip along the major roads. This land use covers an area of 0.589 Ha.

#### Transportation Land Use

Transportation land use in the town includes roads, footpaths and the airstrip. Roads in the town cover a total length of 30km.

## **Undeveloped Spaces**

These are spaces that are currently unutilized within the built-up area. They cover a total area of 208.32Ha. This shows minimal space utilisation within the planning area; therefore, interventions made for development will aim to utilize this land.

## Slaughter House

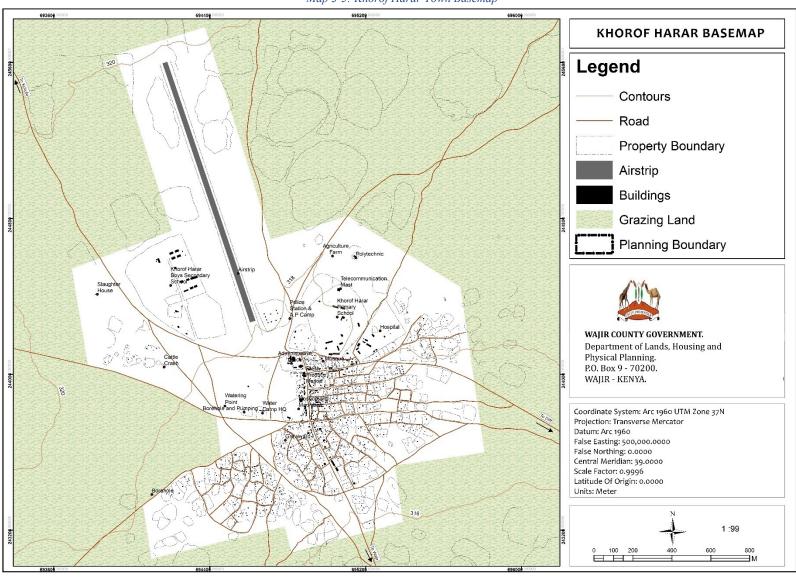
This is the only industrial establishment in the town covering a total area of 0.31Ha offering a site for livestock slaughter only.

## 3.3.1 Summary of Land uses in the town

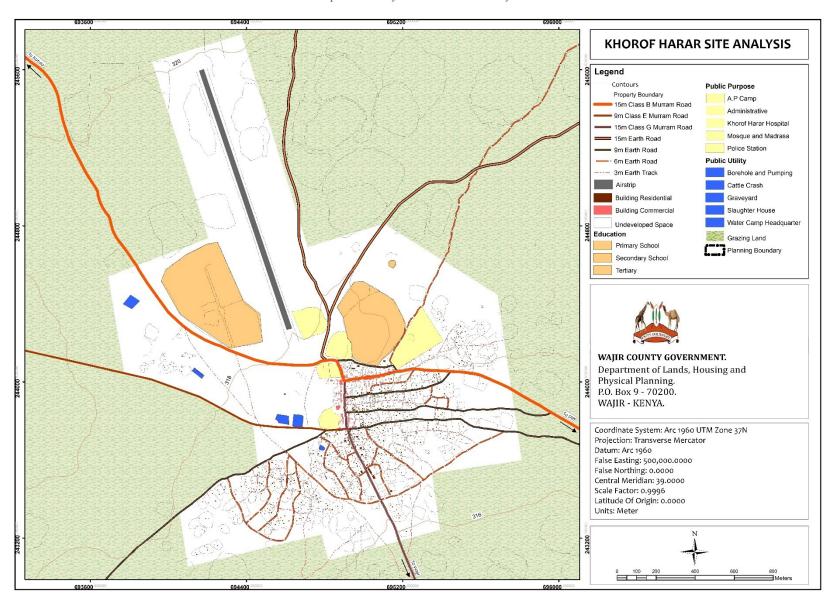
The land uses in the town are summarized in the table below, and a land use map showing the different land uses and their locations is shown on Map 3-6.

Table 3-4: Summary of Land uses in Khorof Harar

LAND USE	AREA IN KM <sup>2</sup>	AREA IN HA
Public Utility	0.0078	0.786
Commercial	0.0059	0.589
Public Purpose	0.09058	9.15
Educational	0.26	34.88
Agriculture/Grazing	34.80	3480.14
Residential	0.0164	39.61
Transportation	0.31932	31.932 (Length 30km)
Slaughter House	0.003168	0.31
Undeveloped Spaces	2.08	208.32



Map 3-5: Khorof Harar Town Basemap



Map 3-6: Khorof Harar Town Site Analysis

## 3.4 Assessment of Development Conditions

#### 3.4.1 Infrastructure

Infrastructure is key to the achievement of economic growth. This section presents an analysis of the town's existing infrastructure.

## 3.4.1.1 Physical infrastructure

## **Water Supply**

Khorof Harar's water supply comes from five boreholes. The main borehole has a pumping station where water is supplied through a water kiosk, and the residents transport the water from the water kiosks to their houses by donkeys or pushing jerry cans on the ground.

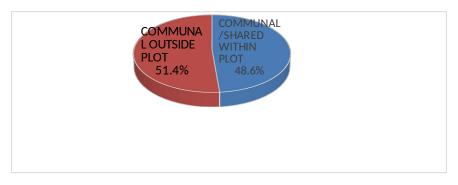




Source: Field survey, 2019

The level of water provision in the town is communal, whereby water is shared within or outside the plots. Communal water access within the plots is 48.6%, while those who source water from outside their plots through water kiosks stand at 51.4%.

Chart 3-2: Level of Water Provision



With a steady population growth in the town, water demand is bound to increase. From the projected population, the town's water demand will increase to approximately 1,249.04m<sup>3</sup> daily by 2033. Hence, the current water supply in Khorof Harar Town needs to be improved.

Table 3-5: Water demand projection

Consumer	% Of Total	Consumption	Litres/Day	M3/Day		
Water	Population	Litres/Head/Day				
Demand	(6,556)					
•	<b>Water Demand Proj</b>	ection For 2023 for	<b>Khorof Harar Tow</b>	n		
Low income	70	75	344,190	344.19		
Medium income	25	150	245,850	245.85		
High income	5	250	81,950	81.99		
Total domestic			671,990	971.99		
Commercial and	30% of total domes	tic water demand	201,597	201.597		
institutions						
Allowance for	20% of total domes	tic water demand	134,398	134.398		
leakage						
Total Water Demar	nd		1,007,985	1,007.985		
Internal usage	5% of total domest	ic water demand	50,399.25	50.4		
Total Water Requirement			1,058,384.25	1,058.38		
Liquid waste	80% of total water demand		846,707.4	846.71		
Demand						
Water Demand Projection For 2033						

Consumer	% Of Total	Consumption	Litres/Day	M3/Day
Water	Population	Litres/Head/Day		
Demand	(6,556)			
Low income	70	75	406,193	406.19
Medium income	25	150	290,138	290.14
High income	5	250	96,713	96.71
Total domestic			793,043	793.04
Commercial and	30% of the total	al domestic water	237,913	237.91
institutions	demand			
Allowance for	20% of total domes	tic water demand	158,609	158.61
leakage				
Total Water Demar	nd		1,189,565	1189.57
Internal usage	5% of total domesti	ic water demand	59,478.25	59.48
Total Water Requirement			1,249,043.25	1,249.04
Liquid waste	80% of the total wa	ter demand	999,234.6	999.23
Demand				

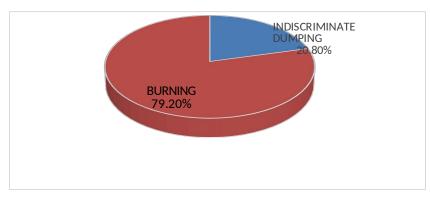
Source: Water Design Manual, 2005

## **Sanitation and Waste Disposal**

## Solid Waste Management

The major areas where solid waste is generated include commercial and residential areas. The waste generated in Khorof Harar has no disposal framework. According to a field survey in 2019, solid waste management takes place at the household level, whereby modes of disposal include burning, which is done by 79.2% of households, and indiscriminate dumping, which is done by 20.8 %.

Chart 3-3: Solid Waste Disposal Methods



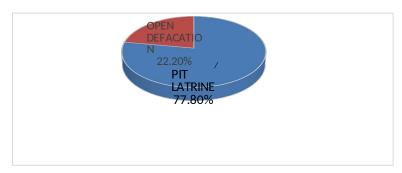
## Solid Waste Output (Quantity)

Solid waste generated per person is 0.74 kilograms daily (World Bank, 2016). With the current population (2023) of 6,556 persons, the total solid waste generated in the town is 4,851.44 kilograms daily. The waste generated is estimated to rise to 5,725.38 kilograms per day by 2033.

## Liquid Waste

The town's main liquid waste management method is using pit latrines. According to a field survey in 2019, 77.8% of households in the town use pit latrines to dispose of liquid waste, while other methods, including open defecation and use of buckets, stand at 22.2%.

Chart 3-4: Liquid Waste Disposal Methods



Source: Field survey, 2019

## Liquid Waste Output (Quantity)

Liquid waste generated is approximately 80% of the total water demand. The current (year 2023) liquid waste generated in Khorof Harar Town is estimated to be 846,707.4 litres daily. By 2033, liquid waste to be generated is estimated to be 999,234.6 litres daily. The town requires a facility that can handle the waste generated.

## **Storm Water Drainage**

Khorof Harar Town does not have a stormwater drainage infrastructure. The town's terrain is relatively flat, leading to flooding during the heavy rainy season.

## **Electricity**

Households in the town are not connected to electricity. The town, however has solar-powered street lights. There are plans to connect the town to electricity. The necessary infrastructure has been put in place and is awaiting connection from the local power grid in Wajir Municipality.

Plate 3-3: Electricity Infrastructure and Solar Powered Street Lights



Source: Field survey, 2019

#### Electricity Demand

An average household consumes about 3,100kWh of electricity annually (World Energy Council, 2010). This is approximately 7.29kWh per day. Khorof Harar Town has 1312 households as of 2023 (based on an average household size of 5, household survey 2019). This translates to a demand of 9,564.48kWh of electricity per day. This demand is estimated to rise to 11,280.546kWh of electricity per day by 2033, with the town projected to have 1,548 households.

#### 3.4.1.2 Social Infrastructure

#### **Health and Social Care**

The main health facility in the town is Khorof Harar Sub-County Hospital. The hospital has one (1) registered clinical officer, two (2) nurses, one (1) laboratory technician, one (1) public Health

Officer (P.H.O), one (1) nutritionist and one (1) pharmacy technician. The facility has a bed capacity of 24. The services offered in the hospital include outpatient services, pharmacy, laboratory services, inpatient services, maternal and child health services, and maternity and V.C.T services. The hospital, however, lacks a constant electricity supply.

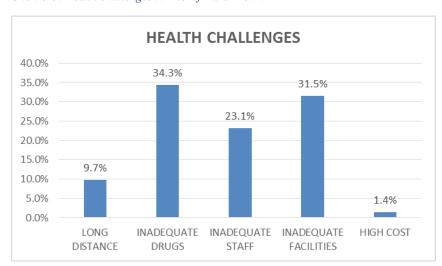
Plate 3-4: Khorof Harar Sub-County Hospital





Source: Field Survey, 2019

Chart 3-5: Health challenges in Khorof Harar Town



Source: Field Survey, 2019

#### Health Demand

Table 3-6: Health Facilities Requirements

Facility	Existing number	Current demand (2023)	Current deficit	Demand by 2033	Required facilities by 2033
Level 2	0	1	1	1	1

Facility	Existing number	Current demand (2023)	Current deficit	Demand by 2033	Required facilities by 2033
(Dispensary)					
Level 3 (Health Centre)	0	1	1	1	1
Level 4 (Sub County Hospital)	1	1	-	-	-

Source: Population Needs Analysis

#### **Education**

Education in Khorof Harar Town for young students aged 5-14 is divided into religious and formal education. Islamic religious education is taught in madrassas. The town has one primary school, Khorof Harar Primary. The school lies on an area of 12 ha with a total of 14 classes with varying numbers of streams. It has three girls' toilets and three boys' toilets, and the staff use their own toilets within their quarters and a playground. There is an all-boys secondary school, Khorof Harar Secondary School, which has boarding facilities.

The vocational training institution in the town offers tailoring courses only. However, The training institute is not adequately equipped to offer practicality in the course taught.

Plate 3-5: Educational Facilities in Khorof Harar (secondary, primary and TTI)







Source: Field Survey, 2019

#### **Education Demand**

Table 3-5 shows the number of education facilities in the town and analyses the number of facilities required currently and by 2033. The physical planning handbook prescribes one primary school per 4,000 persons and one secondary school per 8,000 persons.

Table 3-7: Education Requirements

Facility	Existing number	Current demand	Current deficit	Demand by 2033	Required facilities by 2028
Primary	1	2	1	2	1
Secondary	1	1	-	-	-
Vocational	1	1	-	-	-
institutions					

## **Safety and Security**

The town has both a police station and an Administrative Police Camp. However, security in the town is a major issue considering the volatility of the Republic of Somalia and terrorism. The police station and the AP camp are ill-equipped to repel terror attacks adequately. Street lighting and telecommunication services in the town are limited. There is a need to reinforce the two police facilities, the airfield and telecommunication masts, and install high masts throughout the town. Sensitization of community policing will also be required to reinforce citizenship within the town. The dire security situation in the town also has a bearing on the town's economy due to limitations on investment.

