

REPUBLIQUE DU CAMEROUN

Paix-Travail-Patrie

DEPARTEMENT DU BUI

COMMUNE DE KUMBO



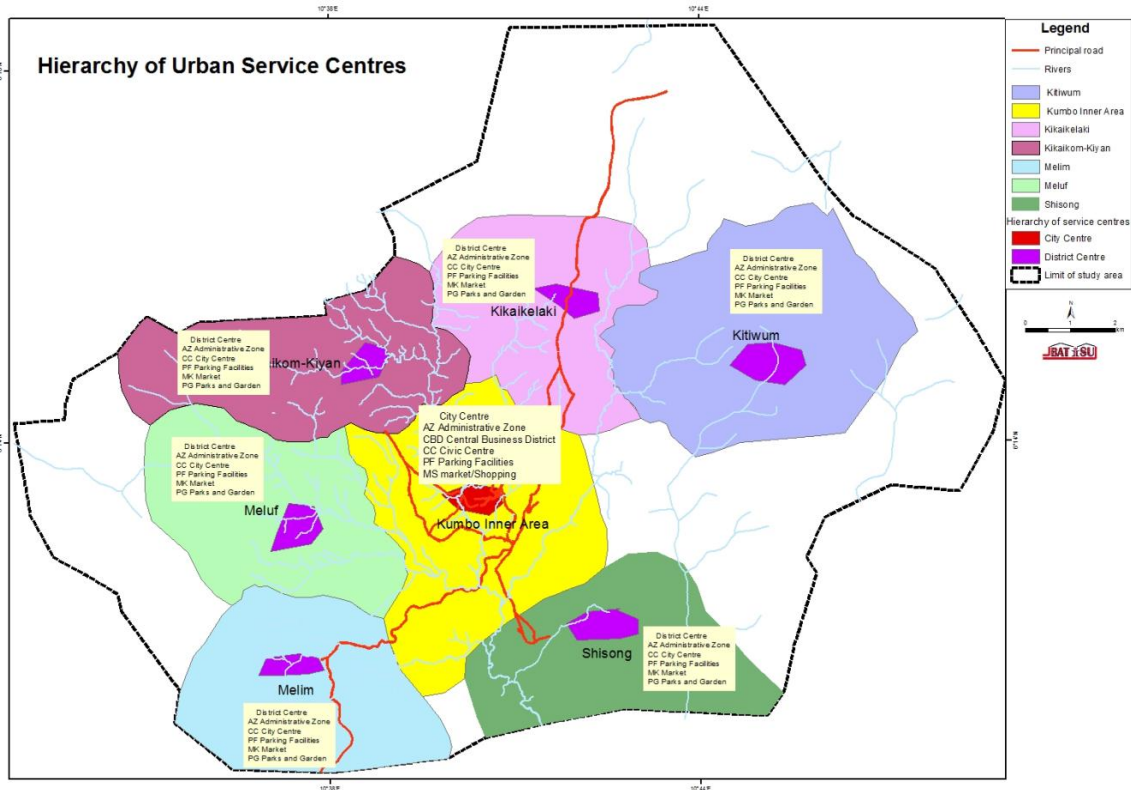
REPUBLIC OF CAMEROON

Peace-Work-Fatherland

BUI DIVISION

KUMBO COUNCIL

KUMBO LAND USE PLAN



PLANNING REPORT



**Bureau d'Appui Technique à l'Immobilier
Et Aux Services Urbains**

ETUDES URBANISTIQUES, ARCHITECTURALES, ENVIRONNEMENTALES,
SOCIO ECONOMIQUES, FONCIERES, CADASTRALES ET INGENIEURIE DU BATIMENT

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Rapport N°III

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MISSION STATEMENT

Kumbo, the Centre of Bui Division and the strategic urban centre of Bui Division is located on a suitable well drained and panoramic site. In spite of the existing largely unplanned urban development, it could be planned, upgraded and systematically extended to play its strategic role within the sub-region and offer a beautiful, healthy, safe, secured, comfortable, convenient and functional living environment which provides equitable opportunities to all its inhabitants and visitors. Kumbo should eventually take its place as an emerging modern urban centre by 2035 within the national development context. To do so, requires the effective involvement and participation of all its stakeholders and partners.

This plan aims at achieving the following overall goals in the long term: -

- ❖ To completely curb the premature invasion and conversion of rural land into urban land.
- ❖ To facilitate access to land in suitable areas, for urban growth and expansion.
- ❖ To completely prevent the spontaneous land subdivision and construction on the urban fringe.
- ❖ To gradually and progressively infill vacant plots within the existing built areas.
- ❖ To gradually and progressively upgrade degraded urban areas.
- ❖ To rehabilitate and upgrade existing road networks and infrastructure.
- ❖ To extend existing road networks to match rapid urban growth and expansion.
- ❖ To rehabilitate and upgrade existing public utility networks and installations.
- ❖ To make optimum use of available capacities of public and community facilities.
- ❖ To ensure the rational location and sitting of public and community facilities and
- ❖ To gradually and progressively segregate residential land uses according to emerging socio-economic status groups while maintaining

KUMBO LAND USE PLAN PLAN

I.0 INTRODUCTION

PLANNING REPORT



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I.0 INTRODUCTION

1.1 INTRODUCTION

The preparation of a Land Use Plan for Kumbo is the initiative of the Mayor of Kumbo Council and the Minister of Housing and Urban Development. It is within the framework of the following national objectives: -

- ❖ National growth, employment and durable economic development.
- ❖ Fight against poverty.
- ❖ Good governance.
- ❖ National decentralization strategy.

This involves establishing and validating through, a participatory process, which brings together concerned local stakeholders, the preparation of a land use plan for Kumbo with a short and medium term development priorities.

This plan should present the priority actions to be taken by Kumbo Council, all institutional partners, the private sector and the civil society, aimed at the following: -

- ❖ Reinforcing the attractiveness and competitiveness of Kumbo by making optimum use of development potentials of the area and taking concrete and appropriate actions.
- ❖ Creating conditions for growth through the judicious planning of economic poles which permit revenue generation from the informal, agro industrial Tourism and cultural sectors.
- ❖ Give attention to the planning principle which reinforces the relationship between development poles, urban centres and urban fringe areas undergoing urbanization.
- ❖ Improve on urban governance through the improvement of institutional frameworks ,which are adopted to the local context and promoting inter council relationships.

- ❖ Improve on the living conditions of the population through the dynamics of economic sector. Particular attention should be given to difficulties of access, in order to, secured land tenure which has been responsible for spontaneous and precarious housing.
- ❖ Develop the cultural potentials of Kumbo with its sub-regional context and the national urban development context.
- ❖ In other words, this involves preparing a plan which when implemented shall ensure the durable economic development of Kumbo while taking into account issuing environmental problems.

1.2 PLANNING APPROACH AND METHODOLOGY

The planning approach was largely consultative and participatory involving: -

- ❖ Carrying out a household survey based on predesigned questionnaire.
- ❖ Carrying out sectoral and thematic surveys of institutions, organizations and enterprises.
- ❖ Analysis and correlation of results of household, sectoral and thematic surveys.
- ❖ Presentation of results of surveys to key stakeholders for restitution.
- ❖ Carrying out of sectoral and thematic urban diagnosis.
- ❖ Generation of alternative development scenarios.
- ❖ Presentation of results of urban diagnosis and development scenarios to representatives of key stakeholders for restitution and selection of preferred development scenario.
- ❖ Development of preferred scenario into a plan accompanied with priority projects and rules and regulations.
- ❖ Presentation of plans, priority projects, rules and regulations for validation by representatives of key stakeholders and
- ❖ Presentation of final plans and planning report for approval.

1.2.3 Limitations

The preparation of the land use plan of Kumbo Town has been limited by the duration of time available due to budgetary constraints. This has limited the extent of mobilization and involvement of

the key stakeholders. More so, planning requires adequate time for consultation, analysis and processing of proposals.

KUMBO LAND USE PLAN

2.0 BACKGROUND OF KUMBO

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2.0 BACKGROUND OF KUMBO TOWN

2.1 SUB-REGIONAL CONTEXT

Kumbo is the administrative and economic capital of Bui Division with six subdivisions including; Kumbo, Jakiri, Mbiame, Nkum, oku and Nkor. In addition, Kumbo provides economic, social and cultural services to a wide hinterland covering Bui and Donga Mantung Divisions. Kumbo is also the main centre of a rich cash crop and foodstuff production region. As such, Kumbo functions as a centre of export for foodstuff and cash crops.

On the other hand, Kumbo largely depends on Bamenda, Bafoussam and Nigeria for the supply of manufactured goods and inputs into production. Kumbo also depends on Bamenda for administrative, higher education, services and recreational facilities.

In spite of these important functions and strategic location of Kumbo, it lacks a properly constructed and well maintained transportation network in the sub-region.

Table N° 1 : State of Sub-regional Transportation Networks

Item	Description	Distance in Km	State	Function
01	Kumbo -Ndop-Bamenda	110	Poorly constructed, partly tarred and poorly maintained	Transport farm produce, manufactured goods and passengers
02	Kumbo -Nkambe	75	Poorly constructed and irregularly maintained earth road	Transport farm produce, manufactured goods and passengers
03	Kumbo -Foumban	99	Poorly constructed and irregularly maintained earth road	Transport farm produce, manufactured goods and passengers
04	Kumbo -Mbiame	45	Poorly constructed and irregularly maintained earth road	Transport farm produce, manufactured goods and passengers
05	Kumbo -Nkor	54	Poorly constructed and irregularly maintained earth road	Transport farm produce, manufactured goods and passengers
06	Kumbo -oku	26	Poorly constructed and irregularly maintained earth road	Transport farm produce, manufactured goods and passengers

Source: National road network map (MINTP)

