THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF LANDS, HOUSING AND HUMAN SETTLEMENTS DEVELOPMENT

DRAFT REPORT
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SINZA REDEVELOPMENT PLAN (2026 – 2046)

PREPARED BY
THE MINISTRY OF LANDS, HOUSING AND HUMAN SETTLEMENTS DEVELOPMENT
IN COLLABORATION WITH
UBUNGO MUNICIPAL COUNCIL

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CHAPTER ONE
LOCATION AND BACKGROUND INFORMATION

1.1 Background

Sinza Area is one of the strategic and rapidly transforming urban neighborhoods within Dar es Salaam, located in Sinza Ward under the jurisdiction of Ubungo Municipal Council. The area occupies approximately 3.37 square kilometers (336.78 hectares) and is administratively divided into five sub-wards of Sinza A, B, C, D, and E). According to the 2012 National Population Census, Sinza had a total population of 40,546 residents; however, this number decreased to 31,396 according to the 2022 Census.

Sinza was originally planned in 1973 under the Government's Site and Services Project, implemented in collaboration with the World Bank, with the primary objective of providing serviced residential plots for low-income households relocated from Manzese. The layout provided standard residential plots of 288 square meters (24m x 12m) intended for single-storey family houses, together with designated public open spaces, water kiosks, and essential community facilities.

Over time, however, Sinza has undergone significant physical, social, and economic transformation. The area has evolved from a purely low-density residential neighborhood into a mixed-use urban zone characterized by increasing commercial activities, multi-storey developments, and intensified land use. The growth of nearby commercial and institutional hubs, such as Mlimani City, Mwenge, and Ubungo, has further intensified development pressure in Sinza.

Despite this rapid growth, development has largely taken place without a comprehensive and updated guiding framework. As a result, the area faces challenges such as unregulated land use changes, encroachment on open spaces and road reserves, insufficient parking, rising demand for infrastructure and social services, environmental degradation, and deterioration of some of the original housing stock.

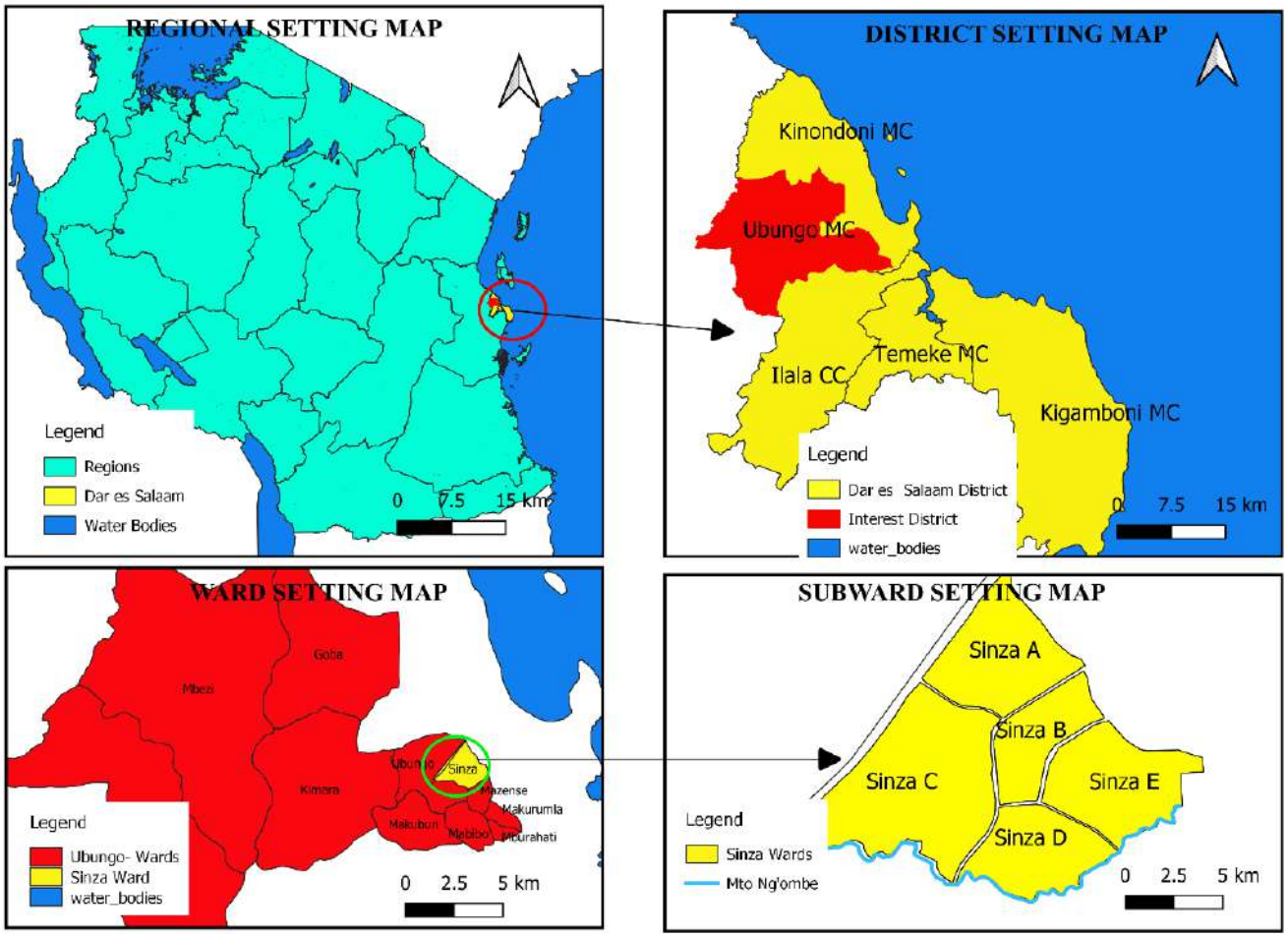
In response to these emerging challenges and opportunities, the Government, through the Ministry responsible for Lands, in collaboration with Ubungo Municipal Council and other stakeholders, has initiated the preparation of the Sinza Redevelopment Plan (2026–2046). The Plan aims to provide a comprehensive strategic framework to guide redevelopment, optimize land use, improve infrastructure and service provision, enhance environmental quality, stimulate economic growth, and promote sustainable and inclusive urban development over the next twenty years.

The Sinza Redevelopment Plan therefore seeks to restore the value, functionality, and urban character of the area while positioning Sinza as a well-planned, resilient, and vibrant urban neighborhood within Dar es Salaam.

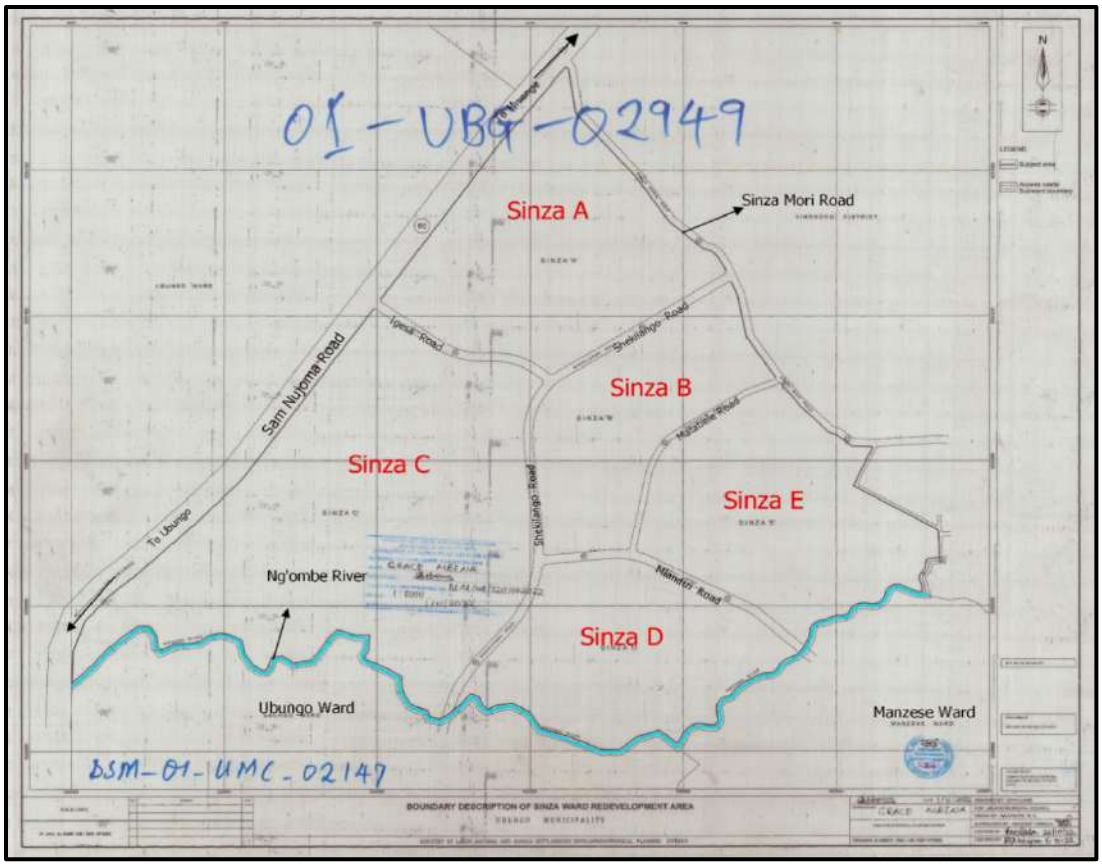
1.2 Location of Sinza

Sinza Area is located in the United Republic of Tanzania, within Dar es Salaam Region, which comprises five municipalities: Ubungo Municipal Council, Ilala Municipal Council, Kinondoni Municipal Council, Temeke Municipal Council, and Kigamboni Municipal Council. Administratively, Sinza falls under the jurisdiction of Ubungo Municipal Council and is situated in Sinza Ward, which is further divided into five sub-wards: Sinza A, Sinza B, Sinza C, Sinza D, and Sinza E.

To the North-West, the area is bordered by Sam Nujoma Road (University area) to the North-East, it borders Mwenge to the South-west, it borders Ubungo, including the main commercial centre of East Africa Commercial and Logistic Centre and to the South-East, it borders the Urafiki and Manzese areas.



Map 1.1: Location Map of Sinza



Map 1.2: Planning Area Map

Sinza Ward is linked to Sam Nujoma Road and Morogoro Road through Shekilango Road which passes through the area and therefore links the other wards such as Kijitonyama and Manzese.

The Sinza Ward acts as Commercial and Trade Centre in Ubungo Municipality as well as Dar Es Salaam Region and serves different traders from adjacent neighboring wards and centers such as Manzese, Mwenge, Kijitonyama and Ubungo.

1.3 Historical Background of Sinza

The Sinza area was planned in 1973 under the Site and Services Project implemented by the Government of Tanzania in collaboration with the World Bank. The project aimed to allocate plots to low-income residents who were relocated from Manzese, which was undergoing improvements under the Manzese Squatter Upgrading Project.

According to Town Planning Drawing No. 1/73/174: Sinza Layout, approved in January 1974, the area was designed and planned for residential plots measuring 288 square meters (24m x 12m). Each plot was intended for the construction of a single-storey, single-family dwelling. The plan designated areas for public use, including water kiosks and public open spaces.

During the implementation of the Site and Services project, the Tanzania Housing Bank (THB), established in 1972, was assigned the responsibility of financing the construction of basic but permanent houses. As a result, standardized house designs known as the "Sinza Type," characterized by split-level roofs, were prepared by THB experts. The designs provided for construction in two phases.

However, during the development of Sinza, it was observed that many developers were middle- and high-income earners rather than the intended low-income beneficiaries. This pattern of development led to encroachment on open spaces and water kiosks. Due to higher income levels, many residents were able to purchase cars but lacked designated parking areas. Consequently, open spaces, some water kiosk areas, and road reserves were converted into parking areas.

1.4 The Need for Sinza Redevelopment

The current development pattern in Sinza is characterized by rapid and largely uncoordinated growth, occurring in the absence of adequate planning regulation and effective development control mechanisms. This situation has led to land-use incompatibilities, non-compliance with established planning standards, and the progressive degradation of the area's urban character, environmental quality, and overall spatial value within Dar es Salaam.

Sinza Redevelopment Plan: 2026 – 2046 is prepared to guide development and control the future growth of the area for the period of 20 years. This plan is also needed as an important tool to maximize an efficient and effective utilization of land and public utilities in the area. Other reasons include:

i. Change in land use from purely residential to mixed residential and commercial uses such as shops, bars, hotels, restaurants, groceries, hostels, and lodges.

Plate 1.1: Trend of change of land use
Source: Field observation, 2024

ii. Non-compliance with planning standards, including setbacks (front, side, and rear), plot coverage, and plot ratio.

Plate 1.2: Houses with very narrow setbacks
Source: Field observation, 2024

iii. Rapid transformation of building typologies from single-storey houses to multi-storey buildings.

Plate 1.3: Single-storey and Multi-storey buildings
Source: Field observation, 2024

iv. Absence of a strategic and sustainable development plan to guide and control growth in the area.

v. Encroachment on open spaces, wetlands and water kiosk areas.

Plate 1.4: Open space used as parking area
Source: Field observation, 2024

vi. Encroachment on road reserves and roads themselves.
vii. Increased demand for social services and public infrastructure due to population growth.
viii. Environmental pollution and deterioration of buildings, particularly the original residential houses.

Plate 1.5: Deteriorated buildings
Source: Field observation, 2024

1.5 Why Sinza Area?

Redevelopment is needed in Sinza because of the following reasons;

i. Sinza is the only planned area, strategic and a commercial hub in Ubungo Municipal council, Dar es salaam.
ii. Gradual increase in the land value of Sinza.
iii. Sinza is well served by major transport infrastructure such as Morogoro Road (BRT Phase 1), Sam Nujoma Road (BRT Phase 4) and Shekilango Road (BRT Feeder Road).
iv. Sinza is surrounded by education institutions such as University of Dar es Salaam (UDSM), Ardhi University, The School of Law and Water Institute. It is also close to investment and business centers like East Africa Commercial and Logistics Centre (EACLC) and Mlimani City Mall.
v. The original plan was not implemented as it was initially planned. Therefore, it does not meet the current need of the residents in Sinza.

1.6 Previous Redevelopment Framework

The Dar es Salaam Master Plan 2016–2036 designates the area for infill and densification development as a strategic approach to promote efficient and effective utilization of land and existing public infrastructure. The Plan recognizes the need to optimize serviced land within established urban areas in order to curb urban sprawl, enhance infrastructure efficiency, and improve service delivery.

Furthermore, the proposed redevelopment aligns with the objectives of the Human Settlements Development Policy (2000), which advocates for vertical and compact urban development as a mechanism for achieving sustainable land use. The policy emphasizes increased density, mixed land uses, and integrated planning to ensure optimal land utilization, improved accessibility, and enhanced urban functionality.

Accordingly, the Redevelopment initiative is consistent with both national urban policy directives and the long-term spatial development strategy for Dar es Salaam.

1.7 Objectives and Vision of Sinza Redevelopment Plan

1.7.1 Main Objective:
To improve the living conditions of residents, attract new businesses and investments, and address environmental, social, and economic challenges.

1.7.2 Specific Objectives:
i. To promote efficient and optimal land use.
ii. To increase the capacity for controlled multi-storey developments.
iii. To promote mixed land-use development.
iv. To improve infrastructure and the overall urban environment.
v. To facilitate investment through development partnerships (public–private partnerships and joint ventures).

1.7.3 Vision:
To transform Sinza into a modern, high-density, mixed-use urban area with quality infrastructure, enhanced government revenue generation, a strong local economy, and a sustainable environment, thereby improving the quality of life for present and future generations.

1.8 Preparation of the Sinza Redevelopment Plan
To achieve the objective of preparing the Sinza Redevelopment Plan, various strategies were implemented in accordance with procedures, including stakeholder mobilization and the collection of baseline data and information from the field.

This task was carried out by a planning team comprising experts from the Office of the Assistant Commissioner for Lands, Dar es Salaam Region, and experts from the Ubungo Municipal Council. The work officially commenced in August 2024 and involved the following steps.

1.9 Stakeholder Meetings

Mobilization was conducted at all levels in accordance with established procedures. The objective was to introduce the Plan and involve stakeholders so that they could provide opinions and recommendations to support its preparation.

Table 1.1: The Stakeholder Meetings conducted**.**

No.	Meeting	Recommendations / Resolutions
1	Meeting of the Sinza Ward Development Committee (WDC) held on 03/08/2024	It was resolved that implementation of the project should commence as early as possible.
2	Meeting with landowners and residents of Sinza Ward held on 10/08/2024	The community understood and positively received the Plan with great enthusiasm; they requested that implementation should begin immediately.
3	Meeting with Public Utility Institutions operating in Sinza Ward held on 25/09/2024	Stakeholders committed to provide adequate cooperation and submit information regarding their existing and planned services within the Sinza area.
4	Meeting with the Head of the Department of Geology, University of Dar es Salaam, regarding subsurface geological conditions of Sinza, held on 12/10/2024	The Department advised that a geotechnical investigation should be conducted to determine soil bearing capacity and suitability for multi-storey buildings.
5	Meeting with TANESCO Regional Management (Mikocheni and Magomeni) serving the Sinza area held on 12/10/2024	They agreed to prepare a status report on the existing electricity distribution network within Sinza.
6	Meeting with the Full Council of Ubungo Municipal Council held on 01/11/2024	The Council unanimously approved the preparation of the Plan.
7	Meeting with the Ministry Management at Headquarters, Dodoma, held on 18/11/2024	It was directed that the redevelopment of Sinza should adopt a Block Consolidation (Block Plan) approach and be mandatory rather than optional.

No.	Meeting	Recommendations / Resolutions
8	Meeting with a private firm – Y & P Architect (T) Ltd – held on 13/12/2024	It was advised that a Financial Analysis should be undertaken to assess the feasibility of joint redevelopment.
9	Meeting with DMDP – Dar es Salaam Metropolitan Development Project – held on 30/12/2024	It was reported that DMDP was responsible for the construction of the Ng'ombe River retention basin and advised that the remaining area should follow legal conservation procedures.
10	Meeting with DAWASA regarding major water transmission pipelines (33-inch and 22-inch diameter) crossing the Sinza area, held on 22/01/2025, 24/03/2025 and 03/06/2025	It was agreed that DAWASA would verify the exact pipeline alignments to identify plots that may be affected.
11	Meeting with the National Housing Corporation (NHC) – Business Department – regarding redevelopment of the Urafiki area held on 23/01/2025	It was noted that NHC is still at preliminary planning stages;
12	Meeting with the Mangement of Ubungo Municipal Council to present the Draft Plan and receive comments and recommendations, held on 17/10/2025	Discussion and resolution on major concerns like plot amalgamation and implementation strategies.
13	Meeting with the Technical Team of the Management at the Ministry of Lands, Housing and Human Settlements Development in Dodoma to present the proposed Plan and receive comments, held on 22/10/2025	Discussion and resolution on major concerns like plots encroachments, water pipeline, public water outlets (kioski),
14	Meeting with the Management office of the Assistant	It was agreed to involve real estate developers such as TISEZA, NHC, TBA,

No.	Meeting	Recommendations / Resolutions
	Commissioner of Lands of Dar es salaam held on 23/12/2025	PSPF, WHC in the implementation of the redevelopment plan.
15	Meeting with Full Council of Ubungo held on 06/02/2025	It was advised to verify ownership of open spaces that have title deed. Also, the issue of ownership of joined plots (block plan) was discussed.
16	Meeting with Public Utility Institutions operating in Sinza Ward held on 27/02/2024	A concern was raised on the availability of land to allow the expansion of roads so as to house other utilities like water pipes, gas pipes, electrical poles, internet wires, etc. Also, it was advised to have an area for cemetery functions since the existing ones are full. The existing cemeteries are to be maintained as memorial/ recreational centres.

1.10 Collection of Baseline Data and Statistics

Baseline data and various statistics were collected to determine the overall existing situation of Sinza. This exercise was conducted jointly by experts from the Office of the Assistant Commissioner for Lands (Dar es Salaam Region) and Ubungo Municipal Council.

Field data collection was carried out through questionnaires and physical inspection of each plot and land parcel. The collected information included:

- Types of residents and existing developments.
- Plot size, land use, building type, building use, building height, and building condition.
- Existing infrastructure, road network and distribution, road conditions, parking areas, and bus stops.
- Social services such as water supply and sewerage systems, solid waste collection, energy supply, education, and health services.
- Social, economic, and cultural activities.
- Proposed planning recommendations.

Additional data were obtained from service providers, government offices, private individuals, schools, hospitals, and religious institutions.

A professional technical analysis was conducted to assess the capacity of Sinza land to support intensified infrastructure development.

Information was also collected on development trends in neighboring areas, including Mwenge, Manzese, Mlimani City, and the East Africa Commercial Centre located at the former upcountry bus terminal site. This was due to the rapid growth of these areas, which has stimulated economic growth in Sinza.

CHAPTER TWO
DEMOGRAPHIC CHARACTERISTICS AND METHODOLOGY

2.1 Population

Population is an important resource for development as it is a source of labor supply for production as well as consumers of different products. The growth and distribution of population also determine the demand and supply of essential social services such as health, education, water, transport, electricity, and housing, etc. The population size of Sinza establishes the basis for determining requirements for social, community and utility services, infrastructure, housing, office, and commercial spaces for the span of the redevelopment scheme of Sinza

2.2 Population Size

According to the National Population Census of 2022, Sinza ward had a total population of **31,396** people and **10,874** households with an average size of **3 people**. In 2012 Sinza ward had a total population of **40,546** and **9,889** households with an average size **of 4 people**. This is distributed in the five sub-wards.

Table 2.1: Sinza Population (2012 -2022)

S/N	Year	Male	Female	Total
1	2002	-	-	36,469
2	2012	18,892	21,654	40,546
3	2022	**14,759**	**16,637**	31,396

Source: National Bureau of Statistics

The above table shows that from 2002 -2012, the population of Sinza Ward increased by **11**% over 10 years, while between 2012 and 2022 its population decreased by over 9,000, about **23%.** Between 2002 and 2012 Sinza population grew due to urban expansion and migration within Dar es Salaam. The drop from 2012 to 2022 is notable, and the possible reason for the decrease in population is;

a) **Migration to newly developed areas**
b) **Household size reduction**
   Urban lifestyles lead to smaller family sizes, and more people live alone or as couples instead of extended families
c) **Change of land use**
   Sinza has been transforming from residential to commercial shops and businesses. Private owners are increasing sales by converting residential housing into commercial spaces, often reducing the number of people living there

d) **High property costs**
   As infrastructure improves (Shekilango road, Sam Nujom, Igesa road, Mlandizi road), property values rise, making housing less affordable for lower-income families and this can push residents to move nearby for an affordable house. Higher rents also reduce long-term residents and family households.
e) **Government relocation**
   Many government workers and formal employee moved to Dodoma, others build homes in neighboring areas like Mbezi, Mbweni, Goba Kigamboni and commute instead of living in older areas like Sinza.

Sinza population decline doesn`t necessarily mean fewer people overall in Dar es salaam the regional population is still growing rapidly. Instead, it reflects urban restructuring, commercial growth and changing residential preferences. This is common in growing areas where older inner areas lose residents but gain economic activity.

The implication of this population decline for the next 20 years is;

Assumption 1: Continued population decline
More residential buildings become commercial and Sinza becomes mainly a business hub and service hub and the expected outcome is a lower residential population but a higher daytime population (workers and customers)

Assumption 2: Population increases through urban Redevelopment
Redevelopment plan advocates densification and mixed use, that is, apartments, high rise buildings and improved social services. This will automatically increase population density and the younger working population will move back to Sinza.

Sinza redevelopment plan will bring back new residents, by increasing density through vertical (multi-storey) housing, hence more housing.

2.3 Population Distribution

Population distribution is used to determine the spreading of population size between the sub-wards in the Sinza Ward. This is caused by differences in land uses in different areas. The area that is dominated by commercial residential seems to be dominated by the residents. Good examples are Sinza C and Sinza D sub-wards which are the most populated sub-wards in the Sinza area according to NBS data of population survey in 2022, which is current data.

Table 2.2: Population Distribution Table of Sinza area in 2012

S/N	Sub-ward	Female	Male	Total	House Hold	Average People Per Household
1	Sinza A	6,373	5,825	12,198	2,970	4.4
2	Sinza B	3,566	3,110	6,676	1,509	4.4
3	Sinza C	3,062	2,598	5,660	1,352	4.4
4	Sinza D	5,015	4,339	9,354	2,288	4.4
5	Sinza E	3,638	3,020	6,658	1,670	4.4
	TOTAL	**21,654**	**18,892**	**40,546**	**9,789**	

Source: NBS-2012

Table 2.3: Population Distribution Table of Sinza area in 2022

S/N	Sub-ward	Female	Male	Total	House Hold	Average People Per Household
1	Sinza A	2,219	2,394	4,613	1,432	3
2	Sinza B	2,106	2,355	4,461	1,657	3
3	Sinza C	3,901	4,398	8,284	2,990	3
4	Sinza D	3,242	3,398	6,640	2,347	3
5	Sinza E	3,291	4,107	7,398	2,448	3
	TOTAL	**14,759**	**16,637**	**31,396**	**10,874**	**3**

Source: NBS-2022

It seems that, Sinza C, D and E sub-wards have a larger population than Sinza A and B sub-wards in the Sinza area. Sinza B is the sub-ward of lowest population in Sinza ward. The fact that brings the Sinza C, D and E to be as the most populated sub wards is that, it is mainly used for commercial residential inhabitants. Another reason is that Sinza C, D and E sub-wards have large areas of unplanned settlement along river Ngombe.

2.3.1 Average Household Size

The average household size refers to the average number of people living in a household

Table 2.4: Average household size

Year	Population	Household size	Number of Households
2002	36,469	4.1	8,894
2012	40,546	4.0	10,137
2022	31,396	2.9	10,874

Source: NBS 2022

From 2002 to 2012, both population and the estimated number of households increased as Sinza continued to urbanize. 2012 to 2022, the population decreased but the number of households remained stable or rose slightly because house size shrank significantly (fewer people per household). This suggests more households with fewer members, a typical urban trend

2.4 Population Projection: Sinza Ward (2026–2046)

Background Base (2022 Census)

According to recent data, the population of Sinza Ward in the **2022 national census** is approximately **31,396 people**.

Assumptions for Projection

Because official ward-level projections for Sinza do not exist, we estimate future population based on the **projected growth trends for the Dar es Salaam region**, which is expected to continue expanding over the next two decades. The **Dar es Salaam Region's population growth rate** is forecast to gradually decline from around ~2.6% in 2023 to ~1.5% by 2050.

For planning purposes, an **average annual growth rate of 3.5%** is applied for the first decade (2026–2036) to reflect continued urban migration and densification pressures, followed by a **moderating rate of 2.5%** in the second decade (2036–2046) as urban expansion stabilizes.

2.5 Population Projection and Planning Rationale

A population trend analysis for the Sinza planning area was undertaken using five-year projection intervals in order to establish a clear and systematic growth path over the planning horizon. The current population of Sinza stands at **31,396 persons**, forming the baseline for future projections.

The purpose of projecting Sinza's population is to provide a reliable quantitative foundation for evidence-based, forward-looking, and policy-aligned urban planning decisions. Population forecasting enables planners to anticipate future growth patterns and assess the implications of such growth on land use, infrastructure capacity, housing demand, and social service provision.

By establishing projected population benchmarks, the redevelopment strategy for Sinza can be structured proactively rather than reactively. This approach ensures that infrastructure systems, housing typologies, transportation networks, and community facilities are appropriately sized and phased to meet future demand in an efficient, sustainable, and economically viable manner.

Ultimately, the population projection serves as a critical planning instrument for guiding compact development, optimizing land utilization, and supporting the long-term sustainability of the Sinza redevelopment initiative.

2.5.1 Resident Projected Population

Table 2.5: Projected Resident Population (2026 -2046)

Year	Years After Base (n)	Projected Resident Population
2022	0 census	31,396 (baseline)
2027	5	37,288
2032	10	44,291
2037	15	52,606
2042	20	62,477
2046	24	71,489

Source: NBS

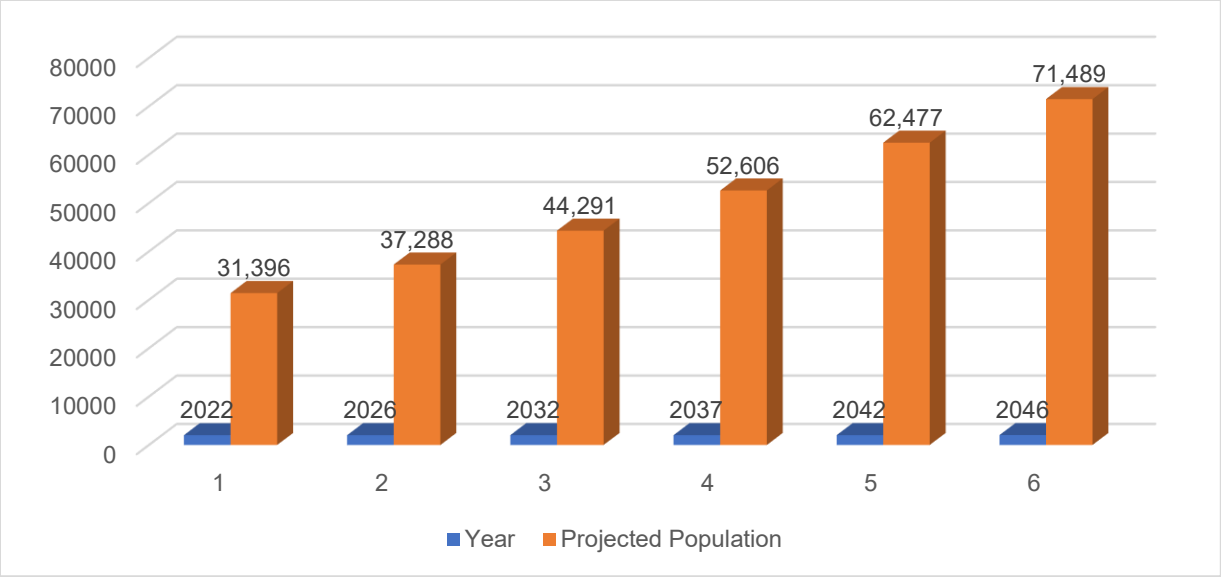


Figure 2.1: Population Projection 2046
Source: NBS

2.5.1.1 Planning Implications

- **2026 Estimate (37,288):** Reflects projected growth from the 2022 baseline over four years at ~3.5% annual growth.
- **2046 Forecast (71,489):** Based on strong urban growth dynamics in Dar es Salaam combined with densification strategies supported by the Master Plan and Human Settlements Policy.

These projections are indicative and for planning use only. They highlight the likely upward trend in population due to:

i. Urban migration and natural increase in Dar es Salaam as the city continues to expand rapidly; and
ii. Policy-driven infill and densification growth within established wards like Sinza due to redevelopment and compact settlement strategies.)

2.5.1.2 Implications for Land Use & Infrastructure Planning

i. Demand for housing, services and utilities (e.g., water, sanitation, transport) will increase significantly by 2046.
ii. Higher density living and vertical development in Sinza can support this projected population growth sustainably.
iii. Integration of mixed-use development, social services, and infrastructure should be prioritized in redevelopment planning.

2.5.2 Employment projection

The employment structure within the planned area is estimated based on typical urban economic patterns observed in emerging commercial centers. The service sector accounts for the largest share of employment, followed by retail trade, reflecting the strong presence of small businesses and informal economic activities. Office-based employment represents a moderate proportion due to the presence of administrative and commercial establishments, while manufacturing and other activities form a relatively smaller share of the local economy.

Table 2.5: Projected Employment Population (2026 -2046)

Year	Office Workers	Retail Employees	Service Workers	Other (Industrial/ Manufacturing)	Total Employment
2026	2,000	3,000	3,500	1,500	10,000
2031	2,433	3,649	4,257	1,824	12,163
2036	2,959	4,439	5,179	2,219	14,796
2041	3,598	5,398	6,297	2,699	17,992
2046	4,378	6,567	7,662	3,284	21,891

Source: NBS

Table 2.6: Employment Estimation

Sector	Assumed Share	Estimated Jobs (out of 10,000)	Rationale
Office workers	20 %	2,000	Office-based employment generally represents a smaller portion of total urban jobs. This category includes administrative staff, professionals, and corporate employees typically found in commercial and institutional offices.
Retail employees	30 %	3,000	Retail trade forms a significant share of employment in urban areas due to the high concentration of shops, markets, and informal trading activities.
Other (manufacturing/industrial/other)	15 %	1,500	This category includes small-scale manufacturing, workshops, logistics support, and construction-related activities present within the urban economy.