## **Community Facilities**

Khorof Harar Town has a small cemetery that is not commissioned. There is a need to allocate land for this purpose. The town has mosques and madrasa classes within each. There are no churches in the town. The town has a public *baraza* located opposite the airstrip.

Plate 3-6: Religious Facilities in Khorof Harar





#### 3.4.2 Environment

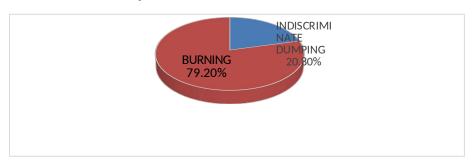
Increased urban development comes with several previously unforeseen challenges to the environment. There is a need to put environmental considerations in the development blueprints of urban areas since it is a determinant to the sustainability of any given urban development plan.

#### **Land Use Effects on the Environment**

#### Solid Waste Disposal and Management

According to a field survey in 2019, 79.2% of households in Khorof Harar Town burn their waste, while 20.8% dispose of solid waste at undesignated points within the town. As a common problem in most urban areas, solid waste disposal practices and mechanisms usually are not well structured in tandem with the growth of these urban areas. The situation consequently leads to environmental degradation due to pollution caused by unregulated solid waste disposal practices.

Chart 3-6: Solid Waste Disposal Methods



Source: Field survey, 2019

Plate 3-7: Indiscriminate Dumping in the Town





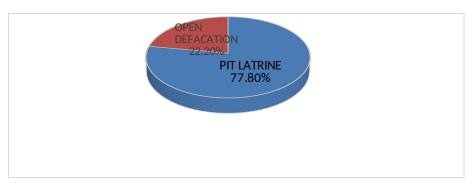
Source: Field Survey, 2019

## Liquid Waste Disposal and Management

The town's liquid waste disposal methods include pit latrines and other methods, including open defecation and bucket use. Open defecation poses a great risk to health and sanitation in the town as it poses a high chance of contamination of ground and surface water during rainy seasons and

the spread of water-borne diseases. The town's main liquid waste disposal methods are pit latrines, used by 77.8% of the households, and open defectaion, practised by 22.2% of households.

Chart 3-7: Liquid Waste Disposal Methods

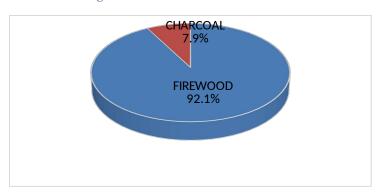


Source: Field survey, 2019

## Destruction of the Indigenous vegetation and reducing vegetation cover

The town's main source of cooking energy is firewood, used by 92.1% of households, and charcoal, used by 7.9%. The use of wood fuel for cooking poses a threat to the available tree cover in the area. The impact of this revelation indicates an increased carbon footprint, air pollution in the area, and constant depletion of indigenous vegetation cover.

Chart 3-8: Cooking Sources



Source: Field survey, 2019

## 3.4.3 Disaster Management

#### **Drought**

Kenya is a drought-prone country, primarily because of its peculiar eco-climatic conditions. Arid and semi-arid lands (ASALs) cover 80% of the territory. Periodical droughts are part of the climatic system in these areas, where annual rainfall varies from 200 to 500 mm.

Communities living in these ASALs understand drought and adapt to these harsh conditions in various ways. Pastoralism is the main source of livelihood for these communities. Pastoralism informs the wealth of communities living in the ASALs; therefore, drought highly affects the livelihood of these regions. The National Drought Management Authority (NDMA) in Wajir Municipality issues early drought warnings and monthly bulletins for the county's drought. Poor management of water catchment areas, inappropriate soil conservation measures, deforestation, and land degradation cause increased frequency of droughts. Wajir County is a drought-prone zone, and this has been witnessed as recently as this year, 2019, when the County was classified to be in the "alarm drought phase". To mitigate the adverse effects of drought, counteractive measures such as irrigation for agricultural production during the dry seasons, increasing forest cover, conservation of water catchment areas, and quantitatively harvesting surface water must be implemented.

#### **Flooding**

Flooding in Khorof Harar Town is characteristic during the long rainy seasons. This causes seasonal challenges of mobility and accessibility within and to the town.

#### Waterborne Diseases

The lack of a sewerage reticulation system and rampant use of pit latrines with occasional flooding during the rainy seasons pose a high risk of water-borne diseases at a large scale within the town. The town needs to develop a sewer treatment plant or a sustainable liquid waste disposal method to avert any outbreaks during heavy, long rain seasons.

#### 3.4.4 Housing and Urban Development Pattern

#### **Housing Provision**

Individuals (owner-occupiers) and public institutions are the only housing providers in Khorof Harar Town. The Kenya Police is the only institution in the town housing its workforce. A majority of houses in the town are individually owned.

Chart 3-9: House Ownership

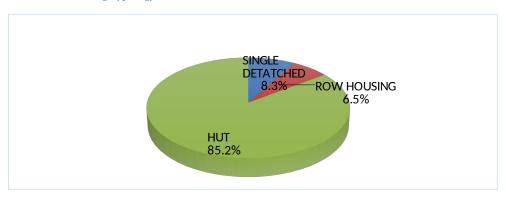


Source: Field survey, 2019

## **Housing Typology**

The main type of housing in the town are huts (*herios*) used by 85% of the households, 7% are row houses, and 8% are single detached houses or bungalows.

Chart 3-10: Housing Typology



Source: Field survey, 2019

Plate 3-8: Housing Typologies







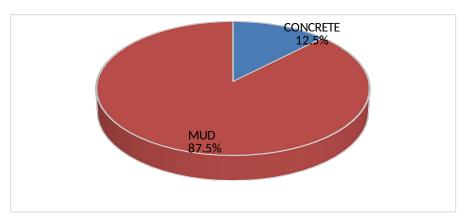
Source: Field survey, 2019

## **Building Materials**

#### Floor Materials

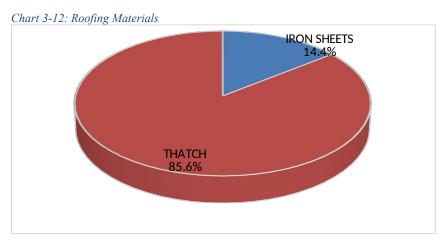
According to the field survey, the primary floor materials are mud, used by 87.5% of the households and concrete, used by 12.5% of the households sampled.

Chart 3-11: Floor Materials



## **Roof Materials**

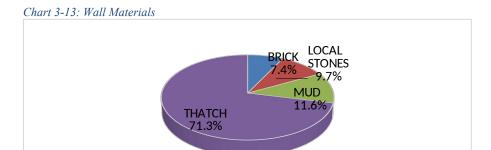
According to the field survey, the most common roofing material used is thatch, considering they prefer the *herios*. Thatch takes up 85.6% while iron sheets are used by 14.4% of the sampled respondents



Source: Field survey, 2019

#### Wall Materials

According to the field survey, the most common wall material used is thatch, which is used by 71.3% of households. Other common wall materials are mud, used by 11.6 %, local stones, 9.7%; and brick, used by 7.4% of households in the town.



## **Housing/Residential Demand**

Increased population change leads to a corresponding changing demand for housing. Population growth, particularly growth in the number of households, will lead to a growth in housing demand. With an estimated population of 6,556 persons, there are 1312 households as of 2023. A projected population of 7,737 will require 1,548 households by 2033.

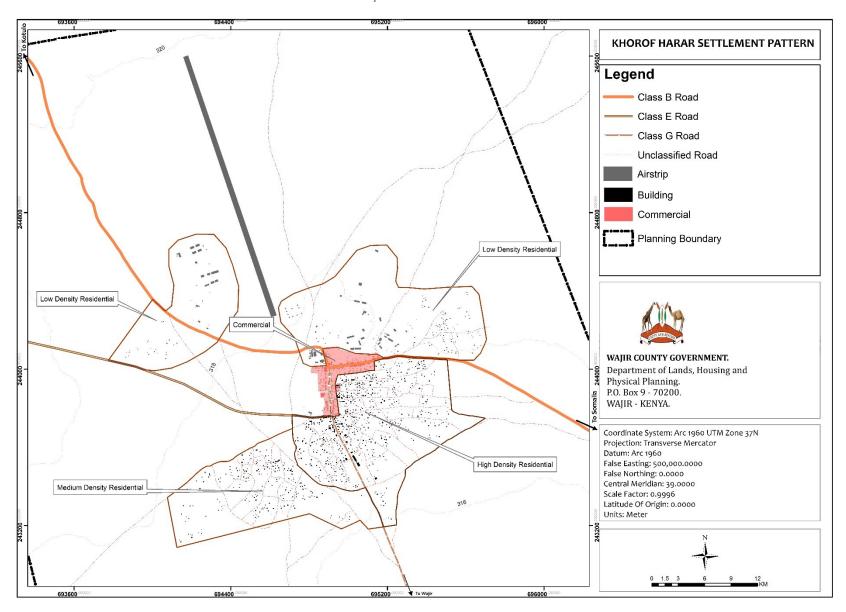
### **Urban Development Pattern**

The town's settlement pattern is clustered around the intersection of the Diff-Kotulo and Khorof-Wajir roads.

The town grows towards the south along the Khorof–Wajir road. The existence of the airstrip and public institutions to the north of the town is limiting its development northwards. This shows that the town will thereby grow more to the south along the road to Wajir.

#### **Structuring Elements**

The town's main structuring elements are the Diff-Kotulo (B93) road and the Khorof-Wajir (G5360) road cut across the town. The airstrip is also a structuring element as it has restricted settlement growth on the Northern side of the town.



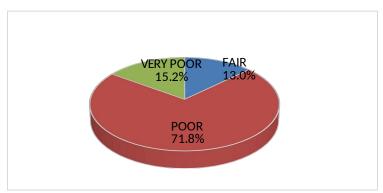
Map 3-7: Settlement Pattern

### **3.4.5** Transportation

### 3.4.5.1 Road Coverage and Surface Condition

Roads in Khorof Harar Town have both murram and earth surfaces covering a total length of approximately 29km within the planning area. These consist of tracks and classified murram roads. Despite their poor state, the Diff-Kotulo (B93) and Khorof- Wajir (G5360) roads are the relevant transport corridors in the town. All roads are rendered impassable during the rainy season, thus curtailing movement. Tracks used to access buildings are narrow and undefined.

Chart 3-14: State of Roads



Source: Field Survey, 2019

Plate 3-9: Road Conditions



Source: Field Survey, 2019

## 3.4.5.2 Air Transport

Khorof Harar Town has an airstrip that can be used for emergencies such as security and food supply relief. The airstrip is located opposite the Kenya Police Station. It can only accommodate light aircraft and has a murram surface.

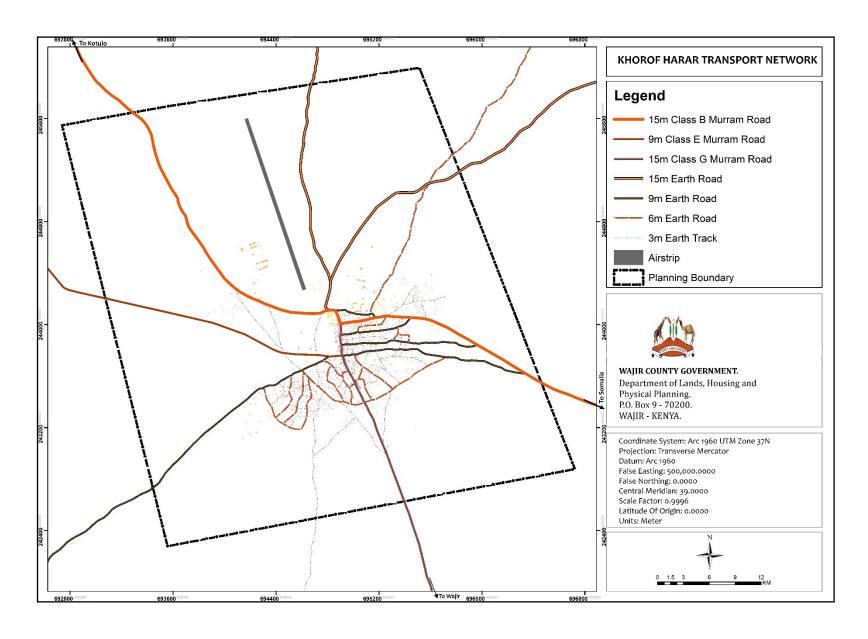
## **Means of Public Transport**

There are two major means of transport in the town: motorised transport, such as bodabodas and buses and non-motorized transportation (NMT), such as animal carts, handcarts, walking, use of bicycles, etc. Buses access the town mostly once a day. Residents are also dependent on private vehicles for movement outside the town.