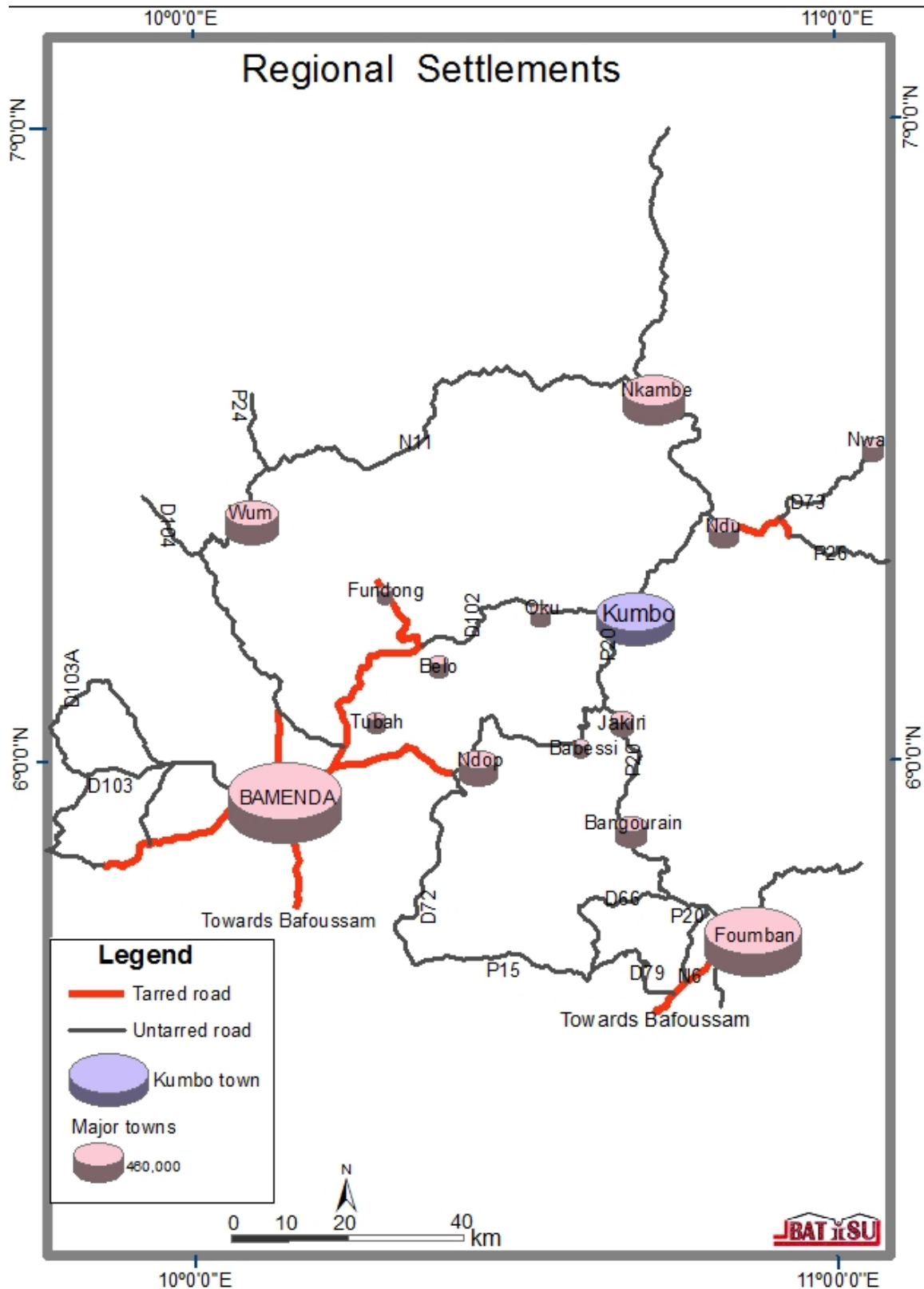


Figure 1 : Sub-regional context of Kumbo town

Table N° 2 : Sub-regional Hierarchy of Settlements

Item	Urban Centre	2012 Population	Position
01	Kumbo	111370	3
02	Bamenda	376735	1
03	Ndop	35978	6
04	Nkambe	23868	5
05	Foumban	96600	4
06	Ndu	17398	7
07	Nkor	6514	8
09	Bafoussam	317010	2

Source: RGPH

2.2 DELIMITATION OF PLANNING AREA

Figure 2 shows proposed limits of the planning area up to 2035 and beyond. These limits have been proposed based on:

- a) The minimum carrying capacity of land within the planning area which can accommodate more than the projected population of Kumbo by 2017.
- b) The need to control and curb the unnecessary urban sprawl which is costly to inhabitants, the council and the government.
- c) Existing physical features such as major streams and steep slopes which constrain urban expansion.
- d) Major roads, which divide, major land uses.
- e) Current direction of urban expansion.
- f) Availability of public utility networks and
- g) Availability of suitable land for urban development.

2.3 CHARACTERISTICS OF NATURAL SITE

The natural site of Kumbo is characterized by: -

- ❖ Numerous plateaus with steep slopes.
- ❖ Rocky steep slopes to the North and Southeast.
- ❖ Savannah shrub lands.
- ❖ Narrow watercourses with fast running streams.
- ❖ Cold dry temperatures.

The main natural constraints on urban development include the steep slopes, the boulders and the narrow valleys which make the construction of a coherent road network extremely difficult.

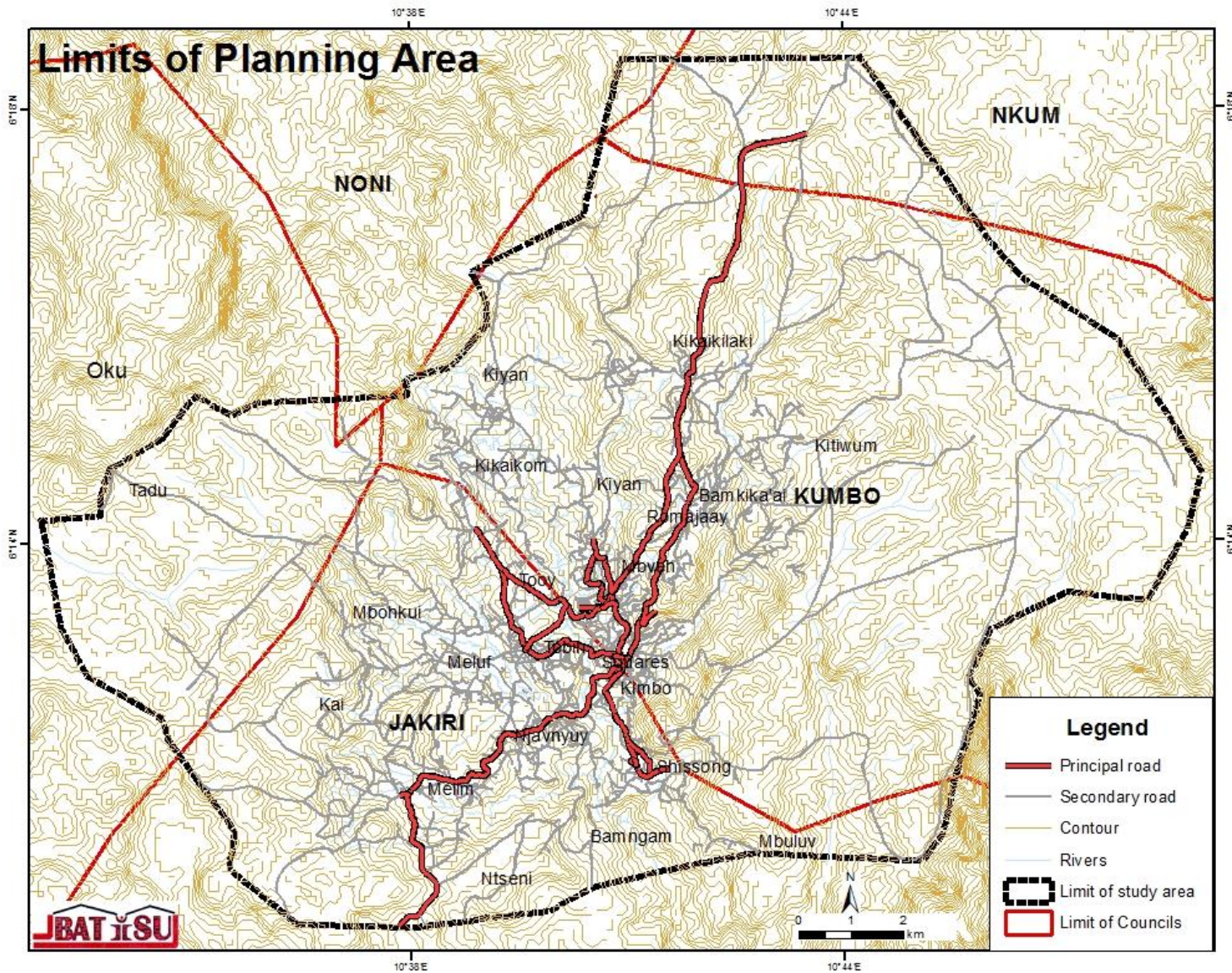


Figure 2 : Limits of Planning Area

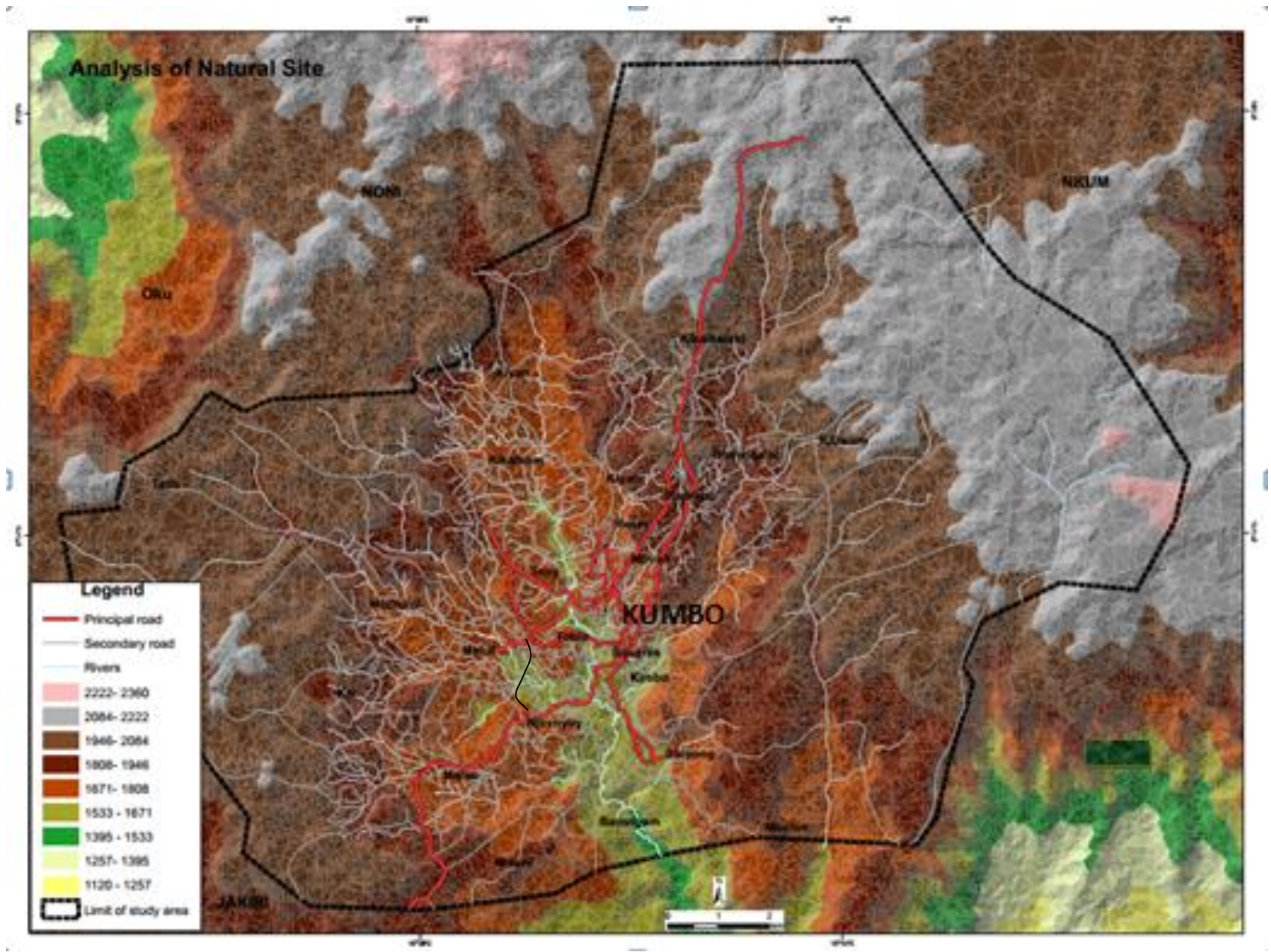


Figure 3: Characteristics of Natural Site

2.4 CHARACTERISTICS OF MAN-MADE SITE

The man-made site in Kumbo Town is characterized by: -

- ❖ Densely built Kimbo Squares, Mbveh and Tobin plateaux;
- ❖ Sparsely built steep slopes;
- ❖ Sporadically developed Shufaidoms;
- ❖ Organized land development in Bambui and Tobin plateaux;
- ❖ Spontaneous and haphazard construction on the urban fringe and
- ❖ An incoherent, poorly designed, irregularly maintained and un-tarred urban road network.