Sources: 2023/24 Tanzania Formal Employment and Earnings Survey (EES) Report of July 2025

2.5.3 Project Floor Space Demand (Commercial Projection)

Employment projections are converted into floor area requirements using space standards per worker. Specific ISO standard that prescribes “floor space per employee” for commercial floor space

Table 2.7: Floor space Demand

Year	Office	Retail	Service	Other	Total Demand (sqm)
2026	2,000 × 12 = **24,000**	3,000 × 28 = **84,000**	3,500 × 20 = **70,000**	1,500 × 45 = **67,500**	**245,500**
2031	2,433 × 12 = **29,196**	3,649 × 28 = **102,172**	4,257 × 20 = **85,140**	1,824 × 45 = **82,080**	**298,588**
2036	2,959 × 12 = **35,508**	4,439 × 28 = **124,292**	5,179 × 20 = **103,580**	2,219 × 45 = **99,855**	**363,235**
2041	3,598 × 12 = **43,176**	5,398 × 28 = **151,144**	6,297 × 20 = **125,940**	2,699 × 45 = **121,455**	**441,715**
2046	4,378 × 12 = **52,536**	6,567 × 28 = **183,876**	7,662 × 20 = **153,240**	3,284 × 45 = **147,780**	**537,432**

Source: Literature review

CHAPTER THREE
EXISTING LAND USE AND BUILDING HEIGHT

3.1 Existing Condition of the Sinza Area

The Sinza area, comprising five sub-wards; Sinza A, Sinza B, Sinza C, Sinza D and Sinza E, is situated within Dar es Salaam and covers a total land area of approximately 3.37 square kilometres (336.78 hectares).

Out of this total area, approximately 23.37 hectares, which were originally designated as river reserve land, including areas along the Ng'ombe river, have been developed contrary to the initial planning provisions. Within this encroached area, surveyed plots allocated for various land uses occupy approximately 11.18 hectares, representing 3.32% of the total planning area.

Table 3.1: Size of Sinza

SN	Subward	Area (Ha)	Percent %
1	Sinza A	65.74	19.5
2	Sinza B	39.83	11.8
3	Sinza C	127.13	37.7
4	Sinza D	49.61	14.7
5	Sinza E	54.49	16.2
TOTAL		**336.78**	**100**

Source: Field work 2024

Figure 3.1: Sinza Sub-wards Area Distribution 2024
Source: Field work data collection, 2024

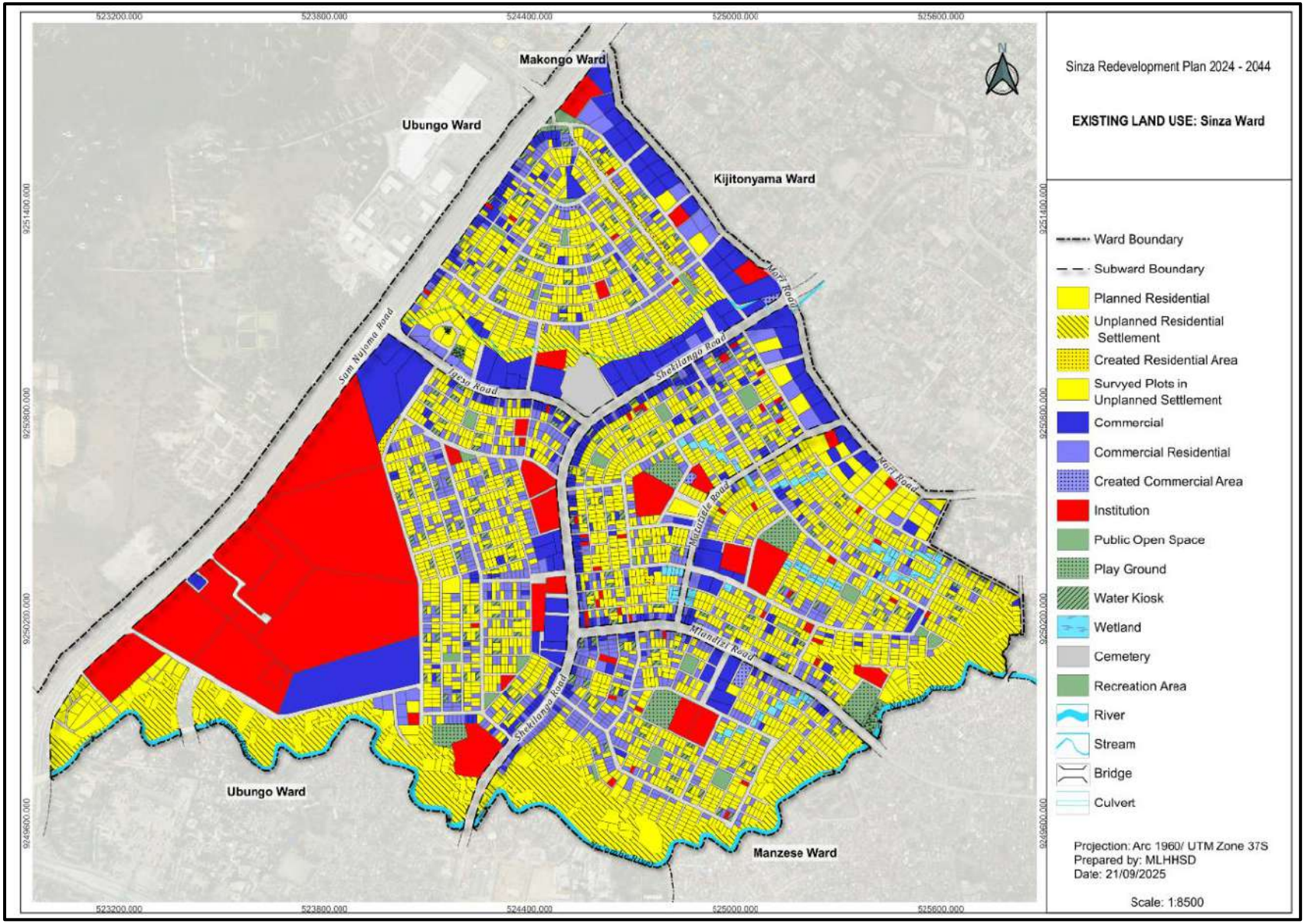
3.2 Land Use

Sinza ward covers an area of **336.78** hectares with approximately **4,686** plots out of which 255 plots are developed with multi-story buildings and 3,980 plots are developed with single-storey buildings. The area is a mixed-use area with a high concentration of commercial, commercial-residential, residential, offices, institutional, and a few recreational areas.

Table 3.2: Distribution of Land use Composition as in 2024

Land use type	Number of Plots	Size (Ha)	Percentage (%)
Residential	2825	112.94	33.54
Commercial	376	31.34	9.30
Commercial Residential	900	31.19	9.26
Unplanned Settlement		23.37	6.94
Institution	87	58.79	17.46
Open Space	28	2.98	0.88
Recreational areas	3	0.5	0.15
Water Kiosks	204	6.01	1.78
Playgrounds	5	3.45	0.15
Cemetery	1	1.77	0.53
Wetlands	72	3.43	1.02
Rivers/ Springs		5.98	1.78
Roads		67.23	19.96
Total	**4,686**	**336.78**	**100.0**

Source: Field work data collection, 2024



Map 3.1: Existing Land Use

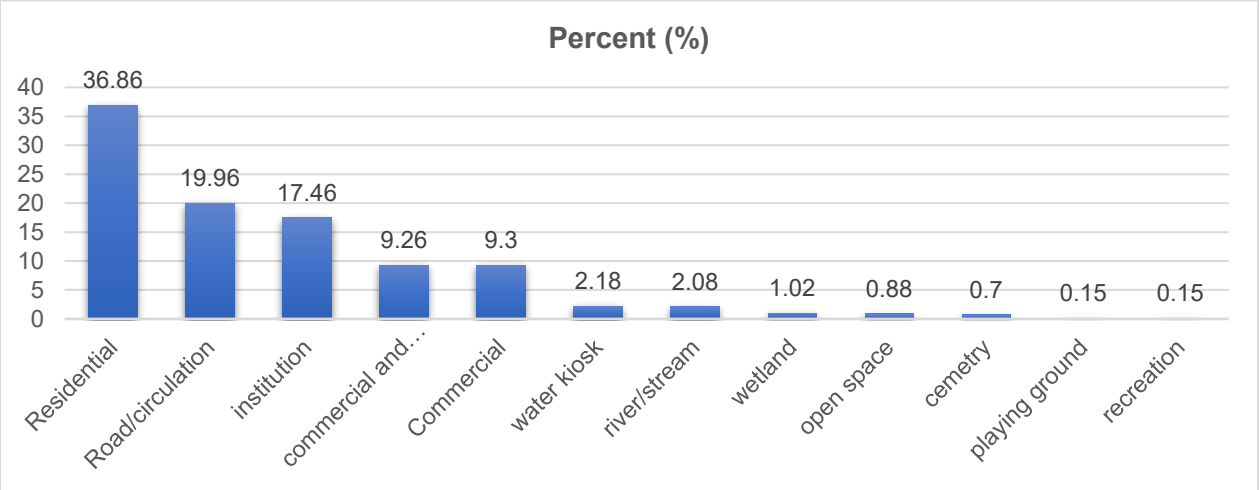


Figure 3.2: Land use distribution 2024
Source: Field work data collection,2024

3.2.1 Existing Land Use Distribution

3.2.1.1 Residential area

The area designated for residential purposes alone measures 88.49 hectares, equivalent to 36.86% of the total land area. The residential area located in unplanned settlements covers 23.37 hectares, equivalent to 6.94%, and the residential area created on land left for other uses, such as road reserves and water pipelines, measures 1.08 hectares, equivalent to 0.32%, making the total developed area for residential use 112.94 hectares

3.2.1.2 Commercial residential

The Residential and Commercial area has a size of 31.19 hectares, equivalent to 9.26 percent, and the established commercial uses in areas left as road reserves and pipeline reserves (created commercial area) have a size of 0.89 hectares, equivalent to 0.26 percent. These areas along the main roads and a few scattered within the inner areas of all streets.

3.2.1.3 Commercial

The commercial area covers 30.45 hectares, equivalent to 9.04 percent, with commercial activities located along the main road of Sam Nujoma, Shekilango, Mlandizi, Igesa and Sinza Mori.

3.2.1.4 Institution

The area designated for public institutions covers 58.79 hectares, which is equivalent to 17.46% of the land area. The largest area for institutional use is in Sinza C ward, which is aligned with Sam Nujom Road. The institutions located there include government offices such as PSPF, TCRA, TTCL, TANESCO, Aga Khan Institution, TMA, DART, the

Law School, the Orphanage Center (Sosi), as well as other institutions like hospitals, schools, health centers, and private offices found throughout all the Sub wards of Sinza.

3.2.1.5 Open spaces

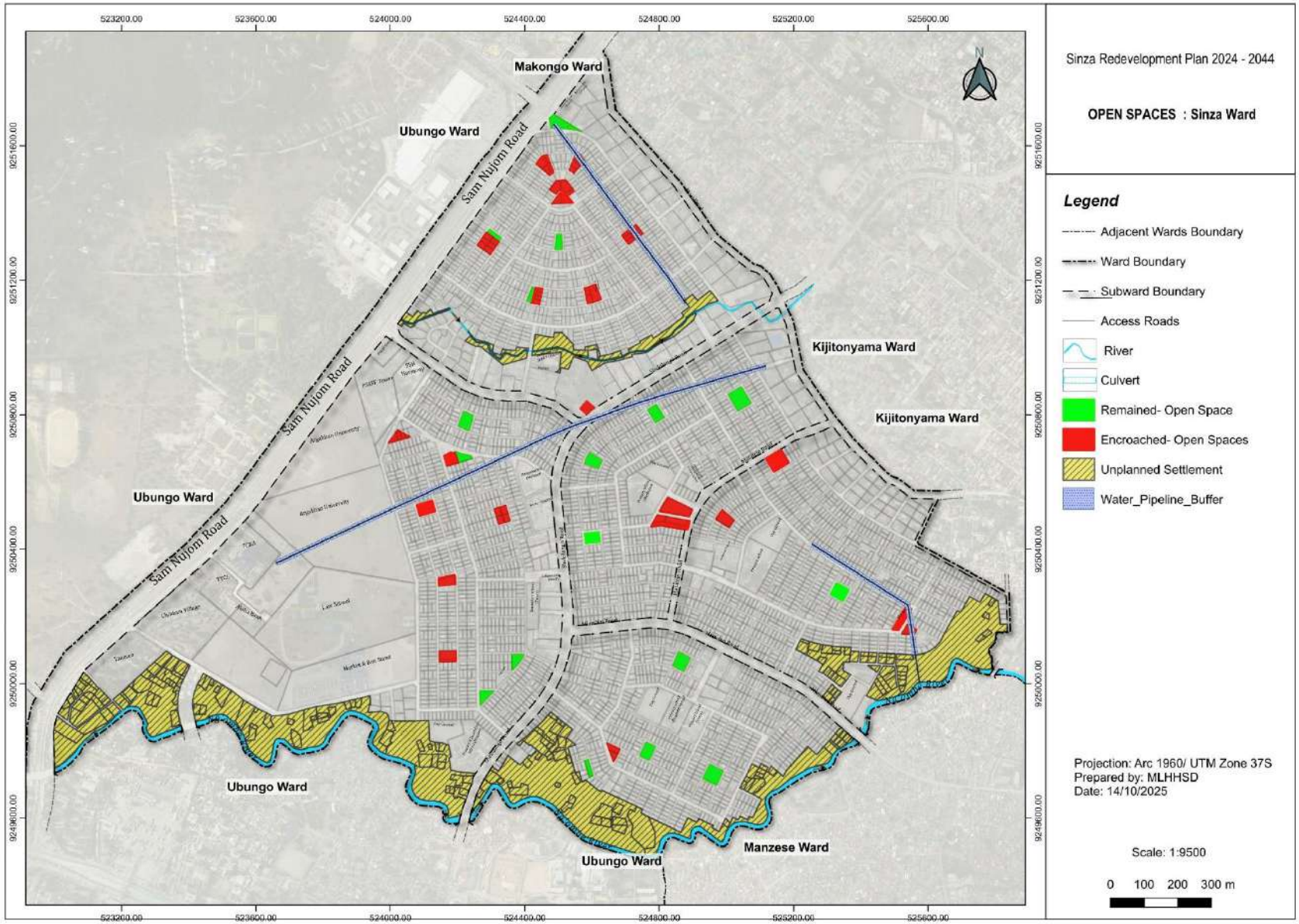
In the Sinza area, there is a total of 40 designated open spaces. The importance of open spaces is for air circulation, relaxation, and shelter during various disasters. Among these planned areas, 13 are open, and 27 have been surveyed and plots have been divided for various uses (residential, commercial). There are also open areas that have been developed by constructing Government Offices, such as Sinza D Ward (where the Sinza Ward Executive Office is located), Sinza B (Sinza B Ward Executive Office), Sinza C Ward (Sinza Primary Court Office and Manzese).

Furthermore, it has been observed that developments that have occurred in 30 of the open spaces involve food and vegetable trading activities. The buildings in these areas are temporary structures.

Table 3.3: Open spaces distribution

S/N	Sub-Ward	Open Spaces Originally Planned	Encroached Open Spaces	Remaining Open Spaces
1.	SINZA A	12	10	02
2.	SINZA B	06	03	03
3.	SINZA C	11	07	04
4.	SINZA D	05	03	02
5.	SINZA E	06	04	02
	TOTAL	**40**	**27**	**13**
	PERCENTAGE (%)	**100**	**67.5**	**32.5**

Source: Field work 2024.



Map 3.2: Open spaces in Sinza

3.2.1.6 Service trade industry

Currently, no areas are being used for manufacturing or industrial purposes. The area designated for service industry use was allocated in Sinza A street, along the edges of Igesa and Shekilango roads. At present, this area is being used for business activities, including clothing shops, function halls, fuel stations, warehouses, garages, and car washes.

Overall, these figures indicate that the Sinza area is dominated by residential use at 26.28% covering 88.49 hectares, followed by public institutions at 17.46% covering 58.79 hectares, and mixed residential and commercial use at 9.26% covering 31.19 hectares (See Tables 3.3 and 3.4 and maps showing the actual land use situation). According to the 2022 Housing and Population Census, Sinza Ward has a total of 4,641 plots, with 3,317 plots used exclusively for residential purposes, 719 for residential and commercial use, and 605 for other uses.

3.2.1.7 Circulation

The total area covered by circulation occupies 67.32ha of the total Sinza area which is equivalent to 19.69%. The area is obtained by adding the area for trunk, collector and local roads makes the road network of the central area.

3.2.1.8 Water kiosks

According to Town Planning Drawing No. 1/73/174: Sinza Layout, approved in January 1974, a total of 207 water kiosk sites were planned and reserved to be used for water kiosk services. Because the plots were relatively small, they did not have enough space to accommodate additional areas for essential social services, including clean water infrastructure and parking spaces. The water kiosk areas were surrounded by roads with a width of 3 meters, and many of these access routes have since been blocked. Out of the 207 water kiosks, 156 have been developed and 51 have not been developed. Among these, several have title deeds or offers as shown in the table 3.4.

Plate 3.1: Areas designated for Water Kiosks
Source: Field work

Map 3.3: Water Kiosks in Sinza

Table 3.4: Water Kiosk distribution

S/N	Sub-ward	Originally planned Water Kiosks	Developed water kiosks			Undeveloped water kiosks		
			No. of developed water kiosks	With title deed / offer	Without title deed/ offer	No. of undeveloped water kiosks	With title deed / offer	Without title deed/ offer
1	SINZA A	44	32	13	19	12	-	12
2	SINZA B	40	33	7	26	7	1	6
3	SINZA C	58	41	13	28	17	1	16
4	SINZA D	33	28	17	11	5	3	2
5	SINZA E	32	22	4	18	10	0	10
	TOTAL	**207**	**156**	**54**	**102**	**51**	**5**	**46**
	Percentage (%)	**100**	**75.4**	**34.6**	**65.4**	**24.6**	**9.8**	**90.2**

Source: MLHHSD

3.2.2 Existing Applications of Change of Land Use

According to records from the Office of the Assistant Land Commissioner for the Dar es Salaam Region, from 2015 to 2024 a total of 52 plots applied for changes in land use. These applications requested change of land use from residential purpose only to other uses such as multi-family residential (apartments), hotels, guest houses, hostels, retail shop businesses, and filling stations.

Table 3.5: Applications of change of Land use from 2015-2024

S/N	Sub-ward	Number of application
1	Sinza A	17
2	Sinza B	10
3	Sinza C	12
4	Sinza D	7
5	Sinza E	6
	Total	**52**

Source: Assistant Land Commissioner Office- Dar es Salaam 2024

3.3 Existing Building Heights

The fieldwork data show that Sinza area has a total of 4,235 buildings. Among these, 3,980 buildings are single-storey structures, which account for 94% of all buildings. The remaining 6% consist of multi-storey buildings, ranging from one to 35 floors, totaling 255 buildings, as shown in the table.

The tallest building in Sinza has 35 floors and is located in Sinza C sub-ward along Sam Nujoma Road. This building is owned by PSPF. The findings indicate that the majority of buildings in Sinza are single-storey, suggesting inefficient utilization of land and existing infrastructure compared to the land value in the area (see Table 3.2 and the Building Height Map).

Furthermore, according to the Building and Housing Census, Sinza Ward has a total of 4,641 buildings. Out of these, 248 are multi-storey buildings, 4,283 are ordinary (mainly single-storey) buildings, and 74 buildings were under construction at the time of the census. This total also includes buildings located within the Ng'ombe River reserve area.

Table 3.6: Building Heights in Sinza Area

Building Height	No of Buildings	Percent (%)
Single storey	3,980	94
2 Floors	117	2.8
3 Floors	34	0.8
4 Floors	37	0.9
5 Floors	19	0.5
6 Floors	10	0.2
7 Floors	12	0.3
8 Floors	3	0.07
9 Floors	1	0.02
10 Floors	2	0.04
13 Floors	1	0.02
35 Floors	1	0.02

Building Height	No of Buildings	Percent (%)
On going construction	4	0.09
Undeveloped plots	14	0.33
Total	4,235	100

Source: Field work 2024

The current building profile in Sinza indicates that 94% of all structures are single-storey buildings, while only 5% are multi-storey buildings ranging from 2 to 4 floors, 0.7% are buildings with 5 to 7 floors, 0.1% have between 8 and 13 floors, and 0.01% consist of a 35-floor building. This distribution highlights a strong dominance of low-rise development, which has significant implications from an urban planning perspective, particularly in terms of efficient land utilization, infrastructure optimization, and the potential for vertical densification in an area experiencing increasing land value and urban growth.

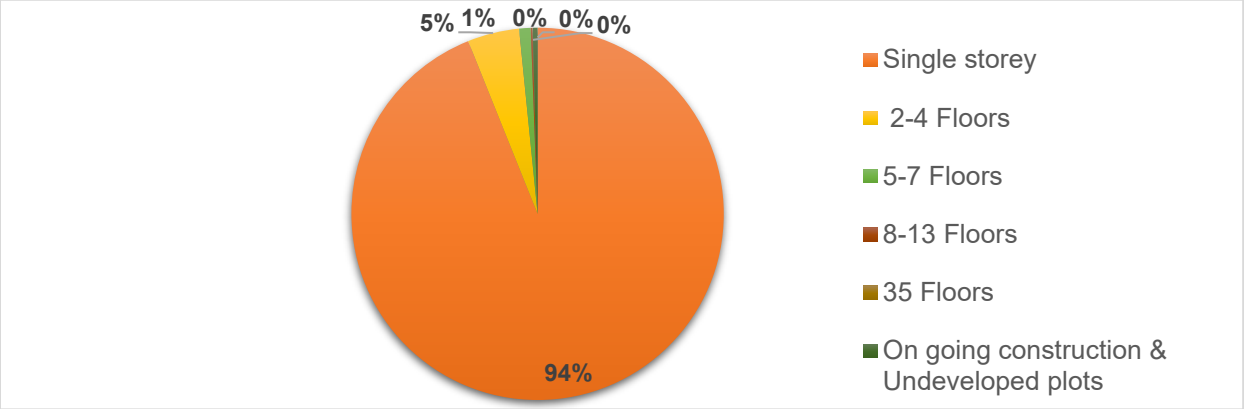
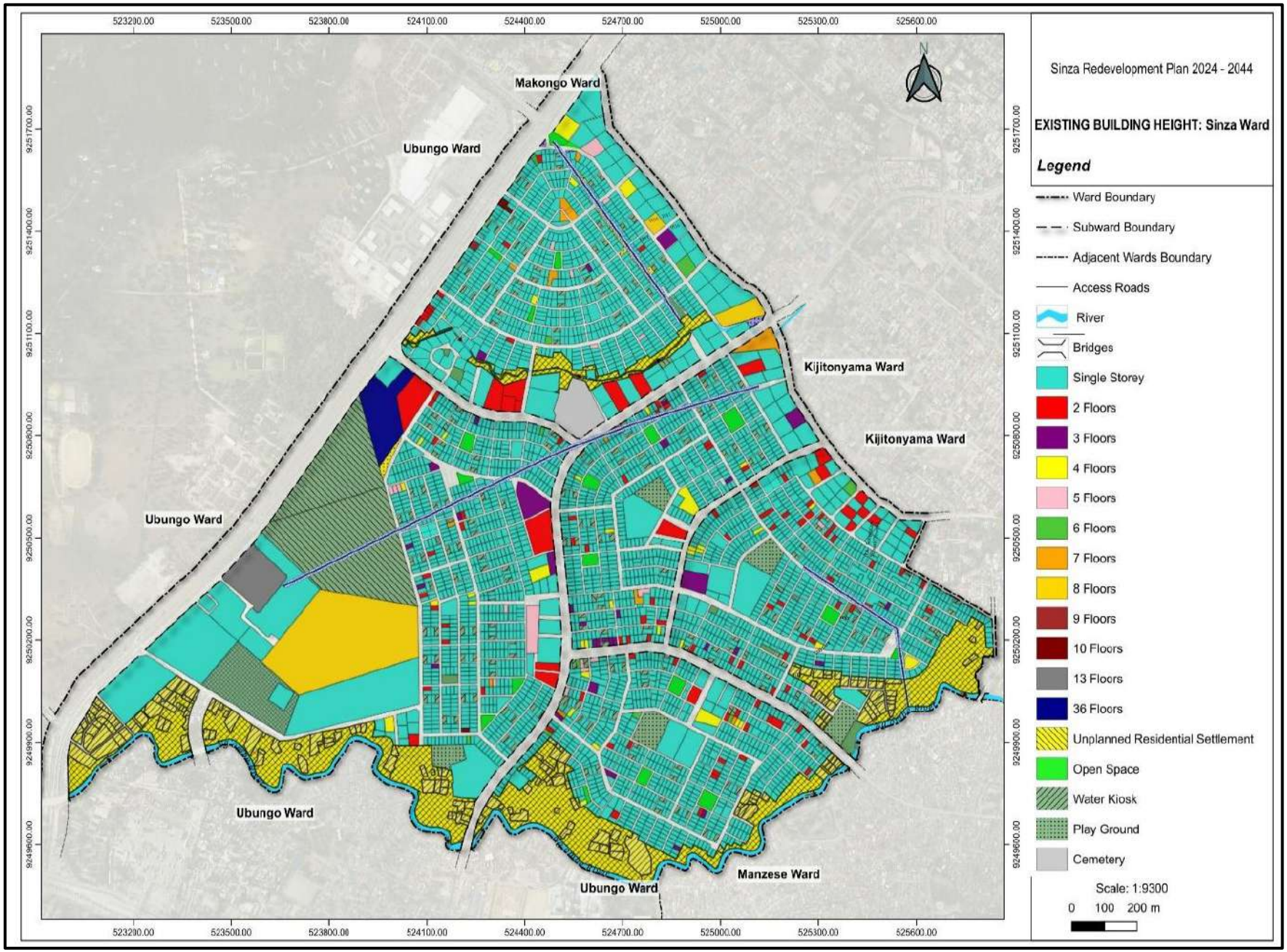


Figure 3.3: Existing Building Heights
Source: Field work data collection,2024



Map 3.3: Existing Building Height

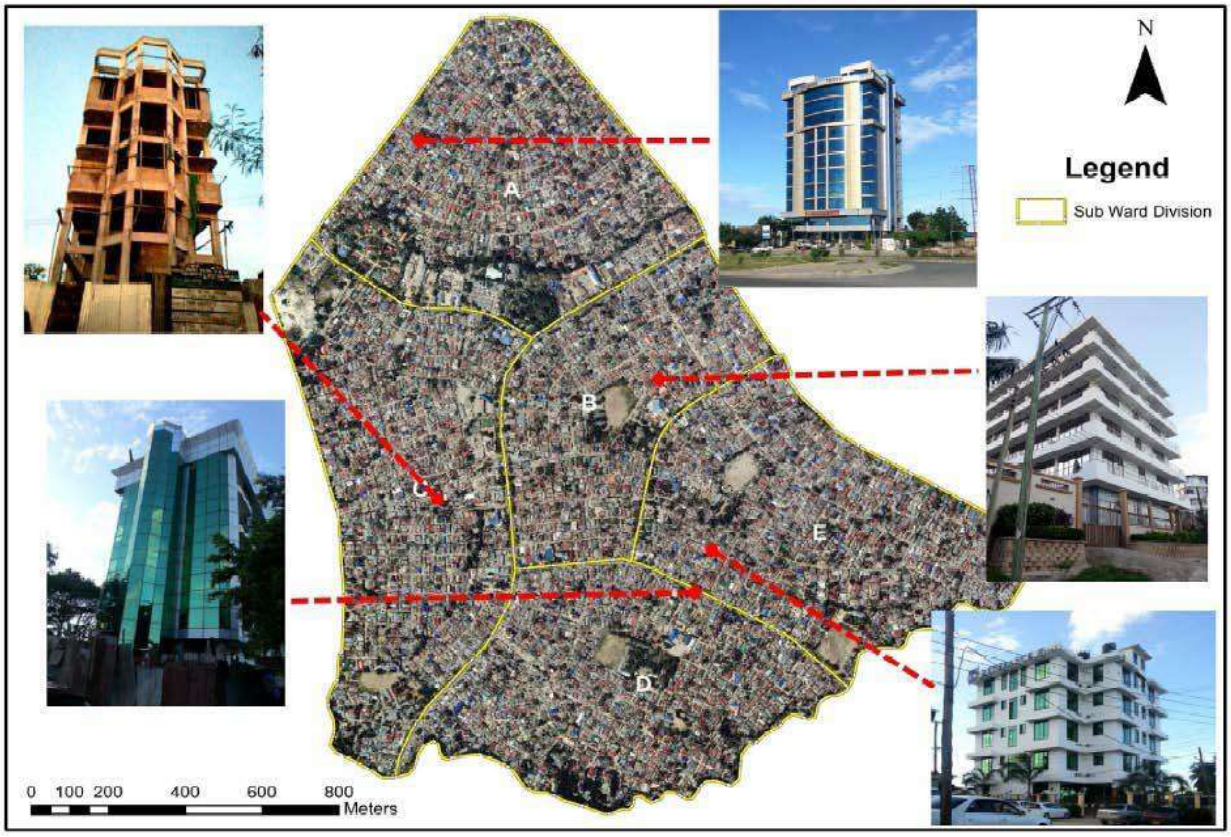


Plate 3.1: Sinza area and emerging high-rise building
Source: Field observation, 2024

3.4 Building condition

Statistical analysis indicates that the Sinza area comprises a total of 4,235 buildings. The condition of these buildings is as follows:

- Good condition: 1,530 buildings (36.1%)
- Satisfactory condition: 2,421 buildings (57.2%)
- Poor condition requiring major repairs: 275 buildings (6.5%)
- Dilapidated buildings requiring demolition: 9 buildings (0.2%)

Many buildings along Shekilango Road have undergone partial façade renovations for commercial purposes, which compromises the structural integrity of the buildings.

Currently, land rental rates are high as compared to Sinza land value; however, and they are not reflective of the actual building conditions.

This overall assessment demonstrates that land value in Sinza is not matched by the quality of existing buildings and infrastructure. Substandard building conditions result in the government losing revenue from property taxes and highlight the urgent need for comprehensive building upgrades and redevelopment initiatives. Refer to Table 3.5.

Table 3.7: Building condition.

SN	Building condition	Number of Buildings	Percent
1	Good	1,530	36.1
2	Poor	275	6.5
3	Fair	2,421	57.2
4	Condemn	9	0.2
Total		**4,235**	**100**

Source: Field work, 2024

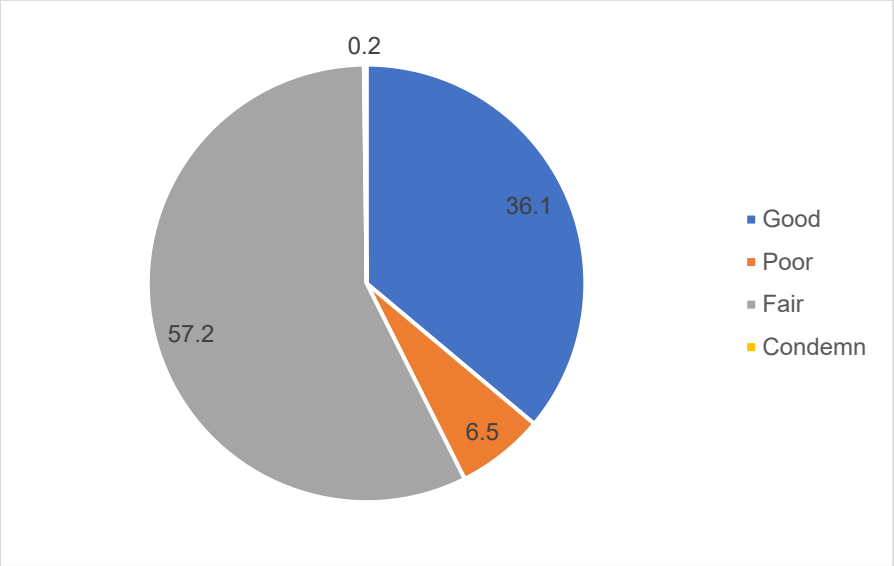


Figure 3.4: Building Condition in the Sinza *Area*
Source: Field work data collection,2024

"The redevelopment plan will upgrade substandard buildings by enhancing their structural integrity, functionality, and visual appeal, incorporating essential services and modern amenities to create sustainable and attractive urban structures."