Plate 3-10: Khorof Harar Airstrip



Map 3-8: Existing Transport Network



#### 3.4.6 Local Economic Development

## **Major Economic Activities**

#### **Trade and Commerce**

A significant number of commercial activities are being undertaken in Khorof Harar Town. Major commercial outlets in the town include small-scale retail shops, motor vehicle mechanics, tailoring and dress-making, hairdressing, metal works, firewood selling and foodstuff vending. There are also several mobile money outlets in the town.

## Agriculture

Pastoralism is the most dominant economic activity for residents of Khorof Harar Town. Common livestock reared includes camels (*Somali*), donkeys, Indigenous cattle, mostly the *Borana* breed, as well as Indigenous goats (*Dala*) and sheep (*Blackhead*). Crop production in the town's hinterland is limited due to adverse climatic conditions and lack of water. However, small-scale maize production is done on the town's fringes. There is an agricultural research farm in the town where research work on agriculture is done.

Plate 3-11: Livestock Rearing





Source: Field Survey, 2019

## **Income Generating Activities**

The main income-generating activities in the town include pastoralism, trade and commerce, and light industries, including vehicle fuelling and auto repair.

Analysis of the main income-generating activities in the town is as illustrated in Chart 3-15.

Chart 3-15: Income Generating Activities

BUSINESS
29.7%

PASTORALISM
66.6%

JUAKALI
3.7%

## **Employment Levels in the Town**

It is worth noting that self-employment, in the form of business and pastoralism, is done by 42.1% of the town's residents. 4.6% of the residents are formally employed or work for a salary/pay in government and non-governmental organizations, while 9.3% of the town's residents are unemployed. 6.9% are casual labourers.

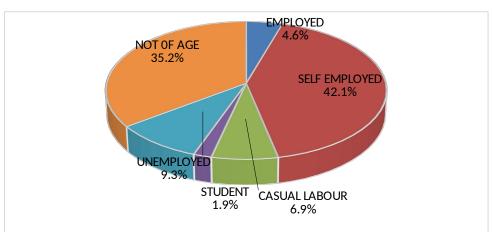


Chart 3-16: Employment Levels

Source: Field survey, 2019

#### **Income levels**

According to a field survey 2019, 43.5% of Khorof Harar Town residents earn between Kshs10,000-20,000 while 0.5% earn above Kshs50,000.

45.0% 40.0% 35.0% 30.0% 25.0% 43.5% 20.0% 15.0% 24.5% 19.4% 10.0% 11.1% 5.0% 0.5% 0.0% Above 50000 2501-5000 5001-10000 10001-20000 20001-30000 30001-50000

Chart 3-17: Incomes Bracket

## 3.4.7 Urban management (Governance)

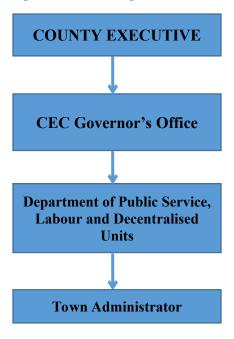
#### Governance

The management of a town is vested upon a town committee (Urban Areas and Cities Act 2011 and Urban Areas and Cities Amendment Act 2019), which prescribes the functions of a town administrator in consultation with the residents/stakeholders. The management of Khorof Harar Town is as described below.

#### Current Town Management Structure

Section 31 (1 and 2) of the Urban Areas and Cities (Amendment) Act (UACA) stipulates the appointment of a town administrator through the county public service board. However, his/her duties are determined by a town committee as per the Urban Areas and Cities Act section 31 (3). Within this prescribed law, Wajir County appointed a town administrator for Khorof Harar, whose office is in the town. The absence of a town committee to prescribe the functions of the town administrator highlights a disparity in the town's management in the form of finance and administration. The organogram for town administration in the county is shown in Figure 3-1.

Figure 3-1: Town Management Structure



Khorof Harar Town lacks a town committee. A town committee is appointed by the county governor and approved by the county assembly. Upon formulation of a town committee, the following are the functions that it is supposed to perform:

- Oversee the affairs of a town
- Formulate and implement an Integrated Plan.
- Develop and adopt policies, plans, strategies and programmes, and may set targets for delivery of services.
- Control land use, land sub-division, land development, and zoning by public and private sectors for any purpose, including industry, commerce, markets, shopping and other employment centres, residential areas, recreational areas, parks, entertainment, passenger transport, agriculture, and freight and transit Adopt policies and plans.
- Promote and undertake infrastructural development.
- Develop and manage schemes, including site development in collaboration with the relevant national and county agencies.
- Maintain a comprehensive database and information system of the administration and provide public access thereto upon payment of a nominal fee to be determined by the board.

- Settle and implement tariffs, rates and tax and debt collection policies as delegated by the county government;
- Monitor the impact and effectiveness of any services, policies, programmes or plans.
- Promote a safe and healthy environment
- Facilitate and regulate public transport

## Rights of Stakeholders/Residents in Town Management

- Contribute to decision-making by submitting written or oral presentations or complaints to a town committee through the town administrator.
- Be informed of decisions of a town committee that affect their rights, property, and reasonable expectations.
- Be privy to regular disclosure of the state of affairs of the town, including its finances.



# 3.5 Summary of emerging issues

Table 3-8: Summary of Emerging Issues

THEME	EMERGING ISSUES RECOMMENDATIONS
TRANSPORT	<ul> <li>Poor road conditions and poor linkages result to high cost of transport.</li> <li>Lack of NMT facilities within the town.</li> <li>Encroachment into road reserves by small-scale business establishments is due to the lack of a framework to guide development.</li> <li>Tracks that act as access to buildings are narrow, thereby limiting connectivity within the town</li> <li>Lack of public transport facilities such as designated bus terminus, parking facilities etc.</li> <li>Improve road conditions, especially of the major roads linking the town to other local centres.</li> <li>Widen narrow access roads</li> <li>Provide adequate Non-Motorized Transport (NMT) facilities along all urban roads.</li> <li>Provide adequate road furniture along all roads within the town.</li> <li>Inadequate street furniture, including street lights.</li> </ul>
HOUSING	<ul> <li>Inadequate infrastructure eg electricity, water, solid and liquid waste infrastructure, access roads, etc.</li> <li>Low housing investment due to a lack of land ownership documents.</li> <li>Provide electricity, adequate portable water, access roads, stormwater drainage infrastructure, and street lighting in residential areas.</li> <li>Invest in public housing.</li> </ul>

THEME	EMERGING ISSUES	RECOMMENDATIONS
	<ul> <li>The clustering of settlements in the town provides a challenge in accessibility.</li> <li>High cost of building materials as a result of high transportation costs.</li> </ul>	Develop functional residential neighbourhoods within the context of the proposed structure plan.
ENVIRONMENT	<ul> <li>The lack of a proper solid waste management structure results in the indiscriminate dumping of solid waste.</li> <li>Lack of a sewerage system and public latrines</li> <li>Over-dependency on wood fuels</li> <li>Poor public perception of individual responsibility towards disposal of waste.</li> </ul>	<ul> <li>Provide a liquid waste management system (sewerage system) for the town.</li> <li>Provide waste skips and staff and designate a landfill to cater to the town's solid waste requirements.</li> <li>Sensitize the locals on the importance of individual responsibility towards environmental management.</li> <li>Encourage the use of alternative energy sources such as solar, wind, and LPG to reduce the overreliance on wood fuel.</li> <li>Encourage afforestation to compensate for the use of wood fuel.</li> </ul>
SOCIAL	Inadequate support infrastructure such	
INFRASTRUCTURE	as electricity and water.	• Adequately provide the existing level 4 Sub-

THEME	EMERGING ISSUES	RECOMMENDATIONS
	<ul> <li>Lack of essential community facilities such as community centres, a library and library services, postal services, and recreational facilities.</li> <li>Inadequate schools, staff and learning materials in the schools</li> <li>Inadequate drugs, medical equipment, staff and high cost of health services.</li> </ul>	<ul> <li>County hospital with water, electricity, staffing, laboratories, wards and an ambulance.</li> <li>Provide a dispensary (level 2) based on gap analysis.</li> <li>Provide recreational facilities such as playgrounds and open spaces.</li> <li>Provide community facilities such as social halls, a library or an ICT centre and cemeteries.</li> </ul>
	PHYSICAL INFRASTRUC	CTURE
Water Supply	<ul><li>Long distance in accessing water.</li><li>Inadequate water points and supply</li><li>Low groundwater potential</li></ul>	<ul> <li>Sink more boreholes.</li> <li>Increase water storage tanks to supply the town.</li> <li>Improve the supply system by constructing a reticulation system.</li> </ul>
Sewerage and sanitation	<ul> <li>Poor liquid waste disposal methods.</li> <li>Lack of a sewer reticulation system for the town</li> <li>Lack of public toilets within the town.</li> <li>Over-reliance on pit latrines and incidences of open (bush) defecation</li> </ul>	<ul> <li>Install communal septic tanks</li> <li>Provide public toilets within the town</li> <li>Construction of an oxidation pond</li> <li>Install a sewerage reticulation system.</li> </ul>

THEME	EMERGING ISSUES	RECOMMENDATIONS
Solid waste management	<ul> <li>Lack of designated solid waste disposal sites within the town.</li> <li>Lack of a solid waste management system, including staff and equipment.</li> </ul>	<ul> <li>Designate a site for a sanitary landfill.</li> <li>Provide solid waste receptacles within the town and residential areas.</li> <li>Purchase a truck to transport solid waste to the landfill</li> <li>Employ staff to manage solid waste</li> </ul>
Stormwater drainage	<ul><li>Lack of drainage channels</li><li>Relatively flat terrain</li></ul>	<ul> <li>Relocate structures on the drainage way leaves</li> <li>Install stormwater drainage channels along classified roads.</li> </ul>
Electricity and Energy	<ul> <li>Lack of electricity.</li> <li>Potential for solar energy harvesting due to long solar insolation periods throughout the year.</li> <li>Overreliance on biofuels.</li> </ul>	<ul> <li>Develop a solar energy production farm within the town to augment the connection to the local power grid.</li> <li>Construct an electricity substation to provide electricity to the town.</li> <li>Install and regularly maintain solar powered street lights throughout the town.</li> <li>Provide incentives and subsidies for alternative sources of cooking and lighting energy such as solar panels, LPG and kerosene.</li> </ul>



# 4 PROPOSALS

## 4.1 Overview

Given the challenges inherent in the town, presented in Chapter Three (3), plan proposals aim to remedy the pressing challenges by providing amenities and facilities, regularizing the existing cadastral layout, and organizing the town into complementary land uses while maintaining the environmentally sensitive areas in the town. This chapter presents the proposed land use plan, the zoning plan and the improvement strategies that contain projects geared toward improving the town.

## 4.2 Structure plan

The Structure Plan presents the long-term land use and development framework for Khorof Harar Town. It indicates broad land use classifications, transportation corridors concerning land uses, and the location of utilities and services. The plan shows the form, shape, urban development limits, trends and development pattern that Khorof Harar Town will take for ten (10) years (2023-2033).

The plan utilized the existing urban character to develop the structure plan. The densification approach has been applied to ease the provision of basic infrastructure/amenities and to concentrate the growing population within the built-up areas to utilize the existing services, hence reducing the cost of service provision.

The description of the proposed land uses is as presented in the table below. *Error: Reference source not found* presents the proposed structure plan for the town.

LAND USE	CODE	DESCRIPTION	LAND SIZE	PROPOSED INTERVENTIONS
			(HA)	
Residential	01	Proposed High- Density Residential	107.82	<ul> <li>Maintain a front setback of 3m for the front, 3m for the side and 4.5m at the rear.</li> <li>Provide/service the residential areas with adequate local distributor</li> </ul>
	$0_2$	Proposed Medium-Density	33.69	roads measuring 18-21m and access roads measuring 9-12m.  • Provide open areas/neighbourhood parks for recreation. Every open

LAND USE	CODE	DESCRIPTION	LAND SIZE (HA)	PROPOSED INTERVENTIONS
		Residential	, ,	space highlighted should have a public toilet.
	03	Proposed Low- Density Residential	83.26	<ul> <li>Service this area with trunk infrastructure, including electricity and street lighting, stormwater drainage infrastructure, water and provide a sewer reticulation system to serve the anticipated population.</li> <li>Increase the institutional capacity of educational and health facilities to aptly serve the resident population.</li> <li>Institute garbage collection points/disposal sites as well as institutions to regularly clean the areas.</li> <li>Ensure strict adherence to zoning regulations as prescribed in section 4.2.</li> </ul>
Industrial	$1_1$ and $1_3$	Existing and Proposed Slaughterhouse	1.75	<ul> <li>Adoption of technology in the slaughterhouse in meat handling and processing</li> <li>Fence and buffer the slaughterhouse with trees.</li> <li>Maintain proper hygiene regulations.</li> <li>Service the site with adequate water and provide electricity. (Use of solar energy is encouraged within the facility)</li> </ul>
	12	Proposed Light industry	8.24	<ul> <li>The site is intended for vehicle repair workshops, wood furniture, metal fabrication, and other similar activities.</li> <li>Service the area with electricity, piped water, sewerage and stormwater drainage infrastructure.</li> <li>Provide solid waste management in the area by instituting garbage collection firms/county government to handle the industrial waste produced.</li> </ul>
Educational	21	Existing Primary School	9.76	• Maintain use and improve the existing facilities by constructing more classrooms and or properly maintaining the existing facilities.
	22	Existing Secondary school	18.61	<ul> <li>Connect and improve physical infrastructure, e.g. electricity and water within the schools. (Ensure use of solar energy for lighting in the schools)</li> <li>Increase the number of streams to a maximum of three</li> <li>Construct proper ablution blocks within the schools and ensure regular</li> </ul>