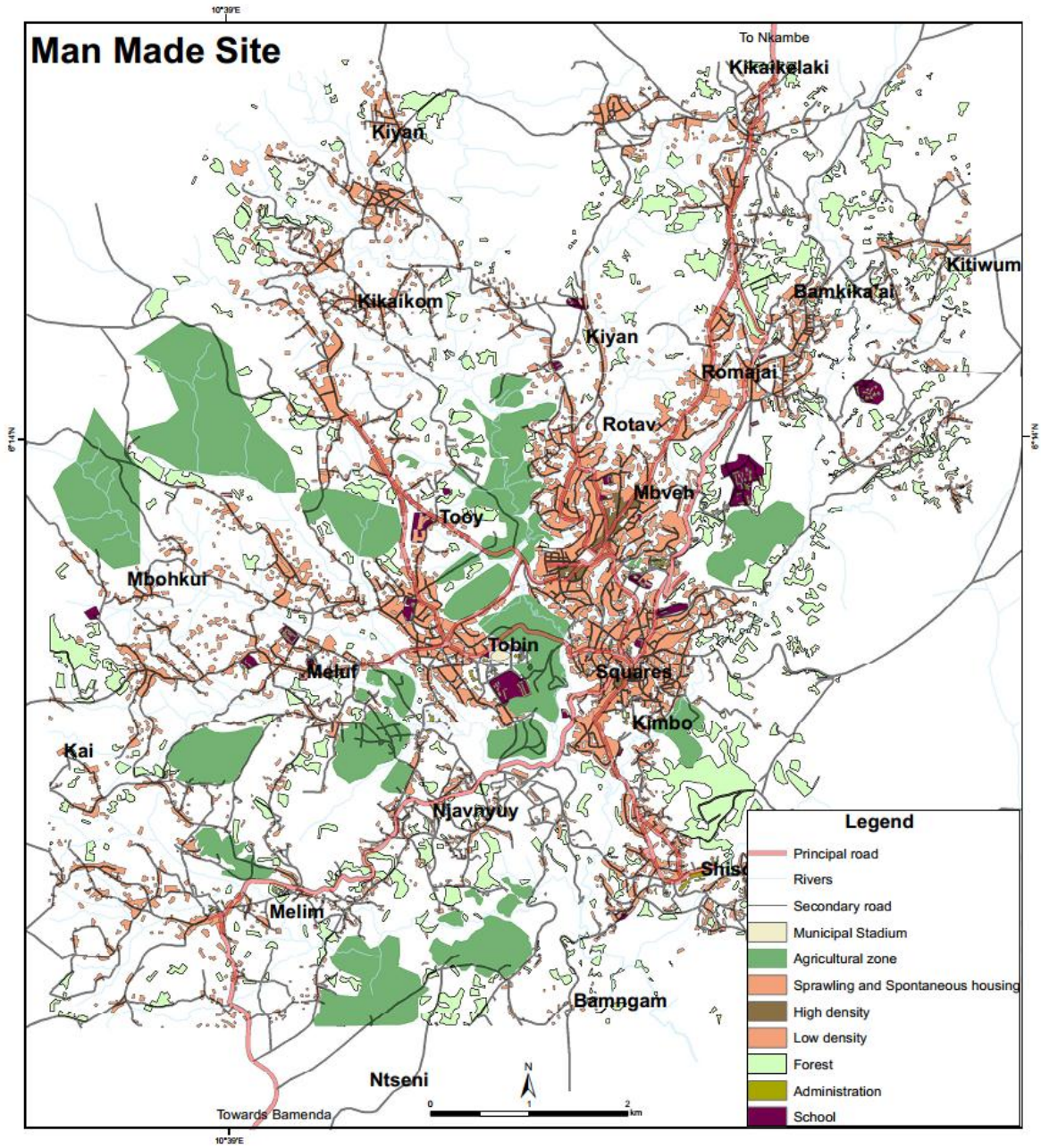


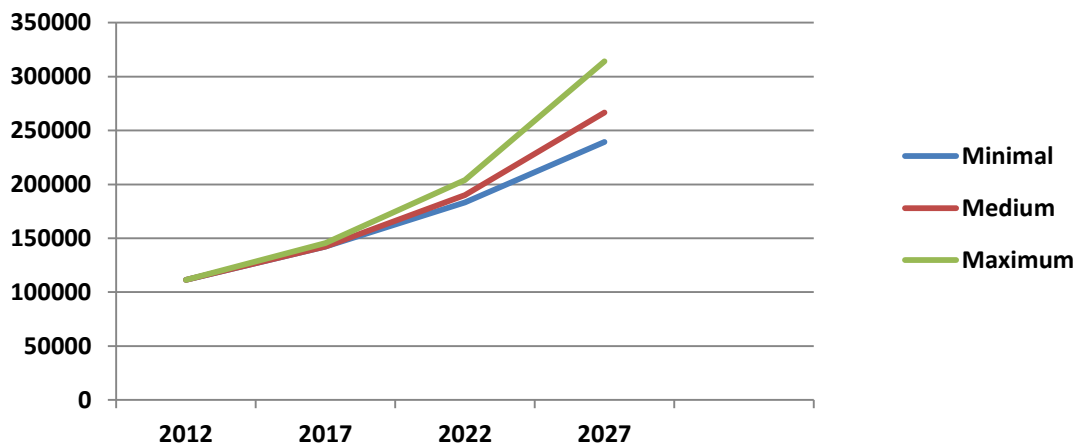
Figure 4 : Characteristics of Man-made Site

2.5 POPULATION PROJECTION

Table N° 3 : Projected population

PERIOD	Minimum Scenario		Medium Scenario		Maximum Scenario	
	Growth Rate	POPULATION	Growth Rate	POPULATION	Growth Rate	POPULATION
2012	4,8	111.370	–	111.370	–	111.370
2017	5 %	142.139	5 %	142.139	5,5%	145.556
2022	5,2%	183.143	6%	190.214	7%	204 149
2027	5,5%	239.360	7 %	266.784	9%	314 108

Source: BATISU Sarl



Graph N° 1 : Population Projection: 2012 – 2027

Table N° 3 and graph N° 1 show three variants of population projections for Kumbo Town from 2012 to 2027:

2.6 LAND CARRYING CAPACITY

2.6.1 Land Required for Urban Development in Kumbo

At the moment, the limits of urbanization in Kumbo are informal as they are determined by the premature invasion and conversion of rural into urban land. Consequently, urban development has taken more land than necessary as the town is sprawling without control. Within the present urban limits much buildable land is yet un-built and unoccupied.

Within the present urban limits much buildable land is yet un-built and unoccupied.

Table N° 4 : gross residential density of Kumbo

Total area of land within the present limits of urbanization in Kumbo (Area in hectares)	Gross residential density of Kumbo (persons/hectares)	Gross residential density of Bamenda (persons/hectares)
22300	5	50

Source: BATISU sarl

The gross residential density of Kumbo is 5 persons per hectare. This factor is low compared to the Gross residential density of Bamenda which is 50 persons per hectare.

The feasible gross residential density for Kumbo at horizon 2027 stands at 25 persons per hectare for the projected population by 2027 from the total land carrying capacity of the planning area.

2.7 DISTRIBUTION OF LAND WITHIN THE PLANNING AREA

Table N° 5 : Minimum Land carrying Capacities within the planning area

Zones	Area in hectares	%	Minimum Carrying capacity	Remarks	Year
Protected areas not suitable for urban development	7 337	33	–	Construction and habitation prohibited	2027
Area suitable for urban development	14 963	67	374 075	Occupation varies with type of land use	2027
Total	22 300	100	374 075		

Source: BATISU sarl

Considering a gross residential density of 25 persons per hectare, the minimum carrying capacity stands at about 374 075. This supposes a prevision of a larger surface area.

2.8 DEVELOPMENT SCENARIOS

The objectives of delimiting an urban area are:

- a) To make rational use of available urban land, infrastructure and services
- b) To minimize the need for the premature extension of utility networks and basic services

In practice, there are three alternative ways of accommodating the expected increase in population over the planning period:

- 1) Allow the present system of uncontrolled urban sprawl.
- 2) Maintain the present limits of urbanization and encourage the infilling of vacant plots and the construction of high rise buildings to accommodate population growth: 2012-2017
- 3) Progressively extend the limits of urban development to accommodate urban growth and expansion: 2017-2027.

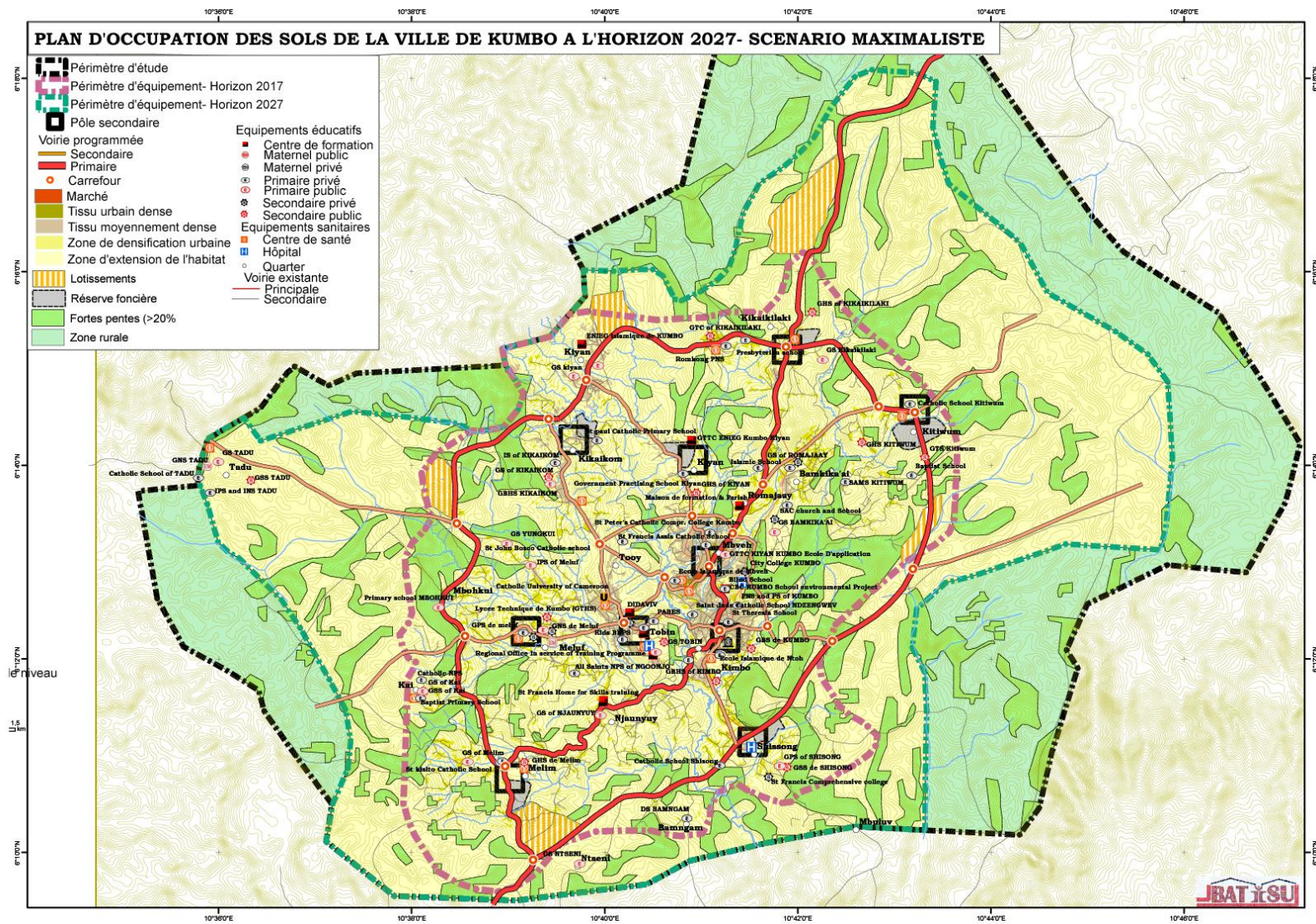


Figure 5 : Preferred Development Scenario

In the short term, 2012 to 2017, the second alternative contained in minimal scenario is feasible while in the medium and long terms (2017 and beyond) the medium and maximum scenarios are feasible.

2.9 RECOMMENDATIONS

It is recommended that urban development within the planning period of 2012-2027 should be concentrated within the proposed planning area. This requires that:

- a) The Kumbo council should make necessary arrangements to officially declare the urban perimeter to conform to the limits of the planning area.
- b) The subdivision of land outside the planning area into urban plots should be restricted.
- c) The extension of public utility networks outside the planning area should be controlled.
- d) The location of urban and social facilities and services should be concentrated within the planning area.

KUMBO LAND USE PLAN

3.0 URBAN SPATIAL STRUCTURE AND ORGANIZATION

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3.0 URBAN SPATIAL STRUCTURE AND ORGANIZATION

3.1 THE EXISTING SITUATION

3.2 OBJECTIVE

The central objective is to provide a spatial framework and organization which can continuously accommodate the growth and expansion of Kumbo Town.