3.5 Existing Combined Plots

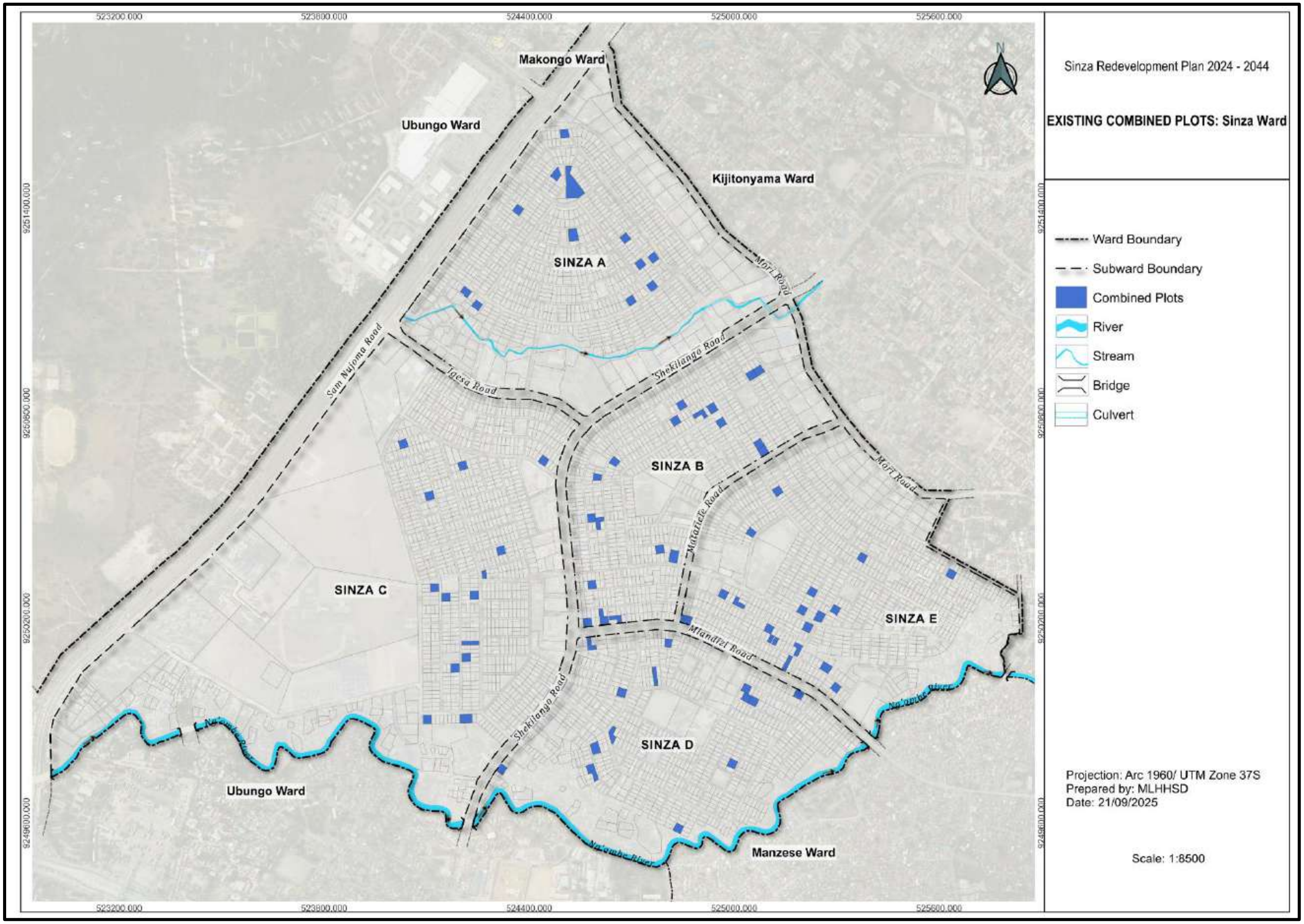
Sinza has a total of 166 plots which have been combined to form bigger plots for higher developments.

Table 3.8: Existing Plot Amalgamation

Sn	Sub-Ward	No. Of Plots Amalgamated (combined)
1	Sinza A	29
2	Sinza B	40
3	Sinza C	31
4	Sinza D	29
5	Sinza E	37
TOTAL		**166**

Source: Field work

Plate 3.2: Example of Plot Amalgamation at Sinza D
Source: Field observation, 2024


Sinza Redevelopment Plan 2024 - 2044
EXISTING COMBINED PLOTS: Sinza Ward
Ward Boundary
Subward Boundary
Combined Plots
River
Stream
Bridge
Culvert
Projection: Arc 1960/ UTM Zone 37S
Prepared by: MLHHSD
Date: 21/09/2025
Scale: 1:8500
Makongo Ward
Ubungo Ward
Kijitonyama Ward
Manzese Ward
SINZA A
SINZA B
SINZA C
SINZA D
SINZA E
Sam Nujoma Road
Shekilango Road
Mori Road
Mwandazi Road
Igesa Road
Mabatini Road
523200.000
523800.000
524400.000
525000.000
525600.000
9251400.000
9250800.000
9250200.000
9249600.000

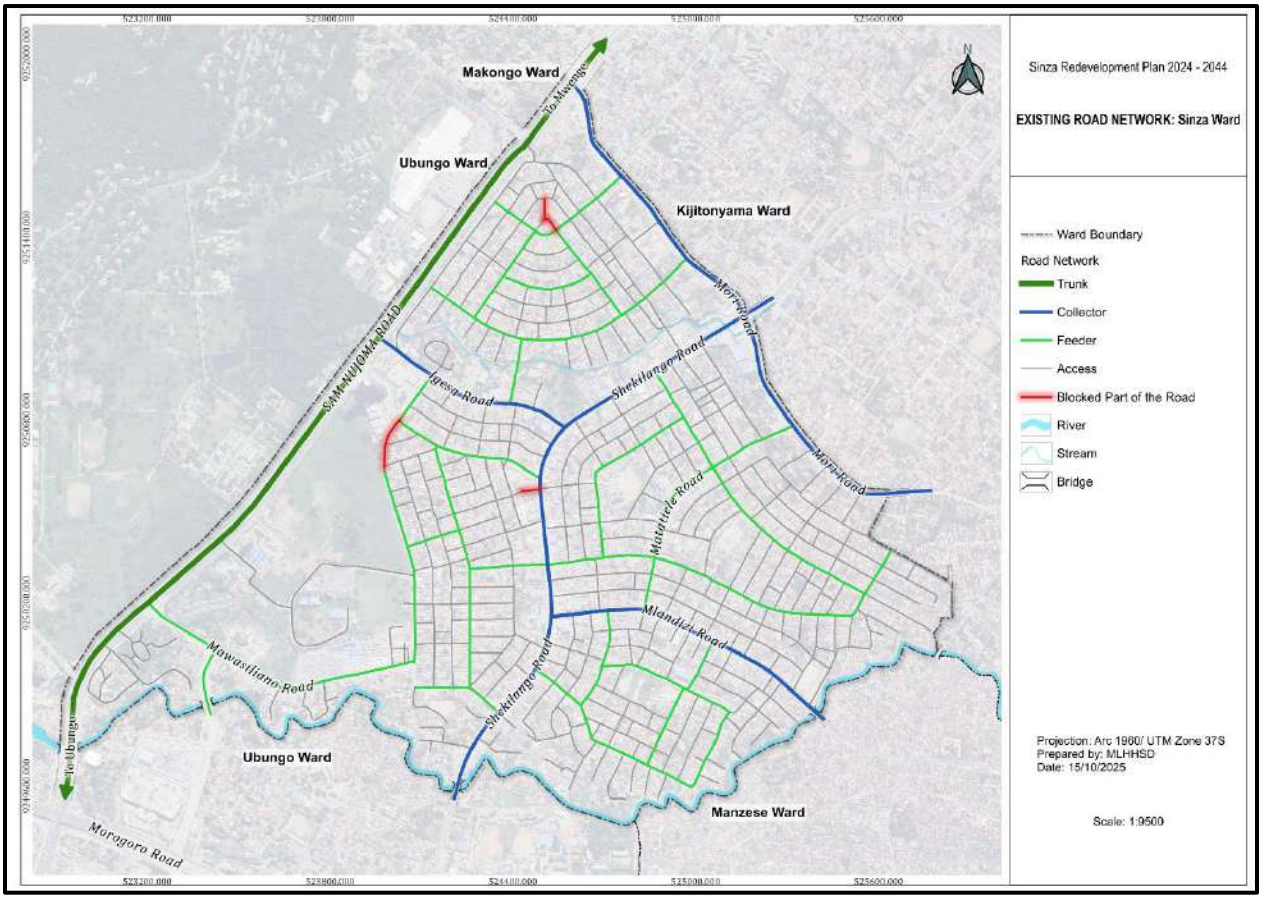
Map 3.4: Existing Combined Plots

CHAPTER FOUR
TRANSPORT AND TRAFFIC

4.1 Road Network and Conditions

The road network in Sinza area is mainly marked by Sam Nujoma Road, Mori Road, Mlandizi Road, Igesa Road and Shekilango road that have all length of 68.352. These are the main traffic collectors supplemented by a number of local roads, and access roads serving individual residences

At present, the level of traffic mixture in Sinza is very high. Motorized and non-motorized traffic is compelled to compete for the existing narrow carriageways. On street parking has displaced pedestrians to share the carriageway with motorized or vehicular traffic. There are some cases where the continuity of pedestrian walkways under shopping arcades have been encroached by developers to the extent of blocking the walkways in favor of either for commercial use or car parking. *See (Map No.4.1)*



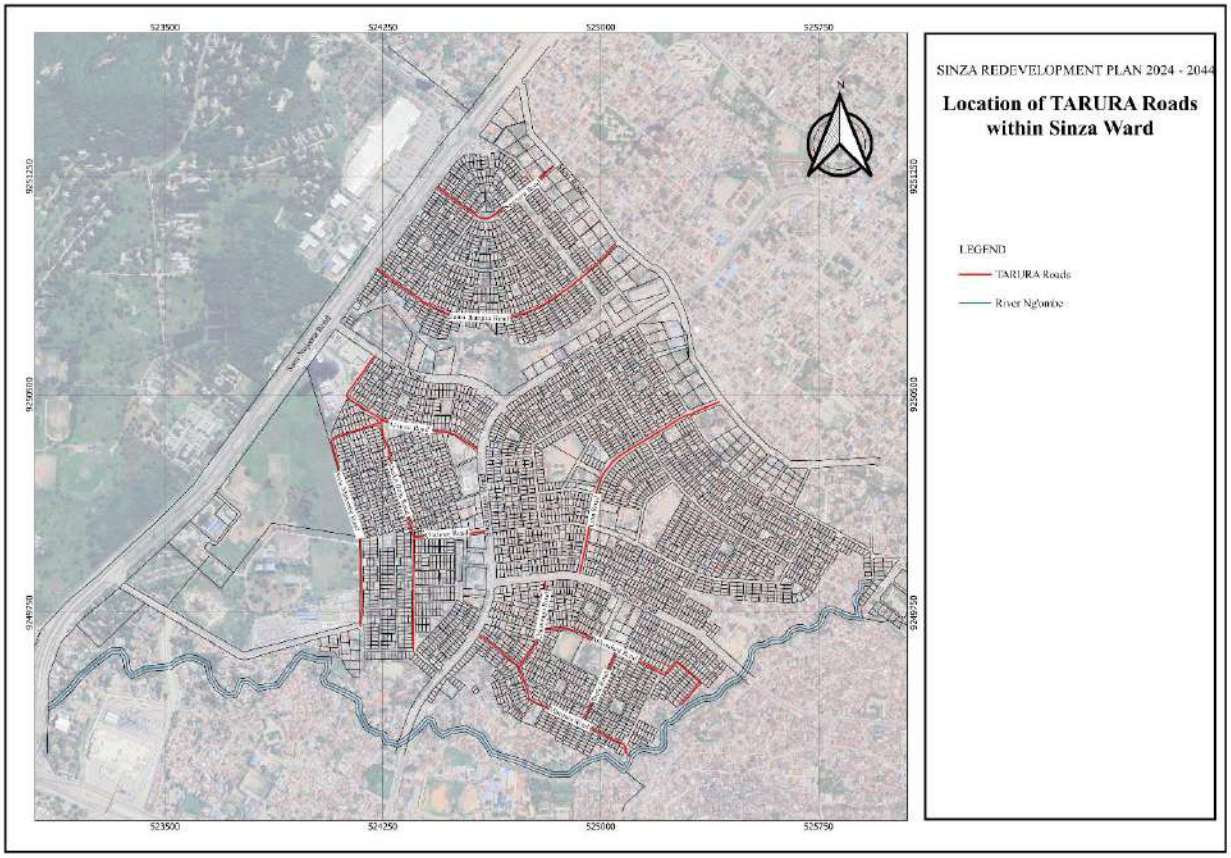
Map 4.1: Existing Road Network

4.2 Road Surface Conditions in Sinza

The road network in Sinza comprises 65% gravel and 35% asphalt surfaces. A total of 10 roads with a width of 12 meters each have been upgraded to improve accessibility and traffic flow. Currently, these roads are undergoing rehabilitation works, including upgrading with asphalt and concrete pavement. See map no 5.2

Gravel (Unpaved) Collectors:

- Matatiele Road – 20m ROW – Gravel
- Juma Ikangaa Road – 12m ROW – Gravel
- Segesera Road – 12m ROW – Gravel
- Chalinze Road – 12m ROW – Gravel
- Al Nuru Road – 12m ROW – Gravel
- Sheik Bofu Road – 12m ROW – Gravel
- Mbegani Road – 12m ROW – Gravel
- Chimwaga Road – 12m ROW – Gravel
- Mikindani Road – 12m ROW – Gravel
- Shule Road – 12m ROW – Gravel



Map 4.2: Location of TARURA Roads undergoing rehabilitation works

4.3 Width of Road in Sinza Area

The area has variaty of road with difference interms of width where the **86.9 percent** is embarked road with difference width between 3 and 6 meters and **13.1 percent** is embarked road with difference width between 15 and 70 meters. The situation does not show whether the highest percentage of 86.9 has road with lowest rate that cannot accomodate verticla extension.

Table 4.1: Width of Roads

S/n	Name of road	Length (Km)	Width (ROW) (m)	Percent (%)	Hierarchy	Surface
1	Sam Nujoma	2.218	70	13.1	Trunk	Tarmac
	Shekilango	1.996	30		(Arterial)	Tarmac
2	Mlandizi	0.962	20		(Arterial)	Tarmac
3	Mori	1.745	20		(Arterial)	Tarmac
4	Igesa	0.688	20		(Collector)	Tarmac
5	Simu 2000	1.343	20		Collector	Tarmac
6	Matatiele	0.842	15		Collector	Tarmac
7	Mbegani	1.352	15		Collector	Gravel
8	Mjiasali	0.635	15		Collector	Gravel
9	Access Roads	59.4	3,4 and 6	86.9	Access	Gravel
	TOTAL	**68.352**		**100**	**Trunk 1 Arteria =3 Collector = 5**	

Source: TARURA, 2024

4.4 Vehicular Circulation

Nearly all the existing roads and streets have no pedestrian walkways or pavements, except part of Sam Nujoma Road (from Igesa road to Sinza Mori road) and Shekilango road to Mori Road. Hence, pedestrians are forced to use road shoulders/carriage ways thereby interfering with the flow of vehicular traffic especially Mori Road, Mlandizi road and Igesa road.

4.5 Public Transport

The residents of Sinza, like many other city residents are served by the popular 'Daladala' as a major public transport mode. The area has a high private car ownership, thus only a few buses serve the area. There are only two routes: from Simu 2000 (Mawasiliano) to Masaki until Msasani through Simu Road – Shekilango road and Mlandizi roads to Masaki Mwisho bus stop.

In the Sinza area, public transport primarily operates along these key roads:

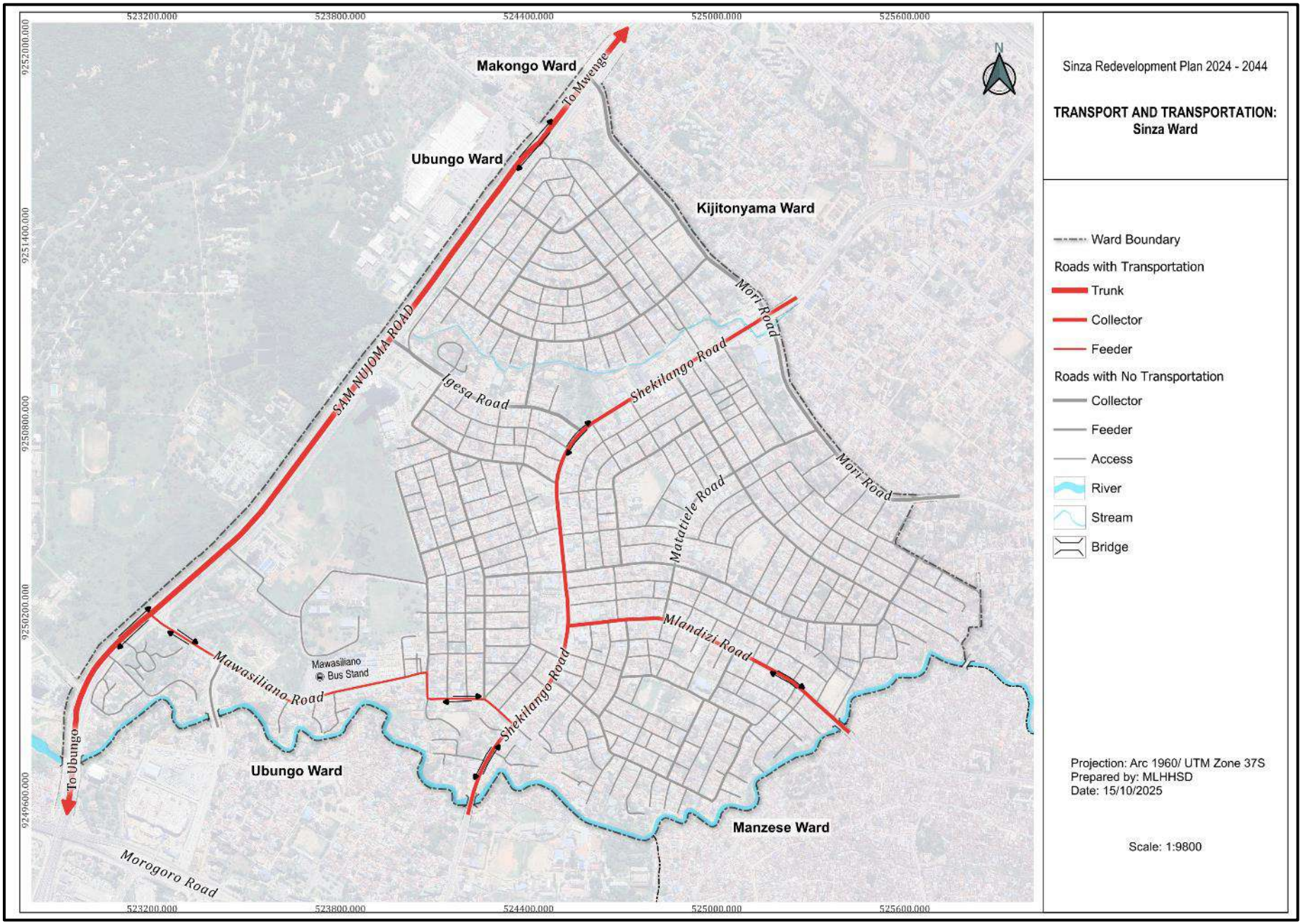
i. **Sam Nujoma Road**: This is a major arterial route, with frequent minibuses (dala-dala, bodaboda and bajaj) and other public transport services. It connects Sinza to both central areas and major roads like Morogoro and Bagamoyo.

ii. **Shekilango Road**: As a key collector road, it also hosts public transport (daladala, Bajaj and bodaboda), especially connecting Sinza to Morogoro Road and further to Bagamoyo.

iii. **Mawasiliano Road**: Another important collector route with public transport links, connecting local areas to larger roads. It connects Shekilango to Sam Nujoma

iv. **Mlandizi Road**: This road also supports public transport, though with moderate frequency, mainly serving as a connector within Sinza.It connect Shekilango to Kawawa road (magomeni mapipa)

The rest of the roads (like IGESA, Sinza Mori, Matatiele, etc.) are more residential, with very limited or no public transport, often serving mainly local traffic or pedestrian use.



Map 4.3: Roads with Public Transportation

4.6 Parking Facilities

Sinza area has no planned/official public parking areas. Vehicles mainly park in business blooming areas such as hotels, schools, and open space and adjacent bus stops. There are a few road side parking places in the area. Business premises have private parking reserved for their customers

The availability of parking spaces is an issue in the Sinza area. On street parking is predominate the area, occupies space of walkways and minimizing width to the carriage ways**.** On street parking contributes large congestion of traffic flow and causes the occurrence of the cumbersome to the users in the carriage way lead accidents in the central area where 2,666 plots is equal to 56.9 percent have parked on a walkways and 29.7 percent have parked within a plots and open spaces as well as 12.5 percent get parking in open space area

However, there are parking services available in Sinza area, such as private service of parking space, onsite and leveling parking. Together they tried to provide the services but it could not have satisfied the demand of the parking space **(refer table 4.2)**

Table 4.2: Existing parking condition.

SN	**Parking**	**No of buildings**	**Percent (%)**
1	Within a plot	1,392	29.7%
2	Ground parking	42	0.9%
3	Alongside road	2,666	56.9%
4	On Open Space	586	12.5%
Total		4,686	100%

Source; field work Agosti, 2024

To address the parking constraints in Sinza, a combination of spatial planning and traffic management interventions is recommended. Key strategies include:

i. **Provision of designated off-street parking facilities**: Establishing formal parking lots within commercial and high-density residential areas will reduce reliance on roadside parking and improve traffic flow.

ii. **Optimization of plot layouts and land use**: Where feasible, plot amalgamation or reconfiguration can create additional space for parking and circulation without compromising urban density.

iii. **Road corridor improvements**: Widening narrow roads and introducing clearly marked parking bays can minimize obstruction and enhance accessibility for both vehicles and pedestrians.

iv. **Implementation of parking regulations and enforcement**: Introducing time-limited parking zones, permit systems, and strict enforcement of no-parking areas will ensure compliance and efficient use of available space.

v. **Integration with public transport**: Encouraging the use of public transport, along with strategically located park-and-ride facilities, can reduce the overall demand for private vehicle parking.

Collectively, these interventions aim to enhance traffic efficiency, improve safety, and optimize the use of limited urban space, contributing to a more sustainable and organized urban environment in Sinza.

4.7 Road surface condition

The Sinza area has a mix of gravel and tarmac roads. Key tarmac roads include:

- **Igesa Road** – two-way street
- **Sam Nujoma Road** – four-way street
- **Sinza Mori Road** – two-way street
- **Shekilango Road** – four-way street
- **Simu 2000 Road** – two-way street
- **Mlandizi Road** – two-way street

A significant issue is the absence of roadside water/storm drains, which has resulted in damage to the road surfaces. Out of the total road network length of 68.352 km, 8.994 km are tarmac and 1.005 km are gravel surfaced. Some tarmac roads exhibit potholes and worn pavements and are therefore in need of urgent repair.

4.8 Road Types

4.8.1 Arterial Roads

The arterial roads function as secondary distributors linking the trunk road to internal neighborhoods:

- **Shekilango Road** – 30m ROW – Asphalt
- **Mlandizi Road** – 30m ROW – Asphalt
- **Mori Road** – 25m ROW – Asphalt

These roads have adequate right of way (25–30 meters) and are fully paved. Their condition supports medium to high traffic flows and makes them suitable corridors for commercial strips, mixed-use development, and medium-rise buildings.

4.8.2 Collector Roads

Collector roads form the majority of the internal circulation network. They distribute traffic from arterial roads into residential and mixed-use areas.

Paved Collectors:

- **Igesa Road** – 30m ROW – Asphalt
- **Simu 2000 Road** – 15m ROW – Asphalt
- Internal roads within Sub-wards 3, 4, and 6 – Predominantly Gravel

4.8.3 Planning Interpretation

i. Strong External Connectivity

The presence of a 70m trunk road and multiple arterial roads ensures strong integration of Sinza with the wider city structure. This creates high redevelopment potential along major corridors.

ii. Internal Infrastructure Deficiency

Although the hierarchy is well defined, most collector roads (particularly 12m wide roads) remain gravel. This indicates:

- Limited infrastructure upgrading
- Reduced accessibility during rainy seasons
- Constraints to high-density and mixed-use redevelopment

iii. Correlation Between Width and Surface Condition

There is a clear relationship between right of way and road surface quality:

- Roads wider than 25m are fully paved.
- Most 12m roads are gravel.

This suggests infrastructure investment has prioritized major corridors over neighborhood-level accessibility.

4.8.4 Planning Implications for Redevelopment Proposal

For effective implementation of the Sinza Redevelopment Plan, the following interventions are recommended:

a) Progressive upgrading of 12m collector roads to asphalt standard.
b) Installation of stormwater drainage infrastructure along internal roads.
c) Road widening where feasible to support vertical densification.
d) Integration of pedestrian walkways and parking management systems.
e) Corridor-based intensification along trunk and arterial roads.

While Sinza possesses a clear road hierarchy and strong primary corridors, the predominance of gravel collector roads presents a structural limitation to sustainable urban transformation. Strategic upgrading of internal roads will be essential to unlock the full redevelopment potential of the area.

4.9 Traffic Volume

Sinza experiences traffic congestion during peak hours. The congestion is anticipated to increase due to the trend of possessing private cars that is rising from year to year and scarcity of parking spaces**.** Traffic volume in the Sinza area is not proportional to the capacity of the infrastructure available where by the size of the roads and spaces for parking are inadequate.

The traffic survey was conducted over a period of 10 days from 15 July to 25 July 2024. Data collection was carried out for seven days from 6:00 a.m. to 6:00 p.m., and for three days from 6:00 p.m. to 12:00 midnight.

Table 4.3: Peak and Normal Hour Traffic Volume in Sinza

S/N	Road	Lanes	Peak Hour (Veh/Hr)	Normal Hour (Veh/Hr)	Condition
1	Sam Nujoma	4	3,600	2,000	Approaching unstable flow
2	Shekilango	4	3,400	1,900	heavy traffic
3	Sinza Mori	2	1,600	900	Normal
4	Mlandizi	2	1,400	800	congested
5	Mawasiliano	2	1,500	850	heavy
6	Igesa	2	1,700	950	High congested
			13,200	**7,400**	

Source: Field work. 2024

4.10 Introduction to Traffic Count in the Sinza Area

Traffic count surveys in the Sinza area were conducted by Tanzania Rural and Urban Roads Agency (TARURA) in **July 2024** to assess the existing traffic conditions and understand the patterns of movement of vehicles and pedestrians along the major roads within the planning area. The exercise aimed to collect data on the volume and composition of traffic, including different categories of vehicles such as buses, minibuses, motorcycles, cars, goods vehicles, and non-motorized transport.

The traffic count was carried out at selected locations within Sinza, including key road sections and intersections that experience significant movement of people and vehicles. The collected data provides important information on traffic flow by direction, vehicle types, and pedestrian activity, which helps to identify the dominant modes of transport and the intensity of road usage.

The results of the traffic count are useful in evaluating the capacity and performance of the existing road network, identifying potential traffic congestion areas, and determining the need for improvements in road infrastructure. Furthermore, the information supports

transport planning, road safety measures, and land use planning within the Sinza redevelopment area.