LAND USE	CODE	DESCRIPTION	LAND SIZE (HA)	PROPOSED INTERVENTIONS
				maintenance.
	23	Existing Tertiary Institute	8.04	<ul> <li>Provide proper learning facilities such as laboratories/workshops, a library and necessary equipment.</li> <li>Construct more lecture halls to accommodate more learners.</li> <li>Connect the facility to electricity and water.</li> </ul>
	24	Proposed Primary School	4.71	<ul> <li>Provide proper learning facilities, including a library and computer lab.</li> <li>Provide adequate classrooms to cater for a higher capacity.</li> <li>Connect the facility to electricity and water.</li> </ul>
	25	Proposed Secondary School	6.06	• Provide proper learning facilities, including labs (science and computer), a library, and books.
	26	Proposed Girls Secondary School	37.61	<ul><li>Provide adequate classrooms to cater for higher capacities.</li><li>Connect the facility to electricity and water.</li></ul>
	27	Proposed ECDE	1.32	<ul> <li>Provide proper learning facilities, including books and office equipment</li> <li>Provide adequate classrooms to cater for a higher capacity.</li> <li>Connect the facility to electricity and water. (Use of solar energy as a source of electricity is highly encouraged.)</li> </ul>
	28	Proposed Special School and EARC (Education Assessment and Resource Centre)	11.74	<ul> <li>Provide proper learning facilities, including books and office equipment</li> <li>Provide adequate classrooms.</li> <li>Connect the facility to electricity and water. (Use of solar energy as a source of electricity is highly encouraged.)</li> <li>Construct an Education Assessment Resource Centre (EARC) within the facility and employ an officer(s) to execute the office's mandate.</li> </ul>
Recreational	31	Proposed Recreational Park	2.2	<ul> <li>Undertake proper landscaping and provide specific species (drought resistant) of trees to be planted for aesthetics.</li> <li>Fence the site using trees.</li> <li>Provide benches and sheds as well as directed walkways</li> <li>Provide a public ablution block within the park and ensure regular</li> </ul>

LAND USE	CODE	DESCRIPTION	LAND SIZE (HA)	PROPOSED INTERVENTIONS
				<ul> <li>maintenance.</li> <li>No development or permanent businesses are to be allowed within the park, and strictly reserved for public use.</li> </ul>
	32	Proposed Sports and Cultural facility	2.91	<ul> <li>Service the sporting complex with trunk infrastructure, including electricity, stormwater drainage infrastructure, and water and provide a sewer reticulation system.</li> <li>Tarmacking of the road to the facility to offer accessibility to the site</li> </ul>
	33	Proposed Open Spaces	4.73	<ul> <li>Sites to be fenced using trees to avoid encroachment</li> <li>Landscape the spaces with grass and trees.</li> <li>No development allowed.</li> </ul>
	34	Proposed Playing fields	0.72	<ul> <li>Sites to be fenced using trees to avoid encroachment</li> <li>Provide furniture such as benches and posts</li> <li>Undertake regular maintenance through landscaping</li> <li>Provide street lighting (solar-powered flood lights) to ensure uninterrupted use.</li> </ul>
Public Purpose	41	Existing Administrative office (Ward Administrator)	1.08	Maintain Use
	42	Existing Baraza Park	0.53	<ul> <li>Maintain Use</li> <li>Construct shades and sitting terraces.</li> <li>Landscape the park with grass and trees.</li> <li>Install support infrastructure such as water and electricity.</li> </ul>
	43	Existing Level 4 hospital	4.03	<ul> <li>Equip the health facility with drugs, construct more wards and adequately equip the laboratory to make it more functional.</li> <li>Employ more personnel (nurses, clinical officers, and doctors) to be permanently stationed in the town.</li> <li>Provide adequate water and install electricity to the facility. Solar</li> </ul>

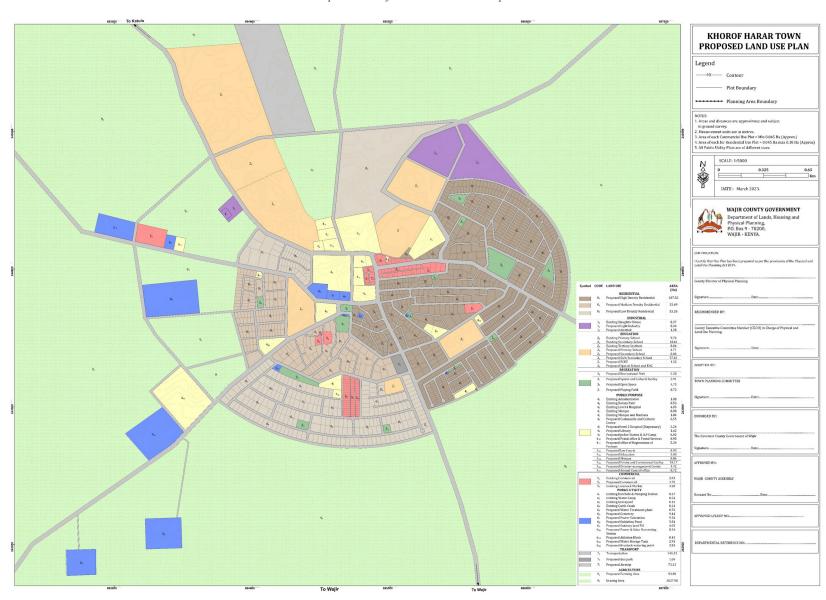
LAND USE	CODE	DESCRIPTION	LAND SIZE (HA)	PROPOSED INTERVENTIONS
				<ul> <li>energy is highly recommended as the facility's backup or main energy supply.</li> <li>Repair and replace ageing machinery with new machines</li> </ul>
	4 <sub>4</sub> and 4 <sub>5</sub>	Existing Mosques and Madrassa	1.92	<ul><li>Maintain the use</li><li>Provide water and electricity</li></ul>
	46	Proposed Community and Cultural Centre	6.55	<ul> <li>Construct a social hall and administrative offices</li> <li>Provide electricity and water.</li> <li>Provide open spaces and parking facilities onsite.</li> <li>Service the site with trunk infrastructure, including water, electricity and sewerage infrastructure</li> </ul>
	47	Proposed Level 2 hospital (Dispensary)	2.24	<ul> <li>Equip the health facility with drugs, wards and a functional laboratory</li> <li>Employ more personnel (nurses) to be permanently stationed in the town.</li> <li>Provide adequate water and install electricity to the facility. Solar energy is highly recommended as a backup or main energy supply.</li> <li>Waste produced by the facility should be transported and adequately handled at the incinerator in Sub-county Hospital.</li> </ul>
	4 <sub>8</sub>	Proposed Library	1.62	<ul> <li>Provide electricity and water to the facility</li> <li>Provide learning materials (books) and computers to the facility</li> <li>Install solar panels to augment the energy supply of the facility</li> </ul>
	49	Proposed Kenya Police camp	6.02	<ul> <li>Adequately fence the site</li> <li>Install a solar-powered high mast on the premises.</li> <li>Construct permanent housing units for staff.</li> <li>Provide water and electricity to the site.</li> <li>Adequately equip the station with proper security apparatus, such as handheld GPS devices, cars to ensure proper administration</li> </ul>
	4 <sub>10</sub>	Proposed postal office and postal services.	0.98	Construct a post office to offer courier services to the town.

LAND USE	CODE	DESCRIPTION	LAND SIZE (HA)	PROPOSED INTERVENTIONS
	411	Proposed Office of Registration of Persons	5.34	<ul> <li>Fence the site.</li> <li>Construct offices and an ablution block for the Registrar of Persons.</li> <li>Service the site with water, electricity and sewerage infrastructure.</li> <li>Ensure adequate security at the facility throughout the day and night.</li> </ul>
	4 <sub>12</sub>	Proposed Law Courts	0.93	<ul> <li>Service the facility with sewerage infrastructure, electricity and water to the facility.</li> <li>Provide parking facilities</li> <li>The site is to be adequately fenced, and security provided throughout.</li> </ul>
	4 <sub>13</sub>	Proposed Education Offices	3	<ul> <li>Service the facility with sewerage infrastructure, electricity and water to the facility.</li> <li>Provide parking facilities</li> <li>The site is to be adequately fenced, and security provided throughout.</li> </ul>
	4 <sub>14</sub>	Proposed Mosque and Madrassa	0.86	Provide water, electricity and sewerage infrastructure.
	4 <sub>15</sub>	Proposed Prison and Correctional Facility	10.17	<ul> <li>Provide water and electricity</li> <li>Adequately fence the facility</li> <li>Provide round-the-clock security to the facility.</li> <li>Install high masts within the facility.</li> </ul>
	4 <sub>16</sub>	Proposed Disaster Management Centre	1.42	<ul> <li>Service the facility with water, electricity and sewerage infrastructure.</li> <li>Equip the facility with necessary equipment, including tractors and fire engines.</li> <li>Provide adequate security to the facility.</li> </ul>
	417	Proposed Animal Control Office	0.72	<ul> <li>Adequately service the facility with electricity and water. Install solar harvesting equipment on site for water pumping and supplementing energy supply.</li> <li>Provide office equipment, including a fully stocked testing lab</li> </ul>

LAND USE	CODE	DESCRIPTION	LAND SIZE (HA)	PROPOSED INTERVENTIONS
				<ul><li>(refrigeration equipment, drugs, vehicles etc.)</li><li>Have a veterinary office on site.</li></ul>
Commercial	51	Existing commercial zone	2.01	<ul> <li>Provide utilities such as sewerage, electricity and water.</li> <li>Install and maintain solar-powered streetlighting</li> </ul>
	52	Proposed commercial zone	4.75	<ul> <li>Maintain road length of 6m for all service lanes and 9-12m for access roads.</li> <li>Maintain the building setbacks as provided in the zoning regulations.</li> </ul>
	5 <sub>3</sub>	Proposed Livestock market	3.2	<ul> <li>Construct a modern slaughterhouse and install refrigeration facilities.</li> <li>Watering points for the animals</li> <li>Provision of requisite utilities such as electricity and water.</li> <li>Demarcate holding pens and inspection bays for livestock.</li> </ul>
Public Utility	6 <sub>1</sub> and 6 <sub>2</sub> and 6 <sub>5</sub>	<ul> <li>Existing         Borehole and         Pumping         station</li> <li>Existing water         camp         headquarters</li> <li>Proposed         Extension         Water         Treatment         plant</li> </ul>	1.84	<ul> <li>Install a solar harvesting system to power water distribution to the rest of the town</li> <li>Increase the water storage facilities through the purchase of high-capacity water tanks of 250m³.</li> <li>Construct water management offices and fence the site.</li> </ul>
	63	Existing Graveyard	0.12	<ul><li>Commission the graveyard</li><li>Fence and regularly maintain the site</li></ul>
	64	Proposed Cattle crash	0.21	<ul> <li>Both proposed facilities are to be located next to the proposed livestock market due to compatibility of use.</li> <li>Fence the site.</li> </ul>
	66	Proposed	9.41	• Fence the site

LAND USE	CODE	DESCRIPTION	LAND SIZE (HA)	PROPOSED INTERVENTIONS
		Cemetery		Undertake regular maintenance of the site.
				• Create a road to access the site as proposed in the plan
				Buffer the site with trees.
	67	Proposed Power sub-station	9.34	<ul><li>Fence the site.</li><li>Develop the site to its intended utility service.</li></ul>
	68	Proposed	5.81	Fence the site
		oxidation Ponds		Develop the sewer treatment plant
				<ul> <li>Create an access road leading to the site. Road to have a width of 12m.</li> <li>Buffer the site with trees.</li> </ul>
	69	Proposed sanitary	4.03	Develop the sanitary landfill to its intended standards
		landfill		• Provide adequate access to the site. Road to measure 12-15m.
				Buffer site with trees.
				• Provide equipment such as tractors and garbage trucks for handling
				solid waste within the town and onsite.
	6 <sub>10</sub>	Proposed Solar	8.54	Appropriately fence the site.
		Harvesting Station		Ensure adequate security around the facility
				• Large-scale solar harvesting equipment will be installed on the site as proposed.
	611	Proposed Ablution	0.43	• Facilities to serve both men and women independently.
		Block		• Provide adequate water and electricity. Connect the facility to a sewerage reticulation network (the use of septic tanks before
	-	Duanagad Water	2.01	construction of the sewerage network is encouraged)
	6 <sub>12</sub>	Proposed Water Storage Tank(s)	2.91	<ul> <li>Install/construct high-capacity water storage tanks of 250m³.</li> <li>Fence the site.</li> </ul>
		Swiage Talik(S)		<ul> <li>Install solar harvesting equipment for water pumping on site.</li> </ul>
	6 <sub>13</sub>	Proposed	3.81	Fence the facility
	013	Livestock	5.01	Drill a borehole on site.
		Watering Point		<ul> <li>Install solar panels for water pumping.</li> </ul>
		., atoming i omit		Construct animal water troughs.
Transportation	71	Proposed Road	145.23	Access roads have a width of 6-9m

LAND USE	CODE	DESCRIPTION	LAND SIZE (HA)	PROPOSED INTERVENTIONS
		Network		<ul> <li>Major roads linking the town to other urban areas have a width of 30m.</li> <li>Local distributor roads to have a width of 18-21m.</li> </ul>
	72	Proposed Bus Park	1.04	<ul> <li>Construct a functional bus park with infrastructure including passenger bays, retail shops and two toll stations.</li> <li>Install support infrastructure such as sewerage, water and electricity.</li> </ul>
	7 <sub>3</sub>	Proposed Airstrip	73.23	<ul> <li>Maintain the use of the airstrip.</li> <li>Fence the facility.</li> <li>Install street lighting facilities next to the airstrip.</li> <li>Improve the surface conditions of the runway. Construct a terminal within the allocated land.</li> </ul>
Agriculture	91	Proposed Farming Area	93.89	<ul><li>Regulate land use to be strictly agricultural.</li><li>Intensification of agriculture.</li></ul>
	92	Grazing area	3027.98	Land use should be strictly for agriculture or other compatible uses.