3.3 THE SPATIAL STRUCTURE OF KUMBO TOWN

3.1.1 Guidelines for Spatial Evolution

The proposed spatial structure and organization of Kumbo is largely influenced by the existing pattern of urban road network, existing pattern of urban development and the topography of the area. It is largely based on developing a self contained satellite urban district on each plateau and connects it to the national highway from Bamenda through Kumbo to Nkambe or a proposed by-pass from Melim to Bamkikai Junction and internally tying it to a central primary road spine linking Melim to Tobin, mbveh and Kimbo Squares. Kumbo Town should be organized into several self contained urban districts where the residents are provided with their daily needs and should only travel to the Town centre for urban wide requirements.

3.1.2 Elements of Spatial Structure and Organization

The main elements of Kumbo spatial structure include:

- ❖ Kumbo Inner Area
- ❖ Kumbo urban districts
- ❖ Shufaidoms
- ❖ Neighborhoods
- ❖ Residential clusters
- ❖ Residential block
- ❖ Building plot

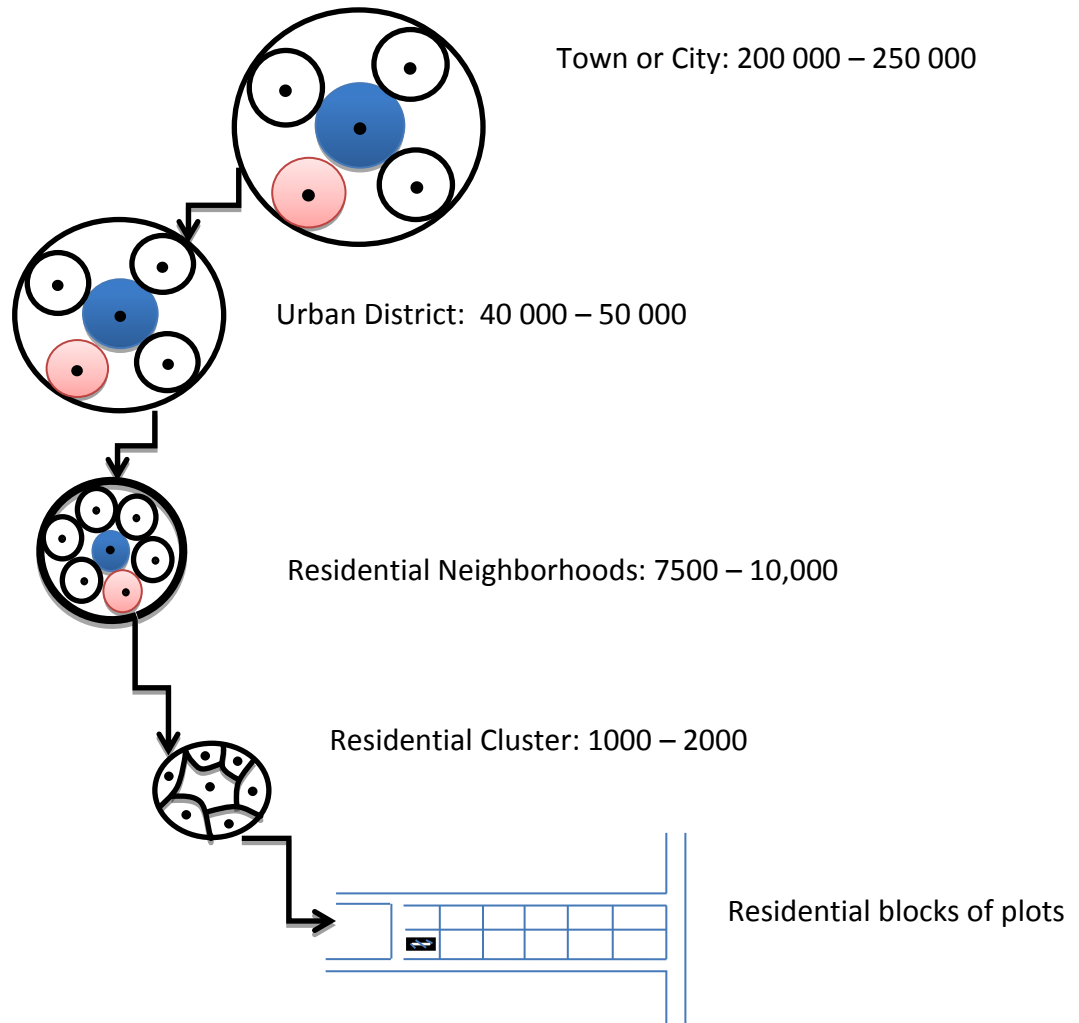
Kumbo has a population of about 111 370 people and likely to grow to over 314 108 by 2027. The proposed elements of urban structure for Kumbo should be made up of:

Table N° 6 : Proposed populations sizes of elements of urban spatial structure by 2027.

Item	Spatial Structure	Population
01	Kumbo Town	More than 200,000
02	Urban Districts	50,000 – 100,000
03	Residential neighborhoods	5,000 – 10,000
04	Residential clusters	500 – 1,000
05	Residential blocks	50 – 100

Source: BATISU sarl

3.1.3 Concept of Urban Spatial Structure



Graph N° 2 : Elements of Spatial Structure and Organization of Kumbo

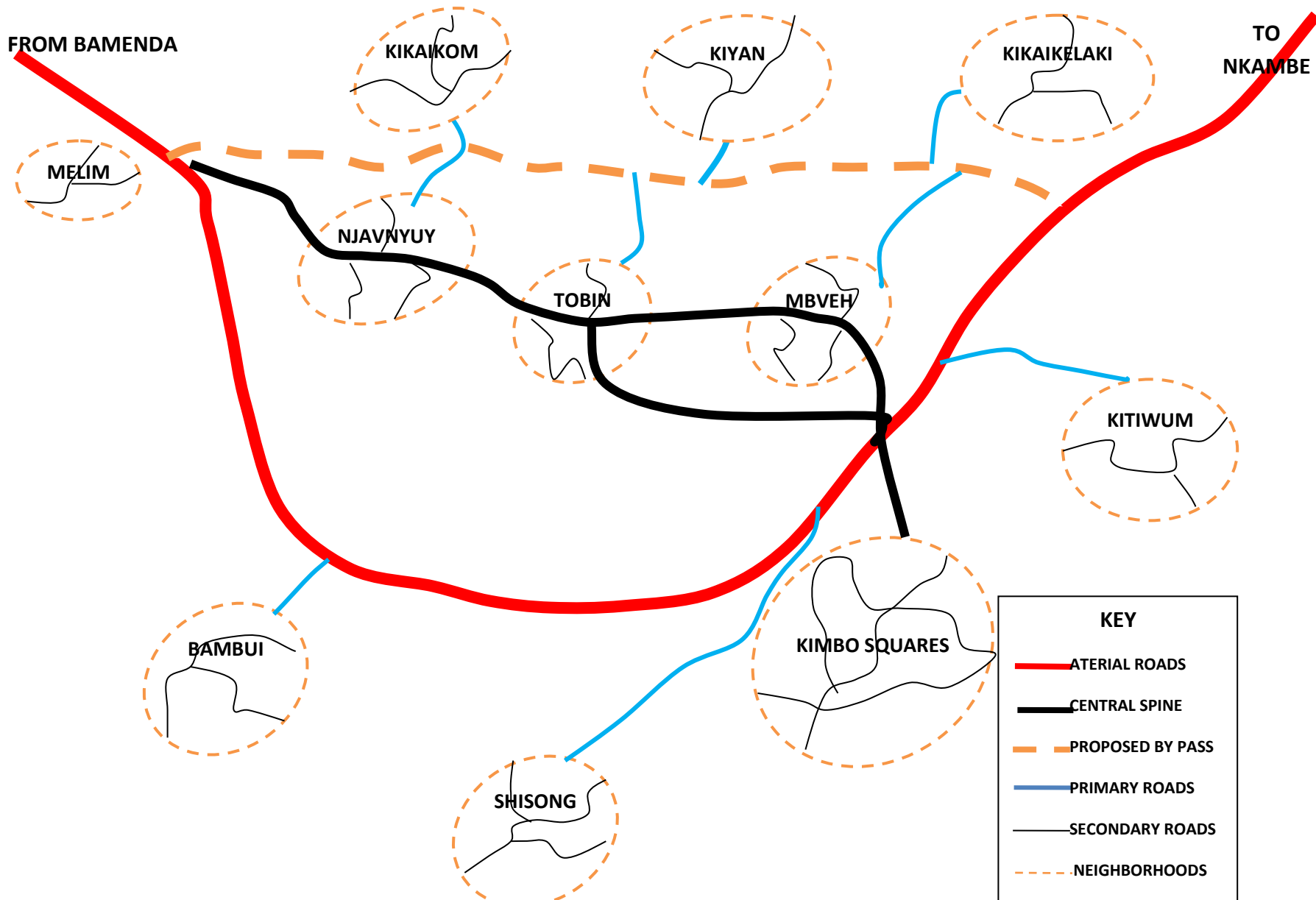


Figure 6 : Spatial structure of Kumbo Town

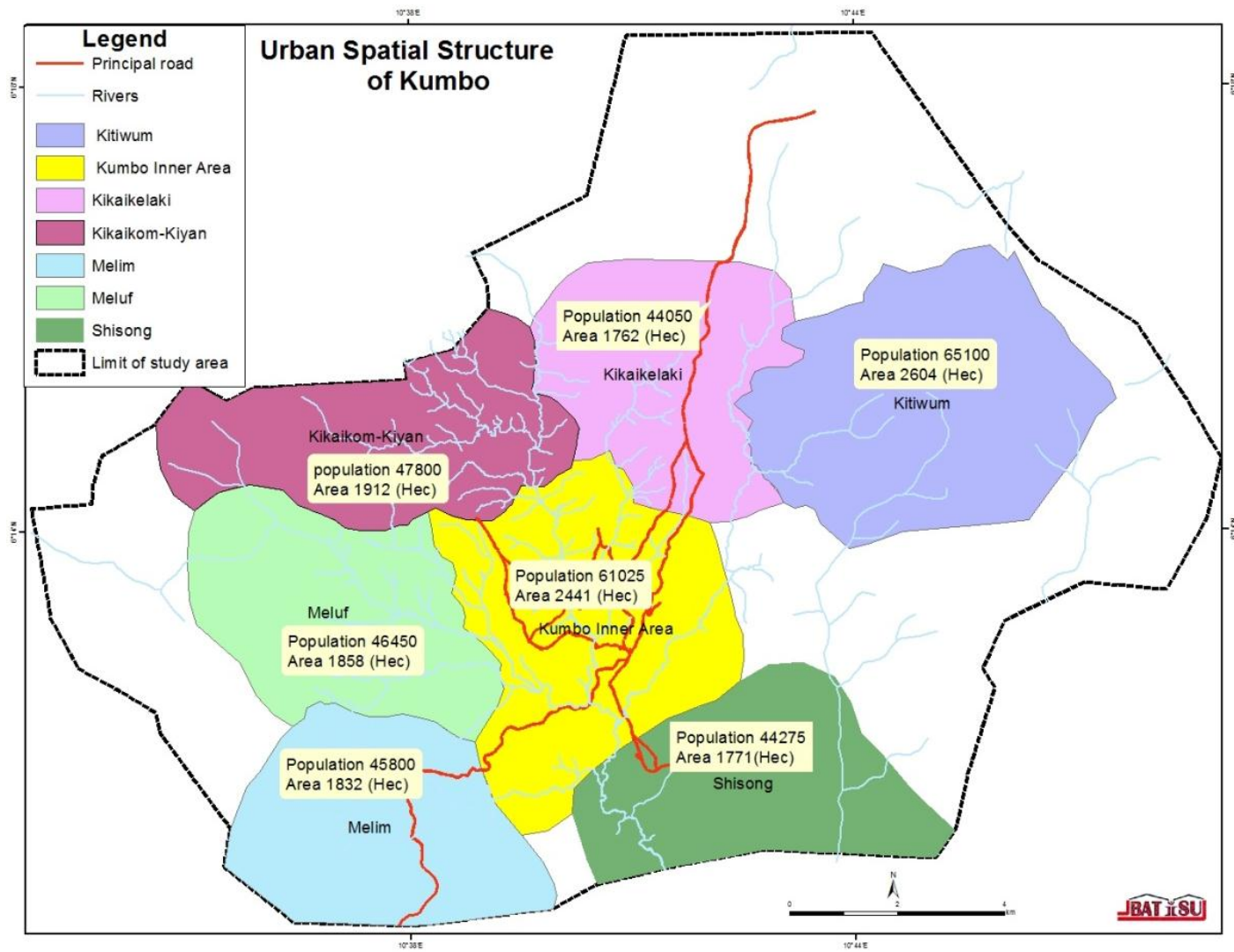


Figure 7 : Proposed Spatial Structure of Kumbo

3.1.4 Proposed Spatial Structure

Considering the topography and the existing pattern of settlement, it is recommended that Kumbo should be planned as several self-contained urban districts:

- Kumbo Inner Area
- Shishong
- Melim
- Meluf
- Kitiwum
- Kiyon/Kikaikom
- Kikaikelaki
- Tadu

Each urban district shall be subdivided into several residential neighborhoods and each neighborhood into several residential clusters and building blocks.