Overall, the traffic count survey forms an important part of the baseline analysis for the Sinza redevelopment plan, as it provides evidence-based data for planning appropriate transportation infrastructure and improving mobility for residents and road users in the area. *(Refer table no 4.4)*

The traffic patterns observed suggest that most roads in Sinza function as mixed urban streets serving local traffic, public transport, and pedestrian movement. Therefore, future planning and redevelopment initiatives should focus on:

- Improving road capacity and intersection management
- Providing pedestrian walkways and safe crossing facilities
- Enhancing traffic safety measures
- Supporting public transport accessibility
- Considering motorcycle management and parking areas

Table No 4.3: Traffic count in Sinza

Directions/Traffic Type	Large Buses	Minibuses - more than 25 seaters	Minibuses - less than 25 seaters	Very heavy goods vehicles	Heavy goods vehicles	Medium goods vehicles	Pick-ups	Cars	Bajaji	3-wheeled motorcycles	Motorcycles	Bicycles	Tri-cycle (Guta)	Total	Pedestrian
Road name: Shule Station:Sinza classic															
Mbegani – Shule	0	6	16	0	1	2	6	92	24	5	284	17	0	453	828
Shule – Mbegani	0	5	9	0	1	2	3	90	34	2	253	29	1	429	766
Total	0	11	25	0	2	4	9	182	58	7	537	46	1	**882**	1594
Traffic Mix (%)	0.00	1.25	2.83	0.00	0.23	0.45	1.02	20.63	6.58	0.79	60.88	5.22	0.11	100	
Road Name: Mikindani Station: Sinza Vatican															
Uzuri – Mawela	0	7	8	1	0	1	7	86	14	2	130	25	1	282	505
Mawela – Uzuri	0	6	5	0	0	1	7	49	14	1	120	22	2	227	371
Total	0	13	13	1	0	2	14	135	28	3	250	47	3	**509**	876
Traffic Mix (%)	0.00	2.55	2.55	0.20	0.00	0.39	2.75	26.52	5.50	0.59	49.12	9.23	0.59	100	
Road Name: Mbegani Station: Mbegani															
Mbegani – Shule	0	6	16	0	1	2	6	92	24	5	284	17	0	453	828
Shule – Mbegani	0	5	9	0	1	2	3	90	34	2	253	29	1	429	766
Total	0	11	25	0	2	4	9	182	58	7	537	46	1	882	1594
Traffic Mix (%)	0.00	1.25	2.83	0.00	0.23	0.45	1.02	20.63	6.58	0.79	60.88	5.22	0.11	100	
Road name Shekilango Station : Mbegani															
Shekilango Road – Itebe	0	14	12	0	1	14	6	144	59	3	523	28	1	805	866
Itebe - Shekilango Road	0	14	20	0	1	7	8	152	60	2	500	24	0	788	795

Directions/Traffic Type	Large Buses	Minibuses - more than 25 seaters	Minibuses - less than 25 seaters	Very heavy goods vehicles	Heavy goods vehicles	Medium goods vehicles	Pick-ups	Cars	Bajaji	3-wheeled motorcycles	Motorcycles	Bicycles	Tri-cycle (Guta)	Total	Pedestrian
Total	0	28	32	0	2	21	14	296	119	5	1023	52	1	**1593**	1661
Traffic Mix (%)	0.00	1.76	2.01	0.00	0.13	1.32	0.88	18.58	7.47	0.31	64.22	3.26	0.06	100	
Road name: Chimwanga Station: Chimwaga															
Tandale Road - Madukani Road	0	15	12	0	1	14	10	253	64	6	452	28	3	858	699
Madukani Road - Tandale Road	0	10	10	0	2	10	10	199	56	7	447	30	3	784	766
Total	0	25	22	0	3	24	20	452	120	13	899	58	6	1642	1465
Traffic Mix (%)	0.00	1.52	1.34	0.00	0.18	1.46	1.22	27.53	7.31	0.79	54.75	3.53	0.37	100	
Road: Segerera Section: Segesera 1 Station: Mlimani tower Segera															
Sam Nujoma – Shekilango	0	1	7	0	1	10	7	418	107	2	337	33	2	925	1151
Shekilango - Sam Nujoma	0	2	2	0	2	9	10	360	82	5	269	23	3	767	999
Total	0	3	9	0	3	19	17	778	189	7	606	56	5	1692	2150
Traffic Mix (%)	0.00	0.18	0.53	0.00	0.18	1.12	1.00	45.98	11.17	0.41	35.82	3.31	0.30	100	
Section: Segerera 2 Station: Katalunya															
Sam Nujoma – Mori	0	3	10	0	1	7	64	626	115	4	405	26	0	1261	655
Mori - Sam Nujoma	0	1	7	0	0	5	32	366	76	5	311	28	0	831	619
Total	0	4	17	0	1	12	96	992	191	9	716	54	0	2092	1274
Traffic Mix (%)	0.00	0.19	0.81	0.00	0.05	0.57	4.59	47.42	9.13	0.43	34.23	2.58	0.00	100	
Road: Namnani Station: Vunjabei															
Shekilango – Namnani	0	16	20	0	1	22	13	632	233	5	1345	41	9	2337	1425

Directions/Traffic Type	Large Buses	Minibuses - more than 25 seaters	Minibuses - less than 25 seaters	Very heavy goods vehicles	Heavy goods vehicles	Medium goods vehicles	Pick-ups	Cars	Bajaji	3-wheeled motorcycles	Motorcycles	Bicycles	Tri-cycle (Guta)	Total	Pedestrian
Namnani – Shekilango	0	15	20	1	1	24	13	607	228	7	1245	30	11	2202	1451
Total	0	31	40	1	2	46	26	1239	461	12	2590	71	20	4539	2876
Traffic Mix (%)	0.00	0.68	0.88	0.02	0.04	1.01	0.57	27.30	10.16	0.26	57.06	1.56	0.44	100	
Road: Juma Ikangaa Station: Juma Ikangaa															
Sinza Mori - Sam Nujoma	0	13	13	0	3	13	26	340	72	4	438	66	2	990	721
Sam Nujoma - Sinza Mori	0	8	16	0	2	13	27	390	71	3	461	66	1	1058	775
Total	0	21	29	0	5	26	53	730	143	7	899	132	3	**2048**	1496
Traffic Mix (%)	0.00	1.03	1.42	0.00	0.24	1.27	2.59	35.64	6.98	0.34	43.90	6.45	0.15	100	
Road: Sinza KKKT Station: Sinza KKKT															
Shekilango - Sinza KKKT	0	14	11	0	1	10	26	575	138	2	926	73	2	1778	1590
Sinza KKKT – Shekilango	0	16	11	0	0	11	24	543	141	2	873	60	3	1684	1674
Total	0	30	22	0	1	21	50	1118	279	4	1799	133	5	**3462**	3264
Traffic Mix (%)	0.00	0.87	0.64	0.00	0.03	0.61	1.44	32.29	8.06	0.12	51.96	3.84	0.14	100	
Road: Msikitini Station:Sinza Msikitini															
Shekilango - Sam Nujoma	0	11	9	0	1	9	8	228	125	9	575	30	6	1010	963
Sam Nujoma – Shekilango	0	6	3	0	2	8	15	218	103	5	586	32	9	988	1059
Total	0	17	12	0	3	17	23	446	228	14	1161	62	15	**1998**	2022
Traffic Mix (%)	0.00	0.85	0.60	0.00	0.15	0.85	1.15	22.32	11.41	0.70	58.11	3.10	0.75	100	
Road: Sheikh Bofu Station: sheikh Bofu															
Mawasiliano - Igesa Road	0	2	4	1	12	13	6	154	37	3	275	37	6	550	632

Directions/Traffic Type	Large Buses	Minibuses - more than 25 seaters	Minibuses - less than 25 seaters	Very heavy goods vehicles	Heavy goods vehicles	Medium goods vehicles	Pick-ups	Cars	Bajaji	3-wheeled motorcycles	Motorcycles	Bicycles	Tri-cycle (Guta)	Total	Pedestrian
Igesa Road – Mawasiliano	0	6	3	0	11	16	9	144	45	2	306	32	5	579	714
Total	0	8	7	1	23	29	15	298	82	5	581	69	11	**1129**	1346
Traffic Mix (%)	0.00	0.71	0.62	0.09	2.04	2.57	1.33	26.40	7.26	0.44	51.46	6.11	0.97	100	
Road Posta Matembe Station: Mawasiliano															
Mawasiliano - Igesa Road	1	9	10	0	0	7	13	202	44	3	334	33	1	657	929
Igesa Road – Mawasiliano	0	3	6	0	1	9	11	167	26	3	344	29	2	601	1256
Total	1	12	16	0	1	16	24	369	70	6	678	62	3	1258	2185
Traffic Mix (%)	0.08	0.95	1.27	0.00	0.08	1.27	1.91	29.33	5.56	0.48	53.90	4.93	0.24	100	

Source: Tarura Traffic count July,2024

CHAPTER FIVE
COMMUNITY FACILITY

5.1 Community Facilities

The Sinza area, comprising five sub-wards (Sinza A, B, C, D and E), is served by a range of essential community facilities. These include key social services such as education and healthcare, as well as other supporting amenities like recreational, entertainment, and sports facilities that contribute to the wellbeing and quality of life of residents. (refer Table no 5.1)

Table 5.1: Distribution of Community facilities

SN	Land use	Facility name	A	B	C	D	E	Total
1	Education facilities	Daycare/nursery	1	1	3	2	6	**13**
		Primary School	1	2	2	2		**7**
		Secondary School		1	2	1		**4**
2	Health facilities	Hospital	1	1	1	1		**4**
		Health centre			1			**1**
		Polyclinic	1	2	2			**5**
		Dispensary		1		1	1	**3**
3	Religious facilities	Church	3	3	1	2	1	**10**
		Mosque	3		2		1	**6**
4	University	Law School			1			**1**
		Orphanage Centre			1			**1**
		Total	**10**	**11**	**16**	**9**	**9**	**55**

Source: Field work, 2024

5.2 Education Facilities

The Sinza area has a large number of educational facilities across different levels, ranging from nursery schools to higher learning institutions. These institutions include both public and privately owned facilities. However, their distribution is uneven across the five sub-wards, with some areas having a higher concentration of education services than others.

5.2.1 Nursery School

A total of eight nursery schools are available within the Sinza area. Some of these are integrated within existing primary schools, while others operate as independent privately owned institutions.

The private operated nursery schools include Omesa Day Care, Beginner Day Care, Mimiis Day Care, Lamanda Day Care, Old Brook Pre and Primary School, Don Bosco, and Baptist Nursery School, which are mainly located in Sinza A Street. Other nursery schools include Mother Mary Day Care located in Sinza B, Grace Nursery School and Wana Nursery School located in Sinza C, and Gladyness Nursery School located in Sinza D.

Overall, the distribution of nursery schools within Sinza is uneven across the different streets, with a higher concentration observed in Sinza E compared to other areas.

5.2.2 Primary School

The Sinza area has a total of six primary schools, of which three are government-owned and three are privately owned.

Sinza C Sub-ward has the highest concentration, with four primary schools. Among these, Mugabe Primary School is a government school, while Grace Primary School, Lugimen Primary School, and Wana Primary School are privately owned. Sinza D Sub-ward has two primary schools, namely Sinza Primary School and Reginald Mengi Primary School, both of which are government-owned.

5.2.3 Secondary School

Sinza has a total of four Secondary Schools. Sinza B has one secondary school which is a government school called **Mashujaa Secondary** School. Other three Schools are in Sinza C Sub ward and among them one is a government School **called Mugabe Secondary School** and two are privately owned called Sinza Tower and Lugimen Secondary School. Sinza A, D and E Sub ward do not have any Secondary schools.

Table 5.2: Distribution of Education Facilities

Subward	Daycare/nursery school	Primary school	Secondary school
SINZA A	Don Bosco Nursery School	Don Bosco Primary School	-
SINZA B	Mother Mary nursery school Stasy day care	Mother Mary primary school .Mashujaa Primary School	Mashujaa Secondary School
SINZA C	Grace day care	1. Mugabe primary school 2. Grace Nursery and Primary School	1. Mugabe Secondary School

Subward	Daycare/nursery school	Primary school	Secondary school
		3. Liquman primary school	2. Sinza Tower Secondary School 3. Luquman Secondary School
SINZA D	Gladyness day care	Sinza Primary Regnald Mengi primary School	Sinza Secondary
SINZA E	1. Omesa day care 2. Bigineer Day care 3. Mimi´s day care 4. Lamanda Day care	Old Brook Pre and Primary school -	-

Source: Field work, 2024

5.2.4 Universities

Sinza has only one higher level university of law (law school). The university is located within the government area at Sinza C Sub ward.

5.3 Cemetery

The area of Sinza has only one cemetery/graveyard which located at the junction of Shekilango road and Igesa road. This area has already reached its full capacity and can no longer be used for burial.

Since the existing cemetery in Sinza has reached its full capacity, the area should be retained and protected as a cemetery site, while the responsible authorities should identify alternative burial areas to accommodate future demand. The existing site may also be improved and maintained as a memorial and landscaped.

5.4 Health Facilities

5.4.1 Hospital

The Sinza area is having one major District Hospital called PALESTINA which is a government hospital with complex functions compared to the rest this hospital is located in Sinza C gives advanced health services to the inhabitants of Sinza and neighboring areas.

5.4.2 Health Centre

The area of Sinza has five healthcare centers which are private owned, three of them located at Sinza A; Edward Mchaudi Hospital, Mlimani poly clinic, Sinza B; Alt centre Clinic, Oriental dispensary, Sinza C; Mico Health Centre, Aghakhan poly clinic, Megra

polyclinic, Mico dispensary, Sinza D; Arafa dispensary, Mwananchi clinic street has one health Centre called Davidson Emmanuel Polyclinic. Sinza C street has, Mico health centre and Sinza D street has Arafa health centre: Polyclinic Sinza Sinza Aghakan polyclinic, Megra polyclinic.

Plate 5.1: Mico Health Centre
Source: Field observation, 2024

5.4.3 Dispensaries

The area of Sinza has three dispensaries and among them one is at Sinza A street is called Survey Dispensary. Another is at Sinza C street called Mico and another one is at Sinza D called Afya Dispensary. Sinza E street has no dispensary and healthcare centre. A&N dispensary

Table 5.3: Distribution of health facilities

Subward	Hospital	Health centre/dispensary	Clinic/polyclinic
SINZA A	Edward Machaud Hospital	-	Mlimani polyclinic
SINZA B		Oriental dispensary	Alt Clinic Zamora Polyclinic
SINZA C	Palestina Government hospital	Mico Health centre	Megra polyclinic Aghakhan poly clinic
SINZA D		Arafa Dispensary Afya Dispensary	-
SINZA E	-	-	-

Source: Field work, 2024

5.5 Religious Facilities

Religious facilities in the Sinza area include churches and mosques, which provide important spiritual and social services to the community. In total, the area has 10 churches and 6 mosques distributed across different locations within Sinza. These facilities serve residents by supporting religious activities, community gatherings, and social cohesion.

Table 5.4: Distribution of Religious facilities

Subward	Mosque	Church
SINZA A	Mosque Mosque Madrasa Mosque	Menonite church Repotin church RC church
SINZA B	-	RC church Arena of holy Sprit Life Ministry
SINZA C	Luquman Mosque Masgi mosque	KKKT church
SINZA D		Pentekoste church Kituo cha maombi
SINZA E	Mosque	Sabato church

5.6 Market area

Market places play an important economic role in any community, as they provide access to essential household goods, including food and other daily necessities. They also create opportunities for employment and income generation for local residents.

The Sinza area has two major markets, one of which is located in Sinza A sub-ward near the cemetery area. The market is easily accessible via Igesa Road, which connects Shekilango Road and Sam Nujoma Road. However, the area is currently being developed with low-quality commercial structures, which do not reflect the current level of urban development taking place in Sinza**.**

The second market area is located in Sinza C Sub-ward near the SIMU 2000 bus station. The area is currently being developed with temporary structures such as mitumba stalls and small informal business sheds, alongside a few larger fruit stalls that operate mainly for wholesale fruit trading.

In general, the existing developments in this area are informal and of low structural quality, which are not consistent with the economic potential and urban value of the area. This indicates the need for planned market redevelopment and improved commercial infrastructure to support orderly business activities and enhance the overall urban environment**.**

CHAPTER SIX
PUBLIC UTILITIES

6.1 Water Supply Services

The demand for clean water services among residents of Sinza has been increasing steadily due to rapid population growth driven by economic development and the expansion of essential social services. While population growth contributes positively to economic development and improved access to social services, it also exerts pressure on clean water supply systems, particularly where water sources are limited relative to demand.

Sinza falls under the service jurisdiction of the Dar es Salaam Water and Sewerage Authority (DAWASA), specifically within the Magomeni Service Zone. The primary water sources for the Magomeni Zone are the Upper Ruvu and Lower Ruvu Water Treatment Plants.

Currently, the Magomeni Service Zone has achieved approximately 92% service coverage, with water supply available for an average of 8 to 12 hours per day. The zone serves the wards of Manzese, Mabibo, Mburahati, Ubungo, Sinza, Makurumla, Magomeni, Tandale, Mzimuni, Kigogo, and Ndugumbi within Kinondoni and Ubungo Municipalities.

The current estimated demand for clean water in Sinza Ward is approximately **100,000 cubic meters (100,000 m³) per month**, while DAWASA currently supplies approximately **92,073 cubic meters (92,073 m³) per month**, indicating a supply gap relative to demand.

Sinza Ward has an estimated population of 31,396 residents, equivalent to approximately 10,874 households. Water service coverage within the ward is estimated at approximately 92%, based on the existing distribution network. The distribution by sub-ward is as follows:

6.1.1 Water Supply Coverage in Sinza Sub-Wards

i. Sinza ‘A’ Sub-Ward

- Population: 4,613
- Households: Approximately 1,432
- Water Service Coverage: Approximately 100% for domestic, commercial, and construction purposes
- Water Quality: Good
- Infrastructure Condition: Aging infrastructure
- Water Source: Lower Ruvu via ARU Terminal Ground Storage Tanks

ii. Sinza ‘B’ Sub-Ward

- Population: 4,461
- Households: Approximately 1,657
- Water Service Coverage: Approximately 90%
- Water Quality: Good
- Infrastructure Condition: Aging infrastructure
- Water Source: Lower Ruvu via ARU Terminal Ground Storage Tanks

iii. Sinza ‘C’ Sub-Ward

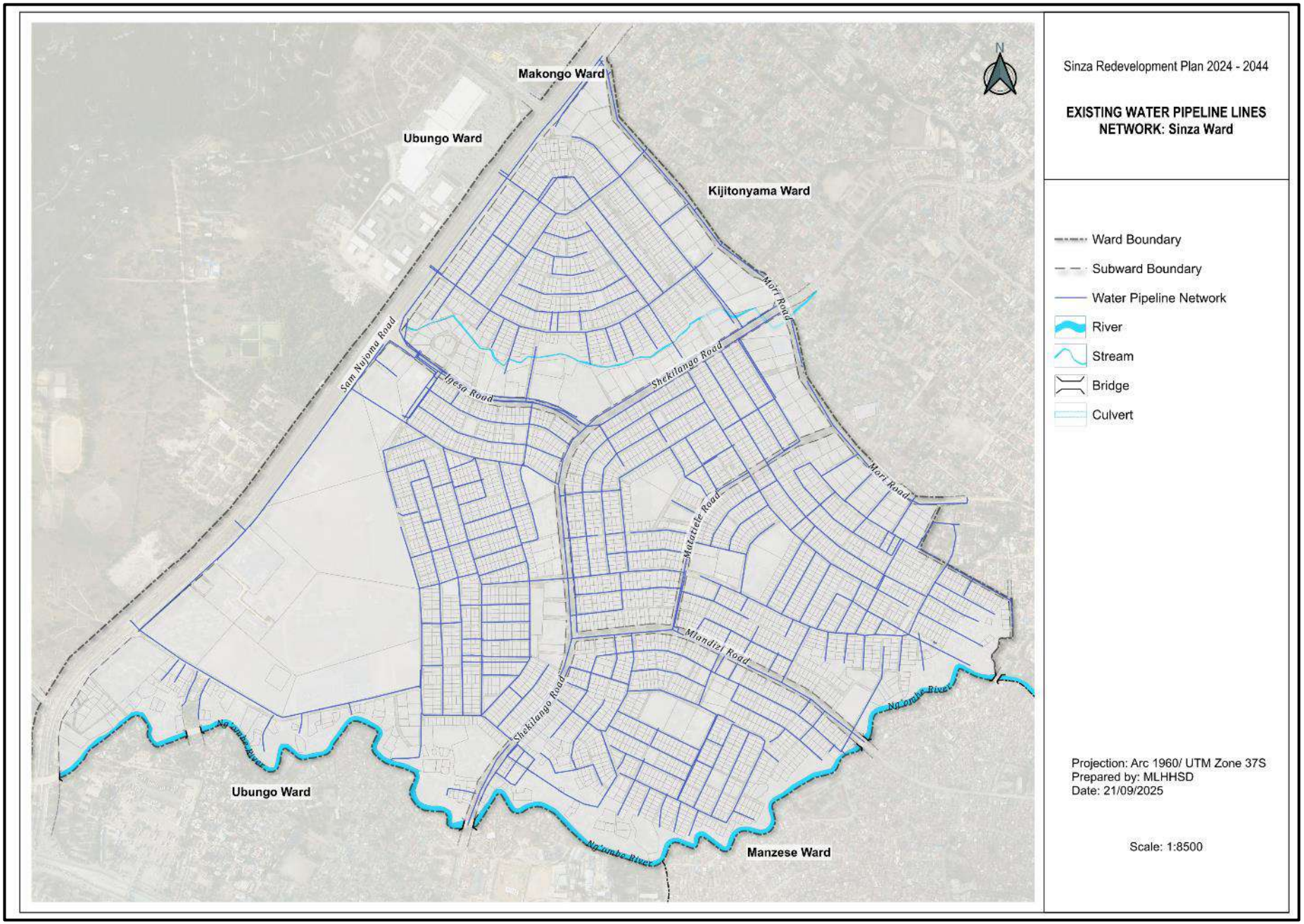
- Population: 8,284
- Households: Approximately 2,990
- Water Service Coverage: Approximately 85%
- Water Quality: Good
- Infrastructure Condition: Aging infrastructure
- Water Sources:
    - Upper Ruvu via Kimara Storage Tanks (Matangini)
    - Lower Ruvu via ARU Terminal Ground Storage Tanks

iv. Sinza ‘D’ Sub-Ward

- Population: 6,640
- Households: Approximately 2,347
- Water Service Coverage: Approximately 95%
- Water Quality: Good
- Infrastructure Condition: Aging infrastructure
- Water Sources:
    - Upper Ruvu via Kimara Storage Tanks
    - Lower Ruvu via ARU Terminal Ground Storage Tanks

v. Sinza ‘E’ Sub-Ward

- Population: 7,398
- Households: Approximately 2,448
- Water Service Coverage: Approximately 90%
- Water Quality: Good
- Infrastructure Condition: Aging infrastructure
- Water Source: Lower Ruvu via ARU Terminal Ground Storage Tanks



Map 6.1: Existing Water Supply System

6.1.2 Major Water Transmission Infrastructure

Sinza is traversed by major water transmission pipelines of 33-inch and 22-inch diameters.

- The 33-inch pipeline passes through Sinza A, Sinza B, and Sinza E Sub-Wards.
- The 22-inch pipeline passes through Sinza B and Sinza C Sub-Wards.

A key challenge is the ongoing development activities within the buffer zones of these major pipelines. Encroachment and construction within these protected corridors pose risks to infrastructure safety, maintenance accessibility, and long-term service reliability

6.2 Solid waste management

At a large amount the solid wastes are generated from commercial, hotel restaurant and office areas**.** While in some amounts are from domestic activities in residential area. Composition of the waste include food remains, paper, plastic, tin/metal, and surgical wastes.

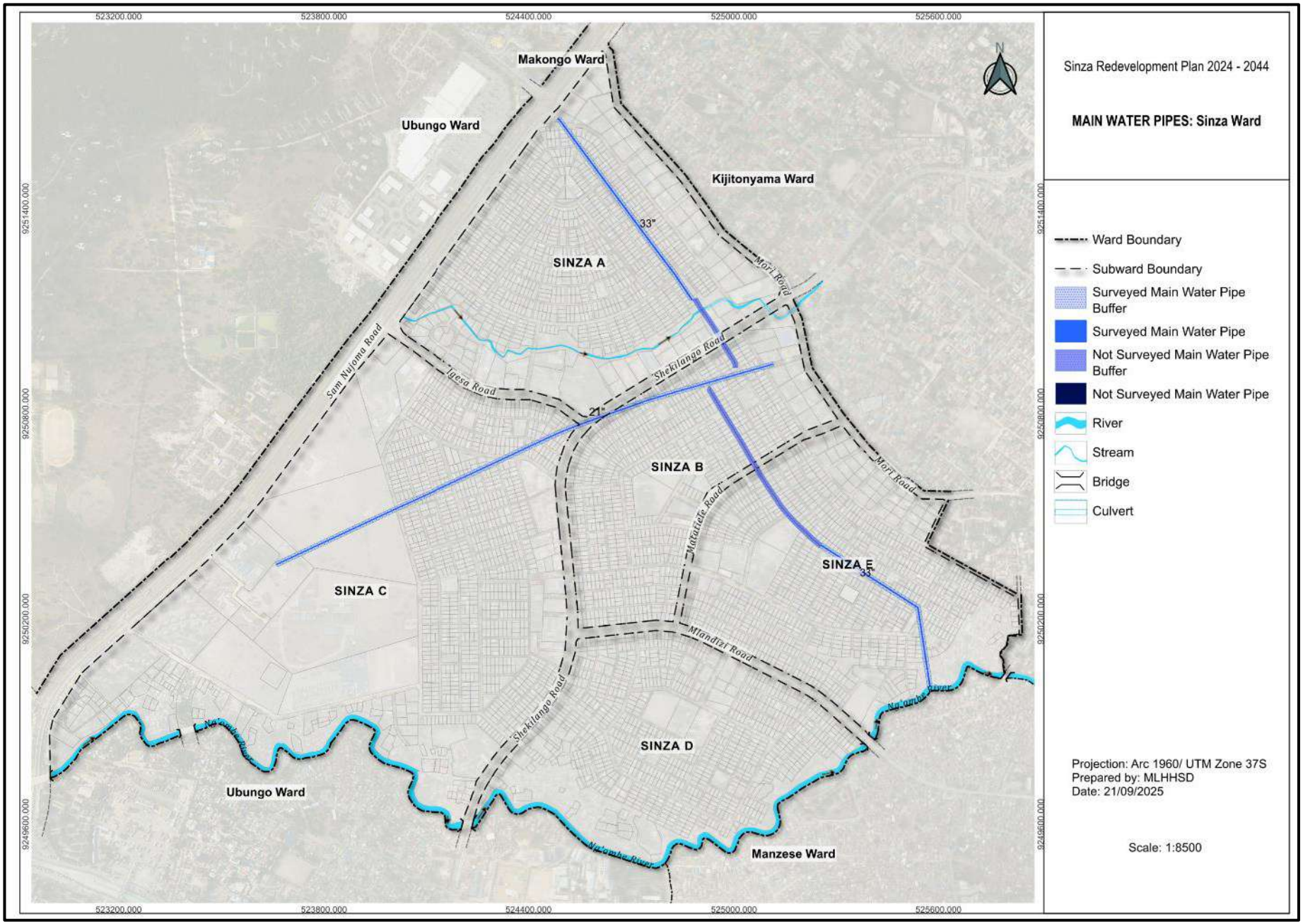
6.2.1 Current Status of Solid Waste Collection in Sinza

Sinza Ward generates an average of 47 tons of solid waste per day. Of this amount, only 28 tons are collected and transported to the disposal site, while approximately 19 tons are either burned or left to decompose in open areas.

There is only one designated solid waste collection point within the ward, located at the Simu 2000 market area. The collected waste is transported to the Tabata Dumpsite using privately operated collection trucks. The remaining uncollected waste is managed by waste generators themselves through burial or open burning. These disposal methods have significant negative impacts on environmental quality, including air pollution, soil contamination, and public health risks.

6.3 Drainage System

Most of the drainages existed in the central area are in underground drainage system where by the excess runoff are transported through underground pipe to the proper disposal area**.** The drainages are road side drainage system found along arterial roads, collectors and streets in the central area**.** The condition of this kind of infrastructure in central area is fairly for large part. However, there some which are in poor condition like one located near to gymkhana, where by it leads smell dirty due to water settled at long time especially during the raining. The amendment should be taken to these drainages for make environment free from pollution and diseases.



Map 6.2: Main Water Pipes

6.4 Sewerage System

The Dar es Salaam Water and Sewerage Authority (DAWASA) has continued to improve environmental sanitation services within its service area to ensure that the environments of its customers remain clean and safe. These efforts are driven by the high demand for sewerage infrastructure in the Sinza area.

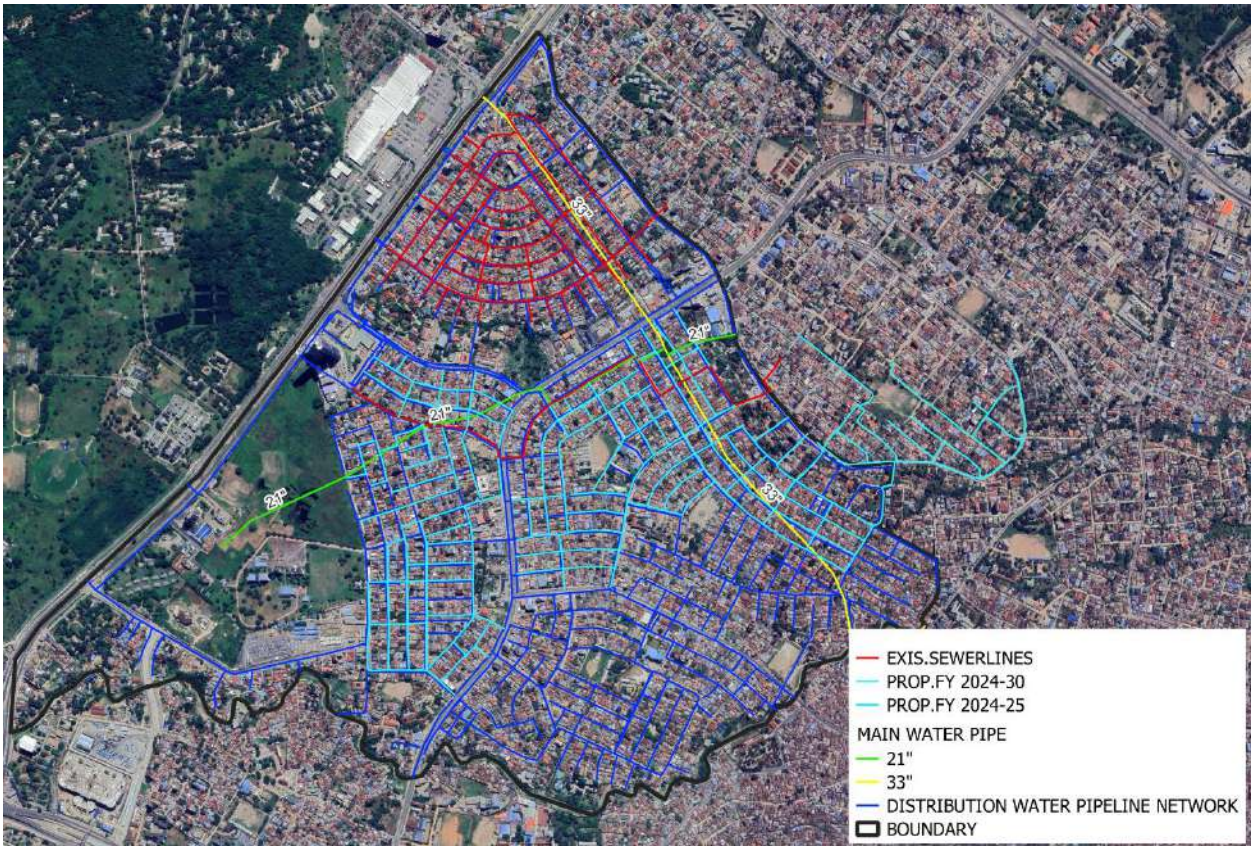
The current actual demand for wastewater disposal services in Sinza is approximately **80,000 cubic meters (80,000 m³) per month**. However, DAWASA is presently serving only a portion of this demand. With the exception of Sinza A, where the sewer network coverage has reached approximately **90%**, service provision in other areas remains limited.

In Sinza A, the sewerage system consists of:

- An 8-inch diameter trunk main, and
- 4-inch and 6-inch diameter lateral connection pipes serving individual properties.

Sinza B and Sinza C are connected to sewerage networks constructed from the PSSSF Complex located in the Kivulini area. The PSSSF complex is linked through a 12-inch diameter pipeline extending from PSSSF Kivulini to Sinza Africa Sana, crossing through Sinza B and Sinza C.

DAWASA has plans to expand the sewerage network to additional areas, including Sinza B, Sinza C, Sinza D, and Sinza E, to facilitate household wastewater connections and improve overall sanitation coverage. *(Refer to the sewerage network map for detailed layout and coverage.)*



Map 6.3: Existing and Proposed Sewer Pipe Network

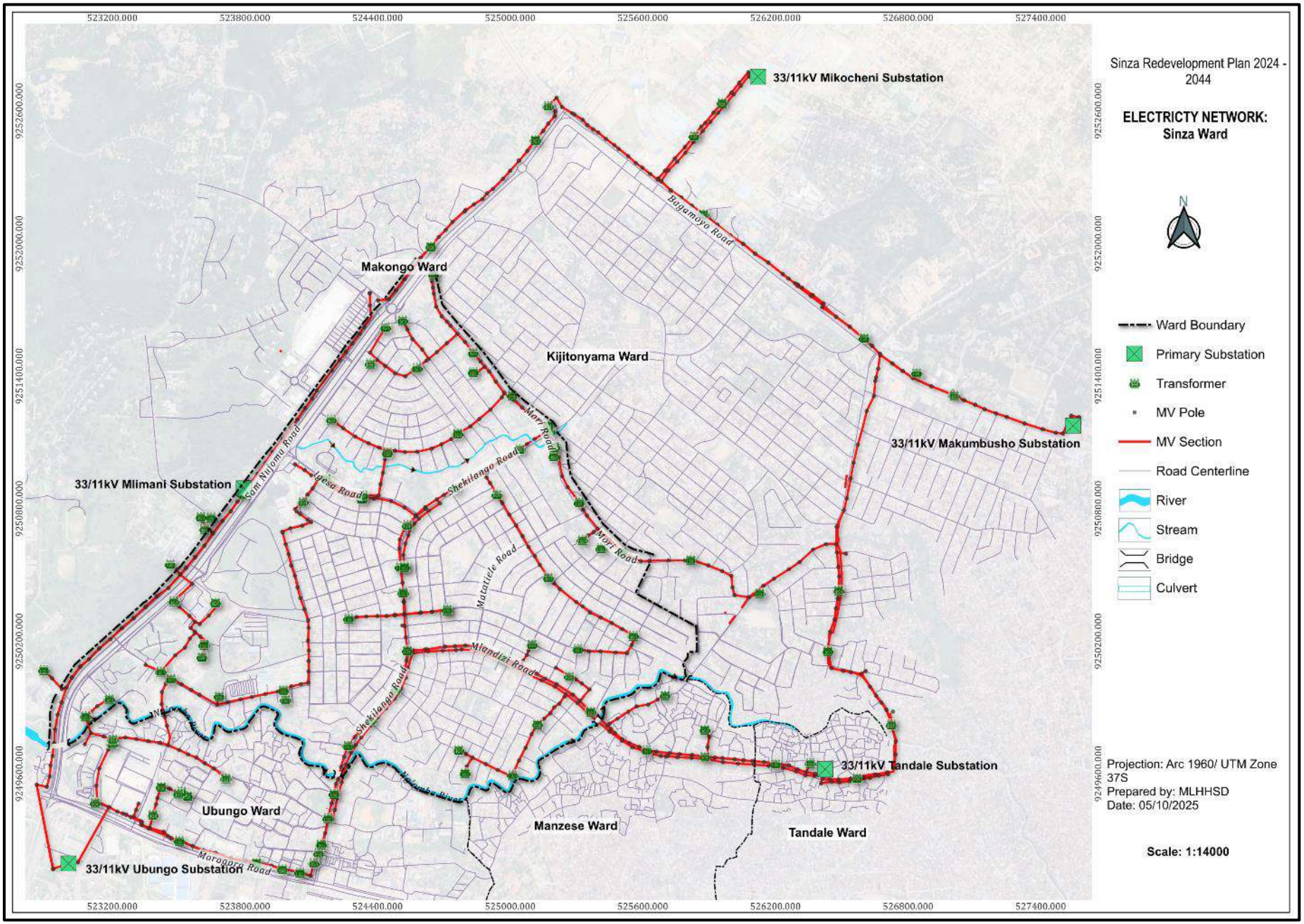
6.5 Electricity

Sinza Ward is served by two regional offices of the Tanzania Electric Supply Company Limited (TANESCO), namely Magomeni and Mikocheni. The primary power sources supplying the area are the Upper Ruvu and Lower Ruvu power generation plants.