Map 4-9 Khorof Harar town structure plan

## 4.3 Zoning Plan

This section provides zoning regulations for zones proposed for the town. The zoning regulations shall serve as a basis for development control. The regulations range from permitted users, minimum plot sizes, setbacks (front, side and rear) and plot coverage. The zones have been numbered systematically, and the area in which they apply is indicated on the zoning map overleaf. Key terms used in the regulations are described below;

- i. Minimum Plot Size Refers to a given plot's minimum allowed horizontal land area.
- Building Setbacks The unobscured, unoccupied open area between the furthest projection of a structure and the property line of the plot on which the structure is located.
   This plan provides for the front, side and rear setbacks.
- iii. Plot Coverage The percentage of the ground area of the plot covered by the structure (principal and accessory).
- iv. Plot Ratio- The ratio of the total built-up area to the plot area.

# 4.4 Zoning Regulations

Table 4-9: Zoning regulations

ZONE		\$	STAN	DAR	DS		PERMITTED USES	PROHIBITED USES	
	Minimum Plot size	Setba F	acks	R	Plot Ratio %	Plot Coverage %			
1. CBD	0.25-0.45	2	0.5	1	240	80%	<ul> <li>Offices</li> <li>Wholesale and retail shops</li> <li>Restaurants and hotels</li> <li>Banks and ATMs</li> <li>Parking areas</li> <li>Postal offices or courier services</li> <li>Government/institutional offices</li> <li>Police post</li> <li>Waste Disposal sites</li> </ul>	<ul> <li>Polluting, obnoxious industries,</li> <li>Go-downs of perishable/goods,</li> <li>Bus and truck depots, gas installation and gas works,</li> <li>Junk yards,</li> <li>Sports facilities</li> <li>Garages</li> <li>Slaughter facilities</li> <li>Water treatment plant</li> <li>Solid waste dumping yards</li> <li>Residential houses</li> </ul>	
2. High-density residential.	15m * 30m	3	1.5	1	210	70%	<ul> <li>(multiple units-flats/row housing)</li> <li>Corner shops</li> <li>Health facilities</li> </ul>	<ul> <li>Slaughter facilities</li> <li>Work offices</li> <li>Warehousing, storage godowns of perishables, hazardous goods,</li> <li>Workshops for matatus/boda boda/buses,</li> </ul>	

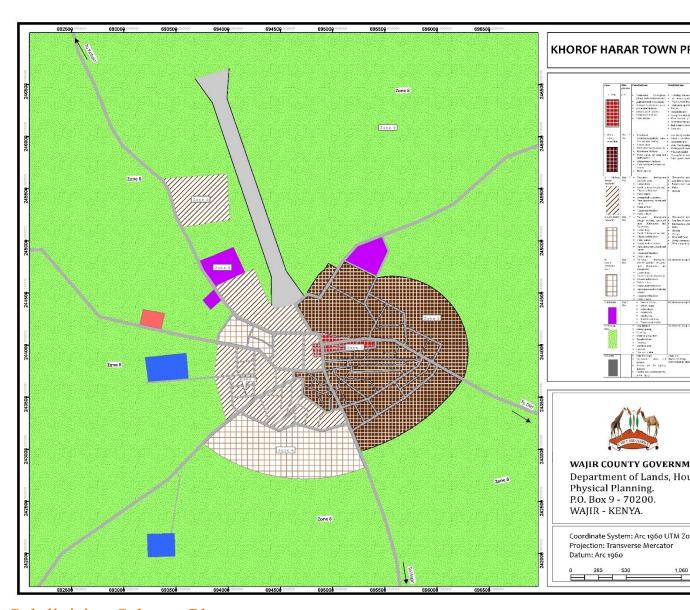
ZONE			STAN	NDAR	DS		PERMITTED USES PROHIBITED USES
	Minimum Plot size	Setbacks			Plot Ratio	Plot	
	Plot Size	F	S	R	- Katio	Coverage %	
							<ul> <li>Police Station</li> <li>Open spaces and recreational centres</li> <li>Public Utilities</li> <li>Cemetery (only sites existing)</li> <li>Indoor games stadium</li> <li>Wholesale markets/shops</li> <li>Sewage/Water treatment</li> <li>Solid waste dumping yards</li> <li>Entertainment spots</li> </ul>
3a. Mediumdensity residential	20m * 45m	6	2	2	140	65%	<ul> <li>Residential development (multiple units)</li> <li>Corner shops</li> <li>Health facilities (dispensary/clinics)</li> <li>Educational facilities</li> <li>Police posts</li> <li>Open spaces and recreational centres</li> <li>Administrative Offices</li> <li>Shopping area</li> <li>Bus Park</li> <li>Water Utility Services</li> <li>Disaster Management Centre</li> <li>High-density residential developments (flats)</li> <li>Any form of industrial activities: large, medium or small-scale</li> <li>Entertainment spots</li> <li>Malls</li> <li>Indoor or outdoor stadium</li> <li>Solid waste dumping yards</li> </ul>
3b. Low-Density Residential	30 * 60m	10	5	5	50	50%	<ul> <li>Residential development (Single dwelling residential units including Maisonettes and Bungalows)</li> <li>Corner shops</li> </ul> All other uses except those permitted.

ZONE			STAN	DAR	DS		PERMITTED USES	PROHIBITED USES
	Minimum Plot size	Setbacks F S R			Ratio	Plot Coverage		
		1			0/0	%	• Open spaces and	
4. Low-density residential.	30m * 60m	10	5	5	50	50%	recreational centres  Residential development (Single dwelling residential units including Maisonettes and Bungalows) Shopping Centre Health facilities (dispensary/clinics) Educational facilities Police post Open spaces and recreational centres	<ul> <li>High-density residential development</li> <li>Any form of industrial activities such as large, medium and small-scale</li> <li>Entertainment spots</li> <li>Malls</li> <li>Stadium</li> <li>Garages</li> <li>Solid waste disposal grounds</li> <li>Water treatment plant.</li> </ul>
5. Industrial	30 * 60m	5	3	2	75	75%	<ul> <li>Warehouses and Godowns</li> <li>Juakali workshops</li> <li>Showrooms</li> <li>Banks and ATM Machines</li> <li>Corner Shops</li> <li>Hotels and Restaurants</li> </ul>	All other uses except those permitted
6. Agricultural	-	-	-	-	-	-	<ul> <li>Livestock Market</li> <li>Cemetery</li> <li>Airstrip</li> <li>Slaughterhouse</li> <li>Solid Waste Landfill</li> </ul>	All other uses except those permitted

ZONE			STAN	NDAR	DS		PERMITTED USES	PROHIBITED USES
			Setbacks		Plot	Plot		
	Plot size	F	S	R	- Ratio	Coverage %		
							<ul><li>A secondary School</li><li>Oxidation Ponds</li></ul>	

Field survey, 2019

Map 4-10: Zoning Map



## Subdivision Scheme Plan

The subdivision scheme plan is a requirement as per the Terms of Reference; the plan initiates the process of preparing a comprehensive and interactive cadastral system to be used in:

- a) Generating a plot register for the town will aid the surveying process and subsequent provision of title deeds.
- b) Promoting accessibility within the town,
- c) Promoting organization in development as well as

d) For improvement and promotion of development standards (plot sizes based on the type of use)

The following factors were considered during the development of the scheme plan:

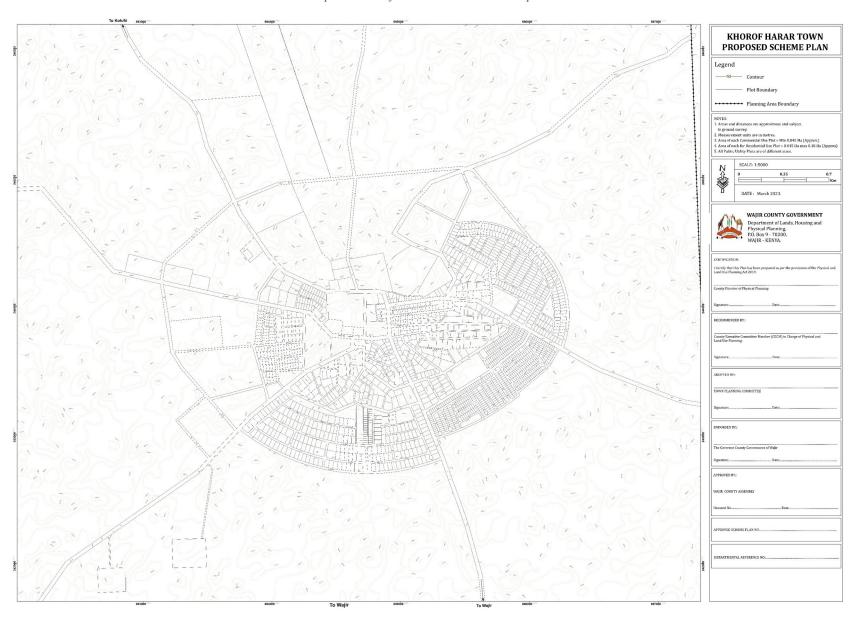
- Minimum disturbance to existing properties by maintaining existing plot boundaries.
- Improving plot access by expanding and regularizing existing roads or footpaths.
- Adopting the right sizes of properties in the town;
  - 15\*30 for High Density
  - 20\*45 for Medium Density
  - 30\*60 for low-density
- Population consideration is used to determine the number of plots within the town.

The subdivision scheme plan has been informed by the aims listed above and the zoning regulations prescribed for different zones in the town. The scheme, therefore, pronounces the plot sizes in different zones.

The table below shows the number of plots created by the town's scheme plan.

Table 4-10: Number of Plots per Land Use

S/ NO.	LAND USE	NO. OF PLOTS
1.	High Density Residential	1731
2.	Medium Density Residential	438
3.	Low Density Residential	483
4.	Industrial	4
5.	Educational	8
6.	Recreational	14
7.	Public Purpose	20
8.	Commercial	120
9.	Public Utility	14



Map 4-11:Khorof Harar Subdivision scheme plan

## 4.6 Urban Design

## **Description of the Design Area**

The area chosen for design is the entire built-up area. Most proposed and existing facilities in the town are located within the design area. The area subjected to design covers an area of 294 Ha. The main land uses found within the design area include commercial, administrative offices, educational facilities, recreational/open spaces, and transportation (road network, airstrip, and bus station).

#### **Rationale of the Design**

The reasons for the chosen area's design can be categorized into spatial, social, environmental, and economic.

- i. **Environmental conservation-** The proposed open spaces within the town present an opportunity for landscaping as recreational areas. This will also help in improving the aesthetics of the town.
- ii. **Efficient and inclusive transportation-** The town's road network should be designed to promote efficient transport that will accommodate both motorized and non-motorized transport systems and integrate parking. The roads will also act as corridors for green networking, linking green spaces in the town and promoting the use of NMT.
- order in development- The town's design presents the form with which the various land uses in the town will be integrated as well as the alignment of buildings in commercial and residential areas thereby creating order within the built-up area. The setbacks presented in the zoning regulations in section 4.2 present the orderliness of building alignment with the roads.
- iv. **Economic Reasons-** The town's design will help enhance the mental picture in terms of the future outlook of the town. It thus presents an opportunity to attract investment for urban improvement.

#### **Design Interventions**

#### **Road Transport**

To promote efficient circulation/movement within the town, motorized and non-motorized transport will be integrated to form an elaborate inclusive transport network. This shall be

achieved through the provision of pedestrian walkways along all roads. All-access roads (9 and 12m) and local distributor (15 to 18m) roads will be single carriageways.

Service lanes (roads with a 6m width) are the back streets within the commercial areas. They shall have a three (3) metre carriageway with a drainage channel of 0.5m. Walkways will cover a total of one (1) metre. This shall facilitate movement around buildings in commercial back lanes to handle goods upon delivery. Street lights (solar-powered) can be installed along the walkways. The visual representation is as depicted in Plate 4-12. Service lanes shall only direct traffic one way.