Table N° 7 : Land Carrying Capacities of Statistical Units

Item	Spatial Units	Surface Area	Estimated Population for 2027
01	Kumbo Inner Area	2 441	61 025
02	Shisong	1 771	44 275
03	Kitiwum	2 604	65 100
04	Melim	1 832	45 800
05	Kikaikom/ Kiyon	1 912	47 800
06	Meluf	1 858	46 450
07	Kikaikelaki	1 762	44 050
08	Tadu	498	12 450

Source: BATISU sarl

3.1.5 Hierarchy of Service Centre

Figure 8; Proposed Hierarchies of Service Centres.

From the existing configuration and structure of Kumbo Town a four level of functional service centers can be created:

- ❖ Kumbo Central Business District (BCD)
- ❖ District service centres
- ❖ Traditional Shufaidoms
- ❖ Neighbourhood centre
- ❖ Residential cluster centre

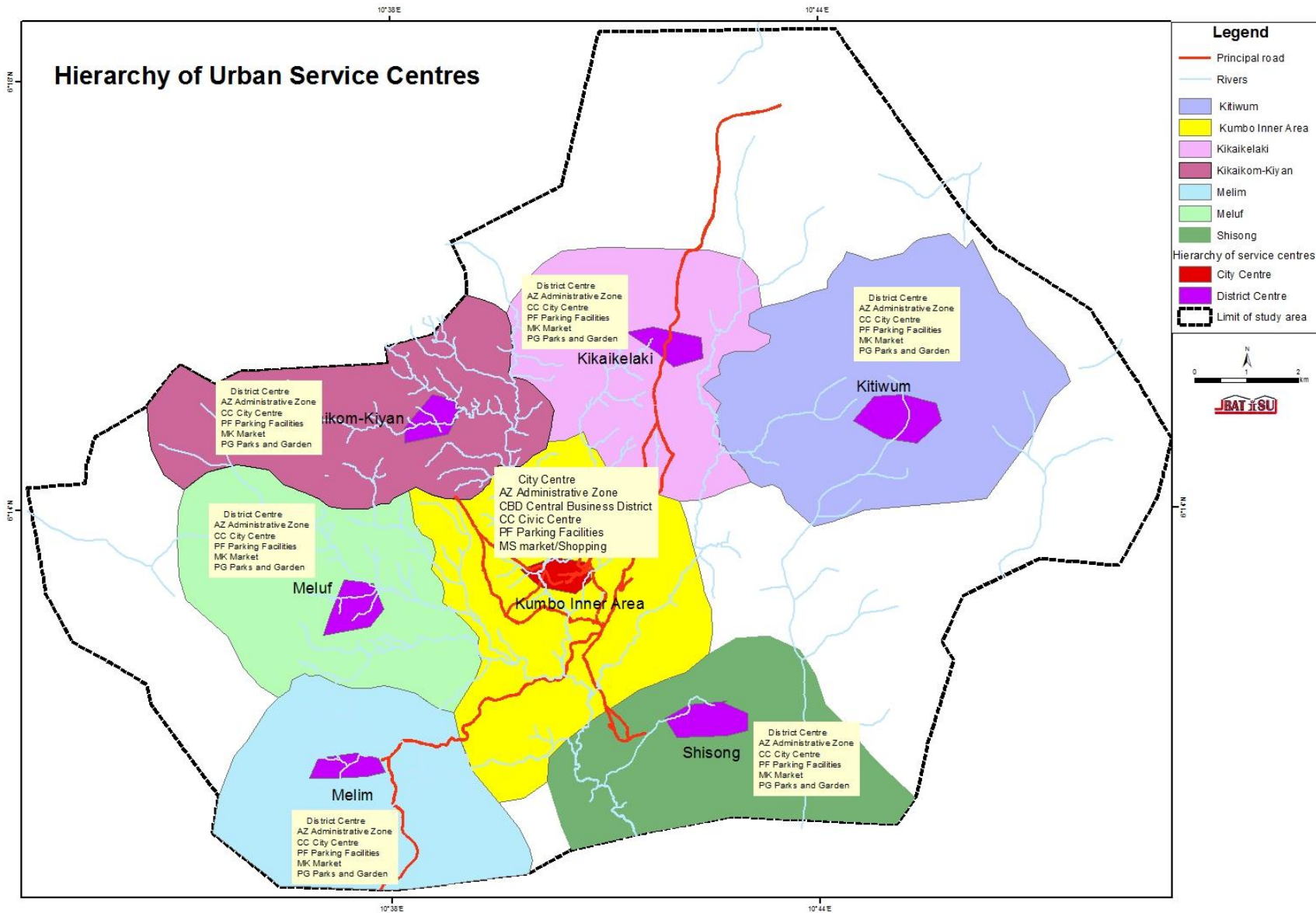


Figure 8 : Proposed Hierarchy of Service Centres (2027)

a) Kumbo Central Business District (BCD)

- Tobin administrative area
- Mbveh Market
- Kimbo Squares
- NJavnyuy central motor park
- District service centres

b) District Service centres

- District community hall
- District shops
- District parks and gardens
- District sports and recreation centre
- District secondary school

c) Shufaidom Centre

- Shufai's Compound
- Lav Njong
- Shufaidom hall and courtyard
- Sacred family sites
- Shufaidom farms
- Nuclear family compounds
- Shufaidom Squares
- Nursery school
- Primary school

d) Elements of a neighbourhood centre

- Neighbourhood shops
- Neighbourhood hall
- Neighbourhood primary school
- Neighbourhood library
- Neighbourhood playground
- Neighbourhood park and gardens

e) Elements of a cluster centre

- Corner shop
- Daycare centre
- Reading room

3.2 LAND ALLOCATION BY SPATIAL UNITS

Table N° 8 : Land Allocation by Spatial Units

Item	Spatial units	Estimated Area (2027)
01	Kumbo Inner Area	2 441
02	Shisong	1 771
03	Kitiwum	2 604
04	Melim	1 832
05	Meluf	1 858
06	Kikaikom/ Kiyan	1 912
07	Kikaikelaki	1 762

Source: BATISU sarl

3.2.1 Priority Projects of Urban Spatial Structure

Table N° 9: project sheet for Hierarchy of Service Centre

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Official delimitation of Kumbo Town Planning Area	2013	Newly proposed	Provide legal basis for planning	KUMBO COUNCIL	KUMBO COUNCIL	5,000,000
2	Delimitation of proposed urban districts	2013	Proposed	Provide legal basis for planning	KUMBO COUNCIL	KUMBO COUNCIL	5,000,000
3	Carry out five yearly censuses of Kumbo Town Area	2015	Conflicting population statistics	Provide reliable statistics for planning	KUMBO COUNCIL	KUMBO COUNCIL	50,000,000
4	Acquisition of satellite images to cover the whole planning area	2015	Partial coverage of proposed planning area	Provide a base for further planning	KUMBO COUNCIL MINH DU	KUMBO COUNCIL MINH DU	15,000,000

Source: BATISU Sarl

KUMBO LAND USE PLAN

4.0 PROPOSED LAND USE PLAN

PLANNING REPORT



Rapport n°III

4.0 PROPOSED LAND USE PLAN

4.1 OBJECTIVES OF LAND USE PLAN

The proposed land use plan for Kumbo aims at achieving the following objectives:

- To determine land uses before land is subdivided, sold and occupied.
- Gradually segregate land uses in already built and developing areas and.
- Ensure the respect and application of land use control procedures in land transactions, the issue of town planning certificates and building permits.
- Facilitate access to land for community and public facilities and utilities in appropriate locations and on suitable sites.

4.2 EXISTING LAND USE PATTERN

The existing land use pattern in Kumbo has largely been determined by informal land transactions between those who own and occupy land and those who need and demand land. Land is largely in the hands of customary and private land owners. Community, municipal and government authorities find it difficult to acquire adequate land in appropriate locations and suitable sites for community and public facilities and utilities. Consequently, most community and public facilities are located largely where land was available.

4.3 PROPOSED MACRO LAND USE CATEGORIES

The spatial evolution of Kumbo should be guided by the following factors: -

- a) The creation of distinct land uses.
- b) The moderate segregation of residential land uses.
- c) The distribution of land uses.
- d) The removal of service and commercial activities away from major roads by:
 - Creating distinct service centers.
 - Increasing accessibility of land for urban development.

The macro land use elements for Kumbo include:

- ❖ Commercial
 - Central Business District
 - District shopping centres
- ❖ Industrial zones
- ❖ Residential
 - Low density high income
 - Medium density medium income
 - High density low income
 - Mixed commercial residential
- ❖ Administrative areas
- ❖ Civic and cultural facilities
- ❖ Protected areas
- ❖ Open spaces
- ❖ Sports and recreation
- ❖ Public and community facilities
- ❖ Public utility networks and right-of-ways

4.4 ELEMENTS OF URBAN DISTRICT LAND USE PLAN

A detailed land use plan should eventually be prepared for each urban district showing the following elements:

- ❖ Urban district service centre
- ❖ Neighborhood centres
- ❖ District service industrial area
- ❖ Residential neighborhoods:
 - High density for low income households
 - Medium density for medium income households
 - Low density for high income households
 - Mixed residential/commercial
- ❖ Parking facilities
- ❖ District parks and gardens
- ❖ Government general secondary and high school
- ❖ Government secondary technical and high school
- ❖ District playground and sports facilities
- ❖ District hospital

4.5 LAND USE IMPLEMENTATION PROGRAMME

Table N° 10 : project sheet for Elements of Urban District land Use Plan

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Preparation of Urban District Development Plans	2013-2015	Not available	Ensure orderly development	<ul style="list-style-type: none"> ▪ MINH DU ▪ KC 	<ul style="list-style-type: none"> ▪ MINH DU ▪ Kumbo Council ▪ community 	150 000 000
2	Preparation of Neighbourhood Plans in Priority Development Area (PDA)	2013-2027	Not available	Ensure orderly development	<ul style="list-style-type: none"> ▪ KC 	<ul style="list-style-type: none"> ▪ Land owners ▪ Kumbo Council 	25 000 000
3	Preparation of CBD and Urban District Service Centre Plans	2015-2017	Not available	Ensure orderly development	<ul style="list-style-type: none"> ▪ KC 	<ul style="list-style-type: none"> ▪ Land owners ▪ Kumbo Council 	60 000 000
4	Preparation of Kumbo town land use rules and regulations	2015	Not available	Provide basis for development control	<ul style="list-style-type: none"> ▪ MINH DU ▪ KC 	<ul style="list-style-type: none"> ▪ Land owners ▪ Kumbo Council 	15 000 000

Source: BATISU Sarl

5.0 NETWORKS AND INFRASTRUCTURE

PLANNING REPORT



5.0 NETWORKS AND INFRASTRUCTURE

5.1 URBAN ROAD NETWORKS

5.1.1 Objectives

The overall objective is to provide Kumbo Town with modern, coherent and functional road networks, which excludes through traffic and provides choices of routes and modes of travelling to activity areas by:

- ❖ Reconstructing and rehabilitating existing urban road networks and infrastructures ;
- ❖ Extending urban road networks.
- ❖ Ensuring regular maintenance of urban road networks.
- ❖ Upgrading arterial roads into Kumbo.
- ❖ Constructing a by-pass of Kumbo Town.
- ❖ Constructing a Melim-bamkikai by-pass road.
- ❖ Upgrading the squares-BBH-Bamkikai road.