Currently, electricity access across the five sub-wards (Mitaa) of Sinza is estimated at approximately 92% coverage, indicating relatively high service availability.

However, it has been observed that there is no substation or transformer located within Sinza Ward itself. Instead, the area is supplied by substations and transformers located in Ubungo, the University of Dar es Salaam (UDSM), and Tandale. These facilities are currently operating beyond their optimal capacity.

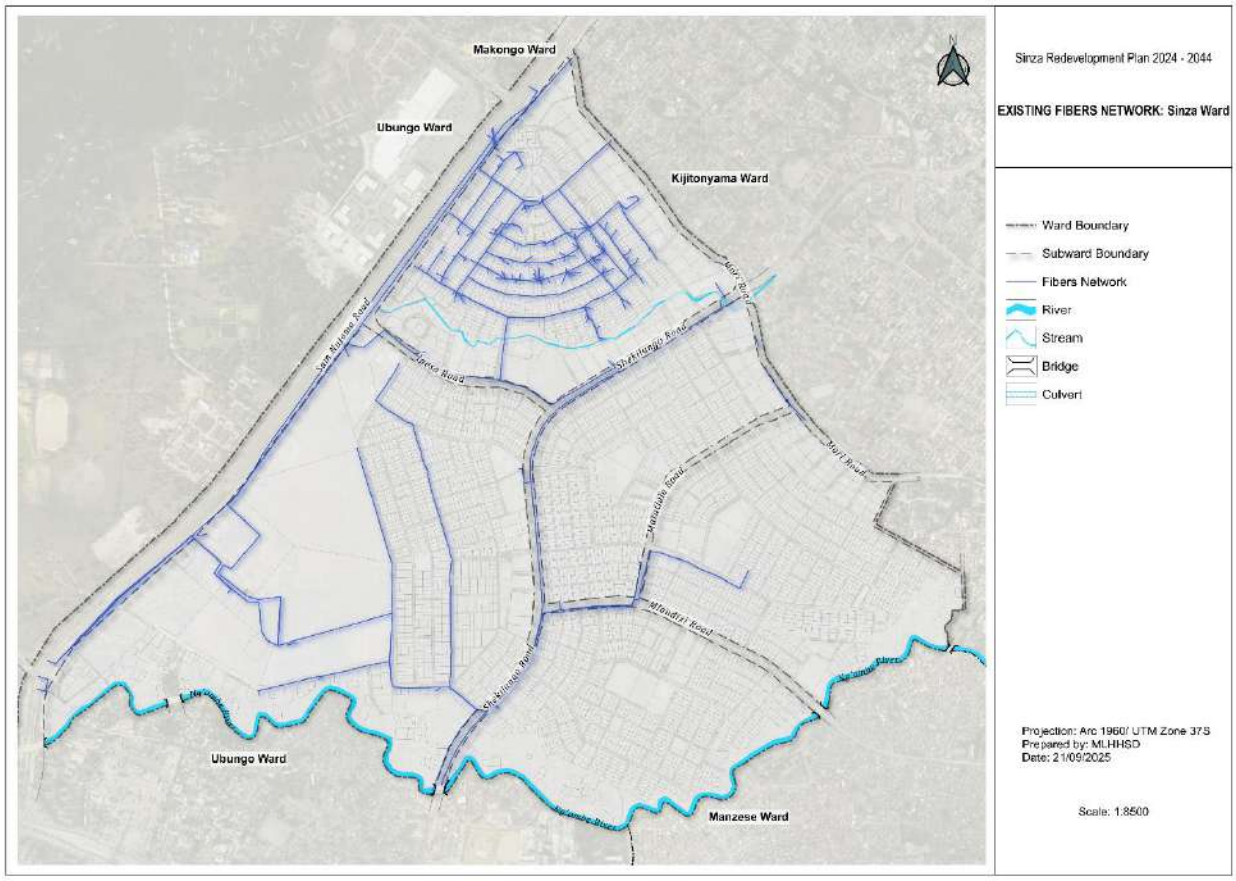
Given the existing overload and anticipated future growth, there is a pressing need to identify and allocate land within Sinza Ward for the establishment of a new substation. This will ensure reliable and sufficient electricity supply to meet projected demand over the next 20 years. *(Refer to the electricity network map for detailed distribution layout.)*



Map 6.4: Existing Electricity Network

6.6 Telecommunication

Most of the people used phones to conduct communication and it seems simple way and people choose to pass the message. There communication companies like Tigo, Vodacom, Airtel, Halotel and TTCL used it as investment opportunity to provide service to people. Apparently, the speed of internet operation in the central area is quite small because of congestion of people used it at the time. Therefore, these companies should promote their services in any ways to satisfy the demand.



Map 6.5: Existing Fiber Network

CHAPTER SEVEN
ANALYSIS OF EXISTING SITUATION IN SINZA AREA

7.1 Trend of Land Use Change.

This trend illustrates the proportional change in land use categories between 1973 and the current status in 2024 within the planning area. The data highlights significant shift in urban development patterns, infrastructure expansion and allocation of land for commercial, public and institutional spaces.

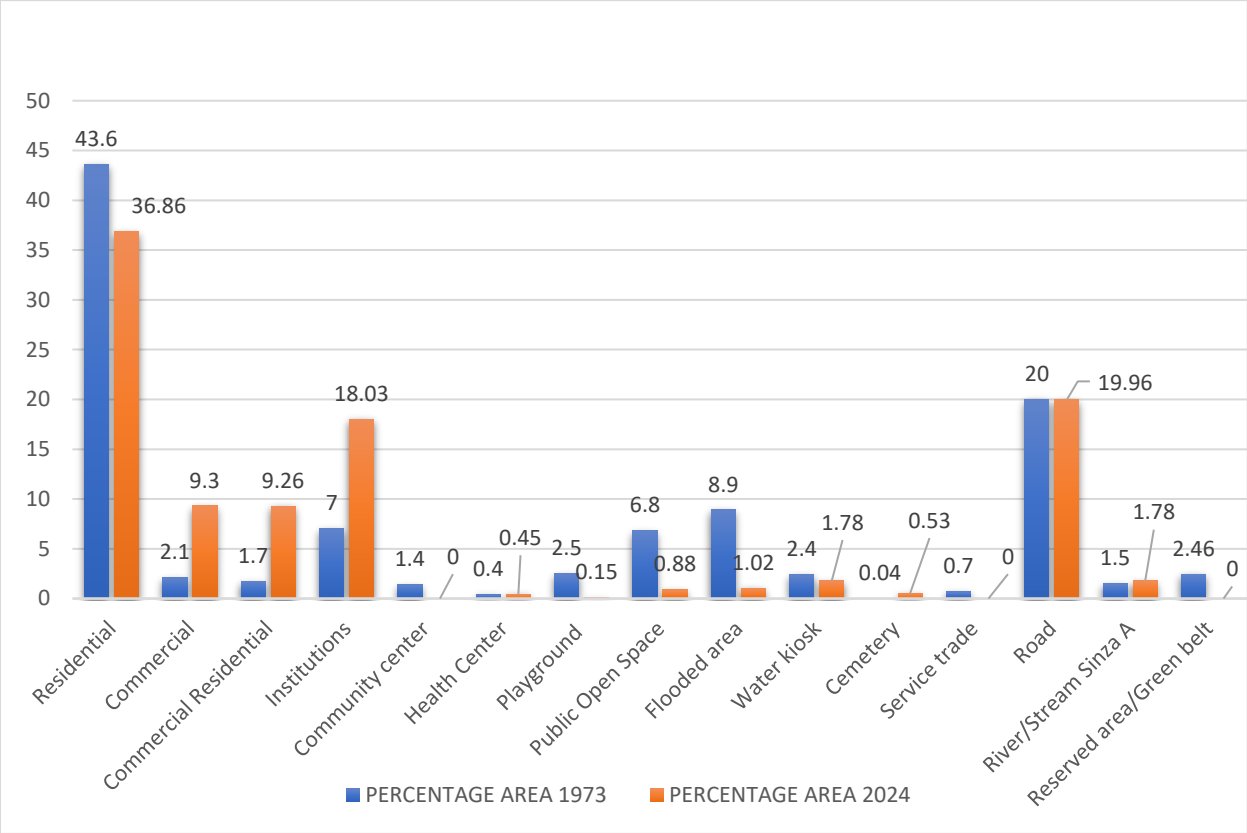


Figure 7.1: Trend of Land Use Change from 1973 to 2024
Source: Literature Review and Field work data collection,2024

7.1.1 Implication of Trend of Land Use Change

i. Residential Areas

Residential land use remains the dominant category within the study area. In 1973, residential areas accounted for 43% of the total land use, while in 2024 the proportion is projected to decrease slightly to 37%. This reduction may indicate increasing urban densification, as well as the gradual conversion of residential plots into other land uses such as commercial and mixed-use developments.

ii. Road Infrastructure

Land allocated for roads constituted 20% of the total area in 1973, while in 2024 it is estimated at 19.69%. The slight reduction is due to the encroachment of road reserves by developments such as buildings and some of the roads are completely closed.

iii. Commercial and Mixed-Use Areas

Commercial land use has experienced significant growth over the period under review. In 1973, commercial areas occupied only 2.1% of the land, whereas by 2024 this share is projected to increase to 9.3%. Similarly, commercial–residential (mixed-use) areas have expanded from 2.1% in 1973 to 9.3% in 2024. This trend suggests increased economic activities, as well as the growing integration of residential and business functions within

iv. Institutional Land Use

Institutional land use, which includes facilities such as schools, government offices, and other public institutions, has increased from 7% in 1973 to 18% in 2024. This expansion reflects efforts to improve public and private services provision in response to population growth and urban development.

v. Community Centre

Community facilities were originally planned in 1973 to occupy 1.4% of the total land area. However, by 2024 there was no area remaining for community facilities. This indicates a complete loss of land that had been allocated for community services. The community centre, which was intended to support recreational and social activities, has since been converted to commercial use.

vi. Public Open Space

Land allocated for public open spaces has experienced a significant decline, decreasing from 6.8% in 1973 to only 0.88% in 2024. This substantial reduction indicates that most of the areas originally designated for open and recreational use have gradually been lost over time. The primary reason for this decline is encroachment and invasion of these spaces by other land uses, particularly residential and commercial developments

vii. Cemetery

The area allocated for cemetery use increased from 0.04% in 1973 to 0.53% of the total land area in 2024, reflecting a significant rise due to increasing demand associated with population growth. Despite this expansion, the existing cemetery has now reached its full capacity and can no longer accommodate future burials. This situation highlights the urgent need to identify and allocate additional land for cemetery purposes to meet the growing needs of the community and ensure proper land-use planning.

viii. Other Land Uses

Other land uses such as cemeteries, service trade areas, river and stream buffers, and reserved green areas remain minimal, each accounting for less than 2% of the total land area. This suggests that these uses occupy only a marginal proportion of the overall land use structure.

7.1.2 Interpretation for Planning

The data indicates a transition toward mixed-use urban development, characterized by increasing densification, expansion of commercial activities, and growth of institutional land uses. At the same time, the proportion of land allocated for purely residential purposes has slightly declined, likely due to the conversion of some residential areas into mixed-use or commercial zones.

In contrast, public and recreational spaces remain limited, which raises concerns regarding urban liveability and highlights the need for targeted planning interventions to preserve and expand such amenities. Furthermore, the growth of institutional and commercial land uses reflects increasing demand for services and economic activities, underscoring the need for adequate infrastructure and effective urban planning to support continued population and economic growth.

7.2 Existing Building Heights

The newly emerging buildings in Sinza are multi-storey but are still scattered and isolated to form a continuous skyline. The isolated buildings pose a threat of privacy to the surrounding low-rise houses because people in the high-rise houses can have a view of indoor and outdoor activities taking place in the low-rise houses. If this trend will continue unchecked, the challenges of loss of privacy, blocked cross ventilation and sun lighting will be more apparent than the case is in Kariakoo.

The current building profile in Sinza indicates that 94% of all structures are single-storey buildings, while only 6% are multi-storey developments. This distribution has significant implications from an urban planning perspective.

First,the dominance of single-storey buildings reflects inefficient land utilization, particularly in an area with relatively high land value and increasing development pressure. Such a pattern suggests that land is not being used to its optimal capacity.

Second, the prevalence of single-storey structures indicates a low-density development pattern, which may not be aligned with current population growth trends, housing demand, and the need for sustainable urban form.

Third, continued development in this pattern risks promoting urban sprawl, leading to increased infrastructure costs, inefficient service delivery, longer travel distances, and reduced overall urban efficiency.

Conversely, the fact that only 6% of buildings are multi-storey highlights a strong opportunity for vertical densification. Increasing the proportion of multi-storey residential and mixed-use buildings would:

- Optimize land use efficiency
- Increase housing supply without expanding the physical footprint of the area
- Improve infrastructure utilization
- Support compact urban development principles

The existing building structure, characterized by 94% single-storey development, demonstrates underutilization of land relative to its strategic value. This provides a strong justification for promoting vertical redevelopment through high-rise and mixed-use developments, thereby supporting a more efficient, sustainable, and compact urban growth model for Sinza**.**

7.3 Existing Development Status

The analysis of existing development indicates that the planning area is highly built-up and substantially developed. Out of a total of **4,686** surveyed plots/buildings, approximately **96% (4,499 units)** are completed buildings. This confirms that Sinza is a mature and consolidated urban area with limited undeveloped land remaining.

Only **1.5% (70 plots)** remain as vacant land, suggesting minimal availability for horizontal expansion. This implies that future development will likely depend on redevelopment, densification, plot amalgamation, and vertical expansion rather than greenfield development.

Buildings under construction account for **1.9% (89 units)**, indicating ongoing but relatively modest development activity. This reflects a steady pace of incremental urban growth.

Table 7.1: Existing development Status

SN	Existing Development Status	Number	Percent
1	Completed Buildings	4,499	96.4%
2	Vacant Land	70	1.6%
3	Under Construction	89	2%
	Total	**4,686**	**100**

Source: Field work 2024

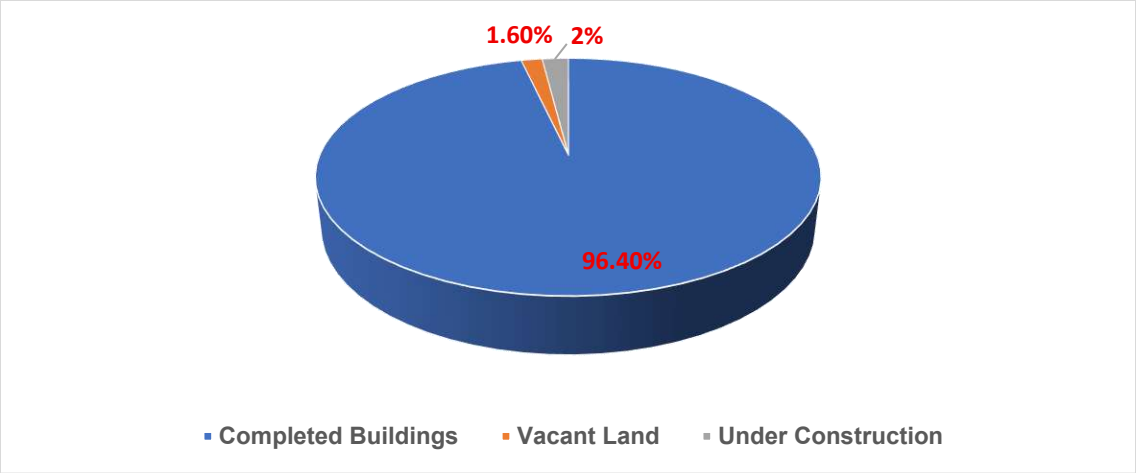


Figure 7.2: Existing Development Status
Source: Field work 2024

7.3.1 Planning Implication of Existing Development Status:

The dominance of completed structures together with the limited availability of vacant land indicates that any proposed redevelopment strategy for Sinza should focus on urban renewal and regeneration, the adoption of compact city principles, and the promotion of mixed-use development to ensure efficient land utilization. In addition, there is a need to protect and expand public open spaces in order to enhance environmental quality and urban liveability. Overall, the data confirms that Sinza is largely built-out, and therefore future planning efforts should prioritize strategic redevelopment interventions rather than expansion-oriented approaches.

7.4 Building Ownership

The findings indicate that private ownership accounts for 99.4% of all buildings within the planning area, while public and institutional ownership collectively constitute less than 1%.

Table 7.2: Building Ownership Status

SN	Building Ownership Category	Number	Percent
1	Private Ownership	4,472	99.4%
2	Public Ownership	17	0.4%
3	Institutional Ownership	10	0.2%
		4,499	100%

Source: Field Survey, 2024

7.4.1 Planning Interpretation of Building Ownership Structure

The building ownership pattern indicates that private ownership dominates overwhelmingly (99.4%), while public (0.4%) and institutional ownership (0.2%) account for only a marginal share of the total building stock. This ownership structure has several important implications for planning and redevelopment:

Implications for Redevelopment Implementation

The predominance of private ownership suggests that any redevelopment initiative such as plot amalgamation, densification, infrastructure upgrading, or urban renewal will require extensive stakeholder engagement, negotiation, and consensus-building. Implementation may be time-consuming due to fragmented individual property rights.

i. Land Readjustment and Plot Amalgamation

With nearly all properties privately owned, strategies such as land readjustment, guided land pooling, or voluntary plot amalgamation will be more practical than compulsory acquisition. Strong legal and institutional frameworks will be necessary to coordinate landowners effectively.

ii. Limited Public Land for Strategic Projects

The minimal proportion of public ownership limits the availability of land for:

a) Public facilities
b) Road widening and infrastructure expansion
c) Open space development
d) Social housing or public investment projects
e) This may increase the cost of redevelopment due to the need for land acquisition or compensation.

iii. Investment and Urban Transformation Potential

High private ownership may also indicate strong individual investment in property development. If properly guided through zoning incentives and redevelopment policies, this structure can support:

a) Urban densification
b) Mixed-use development
c) Private-sector-led regeneration

iv. Policy Recommendation

Given this ownership pattern, the planning approach should prioritize:

a) Participatory planning mechanisms
b) Clear redevelopment guidelines
c) Incentive-based redevelopment tools (e.g., increased plot ratios, development rights transfer)

d) Transparent compensation or benefit-sharing frameworks

The dominance of private ownership presents both a challenge and an opportunity. While it may complicate coordinated redevelopment efforts, it also provides a strong foundation for market-driven urban transformation if supported by effective planning policies and regulatory mechanisms.

7.5 Type of residents

Out of a total of 4,686 residents; Tenants constitute the majority, with 2,952 residents (63%), indicating that most housing in the area is rental-based. Owners account for 1,354 residents (28.9%), showing a smaller proportion of privately owned homes.

Individuals who are both owners and tenants make up 375 residents (8%), reflecting cases where households may rent part of their property or have mixed occupancy arrangements.

Managers and organizational staff represent a negligible proportion, 5 residents (0.1%) and 1 resident (0%), respectively. (refer table no 7.5)

Table 7.3: Type of Residents (Distribution of residents)

SN	Resident Type	Number	Percentage
1	Owner	1,354	28.9%
2	Tenant	2,952	63.0%
3	Manager	5	0.1%
4	Owner and Tenant	375	8.0%
	Total	4,686	100%

Source: Field work 2024

7.5.1 Implications for High-Rise Apartment Development in Sinza

i. High Demand for Rental Housing:

With 63% of residents being tenants, there is a clear demand for rental units. High-rise apartments can efficiently accommodate a large number of tenants in a relatively small land footprint, addressing current housing pressures.

ii. **Optimal Land Use in a Compact Urban Setting:**

Sinza's land is suitable for high-rise development, supporting the compact city concept. Vertical expansion allows the area to maintain open spaces, public amenities, and infrastructure efficiency while increasing housing density.

iii. Supporting Mixed-Use Development:

High-rise apartments can be integrated with commercial and service areas on lower floors, aligning with the need for mixed land use. This approach provides residents with essential services nearby and reduces travel time, supporting sustainable urban growth.

7.5.2 Planning Recommendations:

a) Encourage multi-story apartment projects that include both rental and ownership units.
b) Integrate community facilities, green spaces, and parking solutions into the high-rise design.
c) Ensure zoning regulations allow height and density suitable for high-rise development without compromising infrastructure capacity.

Given the high proportion of tenants and limited land availability, high-rise apartments are the most suitable housing typology for Sinza. They will meet current rental demand, offer opportunities for private ownership, and promote efficient, sustainable urban growth consistent with redevelopment goals.

7.6 Land Capacity Challenges

An analysis of the existing land conditions in Sinza to support redevelopment and construction infrastructure indicates the following: 30.6% of the area has low land-bearing capacity, 42.73% has medium capacity, and 26.67% has high capacity. These findings highlight several key weaknesses:

i. Presence of shallow groundwater affects the durability and quality of buildings, as it can damage construction materials during development and reduce the lifespan of structures.
ii. The area is predominantly underlain by clay soil which has poor water percolation and tends to crack during prolonged dry periods, compromising the structural stability of buildings.
iii. lack of solid bedrock, Subsurface conditions are dominated by claystone, a weak rock type that is insufficient to fully support heavy construction infrastructure.
iv. Terrain characteristics: flatlands and depressions Significant portions of Sinza consist of low-lying areas with depressions and flat plains, resulting in poor drainage during the rainy season due to slow water runoff.
v. Soil erosion along river and stream. Certain sections, particularly along the Ng'ombe River and other small streams, exhibit soil erosion, which may undermine adjacent developments.

7.7 Challenges Related to Main Water Pipelines inch 21 and 33

Sinza is traversed by two major potable water pipelines, which carry water toward other parts of Dar es Salaam City. The pipelines have diameters of 21 inches and 33 inches, respectively. Investigations reveal significant development above the 21-inch pipeline, while the buffer zone for the 33-inch pipeline also shows considerable encroachment. In total, 91 plots intersect the 21-inch pipeline and its associated buffer zones in Sinza B and Sinza C.

7.8 Challenges Arising from Land Use

7.8.1 Presence of incompatible land use

Current development pattern in Sinza demonstrates several incompatible land uses, leading to functional conflicts. For example, commercial structures are located in the middle of residential areas, causing disturbances and reducing overall urban functionality.

7.8.2 Presence of Urban Decay and Stagnation

The Sinza area exhibits pockets of physical deterioration and underutilized land, particularly within interior neighbourhoods. Commercial activities are largely concentrated along the main arterial roads, while inner areas remain relatively stagnant and continue to experience gradual decline.

This uneven spatial distribution of economic activities has resulted in limited reinvestment in interior zones, contributing to poor urban aesthetics, inadequate maintenance of buildings, and the absence of a coherent visual and functional character. Consequently, these areas lack vibrancy, organized development patterns, and an attractive urban image necessary to support comprehensive redevelopment.

7.8.3 Absence of Integrated Land Use, Particularly Production and Service Industry Areas

For a city to be vibrant, resilient, and sustainable, land use must be well integrated, incorporating production areas, commercial activities, residential zones, and social services.

The Sinza area lacks designated production zones, particularly service industries, which are essential for generating stable and long-term employment opportunities, especially for youth. Areas that were previously allocated for service trade activities are currently being utilized for purposes other than those originally planned.

This situation has contributed to the transformation of the area into a predominantly trading-based economy, characterized largely by petty trading activities rather than structured production and value-adding enterprises. As a result, the economic base of the area remains weak and less diversified.

7.8.4 Informal Car Sales Activities in Unplanned Areas

There is an increasing presence of informal car sales activities in unplanned and unauthorized locations, particularly within the road reserve of Sam Nujoma Road and in some water utility reserve areas.

This situation leads to a lack of effective regulation and control over the business activities, and it poses safety risks in the event of emergencies or operational challenges. Furthermore, such encroachments interfere with planned infrastructure functions and undermine orderly urban development.

7.9 Challenges Related to Building Conditions and Construction Practices

i. There has been a rapid increase in construction activities that do not comply with approved development conditions and legally accepted standards. This has led to frequent disputes between developers and neighbouring property owners, as well as encroachment into road reserves. Such practices compromise urban order, infrastructure integrity, and effective land use management**.**

ii. An unattractive urban appearance resulting from the lack of proportionality between building heights and plot sizes. Many buildings occupy almost the entire plot area, while others extend beyond plot boundaries particularly upper floors from the second storey upwards. This situation not only disrupts the visual harmony of the neighborhood but also violates planning regulations and compromises safety, ventilation, and access standards.

iii. Many buildings are experiencing structural distress, including cracking and settlement, due to the limited bearing capacity of the underlying soil to support the weight of the structures. This raises serious concerns regarding structural safety, building stability, and the need for proper geotechnical investigations prior to construction**.**

iv. The rapid increase of tall and slender buildings emerging irregularly within the streets of Sinza resembling isolated palm trees without proper planning or coordinated urban design. This uncoordinated vertical growth disrupts the urban skyline, undermines aesthetic coherence, and reflects inadequate development control and enforcement of planning regulations.

7.10 Challenges Related to the Rising Cost of Living

High and unnecessary living costs have emerged as a result of the existing development pattern, as outlined below:

- The absence of a household gas energy system, forcing residents to rely on more expensive or inefficient energy sources.
- Lack of on-plot parking spaces, which compels residents to pay for parking outside their premises.
- Rental charges that are not aligned with the actual quality and standard of development, placing additional financial strain on residents.

7.11 Investment Challenges

Limited knowledge and awareness of investment opportunities and joint development (public–private or partnership models). This has resulted in plot owners failing to undertake joint redevelopment initiatives, with most opting for individually financed construction. Such fragmented development contributes to financial stress among property owners and leads to stagnation in certain inner areas of Sinza.

Small plot sizes, which limit the potential for large-scale, economically viable investments and reduce opportunities for high-impact, integrated development projects.

7.12 Encroachment and Unplanned Development of Open Spaces, Water Kiosks, Public Buildings and Wetlands

There are widespread encroachment and unregulated development of designated open spaces, including school areas, playgrounds, river reserves, and water kiosk sites. Approximately 75% of the areas allocated for water kiosks have been developed in ways that deviate from the approved plans.

Furthermore, portions of road reserves, school land, and the playground located in Sinza E Sub-ward are currently being utilized for purposes other than those originally intended in the approved land use plan. This situation undermines proper urban planning, reduces access to essential public services, and compromises environmental and social sustainability

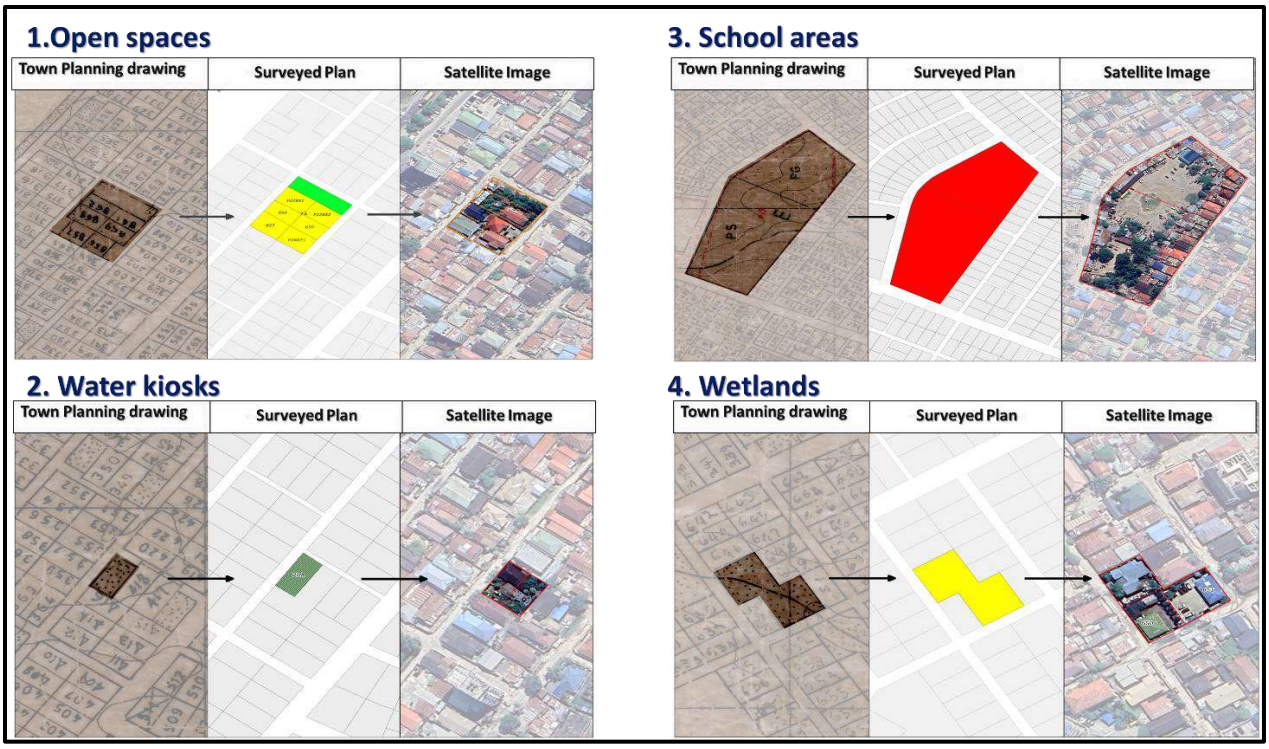


Plate 7.1: Encroachment and Unplanned Development of Open Spaces, Water Kiosks, Public Buildings and Wetlands
Source: Field work, Town planning drawings and Surveyed drawings

7.13 Transportation and Traffic Challenges

Transportation and traffic systems in a city are as vital as blood vessels in the human body. If these systems do not function efficiently, the city cannot grow properly, and some areas suffer, just as a person experiences a stroke when blood vessels fail to circulate blood effectively. In the Sinza area, the transportation and traffic system relies solely on roads.

An analysis conducted has identified weaknesses in the following areas:

a) Poor layout and distribution of the road network, which does not meet current and future development standards.

b) Approximately 86.9% of roads in the Sinza area are too narrow, with widths ranging from 3 to 6 meters. Such widths are insufficient to accommodate the development of high-rise buildings and the increasing intensity of activities, especially large-scale commercial establishments.

c) All roads with widths of 4 to 6 meters lack essential road infrastructure (road furniture), such as stormwater drainage, pedestrian walkways, and bicycle lanes.

d) Lack of road reserve areas that could be used to accommodate essential infrastructure, including clean water, sewage systems, electricity, gas, communication networks, and stormwater drainage.

e) Shortage of parking spaces.

f) Lack of public transport terminals, particularly along Mawasiliano, Shekilango, and Mlandizi roads.

g) Poor condition and deterioration of internal roads in all neighborhoods due to the absence of regular maintenance.

7.14 Challenges of unplanned settlement development along river ng´ombe reserve area

The redevelopment plan for the Sinza area includes land designated for the Ng'ombe River reserve. However, these areas have been occupied by unplanned residential settlements. This land is located along the Ng'ombe River, covering Sinza C, D, and E streets, as well as a stream in Sinza A, with a total area of 23.37 hectares. Furthermore, within this area, there are surveyed plots located within the unplanned settlements.

7.15 Challenges arising from social services

The Sinza area lacks adequate social service facilities. There are no police and fire stations, also there is only one cemetery, which is already full. Additionally, there are insufficient spaces for spiritual, educational, and health services. Existing services are conducted within residential areas, where the available land is small and does not meet the standards stipulated by urban planning regulations.

7.16 Challenges due to lack of recreational and sports areas

There is a shortage of land designated for recreational and sports activities. Most existing sports fields are located within school premises, making them less accessible to the general public. Currently, there is only one sports area in Sinza E.