Plate 4-12: 6m Road Profile

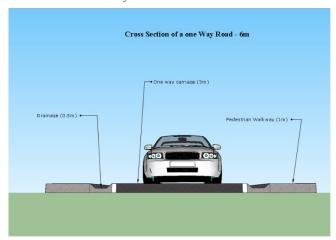
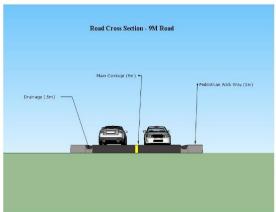


Plate 4-13: 9m Road Profile





Local distributor roads shall have a width of fifteen (15) to eighteen (18) metres. These roads shall distribute traffic from roads of greater functionality and width (secondary and primary roads). The roads shall be single carriageways of 7 metres split by road markings to direct traffic and a shoulder of one (1) m. Drainage channels of one (1) metre on either side of the roads shall

be installed. A pedestrian walkway and cycle path, each of one (1) metre, shall also be constructed. Avenue tree planting covering a total width of 1.5 metres is allocated to promote greening, provide shade along these roads, and improve the aesthetic appeal of the roads and town. The graphic representation of the description mentioned above is shown in Plate 4-14.

Plate 4-14: 18m Road Profile

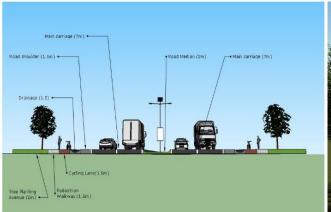




The outermost lanes within roads in the CBD will be used for on-street parking. This will help reduce the amount of space required to provide parking facilities, enhance pedestrian safety, and generate revenue for the town through parking fees.

The main roads, Kotulo-Diff and Khorof-Wajir, have a proposed reserve (width) of 30m. The model for designing these roads shall incorporate a dual carriageway (two lanes) of seven (7) metres each. The carriageways shall be separated by a median of two (2) metres, which shall be utilized for street lighting. A cycle lane and walkway, each 1.5 metres long, shall be constructed after road drainage (on either side of the road) of 1.5 metres. This is as shown in Plate 4-15.

Plate 4-15: 30m Road Profile





## **Recreation (Open Spaces)**

To promote recreational activities, parks/open spaces will be designed to integrate children's playing facilities, directed walkways, manicured lawns with trees, adequate furniture such as seats/benches, and street lighting (solar powered). An area designated as a smoking zone should also be provided within each park. Monuments are to be included within the parks to offer the town an identity. The parks are to have public washrooms for both men and women.

Plate 4-16: Landscaped Neighborhood Park



Plate 4-17: Designated Smoking Zone and Public Toilet



## **Built-Up Areas (Commercial and Residential Areas)**

The design gives life to the building standards prescribed in the zoning regulations for the different activity zones. Building lines will be used to create orderliness in development, ensuring uniformity. This will ease the provision of trunk infrastructure such as electricity, sewer lines, and piped water. Maintaining the prescribed building lines will also promote better movement within the commercial and residential areas during times of emergencies and on regular interaction with space.

On-street parking is encouraged within the town, where the roads have more than eighteen (15) metres reserve. These are as shown in Plate 4-18 and Plate 4-19.

Plate 4-18: Buildings following a defined building line

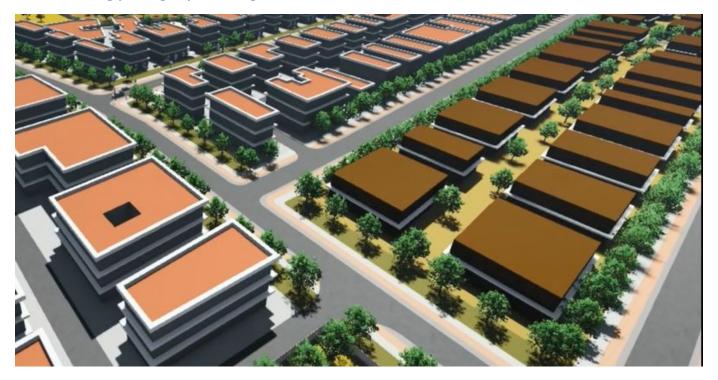


Plate 4-19: On Street Car Parking



## 4.7 Urban Betterment Strategies

Urban development strategies are essential frameworks to guide the growth, revitalization, and sustainability of urban areas. They encompass many actions to address urban areas' multifaceted challenges and opportunities. This section presents thematic-based strategies for ensuring the implementation of the plan. The strategies focus on specific sectors, such as transportation, housing, local economic development, environmental management, physical and social infrastructure, and governance.

#### 4.7.1 Transport Strategy

This strategy aims to ensure a safe, convenient and integrated transportation system for Khorof Harar Town. This is vital in facilitating internal circulation, improving connectivity within the town and other urban areas, and promoting trade, economic growth and accessibility.

## **Strategies**

Integrating the transportation system of the town.

#### **Objective**

To provide an efficient and integrated transportation system.

#### **Proposed Projects and Programmes**

- Upgrade the surface condition of the two major roads: Diff-Kotulo (B93), and Khorof-Wajir (G5360) road, to bitumen standards. Expand the road reserves to 30m.
- Provide NMT facilities such as walkways and cycle paths on the Diff-Kotulo (B93), and Khorof- Wajir (G5360) roads.
- Widen access roads to the required minimum standard of 9 meters.
- Construct a bus park along the Khorof- Wajir (G5360) roads. The bus park will serve public service vehicles operating within and outside the planning area.
- Provide parking spaces along all local distributors and secondary roads.
- Streetlights should be provided on all major roads in the town.
- Following all roads, stormwater drainage should be connected throughout the town to deal adequately with surface runoff.

## 4.7.2 Housing Strategy

## Strategy

Proper housing for all.

## **Objective**

To provide adequately serviced housing areas.

## **Proposed Projects and Programmes**

- The county government, through intergovernmental or private partnerships, to provide housing for all civil servants, including teachers, health workers and the Kenya Police.
- Undertake land survey to provide land ownership documents to act as collaterals in raising funds for housing development.
- Provide requisite infrastructure in the housing areas, such as access roads, water, electricity, and waste management services. These services and infrastructure are to be provided as partly shown in the structure plan in terms of land use.
- Provide incentives to encourage investment in housing, e.g., subsidies for construction materials.
- Promote research within the town in the use of locally available building materials.
- Improve the town's security, safety, and proper administration by strengthening the security apparatus stationed there.
- All the areas earmarked for residential use should have high masts installed to better security.

#### 4.7.3 Local Economic Development Strategy

#### Strategy

Harnessing the town's economic potential.

#### **Objective**

To promote the town's economic growth through the promotion of small-scale industrialization, human capital development and livestock agriculture.

#### **Proposed Projects and Programmes**

- Construct a modern livestock market and equip it with water, electricity, holding pens and an animal control office.
- Construct a gums and resin collection and processing centre at the site earmarked for light industrial activities

- Construct an animal control centre next to the agricultural farm.
- Equip and staff the existing youth polytechnic to provide vocational training for the local labour force.
- Connect the town to the local electricity grid. Investment in solar energy within the town is encouraged at the site proposed for a power sub-station.
- Provide and improve infrastructure and services such as sewer and water reticulation, solid
  waste collection infrastructure and electricity to the proposed commercial centre.
- The proposed commercial areas in the town are to be explicitly for commercial purposes, and business charges and permits to apply therein.
- The town administration is always to ensure regular cleanup of the business area.
- Improve the conditions of all major roads connecting the town to other local urban areas.
- Improve the town's security, safety, and proper administration by strengthening the security apparatus stationed there.

## 4.7.4 Environmental Management Strategy

#### **Strategies**

Protect and conserve the environment

#### **Objective**

To ensure a clean and healthy environment for living and investment.

#### **Proposed Projects and Programmes**

- Promote alternative sources of cooking energy such as energy-saving *jikos*, biogas, and the
  conversion of animal manure to fuel bricks to complement and reduce over-reliance on wood
  fuel
- Provide waste skips and designate specific sites for waste disposal.
- Construct a landfill for handling all waste produced in the town at the site proposed in the structure plan.
- Establish public toilets within commercial areas, proposed marketplaces, the recreational park, and the sports complex.
- Encourage planting diverse and appropriate trees such as the native Commiphora and Gum Arabic as well as Melia Volkensii that thrive in drylands.

#### 4.7.5 Physical Infrastructure Strategies

## **Water Supply**

#### Strategy

Increasing access to potable water for all.

### **Objective**

To provide adequate potable water for all households in the town.

## **Proposed Projects and Programmes**

- Recruit and train technical staff to manage the water supply system within the town.
- Sink more boreholes in areas with adequate groundwater and install treatment reservoirs and high-capacity (250m³) water tanks for storage and supply.
- Install a solar pumping system to guarantee a reliable water supply within the town.
- Encourage water harvesting by provisioning water storage tanks for the fresh produce market and public institutions such as schools, hospitals, and administrative areas.
- Design and construct a water reticulation system covering the entire planning area.

#### **Liquid Waste Management**

#### Strategy

Improving liquid waste management.

#### **Objective**

To enhance proper sanitation through provision of requisite infrastructure for liquid waste management.

#### **Proposed Projects and Programmes**

- Construct neighbourhood septic tanks for liquid waste management before installation of a sewer reticulation system.
- Provide public toilets within the proposed commercial areas, bus park and community centre.
- Design and install a sewerage reticulation system covering the planning area.
- Construct an oxidation pond at the proposed site for liquid waste treatment.

#### **Solid Waste Management**

#### **Strategy**

Ensuring a clean environment.

#### **Objective**

To effectively manage solid waste in the town.

#### **Proposed Projects and Programmes**

- Designate and develop the site proposed for a sanitary landfill.
- Provide solid waste receptacles within the town and the proposed residential neighbourhoods.
- Purchase equipment and vehicles to handle and transport solid waste to the landfill.
- Employ staff to manage solid waste in the town.

#### Stormwater drainage

#### Strategy

Improve drainage of surface run-off in the town.

#### **Objective**

To provide an effective and well-maintained drainage system for the town.

### **Proposed Projects and Programmes**

- Relocate all structures on road reserves.
- Construct storm water drainage channels along classified roads and all secondary (21-30m) and local distributor (12-21m) roads as proposed in the plan.
- Ensure regular maintenance of the stormwater drainage channels.

#### **Energy**

#### **Strategies**

Ensuring an efficient supply of electricity.

#### **Objectives**

- To provide ample electricity supply
- To promote the use of sustainable energy in the town.

#### **Proposed Projects and Programmes**

 Develop a solar energy production farm within the town to provide an efficient and reliable electricity supply.

- Promote the use of alternative sources of energy such as solar, wind and LPG, biogas, and the conversion of animal manure to fuel bricks through providing incentives and subsidies.
- Install and maintain solar powered street lights throughout the town.

#### 4.7.6 Social Infrastructure Strategy

#### **Education Facilities**

#### Strategy

Promoting education for all.

#### **Objective**

To provide adequate, well-equipped educational facilities.

## **Proposed Projects and Programmes**

- Establish a proposed secondary school opposite the existing water pumping station and a primary school off the Khorof-Wajir road.
- Adequately equip existing and the proposed schools with necessary facilities, including laboratories, learning materials, staff and classrooms, libraries, and ablution blocks.
- Employ more teachers and provide housing within the school premises.
- Provide support infrastructure such as water and electricity to all the schools.
- Expand the vocational training centre capacity by constructing more lecture rooms and workshops to provide vocational training for the local labour force.

#### **Health Facilities**

#### Strategy

Improving healthcare services.

#### **Objective**

To provide universal healthcare for all in the town and its hinterlands.

#### **Proposed Projects and Programmes**

• Expand and rehabilitate the existing health facility to meet the required standards for a level IV hospital. The hospital must have a fully functional laboratory, wards and a pharmacy.

Such services as X-rays should be made available within the facility. Ambulance services should also be readily available within the facility.

- Establish a dispensary at the proposed site off the Khorof-Wajr road.
- Employ more medical personnel, including doctors, clinical officers, nurses, paediatricians, etc. Doctors and clinical officers should be posted within the sub-county hospital, while nurses and paediatricians should split service between the Level 4 hospital and the dispensary.
- Provide adequate water and constant electricity to the sub-county hospital and the proposed dispensary. Solar harvesting equipment should be installed within these facilities to offer better services around the clock.

#### **Community Facilities**

# **Strategies**

Providing accessible community facilities.

#### **Objective**

To enhance and foster community well-being through the provision of facilitative facilities.

#### **Proposed Projects and Programmes**

- Construct an integrated community centre at the proposed site. The site facilities include a social hall and town administrative offices.
- Establish a cemetery at the proposed site.
- Construct a post office to offer courier services at the proposed site.
- Construct a community library at the proposed site opposite the water pumping station site.
- Provide recreational parks/open spaces within the residential areas as shown in the structure plan.
- Construct a modern sports complex at the proposed site along the Diff-Kotulo road about 200m from the sub-county hospital.

## **4.7.7** Governance Strategy

#### **Strategy**

Promoting security and effective management of the town.

# **Objective**

To promote better governance, ensure adequate security and participatory decision-making within the town.