5.1.2 Hierarchy of Urban Roads

To ensure the proper functioning of an urban road network, a coherent hierarchy of roads based on functional classification is absolutely necessary as follows:

- ❖ Arterial roads which carry traffic from outside and bring into Kumbo Town.
- ❖ Primary roads which carry traffic from arterial roads and distributes to urban districts.
- ❖ Secondary roads which take traffic from primary roads and distribute within urban districts.
- ❖ Tertiary roads which take traffic from secondary roads and distribute within neighborhoods.
- ❖ Access roads which distribute traffic to individual plots.

5.1.3 Existing Road Network

The existing state of roads in Kumbo Town is characterized by:

- ❖ Incoherent and degraded urban road networks.
- ❖ Unplanned hierarchy of urban roads.
- ❖ Poorly designed road networks.
- ❖ Poorly constructed road networks.
- ❖ Irregular maintenance of existing roads.

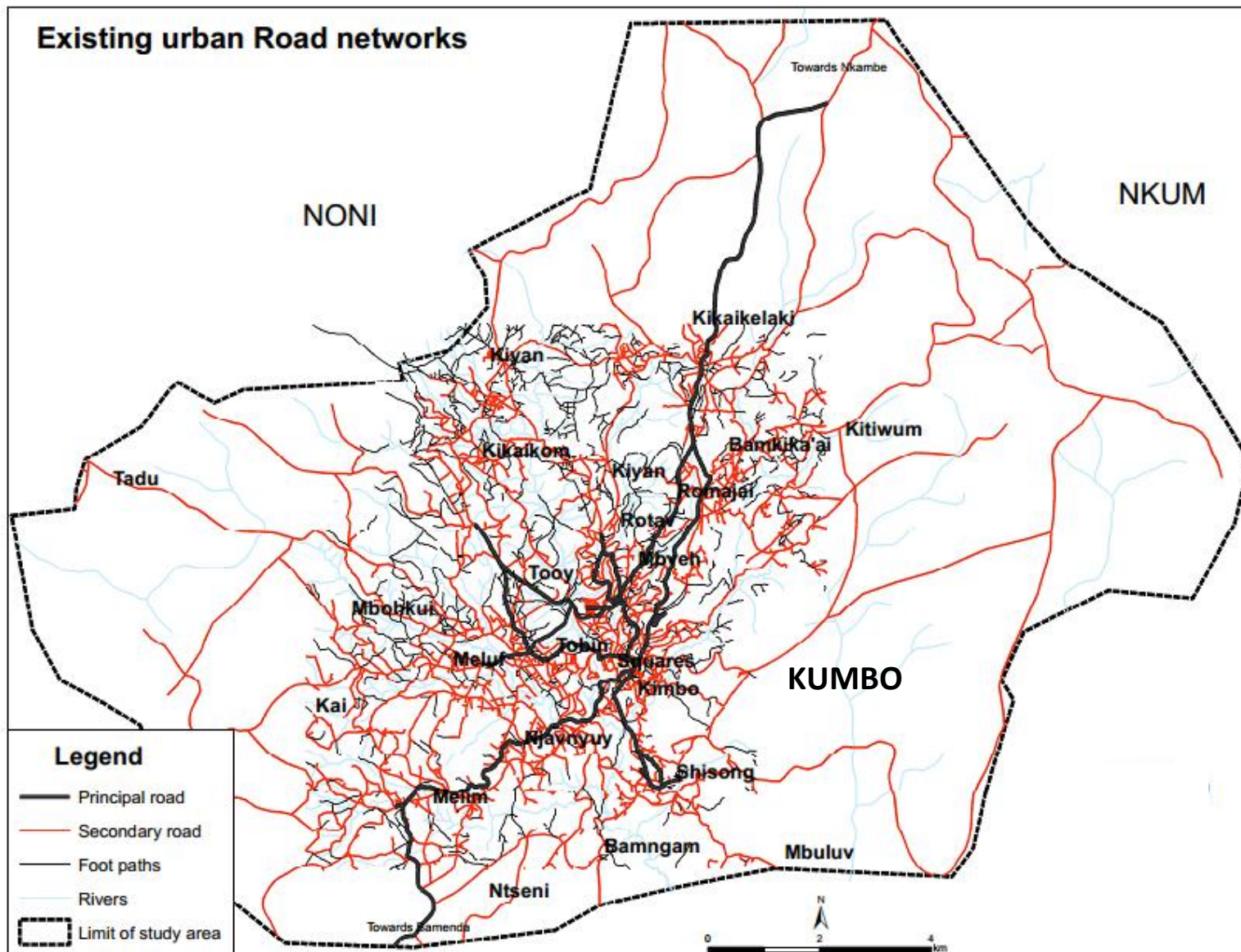


Figure 10 : existing urban road networks

5.1.4 Proposed Road Network

5.1.4.1 Arterial Roads

- ❖ Bamenda-Kumbo -Nkambe Highway.
- ❖ A possible by-pass road from Melim to Bamkikai junction shall reduce traffic through Kumbo Central Business District.

5.1.4.2 Primary Roads

- ❖ Melim-Bamkikai Junction By-pass
- ❖ Kimbo Squares-Shisong road
- ❖ Melim-Tobin road
- ❖ Tobin-Mbveh road
- ❖ Tobin-Kimbo squares road
- ❖ Mbveh-Kikaikom road
- ❖ Tobin-Meluf road
- ❖ Mbveh-Kiyan road
- ❖ Tobin-Njavnyuy road
- ❖ Mbveh-Romajai road
- ❖ Tobin-Bambui-Shisong road
- ❖ Tobin-Nyaro road

5.1.4.2 Double Lane Roads (Boulevard)

- ❖ Mbveh-Kimbo Squares road

5.1.4.3 Secondary Roads

Secondary roads shall be provided within each urban district.

Table N° 11 : Kumbo Public Right-of-ways (PRW's)

Item	Hierarchy	PRWs	Setbacks from axis of road	Restrictions
1	Arterial	-	-	-
2	National highways	60m	30m	No direct access of property
3	Freeways	50m	25m	No direct access of property
4	Regional highways	50m	25m	No roadside parking
5	Divisional highways	40m	20m	No roadside parking
6	Farm to market roads	10m	10m	-
7	Primary distributors	40m	20m	-
8	Secondary distributors	30m	15m	-
9	Tertiary toads	25m	12.5m	-
10	Access roads	10m	10m	-

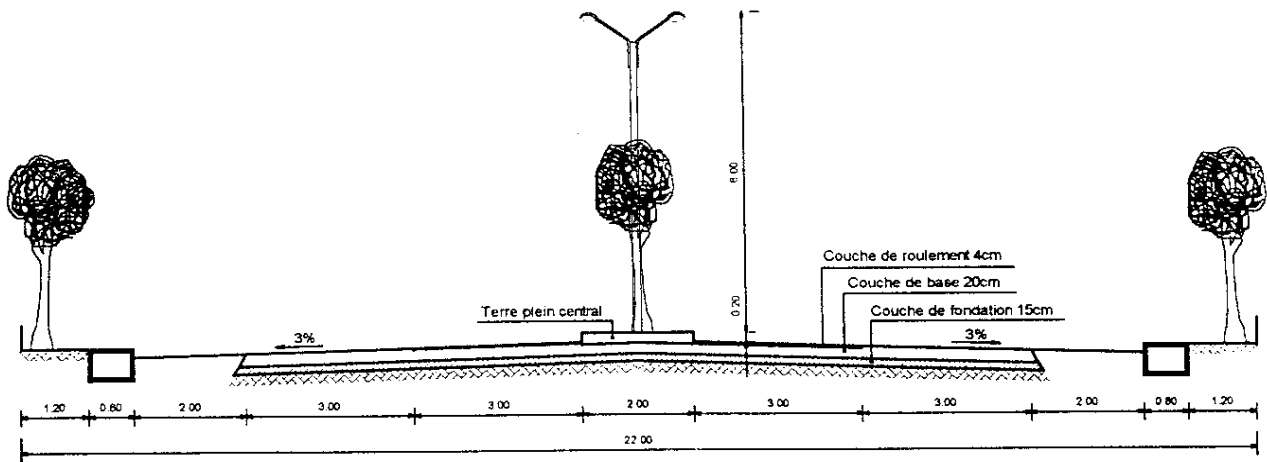
Source: BATISU Sarl

Table N° 12 : Technical Details

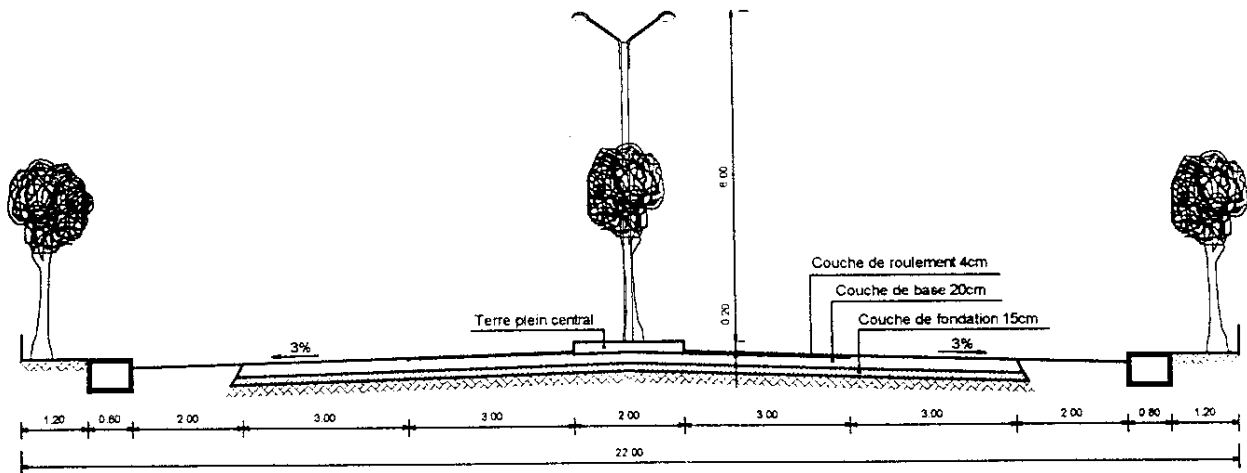
Item	Hierarchy of Roads	Carriage-ways	Islands	Drainage	Side walks
1	Arterial roads	14.0 m	-	3.0m	3.0m
2	Freeways	28.0m	3.0	3.0m	3.0m
3	Primary roads	14.0m	1.5	3.0mm	3.0m
4	Secondary roads	7.0m	None	3.0m	3.0m
5	Tertiary roads	7.0m	None	3.0m	1.5m
6	Access roads	-	-	2.0m	1.0m
7	Footpaths and walkways	3.0m	None	1.0m	None

Source: BATISU Sarl

5.1.4.4 Typical Cross Sections of Roads



Graph N° 3 : Typical Cross Sections of Arterial and Primary 30 m (scale: 1/100^e)



Graph N° 4 : Typical Cross Sections of Primary and Secondary Roads 22 m (scale: 1/100^e)