7.17 Environmental management challenges

a) Lack of a proper system for the collection and treatment of wastewater, resulting in uncontrolled disposal of sewage in the streets and causing environmental pollution.

b) Damage to existing culverts in the middle of roads due to the passage of heavy vehicles over these structures.

c) Some Sinza residents dispose of solid waste into drainage channels, causing blockages, overflow, and scattered waste throughout the neighborhood. Additionally, some residents discharge wastewater from dishwashing and laundry into the streets, while others open pit latrines during the rainy season.

d) Absence of a proper system for segregation, collection, and transport of solid waste to designated dumping sites.

e) Water stagnation in flat areas during rains, which creates breeding grounds for hazardous insects such as mosquitoes.

f) Flooding in low-lying areas, threatening existing developments and the safety of residents in affected zones.

g) Lack of designated areas for tree planting to reduce air pollution and produce clean oxygen for the health of Sinza residents and users.

h) Absence of proper building design that allows for adequate ventilation throughout the Sinza area.

i) Lack of sufficient sunlight penetration in some areas due to dense development.

j) Overcrowded construction, within one plot - fully developed, leaving minimal open space.

7.18 CHALLENGES IN FIRE AND RESCUE SERVICES

a) **Narrow Access Roads** – The narrow road to neighborhoods hinder fire trucks from reaching emergency sites promptly and create difficulties when maneuvering or turning.

b) **Lack of Water Sources (Fire Hydrants)** – Sinza is among the wards without proper infrastructure for emergency water supply to support firefighting.

c) **Insufficient Space for Fire Station Construction** – Due to population growth and high-density housing, there is limited land available to build a fire station, resulting in delayed response times for fire and rescue services.

d) **Deteriorated Local Roads** – Many internal roads in Sinza are worn out, which negatively affects the delivery of fire services, particularly during the rainy season, while some roads are impassable even during dry periods.

PART II
CHAPTER EIGHT
REDEVELOPMENT CONCEPT

8.1 Redevelopment Concept of Compact City in Sinza (2026–2046)

The Sinza area, located within Dar es Salaam, is a rapidly growing urban settlement facing significant challenges related to infrastructure, land use, and service delivery. In response to these challenges, the Sinza Redevelopment Plan 2026–2046 proposes a Compact City model as the guiding framework for sustainable urban development.

The Compact City concept emphasizes high-density, mixed-use development with a focus on efficient land use, improved accessibility, and sustainable infrastructure. This approach aims to optimize the limited land available in Sinza while enhancing the quality of life for residents. Key principles of this concept include:

i. **High-Density Development and Plot Amalgamation** – Encouraging vertical growth through multi-story buildings while consolidating small, fragmented plots to create larger, more functional parcels. This ensures optimal land utilization and supports urban services efficiently.

ii. **Mixed-Use Land Use** – Integrating residential, commercial, service, and recreational functions within the same area to reduce travel distances, enhance accessibility, and foster vibrant, inclusive communities.

iii. **Efficient Transportation and Mobility Networks** – Upgrading road networks, incorporating pedestrian and cycling paths, and improving public transport corridors to support safe, sustainable, and efficient movement within the area.

iv. **Provision of Social and Environmental Infrastructure** – Ensuring adequate access to healthcare, education, green spaces, recreational facilities, and utilities such as water, sanitation, and energy to improve livability and resilience.

v. **Sustainable Urban Growth** – Preserving critical environmental features such as the Ng'ombe River reserve, mitigating flood risks, and promoting urban greenery to enhance environmental quality.

vi. **Encouraging Investment and Economic Opportunities** – By creating well-planned, compact, and serviced urban spaces, the plan aims to attract private investment, formalize businesses, and foster employment opportunities for residents.

The 2026–2046 Sinza Compact City Redevelopment Plan seeks to transform the area from a scattered and unplanned settlement into a modern, inclusive, and sustainable

urban environment, balancing population growth, economic development, and environmental sustainability over the next two decades.

8.2 Block Amalgamation Concept (Block Plan)

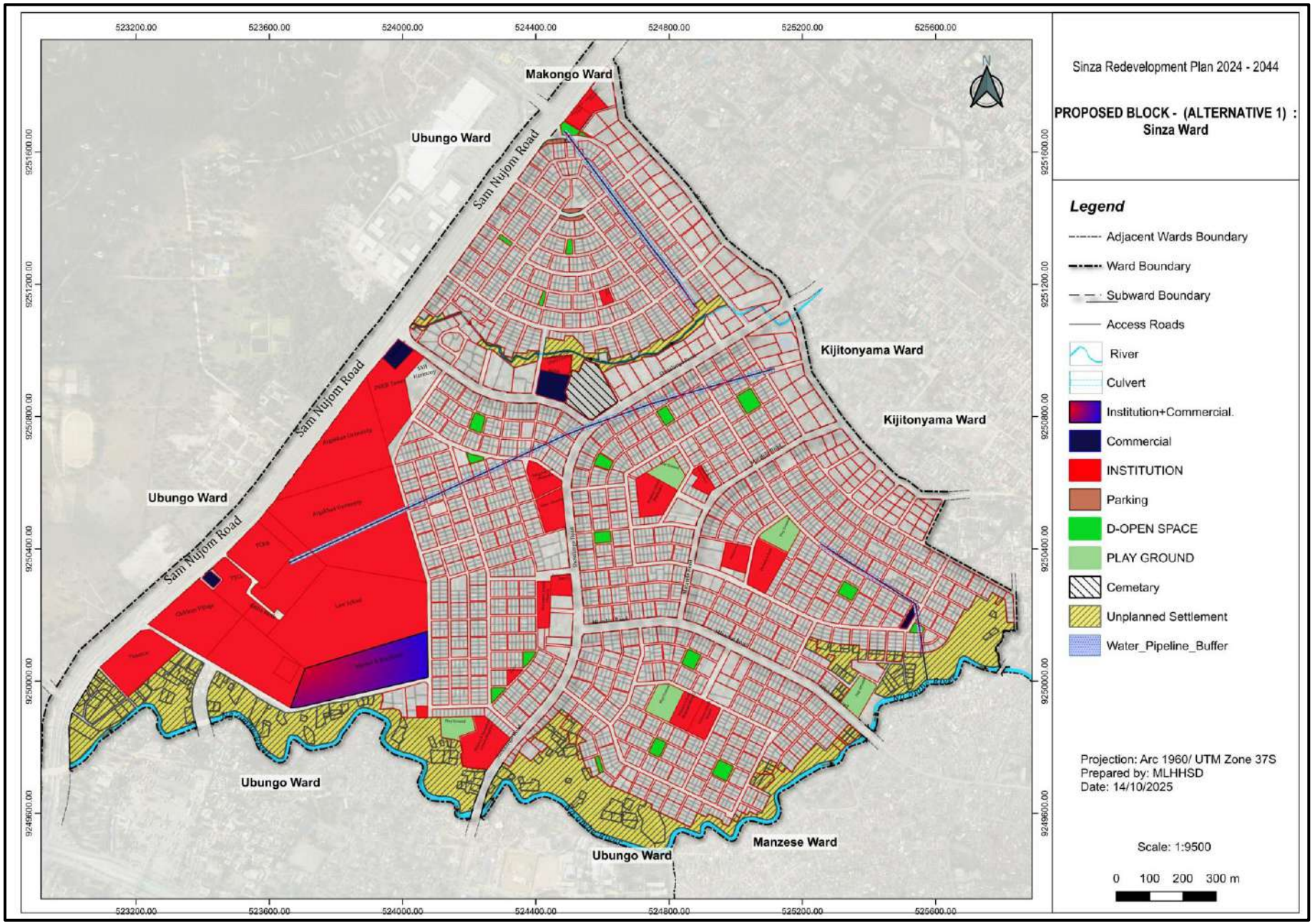
Plot amalgamation refers to the process of combining two or more adjacent plots into a single, larger parcel. This is a common planning approach, particularly in urban development and redevelopment schemes.

In order to address the identified challenges and optimize the opportunities within the Sinza Redevelopment Plan, the proposed concept focuses on block-based plot amalgamation. The implementation of this concept will be guided by soil conditions and the intended land use within the area.

The plots proposed for amalgamation are those ranging between 280–300 square metres. The primary objective of plot amalgamation is to create sufficiently large parcels capable of accommodating multi-storey buildings of six (6) floors and above. This will enhance structural stability, ensure adequate floor space per level, and provide sufficient on-site space to accommodate required amenities and services.

The key principles of the block amalgamation concept are as follows;

i. The concept involves amalgamating plots within a defined block to facilitate high-density and high-rise development.
ii. Amalgamation within a given block will depend on:
    - The intended land use;
    - The height of existing buildings;
    - The proposed number of storeys;
    - The findings of land capacity and infrastructure load analysis for the respective area.
iii. Amalgamation will prioritize back-to-back plots in order to achieve a more balanced and efficient plot ratio.
iv. Plot amalgamation will be mandatory rather than optional, and it will be supported by a formal legal and regulatory framework to ensure effective implementation.
v. The amalgamation strategy will also aim to facilitate road widening to accommodate the anticipated high-rise developments.
vi. The process will encourage joint venture development arrangements involving multiple landowners within the respective block.
vii. Plot amalgamation will create sufficient space to improve air circulation and environmental quality, thereby promoting the physical and mental well-being of residents and contributing to overall national productivity. Refer map 8.1



Map No 8.1 Plot amagalmation (Block Plan)

8.3 Advantages and Disadvantages of Plot Amalgamation

Plot amalgamation is a strategic planning tool in urban redevelopment. While it offers significant benefits, it also presents certain challenges that must be carefully managed.

8.3.1 Advantages of Plot Amalgamation

i. **Increased Land Value**

Larger consolidated plots generally have higher market value compared to small fragmented parcels due to their greater development potential.

ii. Efficient Land Utilization

Amalgamation enables optimal land use, especially for high-rise buildings, commercial complexes, mixed-use developments, schools, hospitals, and hotels.

iii. Facilitates High-Density Development

It supports vertical development (multi-storey buildings), making it suitable for compact city planning and efficient urban growth.

iv. Improved Infrastructure Planning

Larger plots allow better coordination of infrastructure such as roads, water supply, sewerage, electricity, stormwater drainage, and parking facilities.

v. Encourages Investment

Investors prefer large, unified land parcels as they simplify planning, reduce administrative complications, and support large-scale projects.

vi. Reduction of Boundary Disputes

Combining plots reduces conflicts related to unclear or disputed property boundaries.

vii. Better Environmental Quality

Properly planned larger plots allow for improved air circulation, natural lighting, landscaping, and provision of open spaces.

viii. Promotes Joint Venture Development

Amalgamation encourages collaboration among multiple landowners, making redevelopment financially feasible.

8.3.2 Disadvantages of Plot Amalgamation

i. **Complex Ownership Negotiations**

Reaching agreements among multiple landowners can be time-consuming and challenging.

ii. **Legal and Administrative Complications**

The process may involve complex legal procedures, including land title consolidation and regulatory approvals.

iii. Risk of Displacement

If not properly managed, redevelopment following amalgamation may lead to displacement of existing residents or small businesses.

iv. High Initial Investment Costs

Large-scale developments often require substantial capital investment, which may not be affordable for all stakeholders.

v. Loss of Small-Scale Character

Amalgamation may alter the existing neighborhood character, replacing low-rise or traditional structures with high-rise developments.

vi. Potential Social Conflicts

Differences in expectations among landowners (e.g., compensation, profit-sharing, building height) can create disagreements.

vii. Temporary Disruptions

\Construction and redevelopment activities may cause short-term disruptions such as noise, traffic congestion, and reduced access.

Plot amalgamation is a powerful urban redevelopment strategy that enhances land value and development efficiency. However, its success depends on strong legal frameworks, transparent stakeholder engagement, proper compensation mechanisms, and careful planning to minimize social and economic disruptions.

CHAPTER NINE
PROPOSED LAND USE

9.1 Land Use

The Sinza Redevelopment Plan (2026–2046) provides a strategic framework to guide sustainable urban redevelopment through optimized land use, controlled building heights, and effective implementation mechanisms. The plan promotes plot amalgamation, single-plot redevelopment, and joint development partnerships to support orderly and efficient urban transformation.

Analysis of the existing land use pattern indicates a gradual shift from residential to commercial activities, reflecting increasing development pressure that differs from the proposals of the Dar es Salaam Master Plan (2016–2036). The redevelopment proposals therefore aim to align future development with the broader vision for Sinza.

The proposed zoning allocates land uses across Sinza A, B, C, D, and E, promoting mixed-use development along major road corridors while maintaining residential uses within interior areas. Corridors such as Sam Nujoma Road, Shekilango Road, Sinza Mori Road, and Igesa Road are designated for mixed-use development, while existing social service facilities will be retained.

9.1.1 Sinza A

Areas that were previously designated for industrial use are proposed to be restored for similar activities, where Service Industries, Showrooms, and Warehouses are recommended. In addition, areas along Sinza Mori Road are proposed for Commercial and Office uses.

9.1.2 Sinza B

Areas along Shekilango Road are proposed for Commercial uses, while the interior areas are proposed for Mixed Residential and Commercial uses, as well as Purely Residential uses. Areas along Sinza Mori Road are proposed for Commercial and Office uses.

9.1.3 Sinza C

Areas along Sam Nujoma Road are proposed to remain as Commercial and Institutional uses, with an increase in commercial activities within the Aga Khan institutional area. The SOS Children’s Village area is proposed for Service Industries, while the TANESCO area is proposed for Service Industries and Warehousing. Interior areas are proposed for Mixed Residential and Commercial uses, while areas along Shekilango Road are proposed for Commercial and Office uses.

9.1.4 Sinza D

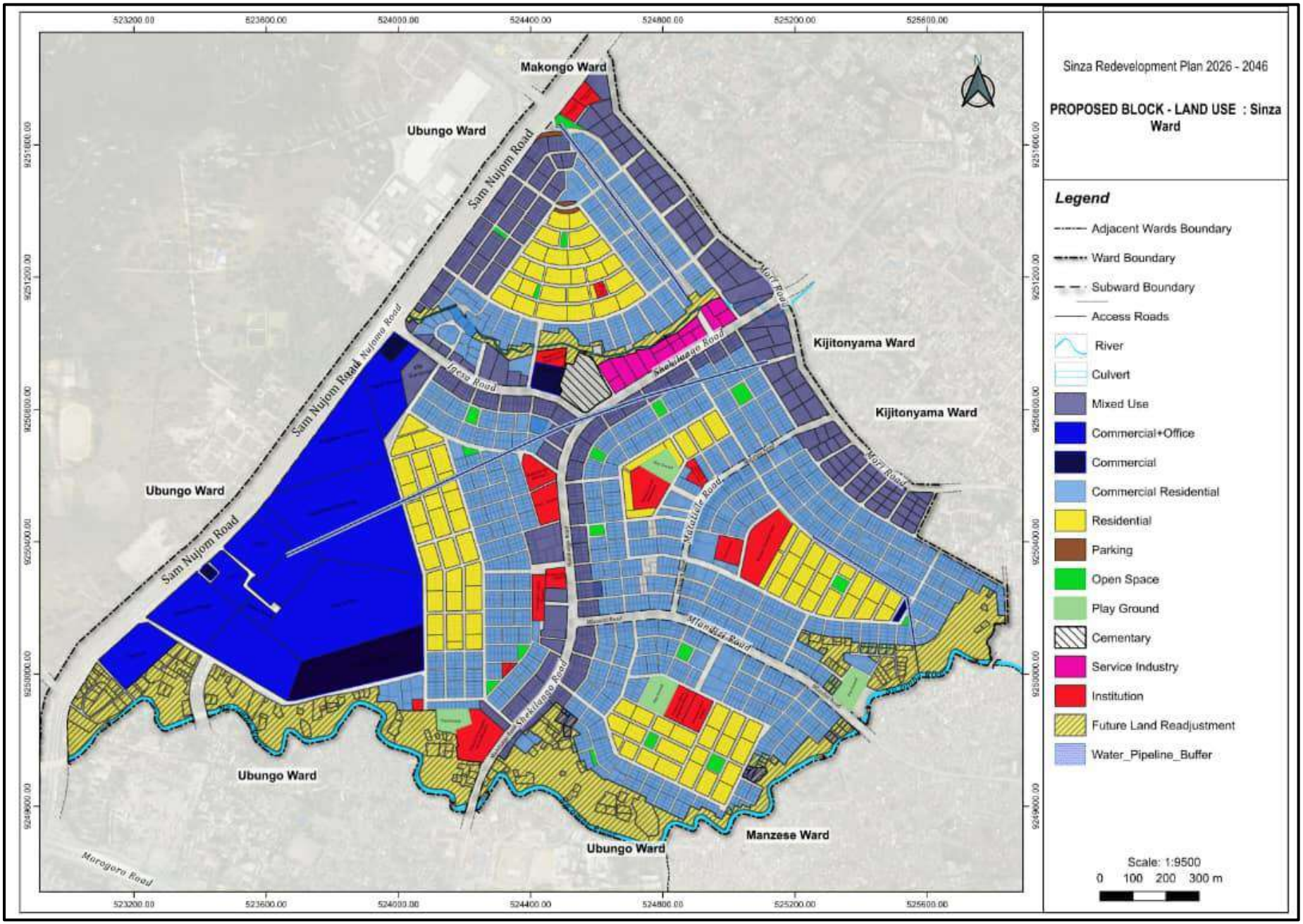
Areas along Shekilango Road and Mlandizi Road are proposed for Commercial and Office uses. The interior areas are proposed for Mixed Residential and Commercial uses, while the deeper interior areas are proposed for Purely Residential uses.

9.1.5 Sinza E

Areas along Tandale Road are proposed for Commercial and Office uses, followed by areas designated for Mixed Commercial and Residential uses, and the deeper interior areas proposed for Purely Residential uses. Furthermore, areas with large plots along Sinza Mori Road are proposed for Mixed Residential and Commercial uses.

Table 9.1: Proposed Land use (2026 -2046)

LAND USE	**AREA (Ha)**	**Percent**
Residential	99.0	29.39%
Mixed Use	40.0	11.88%
Commercial	35.0	10.39%
Commercial & Residential	30.0	8.91%
Commercial & Office (from Institutions)	39.86	11.83%
Service Industries	1.83	0.54%
Institutions (School, health, religious and office)	18.14	5.39%
Open Space	6.0	1.78%
Playgrounds	3.45	1.02%
Recreation Areas	2.5	0.74%
Cemetery	1.77	0.53%
Wetlands (Conservation)	3.43	1.02%
Rivers/Streams (Protected)	5.98	1.78%
Road Circulation	22.0	6.53%
Reserved Land (Unplanned Settlement)	23.37	6.94%
Total	**336.78**	**100%**



Map no 9.1: Proposed Land use

9.2 Proposed Building Height

The proposed building height strategy aims to optimize land use, create a balanced urban skyline, and ensure that development corresponds with road hierarchy, infrastructure capacity and land suitability.

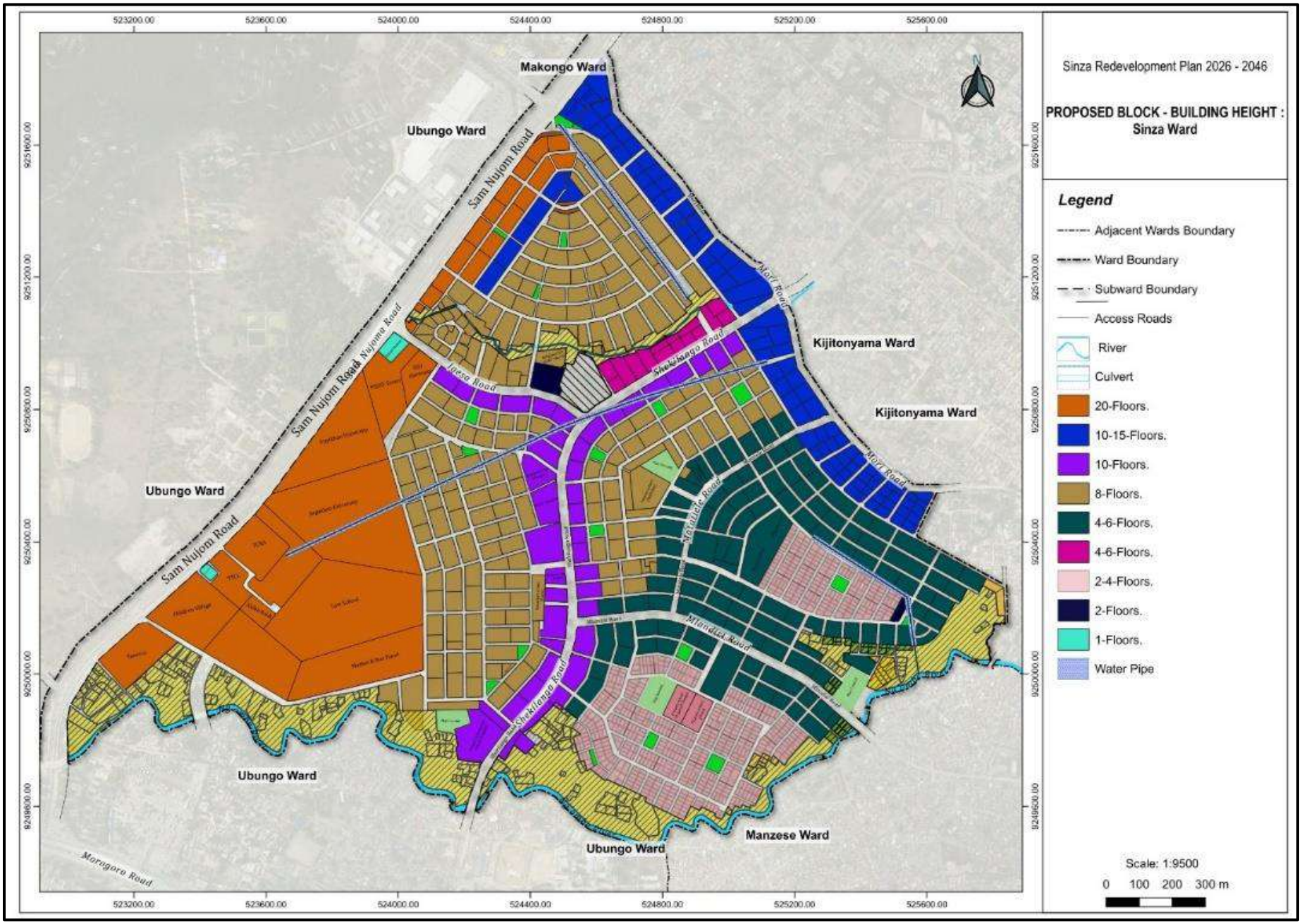
The proposed building heights in the Sinza redevelopment area are categorized into five development classes to guide orderly urban growth and ensure compatibility with land capacity, infrastructure availability, and planning standards.

The categories are as follows:

- **Low-Rise Buildings:** 2–4 storeys
- **Medium-Rise Buildings:** 4–6 storeys
- **High-Rise Buildings:** 8–10 storeys
- **High-Rise Buildings:** 10–15 storeys
- **Very High-Rise / Landmark Buildings:** Up to 20 storeys

These height categories are intended to support controlled densification, promote efficient land utilization, and ensure that future developments align with the structural capacity of the land, infrastructure availability, and urban design objectives.

The proposed building height distribution will also consider factors such as road hierarchy, land bearing capacity, plot size, environmental constraints, and proximity to major commercial corridors



Map no 9.2: Proposed Building Height

9.3 Consideration of building Height

9.3.1 Analysis of soil bearing Capacity for building infrastructure

The analysis indicates that soil bearing capacity for building infrastructure in Sinza is classified into three main categories, namely:

i. Low Bearing Capacity
ii. Moderate Bearing Capacity
iii. High Bearing Capacity

Technical analysis shows that areas with low land bearing capacity are suitable for low-rise developments of approximately one to two storeys.
Areas with moderate bearing capacity can support medium-rise buildings ranging from three to eight storeys. Meanwhile, areas with high land bearing capacity are capable of supporting high-rise developments ranging from ten to fifteen storeys. *(Refer Table No 9.2 and map 9.1.)*

This classification is important for guiding building height regulations, structural design, and safe urban redevelopment, ensuring that future development aligns with the physical capacity of the land while maintaining safety and sustainability standards.

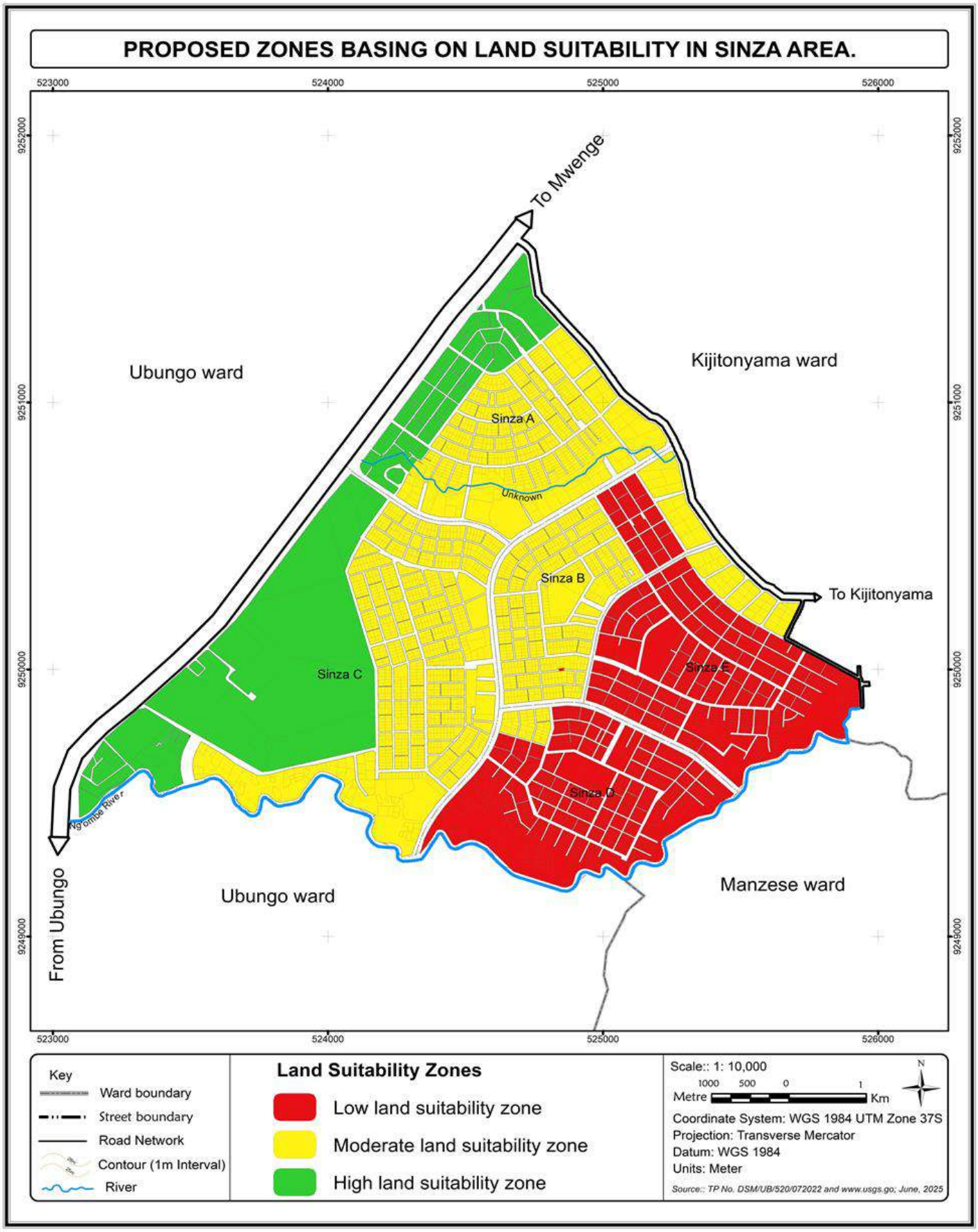
Table 9.2: Land bearing capacity

Land Bearing Capacity	Suitable Building Height	Development Type
Low Capacity	1–2 Storeys	Low-rise residential
Moderate Capacity	3–8 Storeys	Medium-density mixed development
High Capacity	10–15 Storeys	High-rise mixed use, commercial/residential

The results show that a large portion of the area (42.73%) has moderate land bearing capacity, which is suitable for medium-rise developments. Areas with high bearing capacity (26.67%) are appropriate for high-rise buildings, while areas with low bearing capacity (30.60%) should be restricted to low-rise development.

These guidelines aim to ensure that building heights correspond with the structural capacity of the land, thereby enhancing safety, sustainability, and orderly urban development within the Sinza Redevelopment Area.

Furthermore, geotechnical investigation must be conducted before the approval of any high-rise development to confirm the suitability of the soil conditions.



Map no 9.2: Proposed Zone Basing on Land Suitability in Sinza Area

9.3.2 Land Uses

In principle the size of the building will depend on the general land use of the area and the intensity of human activities. Sinza is a CBD of Ubungo Municipal council which the intensity of commercial activities mixed with residential use is very high. This implies that developers will aim at maximizing profit from their plots by exceeding recommended site coverage and/plot ratio.

9.3.3 Townscape

Building height is one of the elements involved in creating an attractive townscape of urban environment. Planned height zoning will tend to create a general pattern that is balanced and well defined.

9.3.4 Plot Sizes

Building height will always differ in proportion to the size of plots. In a situation where plots are too small, optimum use of land can be achieved through high raised build. The concept of plot coverage and plot ratio will always be considered in conjunction with height zoning. Since plots in Sinza are very small, developers would be advised to either combined some plots to form bigger plots that can accommodate high rise structures more spaciously. However, plots coverage and plot ratio have to closely monitored and controlled in order to prevent environment problems of overbuilding. The table below shows the plots sizes for different building heights.

Table 9.3: Building Height, Plot Size and Density Control

Building Height (Storeys)	Minimum Plot Size (m²)	Recommended Floor Area Ratio (FAR)	Maximum Plot Coverage	Development Control Requirement
2–4 Storeys	300 – 600	0.7 – 1.5	50%	Suitable for low-density residential development
4–6 Storeys	600 – 1,200	1.5 – 2.5	60%	Medium density residential / mixed use
8–10 Storeys	1,200 – 2,000	2.5 – 3.5	65%	Medium-high density development
10–15 Storeys	2,000 – 4,000	3.5 – 5.0	70%	High-rise mixed-use or commercial
Above 20 Storeys	≥ 4,000	5.0 – 7.0	70%	Landmark or special commercial development

Source: Literature Review

9.4 Building Height Control Criteria

It explains why some areas allow 20 floors while others allow only 4–6 floors, using factors like:

- road width
- infrastructure capacity
- plot size
- land bearing capacity
- environmental protection

9.5 Site Coverage and Plot Ratio Standards

The construction of new structures shall follow the urban planning standards in the case of site/ plot coverages. This means that plots with block plan development (joined plots) will have a plot coverage ranging from 40%-50% whilst single plots will have 60%-80% plot coverage.

The plot ratio standards will base on the proposed building height zoning as seen below;

Table 9.4: Proposed Plot Ratio Standards

Building height zoning (No. of floors)	Maximum Plot ratio
20 floors	10
10-15 floors	7.5
8 floors	4
4-6 floors	3
2-4 floors	2.5
1 floor	0.8

Source: Analysis carried out.

9.6 Setbacks

The site setbacks will follow urban planning standards meaning, plots with block plan development will have setbacks of 12 meters to the front, 3 meters to the sides and 5.5 meters at the rear. Whilst for single plots with areas less than 300m^2, they will have setbacks of 5 meters to the front, 1.5 meters to the sides and 3 meters at the rear.

9.7 Parking

Surface parking within the plot will be used though this may not be enough for areas with multi-storey building thus we recommend construction of basement parking to cater for the needs. The parking ratio that is recommended based on the type of function/ use is as seen below. This will be used to calculate the total number of parking bays required in the plots.

Table 9.5: Parking Ratio Standards

FUNCTION/ USE TYPE	PARKING RATIO
Residential	2 bays per apartment
Office	5 bays per 500 m^2
Commercial	5 bays per 1,000 m^2

Source: The Urban Planning (Planning Space Standards) Regulations, 2018

Each parking bay will cover an area of 12.5m^2 – 15m^2 depending on the design. Circulation areas for the movement of cars in the basement parking should also be considered based on the architectural standards.