# **Proposed Projects and Programmes**

- Institute a town committee to define roles of the town administration.
- Establish a public information management system to facilitate knowledge sharing between the town administration and residents.
- Establish a disaster preparedness and management centre to control flooding and fire outbreaks.
- Establish a disaster preparedness and management centre to control calamities such as flooding, drought and fire outbreaks.
- To ensure the plan's implementation, Institute a development control unit within the county planning department, which includes environmentalists, planners, surveyors, etc..
- Permanent deployment of relevant staff within the town, such as sub-county administrators, town administrators, etc. to coordinate the town's management.
- Ensure adequate funding to enable efficient town administration.
- Improve the town's security, safety, and proper administration by strengthening the security apparatus stationed there. The Kenya police should erect permanent road blocks along the Khorof-Wajir and Diff-Kotulo Road.
- Community-based development committees and community policing units Formation
- Community policing is to be highly encouraged within the residential areas.

# 4.8 Implementation Mechanism

#### **Overview**

The plan implementation framework translates the identified strategies and measures into specific and deliberate actions to achieve the planning vision, goals and objectives. Therefore, the plan implementation framework is a combination of interrelated activities undertaken according to standards and schedules that are coordinated in advance. This is the final and most important stage, following the identification of goals and outlining of measures and activities to achieve them. This chapter, therefore, indicates the strategic projects, the quick wins, and short-term, medium-term and long-term projects that need to be implemented sequentially to bring about meaningful and sustainable development of Khorof Harar Town in the next ten (10) years. It identifies the relevant institutions that are crucial to the implementation of the various action programmes.

#### 4.8.1 Strategic Projects

Strategic projects are transformative in nature and possess higher multiplicative effects on the society and potential to kick-start the economy of Khorof Harar Town. Strategic projects for urban development are normally classified into three categories: Facilitative, Productive and Perceptive. Facilitative projects or programmes support the productive sector to operate effectively and efficiently. Productive projects are directed towards production of goods and services, while Perceptive or Image Enhancing Projects help improve the image and beauty of the town and have the potential to attract investors and give the town a unique identity.

#### 4.8.1.1 Facilitative Projects

*Facilitative* projects identified for Khorof Harar Town would include:

#### **Land Management**

1. Survey and provide title deeds to the plots resultant from the town's scheme plan.

#### Water and Sewer Supply

- 1. Sink more boreholes in areas with adequate ground water and install treatment reservoirs as well as high capacity water tanks for storage and supply.
- 2. Design and construct a water reticulation system covering the entire planning area. This should include the trunk piping system,

3. Design and construct the sewerage system for the town (trunk sewer lines and oxidation ponds)

#### **Energy**

 Develop a solar energy production farm within the proposed power substation in the town to supplement electricity from the local power grid.

## **Transport**

- Upgrade the surface condition of the two major roads {Diff-Kotulo (B93), Khorof- Wajir (G5360) road} to bitumen standards. Expand the widths of these roads to 30m.
- Create access roads to a minimum standard of 9 meters within the residential neighbourhoods and 6 metres within the commercial areas.
- Construct a bus park along the Khorof-Wajir road. The bus park is to serve public service vehicles operating within and outside the planning area.

#### 4.8.1.2 Productive Projects

*Productive* projects in the town would include:

#### Industrial

1 Establish a light industrial area which compromises of furniture and metal fabrication workshops, garages and godowns.

#### **Commercial**

1. Upgrade the fresh produce market by providing cold storage facilities to traders and provision of services such as piped water and solid waste management services.

#### 4.8.1.3 Perceptive Projects

Perceptive (image enhancing) projects include:

- 1. Installing and maintaining solar powered street lights throughout the town,
- 2. Landscaping all the streets through use of trees along the roads as well as demarcating the areas for different road users (motorized and non-motorized) and
- 3. Providing adequate street furniture.

## 4.8.2 Quick Win Projects

These are projects that can be achieved immediately or within the first 100 days of plan approval. These projects have high visibility, are supportive of the plan implementation and require low funding. They include:

- Installing dustbins and waste receptacles within the main activity areas (Proposed CBD, neighbourhoods),
- Providing and landscaping open spaces in the areas allocated
- Undertake tree planting along major roads.

## 4.8.3 Capacity Building

These are projects to be undertaken immediately and continuously for purposes of enhancing the ability to implement projects during planning period. They are actual actions aimed at institutional development, empowerment and capacity strengthening. They include:

- 1. Formation of a Town Committee for Khorof Harar Town.
- 2. Instituting a development control unit and frequent training of the physical planning department.
- 3. Training of staff for plan implementation.
- 4. Provide adequate resources and enhance capacity of all the departments for proper implementation of the plan.
- 5. Formation of community-based development committees and community policing units.
- 6. Periodic public education, sensitization and awareness creation.

#### 4.8.4 Project Phasing

#### **Short Term Plans**

Short-term projects are achievable within 1-3 years and serve the community's immediate needs. They require little money and human resources investment and form a basis for medium- and long-term projects.

#### **Medium Term Projects**

Projects enumerated here below are medium-term actions achievable within 4-6 years, require more collaborators than short-term, require more inquiry before commencement, acquisition of land and need wider consultations among all the involved partners:

# **Long Term Projects**

The projects enumerated here below are long-term (beyond seven years) actions expected to have been achieved by the end of the planning period. They are more expensive projects that require phasing, feasibility studies, major capital investments, donor funding, and wider consultation:

#### 4.8.5 Co-ordination framework

At the policy and institutional levels, the coordination framework focuses on facilitating:

- 1 The understanding and implementation of strategies and measures by the government and non-government institutions;
- 2 Dialogue between all partners and the government to create conditions that favour the adoption of the plan.

At an operational level, coordination is mainly concerned with improving efficiency of actions through:

- 1. Information exchange between various departments.
- 2. Facilitating administrative procedures as much as possible;
- 3. Ensure the financing of critical activities, direct resources to priority areas, and avoid overlapping activities.

To enhance good coordination, it is recommended that:

- 1. People in the planning area should begin reinforcing this plan's immediate and personal initiatives.
- 2. The quick wins and immediate interventions be cleared to pave the way for the shortterm and medium-term strategies that will ultimately prepare a way for the long-term objectives

#### 4.8.6 Financing Framework

Implementing Khorof Harar Town LPLUDP requires the best elements of organization and management. The capability of authorities to implement the plan greatly inclines on their financial stability. This provides the fundamental basis for well-organized and coordinated departmental structures and organizations. The financing of the projects proposed herein are presented in the town's Capital Investment Plan.

## 4.8.7 Community Participation Framework

The main aim is to improve the effectiveness and validity of implementation processes and to increase the acceptability of plan proposals and decisions. This will fully involve the community in investment choices and management decisions.

- 1. Formation of community-based development and management committees up to the village units.
- 2. Active NGOs to participate in civic governance.
- 3. Community members to set up community police areas in all the residential neighborhoods. Community members to form phone tree communication mechanisms.
- 4. Public to continuously monitor development in Khorof Harar Town.
- 5. Residents to comment on public notices informing them of proposed developments within their neighborhoods and cooperate appropriately.
- 6. Formation of community-based development management committees.

# 4.8.8 Implementation matrix

Table 4-11: Implementation log frame

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
Capacity Building	Enhance skills and efficiency in plan implementation	<ul> <li>Formation of a town committee for Khorof Harar Town.</li> <li>Training of staff in the implementation of the plan for decision making.</li> <li>Provide adequate resources and enhance capacity of all the departments for proper implementation of the plan.</li> <li>Formation of a plan implementation committee and community forums.</li> <li>Periodic public education, sensitization and awareness creation</li> </ul>	Short Term by year 2025 and Continuous	County Government through:  Department of Public service, Labor and Decentralized Units Department of Finance and Economic Planning
Transport	To provide an efficient and integrated transportation system.	<ul> <li>Upgrade the surface condition of the two major roads: Diff- Kotulo (B93), Khorof- Wajir (G5360) road to bitumen standards. Expand the widths of these roads to 30m.</li> </ul>	Long Term by the year 2033	<ul> <li>County Government through the Department of Roads, Transport and Public Works.</li> <li>Kenya Roads Board (KRB)</li> <li>KeNHa</li> <li>KURA</li> </ul>

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
		<ul> <li>Construct a bus park along the Khorof-Wajir (G5360) roads. The bus park will serve public service vehicles operating within and outside the planning area.</li> <li>Construct the road network as indicated on the scheme plan for the town. All roads should have NMT facilities. Roads below 30m width to be graveled/murramed.</li> <li>Provide parking spaces along all local distributor (15-18m) and secondary roads (18-21m).</li> </ul>	Medium Term by the year 2028	<ul> <li>County Government through the Department of Roads, Transport and Public Works.</li> <li>Public Private Partnerships</li> <li>Development partners</li> </ul>
Health	To provide universal healthcare.	<ul> <li>Expand and rehabilitate the existing sub county hospital to meet the required standards for a level IV hospital. The hospital is to be equipped with a fully functional laboratory, wards and a pharmacy. Such services as X-Rays and ambulance services should be made available within the facility.</li> </ul>	Medium Term by the year 2028	County Government through the departments of:  Roads, Transport and Public Works. Public Health, Medical Services and Sanitation Finance and economic planning
		Construct a dispensary at the proposed site off the Khorof-Wajr road.	Long Term by 2033	County Government through the departments of:  Roads, Transport and Public Works.  Public Health, Medical Services and Sanitation Finance and

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
		Provide adequate water and constant electricity to the sub-county hospital and the proposed dispensary. Installation of solar harvesting equipment within these facilities is encouraged in order to offer better services round the clock.	Medium Term by 2027	economic planning County Government through the departments of:  Roads, Transport and Public Works.  Public Health, Medical Services and Sanitation  Finance and economic planning
		Employ more medical personnel including doctors, clinical officers, nurses, pediatricians etc.	Medium Term by 2028	<ul> <li>1.National Government</li> <li>2.County Government</li> <li>through the departments</li> <li>of:</li> <li>Public Health,</li></ul>
Education	To provide adequate, well equipped	<ul> <li>Construct a secondary school opposite the existing water pumping station and a primary school off the Khorof-Wajir road as proposed.</li> </ul>	Long Term by 2033	<ul><li>i. National government through the NC-CDF</li><li>ii. County Government</li></ul>
	educational facilities.	• Adequately equip all schools with necessary facilities including laboratories, learning materials, classrooms, libraries, and ablution blocks among others.	Long Term by 2033	through the departments of:  Roads, Transport and Public Works.

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
		Expand the capacity of vocational training centre through construction of more lecture rooms and workshops to provide vocational training for the local labour force.	Medium Term	<ul> <li>Education, Youth, Culture, Gender and Social Services</li> <li>Finance and economic planning</li> </ul>
		• Employ more teachers and lecturers for the primary, secondary and the vocational training centre and provide housing within the school premises.	Short	<ul><li>Teacher Service Commission</li><li>County Government</li></ul>
Economy	To promote the town's economic growth through promotion of small-scale industrialization, human capital development and livestock agriculture.	<ul> <li>Construct a livestock market.</li> <li>Construct a gums and resins collection and processing centre in the town.</li> <li>Construct an animal control centre next to the agricultural farm.</li> <li>Ensure regular cleanup of the commercial areas at all times.</li> </ul>	Medium Term  Short Term and continuous	<ul> <li>i. Development         Partners</li> <li>ii. County Government         through the         departments of:         <ul> <li>Roads, Transport             and Public Works.</li> </ul> </li> <li>Finance and         economic planning</li> <li>Town Administration</li> </ul>
		Improve the security, safety and proper administration of the town by strengthening the security apparatus stationed in the town.	Short Term and Continuous	<ul><li>National Government</li><li>County Government</li></ul>
Environment	Protect and conserve the environment.	<ul> <li>Introduce alternative sources of cooking energy such as LPG to complement and reduce over-reliance on firewood and charcoal.</li> <li>Establish public toilets within commercial areas, proposed market places, the proposed recreational parks and the</li> </ul>	Short Term and Continuous	<ol> <li>Public Private partnerships</li> <li>Town Administration</li> <li>County Government through the Department</li> </ol>

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
		<ul> <li>Proposed sports complex.</li> <li>Construct a disaster preparedness and management centre to control calamities such as flooding and fire outbreaks.</li> <li>Encourage planting of diverse and appropriate trees such as Melia Volkensii (<i>Mukau</i>) which thrives in drylands.</li> </ul>		of:  • Roads, Transport and Public Works.
Water Supply	To provide and supply adequate potable water for the town.	system within the town.	Short Term	County Government through the Department of:  Roads, Transport and Public Works.  Water, Energy, Environment and Natural Resources Finance and Economic Planning
		<ul> <li>Design and construct a water reticulation system covering the entire planning area.</li> <li>Install a solar pumping system to guarantee reliable water supply within the town.</li> </ul>	Medium Term	County Government through the Department of:  Roads, Transport and Public Works.  Water, Energy, Environment and Natural Resources Finance and Economic Planning
		• Encourage water harvesting by provision of water storage tanks to the fresh produce market, public institutions such as schools, hospitals and administrative areas.	Immediate and continuous	Town Administration