Table N° 13 : Estimated Lengths of Roads

Item	Roads	Lengths (km)	Present State	Future State
01	Melim-Bamkikai Junction By-pass	10	Proposed	Well designed, constructed and tarred
02	Kimbo Squares-Shisong road	2.8	Poorly constructed earth road	Well designed, constructed and tarred
03	Melim-Tobin Road	4.7	Poorly constructed earth road	Well designed, constructed and tarred
04	Tobin-Mbveh road	2.4	Poorly constructed earth road	Well designed, constructed and tarred
05	Mbveh-Kikaikom road	6.2	Poorly constructed earth road	Well designed, constructed and tarred
06	Mbveh-Kimbo Squares road	1.5	Poorly constructed earth road	Well designed, constructed and tarred
07	Tobin-Meluf road	2.1	Poorly constructed earth road	Well designed, constructed and tarred
08	Mbveh-Kiyan road	2.6	Poorly constructed earth road	Well designed, constructed and tarred

Source: BATISU Sarl

Table N° 14 : project sheet for Urban Road Networks

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Rehabilitation of: - Tobin-squares road - Tobin-Mbveh road	2015-2017	Poorly tarred and unmaintained	Prolong life span	- MINHDU - KUMBO COUNCIL - Funding partners	- Road users - Land owners and developers	1 600 000 000
2	Upgrading of existing primary roads: - Squares-Shisong - Bamkikai-kitiwum - Tobin-Meluf - Mbveh-Kiyan - Melim-Bamkikai - Mbveh-Kikaikom - Melim-Tobin - Mbveh- Squares - Tobin-Njavnyuy - Mbveh-Romajai - Tobin-Bambui-Shisong - Tobin-Nyaro	2015-2022	Poorly constructed earth roads	Provide a functional hierarchy of roads	- MINHDU - KUMBO COUNCIL - Funding partners	-Road users -Land owners and developers	30 200 000 000
3	Upgrading of all existing secondary roads	2022-2027	Poorly constructed earth roads	Provide a functional hierarchy	- MINHDU - KUMBO COUNCIL - Funding partners	- Road users - Land owners and developers	24 000 000 000
4	Extension of primary and secondary road networks	2022-2027	Not well defined	Open up development of fringe zones	- MINHDU - KUMBO COUNCIL - Funding partners	- Road users - Land owners and developers	5 300 000 000

Source: BATISU Sarl

5.2 DRAINAGE NETWORKS

5.2.1 Existing Situation

The existing drainage situation is characterized by:

- ❖ Absence of a storm drainage plan.
- ❖ Most roads have no side drains and structures.
- ❖ Unconstructed and blocked natural drainage channels.
- ❖ Poor drainage of private real estate properties.

5.2.2 Objectives

To continuously provide a coherent and regularly upgraded and maintained storm drainage network and infrastructure by:

- ❖ Providing permanent side drains and infrastructure along all roads.
- ❖ Progressing clearing and constructing natural drainage in built areas.
- ❖ Effectively controlling the provision of drainage facilities on private landed properties.

5.2.3 Specific Rules and regulations for natural drainage facilities shall be prepared for:

- ❖ Private land developers.
- ❖ Real estate agents and promoters.
- ❖ Roles and responsibilities of the Council and Government.

5.2.4 Recommended Projects

- ❖ Preparation of a natural drainage network plan
- ❖ Reinforcement of construction of drainage networks along road construction projects
- ❖ Construction of priority natural drainage
- ❖ Regular control of private real estate drainage systems

Table N° 15 : project sheet for Drainage Networks

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Design of natural drainage networks	2015 - 2017	Not designed	Ensure technical feasibility	- MINH DU - Kumbo Council - Funding partners	-Kumbo council -Community	20,000,000
2	Construction of priority natural drainage	2017 - 2022	Not constructed	Rapid evacuation of runoff water	- MINH DU - Kumbo Council - Funding partners	-Kumbo council -Community	5,000,000,000

Source: BATISU sarl

5.3 SEWAGE NETWORKS AND SYSTEMS

5.3.1 Existing Situation

- ❖ Heavy dependence on poorly constructed and maintained individual sewage systems.
- ❖ Some households have no sewage facilities.
- ❖ Inadequate provision of public toilets and conveniences.

5.3.2 Objectives

The overall objective is to reasonably improve the provision, management and maintenance of individual sewage facilities within the framework of eventually developing a collective sewage system.

5.3.3 Specific Rules and Regulations for sewage facilities shall be prepared for:

- ❖ Rules and regulations for individual real estate sewage facilities.
- ❖ Rules and regulations for real estate sewage facilities.
- ❖ Roles and responsibilities of the Council and the Government.

5.3.4 Recommended Projects

- ❖ Construction of adequate public conveniences.
- ❖ Effective and regular control of private sewage facilities.

Table N° 16 : project sheet for Sewage Network systems

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Construction of adequate public conveniences	2013-2015	Inadequate	Increase public comfort and convenience	- Kumbo Council	- Kumbo Council - Community	500 000 000
2	Effective and regular control of private sewage facilities	2015-2027	Ineffective control	Minimize pollution	- Kumbo Council	- Kumbo Council - Community	5 000 000

Source: BATISU Sarl

5.4 WATER SUPPLY NETWORKS

5.4.1 Existing Situation

- ❖ Poor quality of water supply.
- ❖ Unprotected water catchment.
- ❖ Poorly maintained water supply networks and installations.
- ❖ Inadequate water supply.
- ❖ Imbalanced distribution of water supply.
- ❖ Inequitable access to safe water supply.
- ❖ Major water supply network passes on the main road axis.

5.4.2 Objectives

The overall objective is to ensure the adequate supply of and access to safe water over time and space by:

- ❖ Ensuring the effective protection of the existing water catchment.
- ❖ Ensuring the regular maintenance of water supply networks and installations.
- ❖ Ensuring the regular treatment of water through water quality assurance measures.
- ❖ Upgrading the capacities of safe water supply and extending water supply networks to areas of real need.
- ❖ Ensuring the proper alignment and entrenchment of water networks in priority developments areas and urban upgrading zones.

5.5 RULES AND REGULATIONS FOR WATER SUPPLY SHALL INCLUDE:

- ❖ Review procedures for connecting water supply and the provision of public standpipes.
- ❖ Operation procedures for alignment and installing water supply networks and installations.
- ❖ Water quality control standards.

5.5.1 Recommended Projects

- ❖ Protection of water catchment.
- ❖ Rehabilitation and regular maintenance of water supply networks and installations.
- ❖ Put in place water quality assurance measures.
- ❖ Carry out studies for upgrading the water supply capacity.
- ❖ Upgrade water supply capacity.

Table N° 17 : project sheet for Water Supply Networks

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Protection of water catchment	2013-2015	Degraded and unprotected	Minimize pollution and reduction of water	<ul style="list-style-type: none"> ▪ MINHDU ▪ MINEE ▪ KWA ▪ CAMWATER 	Residents	50,000,000
2	Rehabilitation and regular maintenance of water supply networks and installations	2015-2022	Poorly maintained and degraded	Ensure regular and safe supply of water	<ul style="list-style-type: none"> ▪ MINHDU ▪ MINEE ▪ KWA ▪ CAMWATER 	Residents	5,000,000,000
3	Put in place water quality assurance measures	2015	Doubtful quality	Ensure supply of safe water	<ul style="list-style-type: none"> ▪ MINHDU ▪ MINEE ▪ KWA ▪ CAMWATER 	Residents	5,000,000
4	Carry out studies for upgrading the water supply capacity	2015-2017	Unavailable	Ensure technical feasibilities	<ul style="list-style-type: none"> ▪ MINHDU ▪ MINEE ▪ KWA ▪ CAMWATER 	- Kumbo Council - MINEE	25,000,000
5	Upgrade water supply capacity	2017-2027	Inadequate capacity	Ensure adequate supply	<ul style="list-style-type: none"> ▪ MINHDU ▪ MINEE ▪ KWA ▪ CAMWATER 	Residents	1,000,000,000
6	Displacement	2013-2015	Degraded	Ensure regular	▪ MINHDU	Residents	50,000,000

	of water pipes from the main road to the bilateral sidewalks		and unprotected	and safe supply of water	<ul style="list-style-type: none"> ▪ MINEE ▪ KWA ▪ CAMWATER 		
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Source: BATISU sarl

5.6 ENERGY SUPPLY NETWORKS

5.6.1 Existing Situation

- ❖ Inadequate supply and frequent disruptions of electricity supply
- ❖ High cost of connections and electricity bills
- ❖ Haphazard and irregular connections of networks and installations

5.6.2 Objectives

The overall objective is to ensure the adequate, stable and durable supply of affordable energy for domestic and industrial use.

Table N° 18 : Project Sheet for Energy Supply Networks

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Diversification of sources of energy	2015-2022	Dependence of electricity grid	Reduce dependence of electricity	<ul style="list-style-type: none"> ▪ Kumbo Council ▪ AES-SONEL ▪ SNV 	Residents	50 ,000 000
2	Extension of existing electricity networks	2015-2022	Inadequate supply	Stabilize and ensure reliable supply	<ul style="list-style-type: none"> ▪ Kumbo Council ▪ AES-SONEL 	<ul style="list-style-type: none"> ▪ Residents ▪ AES-SONEL 	5 000 000 000
3	Public street lighting	2015-2017	Some areas not lighted	Improve public security	<ul style="list-style-type: none"> ▪ Kumbo Council ▪ AES-SONEL 	Residents	3 000 000 000

Source: BATISU sarl

5.6.3 Rules and regulations for the supply of energy shall include:

- ❖ Review procedures for connecting electricity supply and the provision of public lights.
- ❖ Operational procedures for alignment and installing electricity supply networks and installations.

5.6.4 Recommended Projects

- ❖ Diversification of sources of energy.
- ❖ Extension of existing electricity networks.
- ❖ Public street lighting.

5.7 COMMUNICATION FACILITIES

5.7.1 Existing Situation

The existing situation of communication in Kumbo is characterized by:

- ❖ Bottlenecks and high cost of connecting fixed telephone facilities.
- ❖ Inadequate and poorly maintained fixed telephone facilities.
- ❖ Poor reception of mobile telephone .

5.7.2 Objective

The overall objective is to upgrade fixed and mobile telephone facilities and make them affordable.

5.7.3 Rules and regulation for communication facilities shall include:

- ❖ Review operational procedures and conditions for subscribing for fixed and mobile telephone facilities.

5.7.4 Recommended Projects

- ❖ Extend communication fiber network to Kumbo.
- ❖ Rehabilitate and upgrade existing fixed telephone networks and installations.
- ❖ Upgrade mobile telephone facilities.

Table N° 19 : project sheet for Communication facilities

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Extend communication fiber network to Kumbo	2013-2017	Planned	Extend communication capacity	<ul style="list-style-type: none"> ▪ MINPOSTEL ▪ CAMTEL 	Public	3 000 000 000
2	Rehabilitate and upgrade existing fixed telephone networks and installations	2015-2022	Degraded	Ensure reliability	<ul style="list-style-type: none"> ▪ CAMTEL ▪ MINPOSTEL 	Residents	500 000 000
3	Upgrade mobile telephone facilities	2013-2017	Unreliable	Ensure reliability	Mobile communication providers	Subscribers	1 000 000 000

Source: BATISU sarl

KUMBO LAND USE PLAN

6.0 TRANSPORT AND TRAFFIC PLAN

PLANNING REPORT



6.0 TRANSPORT AND TRAFFIC PLAN

6.1 EXISTING SITUATION

The existing transport and traffic situation is characterized by: -

- ❖ Clandestine and unorganized parking facilities.
- ❖ Poorly developed parking facilities.
- ❖ High incidence of accidents.
- ❖ High cost of travel.
- ❖ Inconvenient and uncomfortable transport facilities.
- ❖ Public insecurity.

6.2 OBJECTIVE

The overall objective is to ease the movement of people and goods from one place to another within Kumbo, safely, comfortably, conveniently and affordably.

6.3 TRANSPORT AND TRAFFIC MANAGEMENT PLAN

- ❖ Location of council motor parks.
- ❖ Location of Council Lorry parks.
- ❖ Location of taxi and motor taxi stops.

6.4 RULES AND REGULATIONS FOR PARKING FACILITIES SHALL INCLUDE:

- ❖ Rules and regulations for location and express site bus parking facilities.
- ❖ Kumbo Town parking rules and regulations.