9.8 Community Services Proposal.

Table 9.6: Community Services – Current Status, 2046 Needs and Proposed Improvements

No	Service Type	Current Status	Estimated Needs (2046)	Proposed Improvements
1	**Primary Schools**	4 schools overcrowded, poor infrastructure, lack of land	6 schools (considering projected population ~51,600)	Add classrooms with multi-story buildings, increase laboratories, and TEHAMA facilities
2	**Secondary Schools**	2 schools insufficient	3–4 schools	Add classrooms with multi-story buildings, libraries, laboratories, and sports facilities
3	**Early Childhood Schools**	11 schools	To be determined	Upgrade existing facilities and construct multi-story buildings
4	**Health Services** (Hospitals, Small Health Centers & Clinics)	1 hospital, 13 clinics; limited space	5 clinics (1 per ~10,000 people)	Renovate buildings, construct multi-story facilities, expand laboratories, delivery rooms, and inpatient wards
5	**Markets**	3 markets; poorly organized	2–3 markets	Upgrade existing markets, expand areas for business activities
6	**Recreational Areas**	7 main areas, 16 open areas	10 areas	Establish multi-purpose facilities, improve open spaces, and allow rentals for sustainable management

No	Service Type	Current Status	Estimated Needs (2046)	Proposed Improvements
7	**Places of Worship**	3 large, 11 small	Upgrade existing	Renovate and improve buildings

9.9 Public Utilities Proposal

9.9.1 Public Utilities Requirements for the Projected Population of 71,489 by 2046

The projected increase in population to **71,489 people by the year 2046** is expected to result in a significant rise in the demand for public utilities and urban infrastructure within the planning area. Population growth is usually associated with the expansion of residential areas, commercial activities, institutions, and other socio-economic services. Consequently, the demand for reliable and efficient infrastructure services such as electricity, water supply, sewerage systems, telecommunication, transportation infrastructure, and clean energy will increase.

In order to ensure sustainable urban development and improve the quality of life of residents, relevant institutions will be required to strengthen and expand their infrastructure networks to meet the anticipated demand.

9.9.2 Electricity Supply

Electricity supply within the planning area is provided by Tanzania Electric Supply Company Limited. With the projected population growth, the demand for electricity is expected to increase due to the expansion of residential developments, commercial activities, and institutional establishments.

To meet the future demand, the following measures will be necessary:

- Expansion of electricity distribution infrastructure, including transformers and power distribution lines.
- Strengthening of the electricity grid to ensure reliable and stable power supply.
- Extension of electricity services to newly developed residential, commercial, and institutional areas.

9.9.3 Water Supply and Sewerage Services

Water supply and sewerage services in the area are managed by Dar es Salaam Water and Sewerage Authority. The projected increase in population will significantly increase the demand for safe and reliable water supply as well as effective wastewater management systems.

The following interventions will therefore be required:

- Expansion of water sources and water distribution networks.
- Improvement and expansion of sewerage infrastructure to enhance sanitation and environmental protection.
- Promotion of rainwater harvesting systems, particularly in large buildings and institutional developments.

9.9.4 Telecommunication Services

Telecommunication services are provided by Tanzania Telecommunications Corporation and other communication service providers. Rapid urban development and increased economic activities will lead to higher demand for reliable digital connectivity.

To accommodate this demand, the following improvements will be required:

- Expansion of internet and telephone infrastructure.
- Installation of additional communication towers and fibre optic networks.
- Enhancement of reliable communication services for households, institutions, and businesses.

9.9.5 Natural Gas Supply

Natural gas supply infrastructure in Tanzania is developed and coordinated by Tanzania Petroleum Development Corporation. As urban development expands, the demand for clean and affordable energy sources will increase.

The following measures will therefore be important:

- Expansion of natural gas distribution networks to residential and commercial areas.
- Promotion of natural gas as an alternative clean energy source to reduce dependence on environmentally harmful fuels such as charcoal and firewood.

9.9.6 Local Roads Infrastructure

Local roads infrastructure within the planning area is managed by Tanzania Rural and Urban Roads Agency. Population growth will result in increased use of local roads and associated infrastructure.

To improve accessibility and mobility, the following actions will be required:

- Improvement and expansion of local road networks.
- Construction and upgrading of stormwater drainage systems to minimize flooding.

- Upgrading of gravel roads to tarmac or concrete surfaces in high-traffic areas.

9.9.7 Trunk Roads Infrastructure

Major roads and trunk roads are managed by Tanzania National Roads Agency. The anticipated increase in population and economic activities will lead to higher traffic volumes along major corridors.

To address this demand, the following improvements will be necessary:

- Expansion and upgrading of major road corridors.
- Improvement of road intersections to enhance traffic flow.
- Installation of road safety infrastructure including road signs and street lighting.

9.9.8 Transit Oriented Development

Promotion of Transit Oriented Development will be essential in ensuring efficient urban mobility and sustainable land use. This approach encourages high-density and mixed-use developments around public transport corridors.

Implementation of this concept will contribute to:

- Reduction of traffic congestion.
- Improved accessibility to public transport services.
- Efficient and sustainable land use within the planning area.

9.9.9 Fire and Rescue Services

With the increasing number of multi-storey buildings and higher population density, the demand for effective fire and rescue services will increase. Fire and emergency services in Tanzania are provided by the Tanzania Fire and Rescue Force.

To improve emergency response capacity, the following measures will be required:

- Strengthening fire and rescue infrastructure, equipment, and service capacity.
- Improving road accessibility and widening selected roads to allow smooth movement of fire engines and emergency response vehicles.

Table 9.7: Utility Service Coverage Targets for 2046 (Population: 71,489*)*

S/N	Utility Service	Responsible Institution	Current Urban Planning Target	Target Coverage by 2046	Estimated Population / Households Served	Planning Implication
1	Water Supply	Dar es Salaam Water and Sewerage Authority	Universal access in urban areas	95 – 100%	67,915 – 71,489 people	Expansion of water distribution networks and storage facilities
2	Sewerage Services	Dar es Salaam Water and Sewerage Authority	Improved sanitation coverage	60 – 70%	42,893 – 50,042 people	Development of sewer systems and wastewater treatment facilities
3	Electricity Supply	Tanzania Electric Supply Company Limited	Urban electrification	95 – 100% households	16,978 – 17,872 households	Expansion of transformers and electricity distribution lines
4	Telecommunication Services	Tanzania Telecommunications Corporation	Full digital connectivity	≈100% coverage	Entire population	Expansion of fibre optic network and communication towers
5	Natural Gas Supply	Tanzania Petroleum Development Corporation	Clean energy transition	30 – 40% households	5,300 – 7,150 households	Expansion of natural gas pipelines and household connections
6	Local Road Access	Tanzania Rural and Urban Roads Agency	Urban accessibility	100% access to road network	Entire population	Upgrading and maintenance of local roads and drainage
7	Trunk / Major Roads	Tanzania National Roads Agency	Efficient regional connectivity	Improved road capacity	Entire population	Widening of main roads and improvement of junctions
8	Public Transport Access	Transit Oriented Development	Efficient urban mobility	90 – 100% access to public transport	64,340 – 71,489 people	Development of mixed land uses near transport corridors

Source: Urban planning standards and projected population analysis for 2046.

9.10 Architectural Conceptual Proposal

Taking a sample of Sinza A area where 8 plots are joined together to form one block of 2000 sqm, based on the proposed land use, we can get a high rise building of 20 storeys with underground parking.

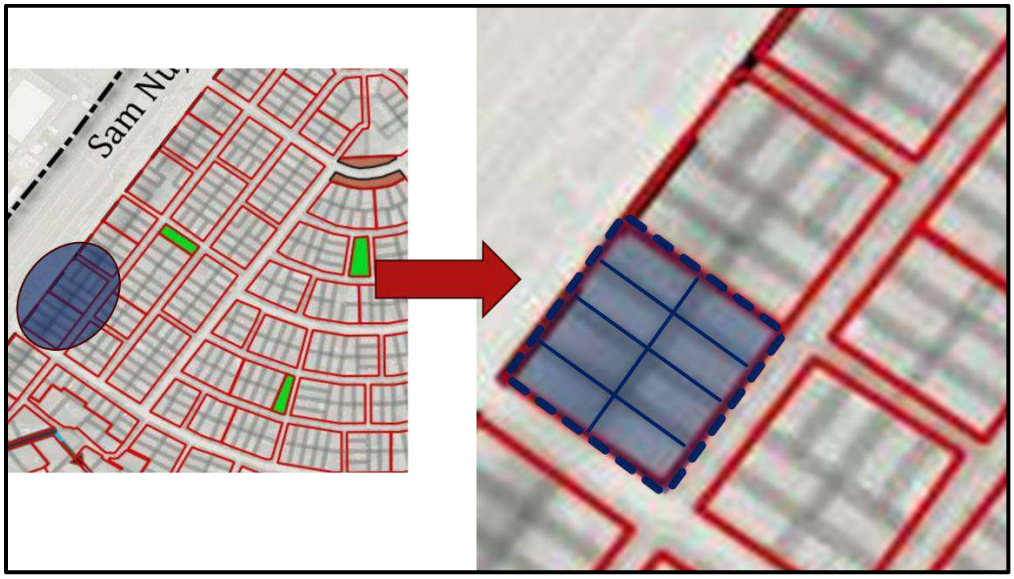


Plate 9.1: Illustration of joining of Plots at Sinza A

Plate 9.2: Conceptual Site Layout

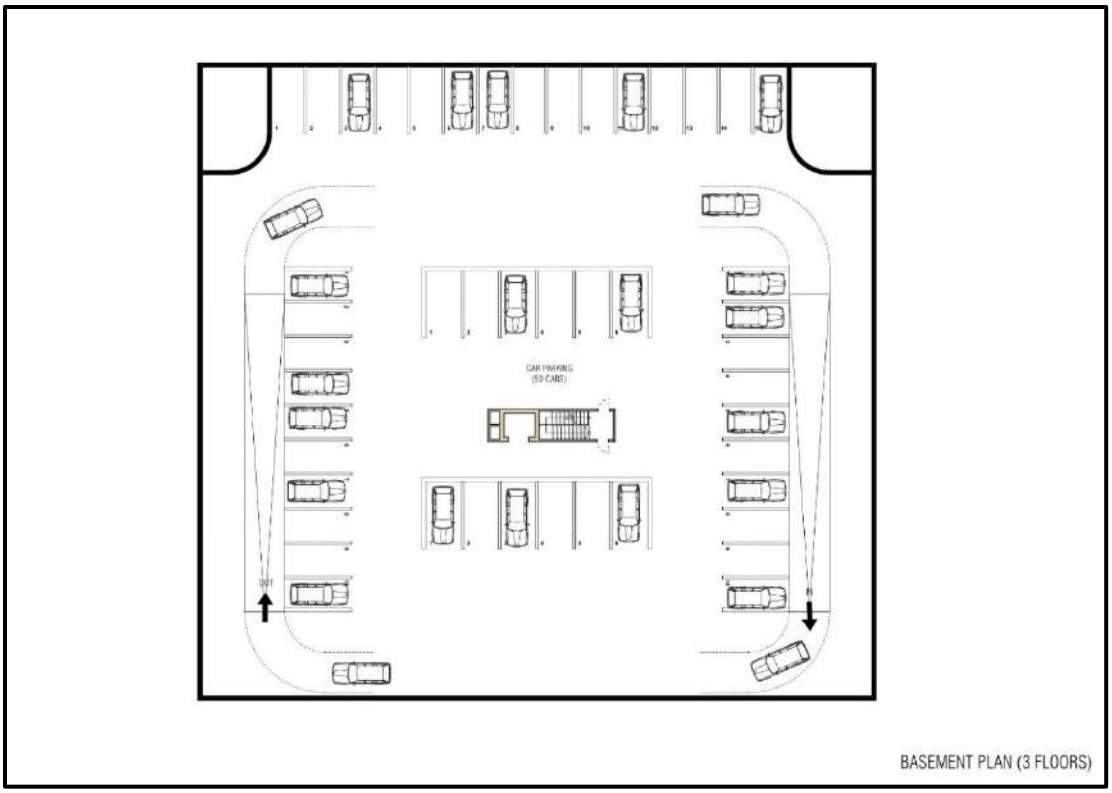


Plate 9.3: Conceptual Basement Layout

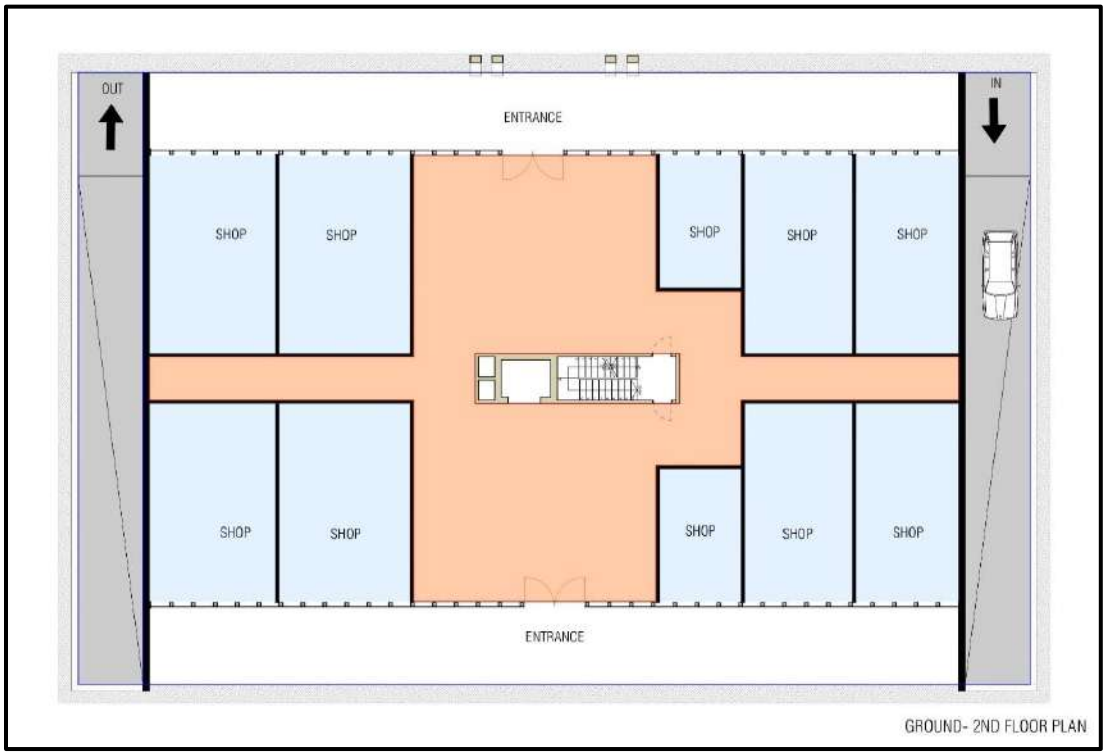


Plate 9.4: Conceptual Ground- Second Floor Layout (Commercial floors)

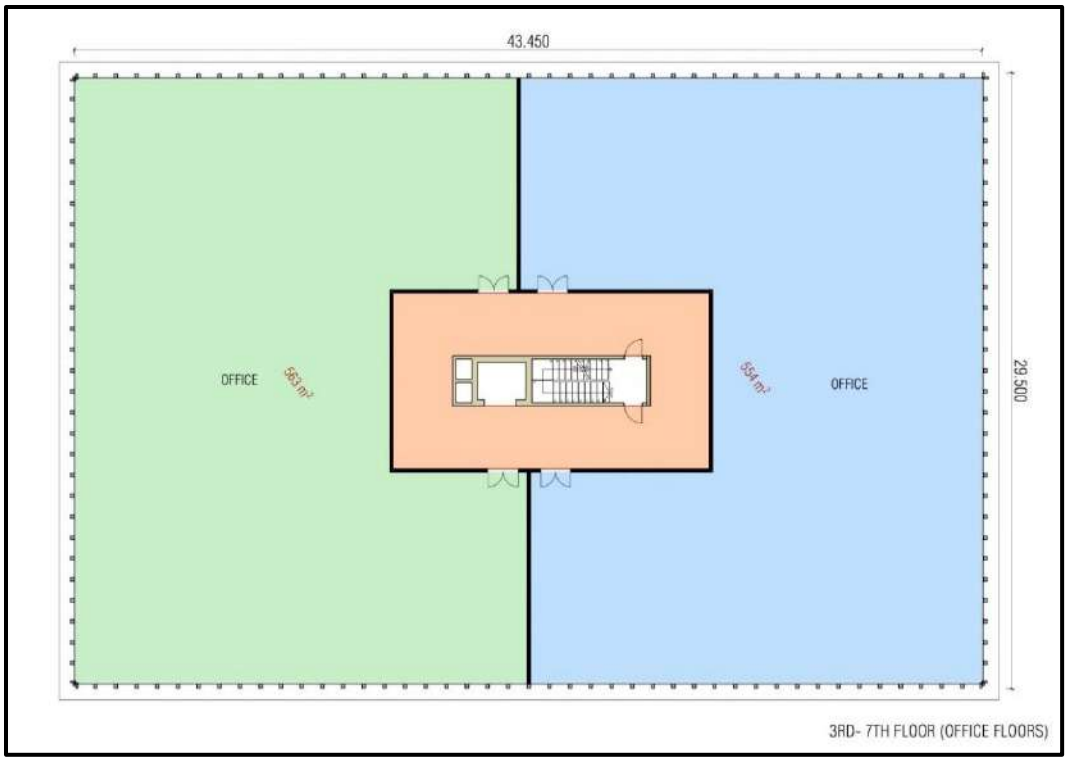


Plate 9.5: Conceptual Third- Seventh Floor Plan (Office Floors)

Plate 9.6: Conceptual Eighth- Nineteenth Floor Plan (Apartments)

Plate 9.7: Conceptual 3D View of the Proposed Multi-storey Mixed-use Building side view

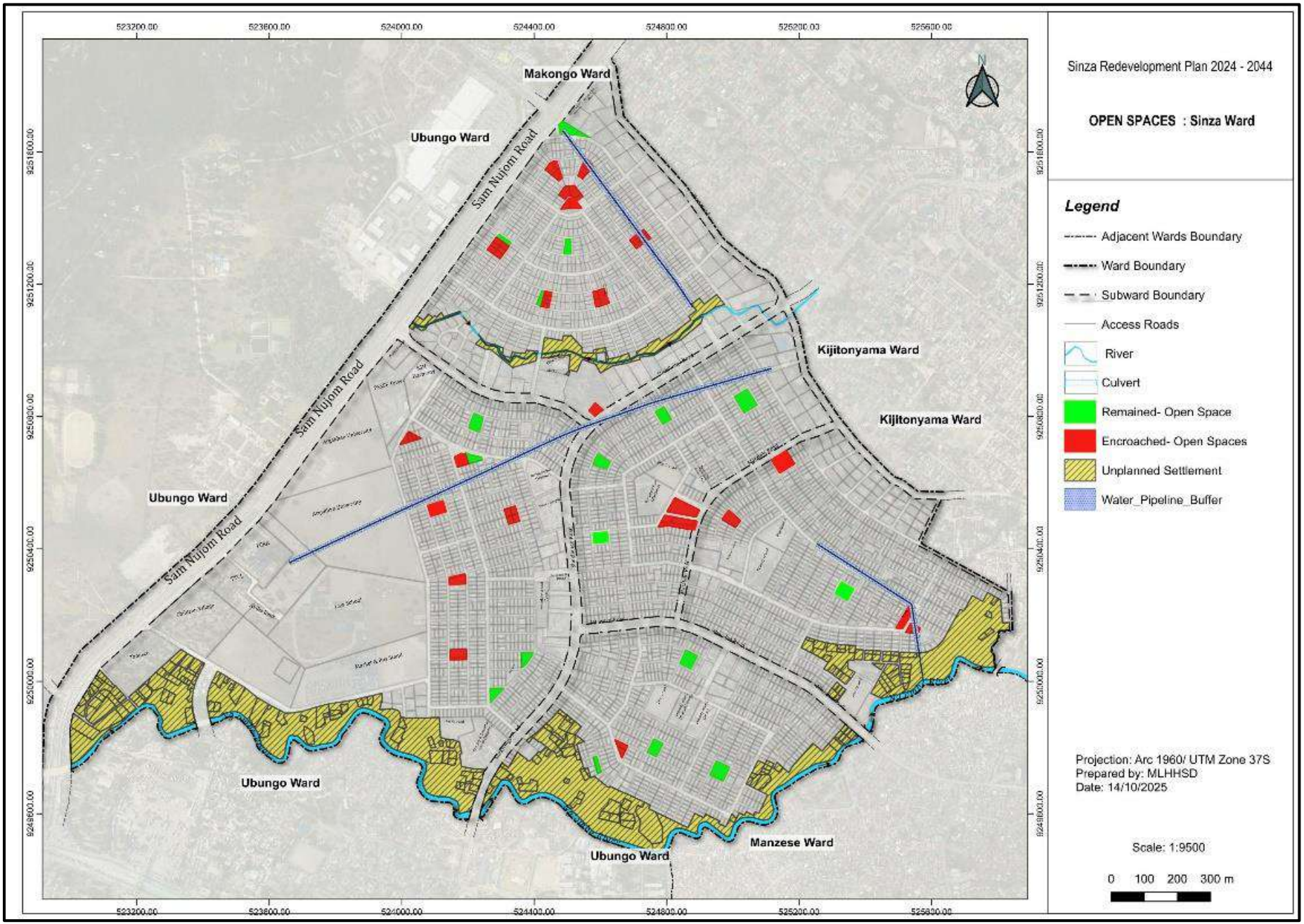
Plate 9.7: Conceptual 3D View of the Proposed Multi-storey Mixed-use building Front view

Plate 9.8: Conceptual 3D View of the Proposed Multi-storey Mixed-use *building*

9.11 Architectural Open Space Design Proposal

As per the field work data, there are currently 16 open spaces out of 40 that have not been encroached. Our main aim is to preserve the remaining open spaces and design them according to their designated use.

Taking a sample of Sinza C area where there is an open space that is currently used by sub-ward government offices to conduct public meetings, it can be transformed to form an open space with harmony that serves the community.


Sinza Redevelopment Plan 2024 - 2044
OPEN SPACES : Sinza Ward
Legend
Adjacent Wards Boundary
Ward Boundary
Subward Boundary
Access Roads
River
Culvert
Remained- Open Space
Encroached- Open Spaces
Unplanned Settlement
Water_Pipeline_Buffer
Makongo Ward
Ubungo Ward
Kijitonyama Ward
Kijitonyama Ward
Ubungo Ward
Ubungo Ward
Ubungo Ward
Manzese Ward
Sam Nujom Road
Sam Nujom Road
Sam Nujom Road
Projection: Arc 1960/ UTM Zone 37S
Prepared by: MLHHSD
Date: 14/10/2025
Scale: 1:9500
0 100 200 300 m

Map 9.3: Location map showing the sample open space chosen for design

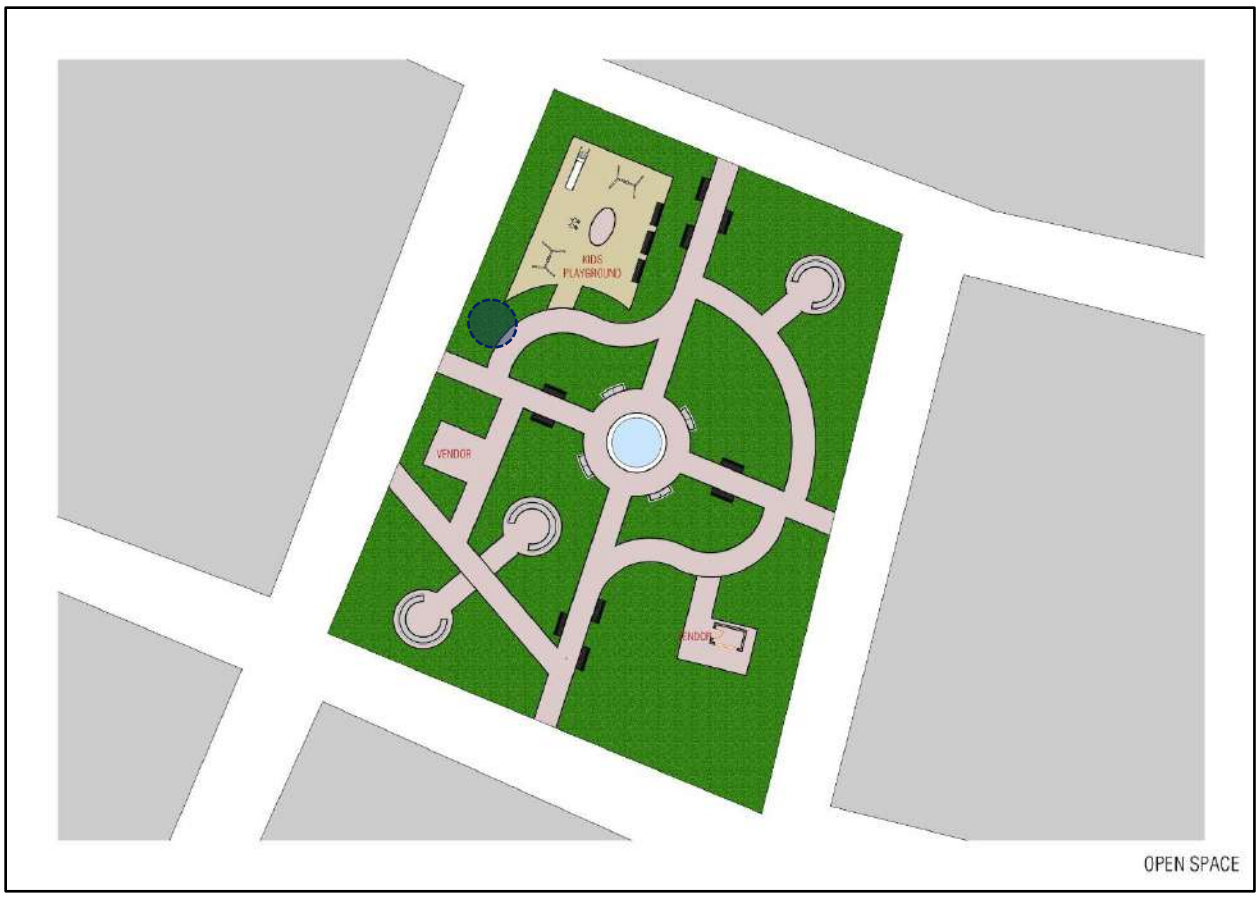


Plate 9.9: Conceptual Site Layout for Open space

Plate 9.10: Conceptual 3D Views of Open Space Design

Plate 9.10: Conceptual 3D Views of Open Space Design

CHAPTER 10
IMPLEMENTATION STRATEGIES FOR SINZA REDEVELOPMENT PLAN

10.1 Introduction
This chapter outlines the implementation framework for the Sinza Redevelopment Plan for the period 2026–2046. The strategies provide a clear roadmap for translating the proposed land-use plan and redevelopment objectives into actionable programmes, projects and policies. The implementation approach is based on phased development, institutional coordination, stakeholder participation and sustainable financing mechanisms.

10.2 Objectives of Implementation
The implementation strategies aim to:

- Ensure orderly and sustainable redevelopment of Sinza.
- Optimize land use through appropriate densification.
- Improve infrastructure and social services.
- Promote social inclusion and minimize displacement.
- Enhance environmental sustainability and climate resilience.
- Strengthen governance and development control.

10.3 Implementation Strategies
The successful implementation of the **Sinza Redevelopment Plan (2026–2046)** will depend on coordinated efforts between government institutions, private developers, and local communities. The strategy focuses on structured redevelopment approaches to ensure efficient land utilization, improved infrastructure, and sustainable urban growth.

10.3.1 Plot Amalgamation
Plot amalgamation is encouraged to enable efficient redevelopment and allow the construction of modern buildings that meet the proposed land use and building height regulations. Small and fragmented plots will be combined to form larger development parcels capable of accommodating high-rise and mixed-use developments, particularly along major road corridors.

10.3.2 Redevelopment Partnerships
The plan promotes lease and **joint development partnerships** between landowners, private investors, and government authorities. These partnerships will facilitate coordinated redevelopment, improve financing opportunities, and ensure that development aligns with the proposed zoning and building height guidelines.

10.3.3 Phasing of Development
Redevelopment will be implemented in **phases** to ensure orderly transformation of the area and to minimize disruption to existing activities. Priority will be given to areas along

major roads such as **Sam Nujoma Road, Shekilango Road, and Sinza Mori Road**, where infrastructure capacity and development pressure are highest.

10.3.4 Institutional Responsibilities

Implementation of the plan will involve collaboration among key institutions, including **local government authorities, planning authorities, infrastructure agencies, and private sector stakeholders**. These institutions will be responsible for enforcing zoning regulations, coordinating infrastructure improvements, and facilitating redevelopment initiatives.

10.4 Phasing of Redevelopment

Redevelopment shall be implemented in three phases:

Phase I: Planning and Enabling Phase (2026–2031)

- Land tenure regularization and cadastral surveys.
- Preparation of Detailed Local Area Plans (LAPs).
- Infrastructure upgrading in priority zones.
- Community sensitization and pilot redevelopment projects.

Phase II: Major Redevelopment Phase (2032–2038)

- Large-scale redevelopment of high-density residential areas.
- Construction of mixed-use developments along major corridors.
- Upgrading of social and economic infrastructure.
- Implementation of PPP-led housing projects.

Phase III: Consolidation and Sustainability Phase (2039–2046)

- Completion of redevelopment in remaining areas.
- Enhancement of public transport integration.
- Environmental restoration and open space development.
- Comprehensive review and updating of the redevelopment plan.

10.5 Institutional Framework

Implementation shall be coordinated by the **Local Authority** through a dedicated **Sinza Redevelopment Coordination Unit (SRCU)**, working in collaboration with:

- Ministry responsible for Lands and Human Settlements Development
- Utility agencies (water, sewerage, roads, electricity)
- Private developers
- Community organizations and residents

Clear institutional roles and inter-agency coordination mechanisms shall be established to ensure effective implementation.

10.6 Financing Mechanisms

- Public–Private Partnerships (PPP)
- Central and Local Government budget allocations
- Development charges and land value capture
- Donor and development partner funding
- Establishment of a **Sinza Redevelopment Fund**

10.7 Legal and Policy Instruments

Implementation shall comply with:

- Urban Planning Act and its regulations
- Land Act and Village/General Land regulations
- Building codes and development control guidelines
- Environmental Management Act (EIA requirements)

10.8 Alignment of Implementation Strategies with Zoning and Land-Use Proposals

10.8.1 Residential Zones

- **High-density residential zones**: phased redevelopment into multi-storey apartments.
- **Medium-density zones**: redevelopment through plot amalgamation and controlled densification.
- **Low-density zones**: gradual upgrading and infrastructure improvement.

10.8.2 Commercial and Mixed-Use Zones

- Concentration of mixed-use developments along:
    - Major arterial roads
    - Public transport corridors
- Ground floors for commercial use, upper floors for residential and offices.

10.8.3 Public and Social Facilities

- Reservation and redevelopment of land for:
    - Schools
    - Health centres
    - Markets
    - Community centres
- Integration of facilities within mixed-use developments where land is limited.

10.8.4 Transport and Infrastructure Zones

- Road widening and hierarchy enforcement.
- Non-motorized transport (NMT) corridors.
- Integration with mass transit systems.

10.8.5 Environmental and Open Space Zones

- Protection of river valleys and flood-prone areas.
- Development of neighbourhood parks and green buffers.
- Enforcement of development setbacks.

Table 10.1: Implementation Matrix (2026–2046)

Activity	Responsible Institution	Timeframe	Funding Source
Land tenure regularization	Local Authority, Ministry of Lands	2026–2030	Government Budget
Preparation of LAPs	Local Authority	2026–2031	Government / Donors
Infrastructure upgrading	Local Authority, Utilities	2027–2038	Government, PPP
High-density housing projects	Private Developers, PPP Unit	2032–2040	PPP / Private
Social facilities development	Local Authority, Sector Ministries	2030–2040	Government / Donors
Environmental protection projects	Local Authority, NEMC	2028–2046	Government / Donors
Monitoring and plan review	Local Authority	Every 5 years	Government

10.9 Monitoring and Evaluation

Monitoring and evaluation shall be conducted through:

- Annual progress reports
- Five-year plan reviews
- Performance indicators linked to land use efficiency, infrastructure provision and social outcomes

CHAPTER 11
DEVELOPMENT CONTROL GUIDELINES

11.1 Development Control Guidelines
The Development Control Guidelines are intended to regulate future developments within the Sinza Redevelopment Area in order to ensure orderly urban growth, efficient use of land, and compatibility between different land uses. These guidelines provide standards for building development, infrastructure provision, and environmental management.