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
Sanitation	To provide necessary liquid and solid waste infrastructure	<ul> <li>in the town.</li> <li>Design and construct a sewerage reticulation network covering the town and establish its treatment point as proposed.</li> </ul>	<ul><li>Medium term by 2027</li><li>Long term by 2033</li></ul>	County Government through the Department of:  Roads, Transport and Public Works Public Health, Medical Services and Sanitation
		<ul> <li>Provide solid waste receptacles/skips within the town and the proposed residential neighbourhoods.</li> <li>Purchase equipment and vehicles to handle and transport solid waste in the town.</li> </ul>	<ul> <li>Short term by 2025</li> <li>Medium Term by 2028</li> </ul>	County Government through the Department of:  Roads, Transport and Public Works Finance and Economic Planning
		Employ staff to manage solid waste in the town.	Short term by 2025	County Government through the Department of:  Public Service, Labour and Decentralized units
Energy	To ensure ample electrical supply and promotion of use of sustainable energy in the town.	<ul> <li>sub-station.</li> <li>Connect the town to the local electricity grid. Establish a power line network to the town from Wajir.</li> </ul>	Short Term by 2025	1.Kenya Power and Lighting  2.Rural Electrification and Renewable Energy Corporation  3.County government through the department of:

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
				<ul> <li>Water, Energy,         Environment and         Natural Resources</li> <li>Finance and         economic planning</li> </ul>
Housing	To provide adequately serviced housing areas.	Survey and titling of plots resultant from the scheme plan for incentivizing housing development.	Medium Term by 2028	1.National Land Commision  2.Ministry of Lands and Physical Planning  3.Public-Private Partnerships  4.County Government through the Department of:  • Lands, Housing and Physical Planning • Finance and Economic Planning
		Construct houses for all civil servants including teachers, health workers and the Kenya Police.	Medium Term by 2028	<ul> <li>1.National Government</li> <li>2.County Government through the Department of:</li> <li>Roads, Transport and Public Works</li> </ul>

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
		<ul> <li>Provide incentives to encourage investment in housing e.g. provision of subsidies on construction materials.</li> <li>Promote research and development within the town in the use of locally available building materials.</li> </ul>	Short term and Continuous	County Government through department of:  Roads, Transport and Public Works Finance and economic planning
Facilities adequate community facilities	adequate community facilities for	• Construct an integrated community centre at the proposed site. Facilities to be located on site include a social hall and town administrative offices.	Medium Term by 2028	County Government through department of:  Roads, Transport and Public Works
		Establish a cemetery at the proposed site.	Short Term by 2025	<ul> <li>Finance and economic planning</li> <li>Lands, Housing and Physical Planning</li> </ul>
		<ul> <li>Construct a post office to offer courier services at the proposed site.</li> </ul>	Medium Term by 2027	County Government through department of:  Roads, Transport and Public Works
		Construct a community library at the proposed site.	Medium Term by 2028	<ul> <li>County Government through department of:</li> <li>Roads, Transport and Public Works</li> <li>Kenya National Library Service</li> </ul>
		Construct a modern sports complex at the proposed site along the Diff-Kotulo road about 200m from the sub-county hospital.	Long Term by 2033	<ul><li>1.Public-Private Partnerships</li><li>2.County Government through department of:</li><li>Roads, Transport</li></ul>

THEME	OBJECTIVE	PROJECT	TIMEFRAME	ACTOR
				<ul><li>and Public Works</li><li>Finance and economic planning</li></ul>



# **5 CAPITAL INVESTMENT PLAN**

# 5.1 Overview

A capital investment plan is a tool spanning several years that identifies capital projects for investment based on priority and scale of impact to bettering people's lives. Capital investment planning includes capital investment by the government or private sector through public-private partnerships (PPPs). It inter-relates asset management and financial management. A CIP is, therefore, a link between spatial planning aspects and financial capacities and realities. For a capital investment plan to prove its effectiveness over time, the following are the key considerations:

- i. The local government must have the responsibility and authority to plan and make capital investments for a set of specified functions.
- ii. The local government should have economic autonomy that enables it to raise funding for its capital investment either through local taxes, fees, and other local sources or through borrowing or involving the private sector, i.e., influence outside funding.
- iii. The local government should be able to independently carry out its budgeting process to align the capital investment plan to the local budgeting cycle.

The considerations mentioned above are characteristics of the devolved governance system in Kenya, thereby underlining the need for implementable capital investment plans that are linked to the annual local budgeting process. The CIP is intended to provide practical and realistic guidance regarding the next steps in implementing the capital development aspects of this plan.

To be realistic, this CIP is built upon two principles:

- i. Affordability within the current budgetary conditions and
- ii. Effectiveness in responding to the aspirations and expectations of the people of Khorof Harar.

# 5.2 Criteria for Selection of Capital Projects

The process began with enlisting all the projects and programmes proposed in the Khorof Harar LPLUDP. A selection criterion was undertaken based on the importance/urgency of each project. The selected projects were then valued against the subsequent benefits to the town's development

#### **PLAN**

and the ability to achieve the plan's objectives adequately. This ability/capacity is indicated by the attributes listed below.

- Improving the quality of life
- Economic productivity, creation of employment and investment opportunities
- Number of people positively impacted by the project

## i. Improving the quality of life

The projects selected within this plan are primarily based on building base/trunk infrastructure, which will form an enabling environment for local capital investment in the town, thereby improving the quality of life.

## ii. Economic productivity

The projects selected shall form the platform for supporting the overlying land uses and subsequently boost the town's economy and livelihood. The projects offer the highest potential for boosting productivity within the town. The over-arching effect in improved production shall lead to employment creation and increased investment.

#### iii. Number of people positively impacted by the project

The projects have the potential to positively impact the largest number of people within the town and its hinterland either through increased productivity, wellness, employment creation or income generation. This is based on the presumed notion that the larger the number of beneficiaries as a result of the implementation of a certain project, the higher the chances that the project promotes the achievement of preset objectives.

# 5.3 Selected Capital Projects and Plan

After a critical assessment of all the projects required to implement the urban plan for Khorof Harar Town, the following capital investment projects were selected.

Table 5-12: Selected Capital Projects

SECTOR	PROJECT
Land Management	• Survey and provide title deeds of the plots resultant from the town's scheme plan.
Transport	• Upgrade the Khorof-Wajir and Diff-Kotulo roads to

# **PLAN**

SECTOR	PROJECT
	bitumen standards
	• Construction of a bus park along the Khorof-Wajir road.
Sanitation	• Design and construct the sewerage system for the town
	(trunk sewer lines and oxidation ponds)
	• Design and construction of a sanitary landfill
Water	Drill more two boreholes to augment the current water
	supply.
	Design and construction of a water reticulation system
	(treatment plant and trunk piping system tanks).
	Construction of high-capacity storage tanks.
Electricity	Installation of an electricity power substation.
Health	Construct a dispensary
	• Procure medical equipment for the Khorof Harar Sub-
	County Hospital.
Education	Construct two schools: A primary and secondary school
Community development	Construction of a community centre
	Construction of a sports stadium.

Table 5-13: Capital Investment Framework

NO.	PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
1.	Survey and provide title deeds of the plots resultant from the town's scheme plan.	<ul> <li>Survey</li> <li>Creation of a plot register</li> <li>Beaconing</li> <li>Titling</li> </ul>	1,905 plots	Kshs76,200,000	<ul><li>National government</li><li>County Government</li></ul>
2.	Tarmacking the Khorof- Wajir and Diff-Kotulo roads	<ul> <li>Clearing and Excavation</li> <li>Mounting</li> <li>Fine Grading</li> <li>Aggregate Base</li> <li>Tarmacking</li> </ul>	<ul> <li>Khorof-Wajir- 105km</li> <li>Khorof- Kotulo- 32km</li> </ul>	<ul> <li>Kshs6,300,000,00</li> <li>0</li> <li>Kshs1,920,000,00</li> <li>0</li> </ul>	<ul><li>National government</li><li>County Government</li></ul>
3.	Construction of a bus park along the Khorof-Wajir road.	<ul> <li>Construction of:</li> <li>10 Passenger Bays</li> <li>Construction of 10 retail Shops</li> <li>Construction of 2 toll stations</li> <li>Tarmacking of the road surface</li> </ul>	<ul> <li>Construction of shops, toll stations, passenger bays-22 units</li> <li>Length of road for tarmacking within bus park-1km</li> </ul>	Kshs16,000,000 Kshs60,000,000	<ul> <li>i. Public Private         <ul> <li>Partnerships</li> </ul> </li> <li>ii. County Government             through the             department of</li> <li>Roads, Transport and             Public Works</li> <li>Lands, Housing and             Physical Planning</li> </ul>
4.	Design and construct the sewerage system for the town (trunk sewer lines and oxidation ponds)	<ul><li>Hydrogeological survey</li><li>Construction of the trunk sewer lines</li></ul>	<ul> <li>Length of trunk sewer lines- 3.26km</li> <li>Oxidation</li> </ul>	<ul><li>Kshs130,400,000</li><li>Kshs7,000,000</li></ul>	<ul> <li>i. Development         Partners/Donors</li> <li>ii. County Government         through the         department of</li> </ul>

NO.	PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
		Construction of oxidation ponds	Ponds- 2Ha		<ul> <li>Roads, Transport and Public Works</li> <li>Lands, Housing and Urban Development</li> <li>Public Health, Medical Services and Sanitation</li> <li>Water, Energy, Environment and Natural Resources</li> </ul>
5.	Design and construct the water reticulation system for the town (trunk reticulation lines and 3 high-capacity tanks)	<ul> <li>Laying of Trunk Water Reticulation pipes</li> <li>Construction/ Installation of 3 High- Capacity Water Tanks</li> </ul>	<ul> <li>Length of trunk Water lines- 4km</li> <li>3 high-capacity Water Tanks- 2Ha</li> </ul>	Kshs50,000,000	<ul> <li>i. Development         Partners/Donors</li> <li>ii. County Government         through the         Department of:         <ul> <li>Roads, Transport and             Public Works</li> </ul> </li> <li>Water, Energy,         <ul> <li>Environment and Natural</li> <li>Resources</li> </ul> </li> </ul>
6.	Drill 2 boreholes	<ul> <li>Hydro-geological survey</li> <li>Environmental impact assessment</li> <li>Piping and Pumping Station</li> <li>Storage Tanks</li> </ul>	2	Kshs7,000,000 (@Kshs3,500,000)	<ul> <li>County Government through the Department of</li> <li>Roads, Transport and Public Works</li> <li>Water, Energy, Environment and Natural Resources</li> </ul>
7.	Installation of an electricity power substation.	<ul><li>Solar Panels (95MW)</li><li>Generators</li><li>Transmission Lines</li></ul>	1	Kshs158,000,000	<ul> <li>Rural Electrification and Renewable Energy Corporation</li> </ul>

NO.	PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
		<ul><li>Transformers</li><li>Perimeter Fencing</li></ul>			<ul><li>County Government</li><li>Kenya Power and Lighting</li></ul>
8.	Construct a dispensary	<ul> <li>Construction of:</li> <li>Waiting Area</li> <li>4 Offices and a Pharmacy</li> <li>2 Ablution Blocks</li> </ul>	1	Kshs20,000,000	<ul> <li>i. National Government through NGCDF</li> <li>ii. County Government through the department of</li> <li>• Roads, Transport and Public Works</li> <li>• Public Health, Medical Services and Sanitation</li> </ul>
9.	Construct a primary school	<ul> <li>Construct classrooms for grade 1-8, 3 streams per class</li> <li>Construct 2 Ablution Blocks</li> <li>Construct 2 Units of staffroom and offices</li> <li>Perimeter Fencing</li> </ul>	28	Kshs19,600,000	<ul> <li>i. National Government through NGCDF</li> <li>ii. County Government through the:</li> <li>Department of Roads, Transport and Public Works</li> <li>Department of Education, Youth, Culture, Gender and Social Services</li> </ul>
10.	Construct a secondary school	<ul> <li>Construction of:</li> <li>Forms 1-6, 3 streams per class</li> <li>3 Laboratories</li> <li>10 dormitories</li> <li>1 Library</li> <li>7 Ablution Blocks</li> </ul>	39	Kshs27,300,000 (Kshs700,000 per classroom/unit of construction)	<ul> <li>i. National Government through NGCDF</li> <li>ii. County Government through the:</li> <li>Department of Roads, Transport and Public Works</li> </ul>

NO.	PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
					• Department of Education, Youth, Culture, Gender and Social Services
11.	Construction of a community centre	Construction of:  A social hall A Library  4 offices 2 ablution blocks	8	Kshs12,500,000	County Government through the:  • Department of Roads,    Transport and Public    Works • Department of Education,    Youth, Culture, Gender    and Social Services
12.	Construction of a sports stadium.	<ul> <li>Leveling and growing grass on the playing ground</li> <li>Construct the main and spectator dias</li> <li>Changing rooms</li> <li>Ablution Blocks</li> </ul>	1	Kshs50,000,000	<ul> <li>i. Development         Partners/Donors</li> <li>ii. County Government         through the:         <ul> <li>Department of Roads,</li></ul></li></ul>