11.2 Plot Amalgamation
To facilitate modern and efficient development, plot amalgamation is encouraged particularly along major roads such as Sam Nujoma Road, Shekilango Road, Sinza Mori Road, and Igesa Road. Combining small plots will allow the development of larger projects that can accommodate high-rise buildings, mixed-use developments, and adequate infrastructure such as parking and open spaces.

11.3 Building Height Regulations
Building heights shall follow the proposed zoning and road hierarchy within the redevelopment area. Higher buildings are permitted along major road corridors, while moderate heights are allowed within interior areas to maintain a balanced urban skyline and protect residential environments.

11.4 Plot Coverage and Floor Area Ratio (FAR)
Developments should adhere to approved standards of plot coverage and Floor Area Ratio (FAR) to ensure proper land utilization, adequate ventilation, and sufficient open space within development plots.

11.5 Setbacks and Building Lines
All new developments must observe the prescribed **setbacks and building lines** to ensure road safety, space for infrastructure expansion, and improved urban aesthetics. Setback requirements may vary depending on the road classification and building height.

11.6 Parking Provision
All new developments must provide adequate off-street parking facilities in accordance with planning standards. This is intended to reduce roadside parking and traffic congestion along major roads and within residential areas.

11.7 Infrastructure Provision
Developments must ensure proper connection to water supply, sewerage systems, drainage infrastructure, electricity, and solid waste management services. Developers may also be required to contribute to infrastructure improvements where necessary.

11.8 Environmental Considerations
All developments must comply with environmental regulations to ensure sustainable urban development. Particular attention should be given to stormwater management, flood control, waste management, and preservation of environmentally sensitive areas.

11.9 Urban Design and Development Guidelines
The Urban Design Guidelines complement the land use and development control framework by promoting an orderly, attractive, and sustainable urban environment in Sinza. They provide standards and principles for building design, streetscape, public spaces, and integration of mixed uses.

11.9.1 Street Hierarchy and Road Frontage
- Buildings along major roads (Sam Nujoma, Shekilango, Sinza Mori, Igesa) should present active frontages, with commercial uses on ground floors and residential or office uses above.
- Interior streets should maintain moderate building heights and low-density development to preserve neighborhood character.
- Roads shall be expanded or upgraded where necessary to accommodate traffic from new developments.

11.9.2 Building Massing and Form
- High-rise buildings shall be concentrated along major corridors to form a coherent skyline, while interior areas shall maintain moderate heights.
- Buildings should incorporate step-backs and setbacks to reduce visual bulk, enhance sunlight access, and allow for public spaces.
- Mixed-use developments are encouraged, combining residential, commercial, and service industries vertically or horizontally.

11.9.3 Public and Open Spaces
- Developments must provide adequate public open spaces, plazas, and landscaped areas to enhance livability and community interaction.
- Existing parks and public facilities must be preserved, and new green spaces integrated into high-density areas.

11.9.4 Pedestrian and Bicycle Infrastructure
- Sidewalks, pedestrian crossings, and bicycle lanes should be incorporated in all major roads and new developments.
- Streetscape design should prioritize walkability, safety, and accessibility for all users.

11.9.5 Parking and Transportation Integration
- Off-street parking must meet minimum requirements for residential, commercial, and mixed-use developments.
- Parking areas should be landscaped and located to minimize disruption to street life.
- Integration with public transport nodes is encouraged to reduce traffic congestion.

11.9.6 Architectural Quality and Identity

- New developments should reflect modern urban design standards while being sensitive to the local context.
- High-quality materials, façade articulation, and architectural detailing are encouraged to enhance the visual character of streets and neighborhoods.
- Large-scale commercial and institutional developments should include landscaping and public access areas to promote urban vibrancy.

11.9.7 Sustainable Urban Development

- Incorporate energy-efficient building designs, water harvesting, and waste management solutions.
- Encourage use of green roofs, solar energy, and sustainable construction materials.
- Stormwater management must be integrated into site design to reduce flooding risks.

11.9.8 Integration of Social Infrastructure

- Schools, hospitals, markets, places of worship, and cemeteries must be retained and integrated into redevelopment designs.
- Developments should ensure easy access to community facilities for all residents.

11.9.9 Phased Redevelopment and Transition Management

- Redevelopment shall be implemented in stages, prioritizing areas with existing infrastructure and high development demand.
- Transitional strategies must protect existing residents, maintain access, and provide relocation options where necessary.

11.10 Wetlands, Rivers, and Water-Sensitive Areas

The Sinza Redevelopment Plan recognizes the importance of wetlands, rivers, and other water-sensitive areas in maintaining ecological balance, managing stormwater, and reducing flood risks. These areas are critical in guiding urban development, particularly in areas with high-density construction and major infrastructure.

11.10.1 Identification of Wetlands and Rivers

- All wetlands and rivers within Sinza A–E have been mapped and classified according to their ecological importance, size, and flood risk potential.
- Key waterways include Sinza River, its tributaries, and seasonal drainage channels, which traverse the sub-wards and connect to larger stormwater networks.
- Wetlands along low-lying areas act as natural flood retention and recharge zones.

11.10.2 Protection and Conservation

- Wetlands and rivers shall be preserved and protected from encroachment, particularly by high-density developments or industrial activities.

- A buffer zone of 30–50 meters is recommended along rivers and wetlands to prevent pollution, preserve biodiversity, and provide space for drainage infrastructure.
- Any proposed development near wetlands must undergo an environmental impact assessment (EIA) to ensure compliance with Tanzanian environmental regulations.

11.10.3 Integration with Urban Design

- Wetlands and rivers shall be integrated as green corridors within the urban landscape, offering recreational, aesthetic, and ecological benefits.
- Public access paths, walkways, and landscaped edges can be designed along rivers without compromising ecological integrity.
- Developments in proximity to water-sensitive areas should incorporate sustainable drainage systems (SuDS), retention ponds, and permeable surfaces to reduce runoff.

11.10.4 Flood Management and Drainage

- Rivers and wetlands play a key role in stormwater management. Development plans must avoid filling wetlands or altering river courses without mitigation measures.
- Areas identified as flood-prone shall have restricted building heights or lower-density development, and the land may be reserved for open spaces, parks, or stormwater retention basins.
- Infrastructure planning must ensure connectivity of natural drainage networks to prevent waterlogging and downstream flooding.

11.10.5 Policy and Regulatory Compliance

- All developments must comply with:
    - Environmental Management Act, 2004
    - Water Resources Management Act, 2009
    - Dar es Salaam Master Plan (2016–2036) environmental guidelines
- Encroachment, dumping of solid waste, or alteration of natural watercourses is strictly prohibited.

11.11 Protection of Road Reserves and Prohibition of Unauthorized Development

To ensure orderly urban growth, traffic safety, and infrastructure sustainability, the following measures shall apply within the Sinza Redevelopment Area:

11.11.1 Road Reserve Protection

- All road reserves are strictly protected and must remain free from any permanent or temporary construction.
- No building, fence, kiosk, or any structure shall encroach into the road reserve, including major roads such as Sam Nujoma Road, Shekilango Road, Sinza Mori Road, Igesa Road, Mlandizi Road, and Tandale Road.

- Road widening, future transport corridors, pedestrian pathways, and service infrastructure will rely on these protected reserves.

11.11.2 Prohibition of Business Activities in Road Reserves

- No business activities, stalls, markets, or commercial operations are allowed within road reserves.
- Vendors and informal businesses must be relocated to designated commercial plots or markets approved by the local authority.
- Enforcement of this regulation is critical to prevent traffic obstruction, maintain road safety, and allow smooth public transport movement.

11.11.3 Monitoring and Enforcement

- The local authorities will implement regular inspections to ensure compliance.
- Violations, including construction or commercial use within road reserves, will be subject to penalties, removal orders, or legal action.
- Public awareness campaigns will inform residents and business operators about the importance of preserving road reserves.

11.11.4 Integration with Urban Planning

- Road reserves will be maintained as part of a functional urban network, allowing safe movement of vehicles, pedestrians, and emergency services.
- Adjacent developments must respect building line regulations and setbacks to avoid encroachment and maintain aesthetic and functional streetscapes.

11.12 Protection of Water Pipelines and Buffer Zones

To safeguard essential water infrastructure and ensure uninterrupted water supply, the following measures shall apply within the Sinza Redevelopment Area:

11.12.1 Prohibition of Construction Above Main Water Pipelines

- No building, structure, or excavation is permitted directly above main water pipelines of 21-inch and 33-inch diameter.
- This includes residential, commercial, or industrial constructions. Any development in these areas is strictly prohibited.

11.12.2 Buffer Zones

- A buffer zone of at least 5–10 meters on either side of the main water pipelines must be maintained free from permanent structures.
- Buffer zones ensure easy access for maintenance, emergency repairs, and pipeline expansion.

11.12.3 Relocation and Compliance

- Any proposed redevelopment near these pipelines must coordinate with the water authority (DAWASA/DART) to avoid interference with the pipeline network.
- Developers must obtain approval before undertaking any excavation or land modification in proximity to pipelines.

11.12.4 Enforcement

- Local authorities will monitor compliance through regular inspections.
- Unauthorized construction or encroachment on pipeline corridors or buffer zones will be subject to legal action, removal, and penalties.

11.12.5 Integration with Land Use and Building Guidelines

- Land use zoning and building height proposals must respect pipeline corridors, ensuring safe distances from all infrastructure.
- Road and open space planning should consider pipeline locations to maintain both accessibility and public safety.

11.13 Protection of Open Spaces

To ensure environmental sustainability, recreational opportunities, and quality of life, all designated open spaces within the Sinza Redevelopment Area shall be strictly protected from development.

11.13.1 Prohibition of Construction in Open Spaces

- No building, structure, or business activity is allowed within areas designated as open space, including parks, playgrounds, and green corridors.
- Open spaces are reserved for recreational use, public amenities, and environmental purposes.

11.13.2 Maintenance and Management

- Open spaces shall be maintained by local authorities, community groups, or designated institutions to ensure accessibility and usability.
- Any unauthorized use or encroachment will be subject to legal enforcement and removal.

11.13.3 Integration with Urban Design

- Open spaces shall be strategically located to serve residential neighborhoods, commercial areas, and institutional zones.
- They shall act as buffers between high-density developments, enhancing urban aesthetics, ventilation, and microclimate.

11.13.4 Sustainable Use

- Open spaces may incorporate landscaping, walking paths, playgrounds, and stormwater retention features.
- They are critical for flood mitigation, environmental protection, and community well-being.

11.14 Implementation Strategy and Development Guidelines (with Stakeholder Inputs)

The successful implementation of the Sinza Redevelopment Plan (2026–2046) relies on coordinated action between government institutions, private developers, and local communities. The plan incorporates stakeholder recommendations to ensure orderly development, protection of critical infrastructure, and sustainable urban growth.

11.14.1 Plot Amalgamation and Redevelopment Partnerships

- Small and fragmented plots will be combined to allow efficient mixed-use redevelopment, particularly along major roads.
- Joint development partnerships between landowners, private investors, and government agencies will be encouraged to facilitate coordinated urban transformation.
- Stakeholder input: TANROADS and TARURA emphasize coordinated road widening and infrastructure alignment with plot amalgamation.

- **Plot amalgamation shall be mandatory for all high-rise developments** (buildings above 8–10 storeys) to ensure sufficient plot area for:
    - Structural stability of tall buildings
    - Adequate open space, setbacks, and parking
    - Integration of utility infrastructure (water, sewer, electricity, gas)
    - Safe pedestrian and vehicular circulation
- Small and fragmented plots may be combined to form larger development parcels capable of accommodating **high-rise and mixed-use projects**, particularly along **major road corridors** such as **Sam Nujoma Road, Shekilango Road, Sinza Mori Road, and Igesa Road**.
- **Joint development partnerships** between landowners, private developers, and public agencies are encouraged to facilitate coordinated redevelopment while ensuring compliance with building height and land use regulations.
- **Enforcement:** No high-rise building permits will be issued unless plot amalgamation requirements are satisfied and approved by the local authority.

11.14.2 Phasing of Development

- Redevelopment will occur in stages, prioritizing areas with high development pressure and adequate infrastructure.
- Stakeholder input: TPDC and DAWASA recommend careful sequencing near pipelines, gas lines, and water infrastructure to prevent service disruption.

11.14.3 Building Heights and Skyline Management

- Maximum building heights follow the proposed zoning and road hierarchy (20 storeys along major roads, lower heights in interior areas).
- Stakeholder input: TANESCO requires safe distances from substations; DAWASA prohibits construction over main water pipelines (21" and 33") and in buffer zones.

11.14.4 Protection of Infrastructure

- Road Reserves: No buildings, businesses, or informal activities are allowed in road reserves. (Stakeholder input: TARURA, TANROADS, LATRA)
- Water Pipelines: No construction or excavation over main water pipelines; buffer zones of 5–10 m must be maintained. (Stakeholder input: DAWASA)
- Gas Lines and PRS: Buildings must leave space for gas pipeline corridors and Pressure Reduction Stations. (Stakeholder input: TPDC)

11.14.5 Open Space Preservation

- All designated open spaces are strictly protected from development and reserved for recreational or environmental purposes. (Stakeholder input: TARURA, NEMC)

11.14.6 Integration of Social Infrastructure

- Schools, hospitals, markets, places of worship, and cemeteries shall be preserved and integrated into the redevelopment plan. (Stakeholder input: NEMC, LATRA)
- Public facilities should be upgraded to match redevelopment standards.

11.14.7 Parking, Traffic, and Public Transport

- Allocate off-street parking, park-and-ride facilities, and transport stands. (Stakeholder input: TARURA, TANROADS, LATRA)
- Designate zones for bodaboda and three-wheeler (bajaj) operations to reduce congestion along main roads.
- Ensure road widening and improved pedestrian/cycling routes to complement urban design.

11.14.8 Utilities and Service Infrastructure

- Provide water, sewerage, electricity, gas, and internet infrastructure in all new developments. (Stakeholder input: DAWASA, TPDC, TTCL)
- Firefighting equipment and access points must be included in all buildings and public spaces. (Stakeholder input: FIRE)
- Substations, poles, and underground utility corridors must be protected and integrated into redevelopment designs. (Stakeholder input: TANESCO).

11.14.9 Environmental and Sustainability Considerations

- Protect wetlands, rivers, and water-sensitive areas; integrate stormwater retention, landscaping, and green corridors. (Stakeholder input: NEMC)
- Reduce energy consumption in buildings (e.g., limit excessive glass use) and incorporate sustainable water management practices.

11.14.10 Monitoring and Enforcement

- Local authorities will enforce compliance with zoning, building heights, open spaces, pipeline buffers, and road reserves.
- Violations of regulations (construction over pipelines, road reserves, or open spaces) will be subject to penalties, demolition, or legal action.

- Periodic inspections will ensure alignment with stakeholder requirements and sustainability standards.

11.15 Land and Site Suitability Analysis for High-Rise Development

Before approval of **any high-rise building**, a comprehensive **land analysis** shall be conducted to ensure the site can safely accommodate tall structures and associated infrastructure.

11.15.1 Geological and Soil Assessment

- Conduct a geotechnical survey to determine soil type, bearing capacity, and settlement characteristics.
- Identify areas prone to landslides, erosion, or subsidence.
- High-rise buildings are only permitted on land that can safely support proposed loads and structural requirements.

11.15.2 Topography and Drainage

- Assess site elevation, slope, and natural drainage patterns.
- Avoid development in low-lying or flood-prone areas unless mitigation measures (retention ponds, raised foundations) are implemented.
- Ensure integration with existing stormwater management systems.

11.15.3 Environmental Considerations

- Conduct Environmental Impact Assessments (EIA) for proposed high-rise sites. (NEMC recommendation)
- Identify wetlands, rivers, watercourses, and other sensitive ecosystems. High-rise construction must avoid these areas or include strict mitigation measures.

11.15.4 Utility and Infrastructure Assessment

- Verify proximity to main water pipelines, gas lines, electricity substations, and sewer lines.
- Ensure development does not encroach on utility buffer zones or compromise maintenance access. (DAWASA, TPDC, TANESCO)

11.15.5 Land Ownership and Legal Status

- Confirm clear land ownership and compliance with all land-use regulations.
- Address any existing debts, easements, or rights-of-way that may affect development feasibility. (TANESCO, TARURA)

11.15.6 Recommendation

- No high-rise construction shall be approved without the submission and approval of a detailed land suitability report.
- Authorities must review and verify compliance with all geotechnical, environmental, infrastructure, and regulatory requirements.

CHAPTER TWELVE
PROJECT FINANCING MODELS FOR SINZA REDEVELOPMENT PLAN

12.0 Project financing models for Sinza redevelopment plan
Successful implementation of the Sinza Redevelopment Project requires sustainable and well-structured financing mechanisms. The following financing models can be adopted depending on the scale of development, stakeholder involvement, and financial capacity.

12.1 Lease Financing (Leasehold Model)
Under this model, the Government or landowner leases land or property to an investor for a specified period (typically 15–30 years or more). The investor undertakes development while paying agreed lease rent.

Advantages
- Reduces upfront capital requirements for investors.
- Ensures continuous revenue to the Government or Municipality.
- Allows phased development and better revenue planning.
- Retains long-term public control over land.

Disadvantages
- Investors may lack motivation for long-term investments due to limited ownership.
- Developed property may revert to the original owner after lease expiry.
- Potential disputes over lease terms and renewal conditions.

12.2 Joint Venture (Public–Private Partnership Model)
This model involves collaboration between landowners (or Government) and private investors. The landowner contributes land as equity, while the investor contributes capital, technical expertise, and construction services.

Advantages
- Reduces land ownership conflicts.
- Shares financial burden and risks.
- Profits are distributed according to agreed equity shares.
- Encourages inclusive urban redevelopment.

Disadvantages
- Management disagreements may arise.
- Profit-sharing arrangements can be complex.
- Requires strong legal agreements and transparency.

12.3 Sale Agreement Model (Transfer of Ownership)
In this model, land or property is sold to an investor through a formal legal agreement. Payment may be made in full or in installments.

Advantages
- Investor gains full ownership rights.
- Simplifies project management.
- Facilitates property resale and financing access.

Disadvantages

- Government or landowner loses long-term rental income.
- Risk of speculative development.
- Requires high upfront investment from the buyer.

12.4 Mortgage Financing (Loan-Based Model)

The investor or landowner secures financing from a bank or financial institution using land/property as collateral. Project revenues are used to repay the loan.

Advantages

- Enables large-scale development without full upfront capital.
- Financial institutions may provide technical oversight.
- Suitable for affordable and middle-income housing development.

Disadvantages

- Risk of financial loss if revenues are insufficient.
- Requires strong collateral security.
- Loan default may lead to property foreclosure.

12.5 Self-Financing (Full Ownership Financing)

The investor funds the redevelopment project entirely using personal or internal funds without loans or partnerships.

Advantages

- Full control over project decisions and profits.
- No profit-sharing or partnership conflicts.
- Faster implementation process.

Disadvantages

- Requires substantial capital.
- All financial risks are borne by one investor.
- Limits participation of smaller developers.

Table 12.1: Comparison of Financing Models

Sn	Criteria	Lease Financing	Joint Venture	Sale Agreement	Mortgage Financing	Self-Financing
1	Land Ownership	Retained by original owner	Shared (Land as equity)	Transferred to investor	Retained but used as collateral	Fully owned by investor
2	Initial Capital Required	Low for investor	Shared between parties	High	Medium–High	Very High

Sn	Criteria	Lease Financing	Joint Venture	Sale Agreement	Mortgage Financing	Self-Financing
3	Risk Distribution	Moderate	Shared	High for investor	High (loan risk)	Very High (single party)
4	Long-term Revenue for Municipality	Yes (lease payments)	Yes (profit share, taxes)	No (one-time payment)	Yes (through taxes & fees)	Yes (through taxes & fees)
5	Control Over Developme nt	Moderate	Shared	High (investor controlled)	High (investor controlled, bank oversight)	Full control
6	Suitability for Large-Scale Urban Redevelop ment	Good	Very Good	Moderate	Good	Limited (capital intensive)
7	Conflict Potential	Lease disputes	Management / profit disputes	Minimal after transfer	Loan default risk	Low (single decision maker)

Table 12.2: Financial Structuring Models for Sinza Redevelopment Project

Sn	Financial Model	Contributions / Capital	Benefits	Risks / Losses
1	**Lease Financing**	Investor: 100% of construction cost; Landowner: Land contributed through lease	Rental income for the landowner; low initial cost for the investor; easy phasing of development	Investor does not obtain full ownership; lower long-term incentive;

Sn	Financial Model	Contributions / Capital	Benefits	Risks / Losses
				possible lease agreement disputes
2	**Joint Venture (Partnership)**	Investor: 50–70% capital + technical expertise; Landowner: 30–50% land as equity	Risk sharing; participation of both parties; reduces land-related conflicts	Management disputes; challenges in profit sharing; complex contractual arrangements
3	**Build–Operate–Transfer (BOT / Sale)**	Investor: 100% capital investment	Full ownership; easier management; strong investor motivation	Landowner loses long-term income; high upfront cost for investor; risk of speculative development
4	**Mortgage Financing**	Investor: 20–40% equity, 60–80% loan financing	Enables large-scale investment; Financial and technical support; Costs can be spread over time	Financial risk; interest obligations and property collateral; delayed repayment may lead to property loss
5	**Owned Finance (Self-Financing)**	Investor: 100% upfront capital	Full management control; Full profit retention; faster decision-making	High initial capital requirement; Full risk borne by investor;

Sn	Financial Model	Contributions / Capital	Benefits	Risks / Losses
				challenging for small-scale investors

12.6 Linking Financing Models to the Sinza Compact City Concept

The proposed Sinza Redevelopment is based on the Compact City Concept, which promotes:

- High-density development
- Plot amalgamation
- Mixed land use
- High-rise buildings
- Efficient infrastructure use
- Reduced urban sprawl

To successfully implement this concept, financing must:

a) Encourage land consolidation (plot amalgamation)
b) Reduce resistance from existing landowners
c) Attract private sector capital
d) Ensure long-term Municipal revenue sustainability
e) Support phased high-rise development

12.7 Recommended Financing Strategy for Sinza Compact City

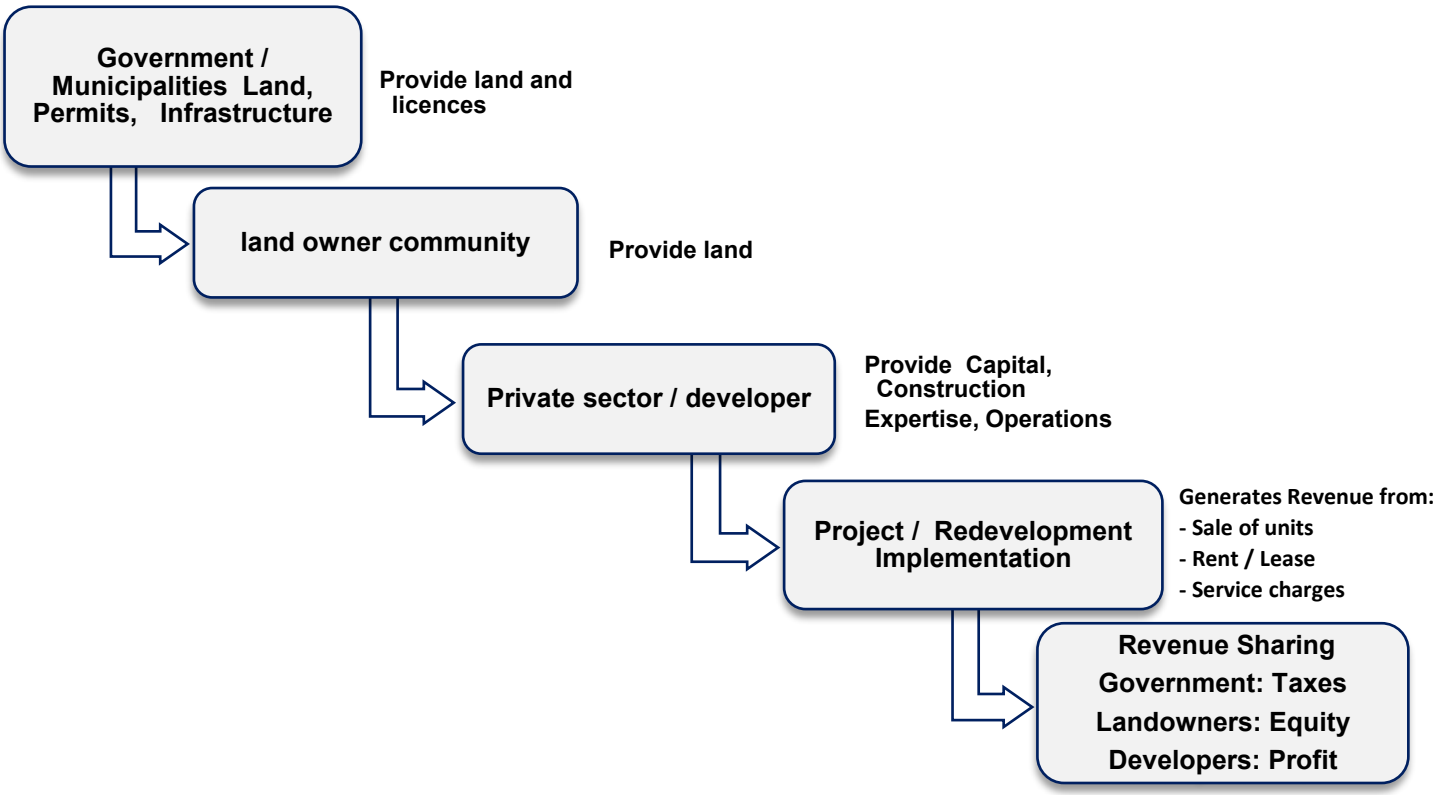
A Hybrid Model combining:

a. Joint Venture Model

- Landowners contribute small fragmented plots as equity.
- Developers finance and construct high-rise mixed-use buildings.
- Profits are shared proportionally.
- Reduces displacement conflicts.

b. Lease Financing for Strategic Public Land

- Municipality retains ownership of key areas.
- Private developers lease land for commercial and mixed-use towers.
- Generates sustainable Municipal income.



Flow Explanation

a) Government / Municipalities

- Provide land, permits, and basic infrastructure (roads, water supply, electricity).
- Participate in revenue through taxes and levies.

b) Landowners / Community

- Contribute land as equity or through lease arrangements.
- Receive profit or long-term income depending on the model (Joint Venture / Lease).

c) Private Sector / Developers

- Contribute capital, construction expertise, and project management.
- Earn profits from sales or rental income.

d) Project / Redevelopment Implementation

- Construction of residential units, commercial buildings, and supporting infrastructure.
- Implementation is carried out in phases (Phase I–III).

e) Revenue Sharing

- Profits are distributed according to each party's contribution.
- Government revenue is allocated through taxes and social development projects.
- Income for landowners and developers is shared based on the agreed terms.

12.8 Conclusion on Financing Models

The selection of an appropriate financing model is critical to the successful implementation of urban redevelopment projects. Each model presents different levels of ownership control, financial risk, revenue sustainability, and stakeholder involvement.
For large-scale urban transformation such as the Sinza Redevelopment Project, financing mechanisms that promote shared responsibility, reduce land conflict, and ensure long-term Municipal revenue are more sustainable.

While self-financing and sale agreements provide strong investor control, they may not adequately protect long-term public interests. Mortgage financing supports capital access but increases financial risk exposure.

Therefore, financing approaches that balance public interest and private investment are most suitable for structured urban redevelopment.

“The Sinza Compact City Redevelopment should adopt a hybrid financing framework combining Joint Venture and Leasehold models to ensure equitable land participation, sustainable Municipal revenue, and effective implementation of high-density mixed-use development.”

12.9 The State of the Economy and Financial Analysis

During the preparation of any project or plan, it is important to prepare a financial analysis in order to know whether the implementation of the plan or project will bring productivity.

Sinza area is an important and strategic area in collection of government revenue through various sources. The financial analysis will show the current state of collection and how the revenue will increase after the implementation of the plan.

The preparation of the financial analysis will also help to know in how much the citizens and owners of plots in the Sinza area will benefit from the program by increasing their economic situation.

12.9.1 Government Revenue

Government revenue includes various taxes including land rent, property tax and various business taxes.

12.9.1.1 Property Tax

The amount of property tax charged for a normal building is Shs. 18,000 per year. The tax amount charged for each floor in an apartment building is Sh.90,000 for one year.

On that basis the implementation of plan in Sinza area will enable the Government to increase income to a greater extent.

The statistics collected shows that more than 96 percent of the buildings in sinza are single floor building and only 4 percent are high buildings

The breakdown of estimated increase in government revenue through the source of property tax listed in the table below

12.9.2 Land Rent

75 percent of the area in Sinza is used for residential only and 25 percent of area has mixed land use including commercial and commercial residential

The new development plan will accommodate mixed land use such as special commercial zone, recreational areas, and many areas with various land uses. These changes in land use will allow land tax rates to increase.

The estimated increase in land rent revenue is shown in the table below

12.9.3 Revenue Through Business Taxes

The new development plan will enable the presence of many wholesale and retail businesses, a situation that will enable the government to collect more revenue in one area

12.9.4 Economic State of the Residents of Sinza

The economic status of the citizens of SINZA will increase due to the presence of many commercial activities in the area. The cost of living will drop because all social and commercial services will be available in one within the area.

Also, the implementation of the plan will attract many investors, a situation that will bring a wide economic scope. Also, the presence of many activities in one area will reduce the cost of transportation in the implementation of daily tasks, the economic situation will improve

12.9.5 Income for Plot Owners in the Sinza Area

Plot owners in the Sinza area are important stakeholders in the implementation of the plan. This is due to the fact that the entire area of Sinza has been planned, surveyed and owned by individuals and various institutions. If the plot owners ensured that their income will increase through this program, they will fully participate in the implementation of the program.

Currently, the value of land in the Sinza area is high compared to many areas of the Ubungo Municipal Council. The biggest challenge is the size of the plots that do not meet the standards for the construction of raised buildings.

The construction of high raised houses will bring productivity to plot owners and attract investors.

In order for the owners to benefit from the implementation of the plan, the question the plots algamation is very important.

12.9.6 Joint Venture Development

Due to the challenge of the size of the plots in the Sinza area, the plots must combine to get a size that meets the intended construction. On that basis, the plot owners are advised to enter in to a joint venture in the construction of their plots.

12.9.7 Types of Partnerships

There different types of plot partnership depending on the type of construction intended.

12.9.7.1 Plot Owners to Join and Do Construction Themselves

The first type of partnership is the owners of the plots in the same block to join and do construction themselves. In the implementation the above plan, the plot owners can make

an agreement themselves and prepare a legal contract that will guide them in implementing the plan. In achieving this plan, the plot owners can form their union and request a loan from financial institution.

Estimated Income for Plot Owners

Analysis of a 20-floor building built in an area of 2,000 square meters which is the area of eight plots.

- 3 floors commercial - each floor approximately 1,200 square meters
- 5 floors office use - each floor approximately 1,200 square meters
- 12 floors residential use - 72 apartments- each apartment approximately 200 square meters

The price of renting a business frame at moment in Sinza is Tsh. 30,000 to Tsh. 50,000 per month per square meter =Tsh. 108,000,000 – Tsh. 180,000,000

The price of renting an office room is Tsh 20,000 to 40,000 per month per square meter = Tsh. 120,000,000 - Tsh. 240,000,000

The price of renting one residential unity is Tsh 500,000 to 800,000 per month = Tsh. 36,000,000 – Tsh. 57000,000

The analysis above shows that the 20 floors mixed –use building is estimated to generate an income of Tsh. 264,000,000 – Tsh. 477, 000,000 per month

It is estimated that each plot owner can get an amount of Tsh. 33,000,000 - Tsh. 59,625,000 per month if they could build 20 floors building through partnership.

12.9.7.2 Joint Ventures with Investors

Another type of joint venture is the plot owners forming their union and looking for an investor and marking special agreements and preparing legal contract s that will protect their interest. In this type of partnership, the owners can agree with investor so that they can have a share in the development that will take place in their area.

Also, the owners can make investments by renting their land to the investor for a period of twenty years. Using this procedure the plot owners will be paid rent every month for entire life of the contract, they will also own part of the building according to the agreement they will make.