6.5 RECOMMENDED PROJECTS

- ❖ Selection, acquisition and reservation of sites for Council motor and lorry parks.
- ❖ Rehabilitation and upgrading of existing council motor parks.
- ❖ Preparation of Kumbo Town parking rules and regulations.
- ❖ Carry out feasibility studies for creating a Kumbo Town municipal bus system.

Table N° 20 : project sheet for Transport and Traffic Plan

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Selection, acquisition and reservation of sites for Council motor and lorry parks	2015-2022	Poorly located and sited along highways	Ensure proper location and siting	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL ▪ MINDAF 	<ul style="list-style-type: none"> ▪ Transporters ▪ Passengers 	2 000 000 000
2	Rehabilitation and upgrading of existing council motor parks	2015-2022	Poorly developed	Increase comfort and convenience	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL 	<ul style="list-style-type: none"> ▪ Transporters ▪ Passengers 	1 000 000 000
3	Preparation of Kumbo Town parking rules and regulations	2015	Incomplete rules and regulations	Ensure application	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL 	<ul style="list-style-type: none"> ▪ Transporters ▪ Passengers 	50 000 000

Source: BATISU sarl

KUMBO LAND USE PLAN

7.0 LAND MANAGEMENT AND HOUSING

PLANNING REPORT



Rapport n°III

7.0 LAND MANAGEMENT AND HOUSING

7.1 EXISTING SITUATION

The present situation of land management and housing in Kumbo is characterized by:

- ❖ Poor and disadvantaged households encounter enormous difficulties in acquiring suitable land for housing.
- ❖ Inadequate supply of decent housing for the poor and disadvantaged.
- ❖ Spontaneous and haphazard construction of houses.
- ❖ Un-segregated housing areas.
- ❖ Unpleasant and unhygienic housing environment.

7.2 PROJECTION OF HOUSING DEMAND AND NEEDS: 2012 -2027

The projected number of housing dwelling units and plots is shown on the following table:

Table N° 21 : Projected Housing demands and Needs

Item	Population	Population Increase	Total Number of Households	Estimated Number of plots
2012	111 370	-	18 562	9281
2017	145 556	134 186	22365	11183
2022	204 149	58 593	9 766	4883
2027	314 108	109 959	18 327	9 164

Source: BATISU sarl

7.3 OBJECTIVES

The overall objectives for housing are:

- ❖ To facilitate access to affordable and suitable land for housing especially for the poor and disadvantaged.
- ❖ To improve on the quality of the present housing stock and increase the supply of decent houses especially for the poor and disadvantaged.

7.4 UPGRADING AND INFILLING OF HOUSING AREA

- ❖ Mbveh
- ❖ Kimbo Squares

7.5 CREATION OF NEW HOUSING LAYOUTS

New housing layouts should be created in each urban district for:

- ❖ Low cost housing.
- ❖ Medium income housing .

- ❖ High income housing .
- ❖ Mixed housing.

7.6 RECOMMENDED PROJECTS

7.6.1 Facilitate access to housing finance and construction techniques and technologies

- ❖ Establish housing mortgage societies .
- ❖ Provide financial and technical assistance for housing the poor.

7.6.2 Facilitate access to housing land for the poor

- ❖ Develop a land management partnership between the council and land owners and occupants;
- ❖ Create a transparent land market.

7.6.3 Facilitate access to basic services and utilities in housing areas

- ❖ Water supply.
- ❖ Electricity supply.
- ❖ Social services.

7.6.4 Rules and Regulations for Residential land Uses

The following rules and regulations for residential land use categories shall be respected accordingly:

- ❖ All plots should have a rectangular shape with side boundaries approximately at right angle from the front line of the plot.
- ❖ Minimum height of DPC above ground level of roads: 50 cm above.
- ❖ All housing types, public utility easements and construction norms and standards shall be as specified in layout regulations and building permits.

Table N° 22 : Plot development norms and standards

Item	Parameters	Low Income	Medium Income	High Income
01	Area of plot	300-400m ²	400-600m ²	600-1000m ²
02	Minimum width of plots	15m	20m	25m
03	Setback of plots from road curbs	3.0m	5.0m	10.0m
04	Setback from axis of road	10.0m	15.0m	20.0m
05	Side setbacks	1.5m	3.0m	5.0m
06	Rear setback	3.0m	5.0m	7.5m
07	Plot occupation ratio	80-90%	60-70%	40-50%
08	Height of buildings	One floor	1-3 floors	1-2 floors
09	Maximum dwelling units	2	6	1

Source: BATISU sarl

Table N° 23 : project sheet Land Management and Housing

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Facilitate access to housing finance and construction techniques and technologies	2015-2027	Inexistent	Make housing affordable	<ul style="list-style-type: none"> ▪ CFC ▪ Micro finance organizations ▪ Commercial banks 	<ul style="list-style-type: none"> ▪ Land owners ▪ Households in need for housing 	50 000 000
2	Facilitate access to housing land for the poor	2013-2027	Inexistent	Make housing affordable	<ul style="list-style-type: none"> ▪ Kumbo Council ▪ MAETUR ▪ Traditional authorities ▪ Land owners 	<ul style="list-style-type: none"> ▪ Poor households 	1 000 000 000
3	Facilitate access to basic services and utilities in housing areas	2015-2017	Inexistent	Improve quality of housing	<ul style="list-style-type: none"> ▪ AES-SONEL ▪ CAMWATER ▪ Kumbo Council ▪ Land owners 	<ul style="list-style-type: none"> ▪ Poor households 	5 000 000 000
5	Upgrading of slum areas	2022-2027	Inexistent	Improve on stock of existing housing	<ul style="list-style-type: none"> ▪ MINH DU ▪ Kumbo Council ▪ Land owners 	<ul style="list-style-type: none"> ▪ Poor households 	50 000 000

Source: BATISU sarl

KUMBO LAND USE PLAN

8. 0 PUBLIC AND COMMUNITY FACILITIES

PLANNING REPORT



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8. 0 PUBLIC AND COMMUNITY FACILITIES

8.1 EXISTING SITUATION

The present situation of the provision of public and community facilities is generally characterized by:

- ❖ Inadequate supply of basic public and community facilities.
- ❖ Unsatisfactory location and site of public and community facilities.
- ❖ Existing public facilities are poorly maintained and equipped.
- ❖ Poorly constructed public and community facilities.

8.2 OBJECTIVES

The overall objective is to ensure the adequate provision, satisfactory location and site of good quality and affordable provision of public and community facilities so as to minimize the cost and time of travel to basic services and assure the safety of users.

8.3 EDUCATIONAL FACILITIES

8.3.1 Planning grill for government educational facilities

Table N° 24 : Proposed Standards for Public Educational Facilities

Item	Public Educational Facilities	Level of Provision	Population Threshold	Catchment Radius	Space Standards
1	Nursery Schools	Cluster	3 000-5 000	500m	0.5hectares
2	Primary Schools	Neighborhood	5 000-10 000	1.0km	2.0hectares
3	General Secondary and High Schools	District	40-50 000	2.5km	5.0hectares
4	Technical Secondary and High schools	District	40-50 000	2.5km	5.0hectares
5	Higher institute	Town	More than 100 000	5.0km	10.0hectares
6	University	Town	More than 200 000	N.A	50.0hectares

Source: BATISU sarl

Table N° 25 : Projected Demand for Government Schools: 2012 – 2027

Year	Nursery school			Primary School			Secondary school						High School					
							General			Technical			General			Technical		
E	25			25			6			3			3			1		
	T	G	P	T	G	P	T	G	P	T	G	P	T	G	P	T	G	P
2012	37	12	12	22	0	0	3	0	0	3	0	0	3	0	0	3	2	2
2017	49	12	12	29	4	4	4	0	0	4	1	1	4	1	1	4	1	1
2022	68	19	19	40	11	11	5	0	0	5	1	1	5	2	2	5	1	1
2027	105	37	37	62	22	22	8	2	2	8	3	3	8	3	3	8	3	3

Source: BATISU sarl

Keys: T = total G = Gap P = Proposed E = Existing

8.3.2 Recommended Projects

- ❖ Rehabilitation and upgrading of existing schools.
- ❖ Acquire and reserve sites for educational facilities.
- ❖ Provide new educational facilities to match growing demand.

8.3.3 Rules and Regulations

All pupils and students within government school catchment areas have the right to be admitted into their local government school before anyone from outside the catchment area.

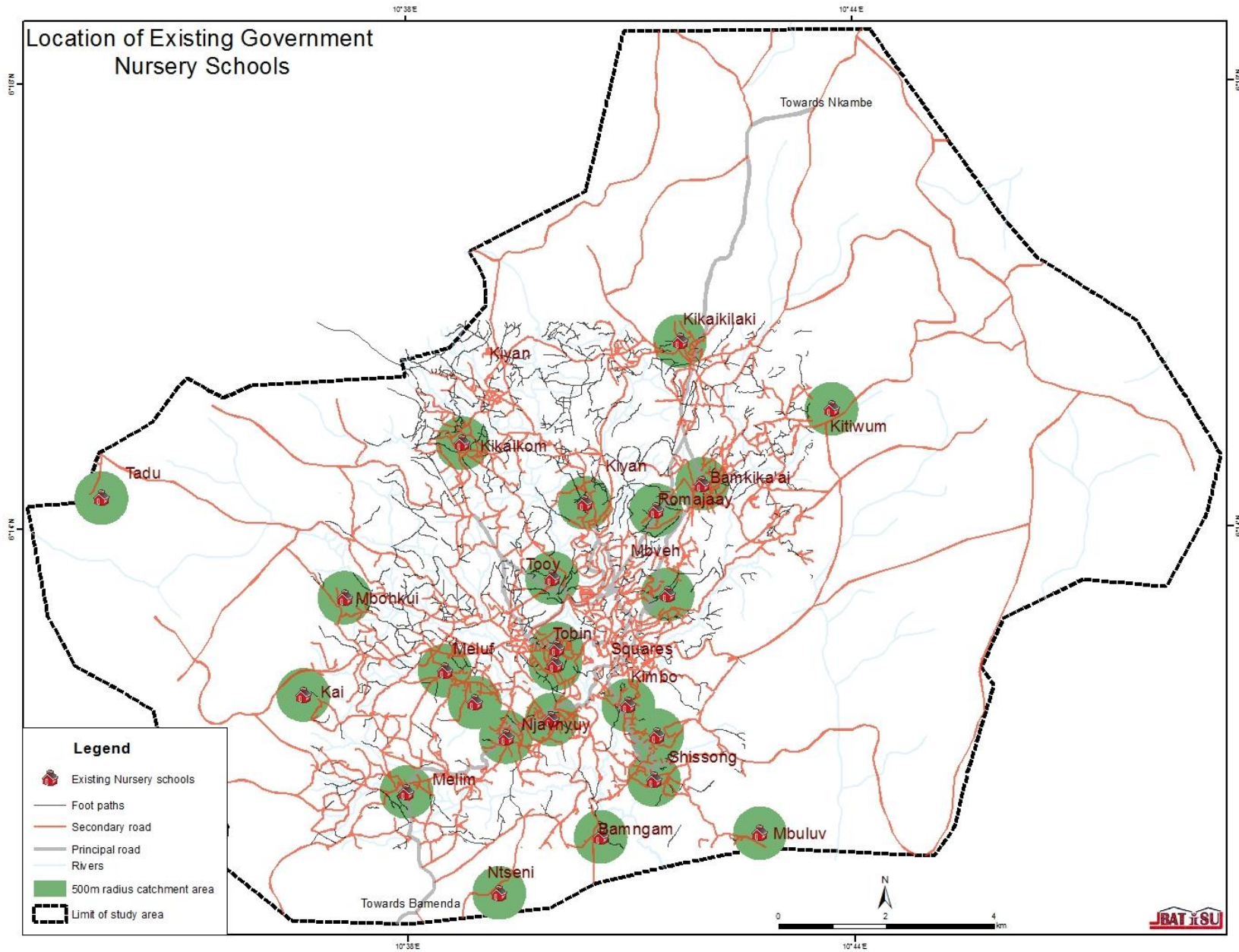


Figure 12 : location of existing government nursery schools

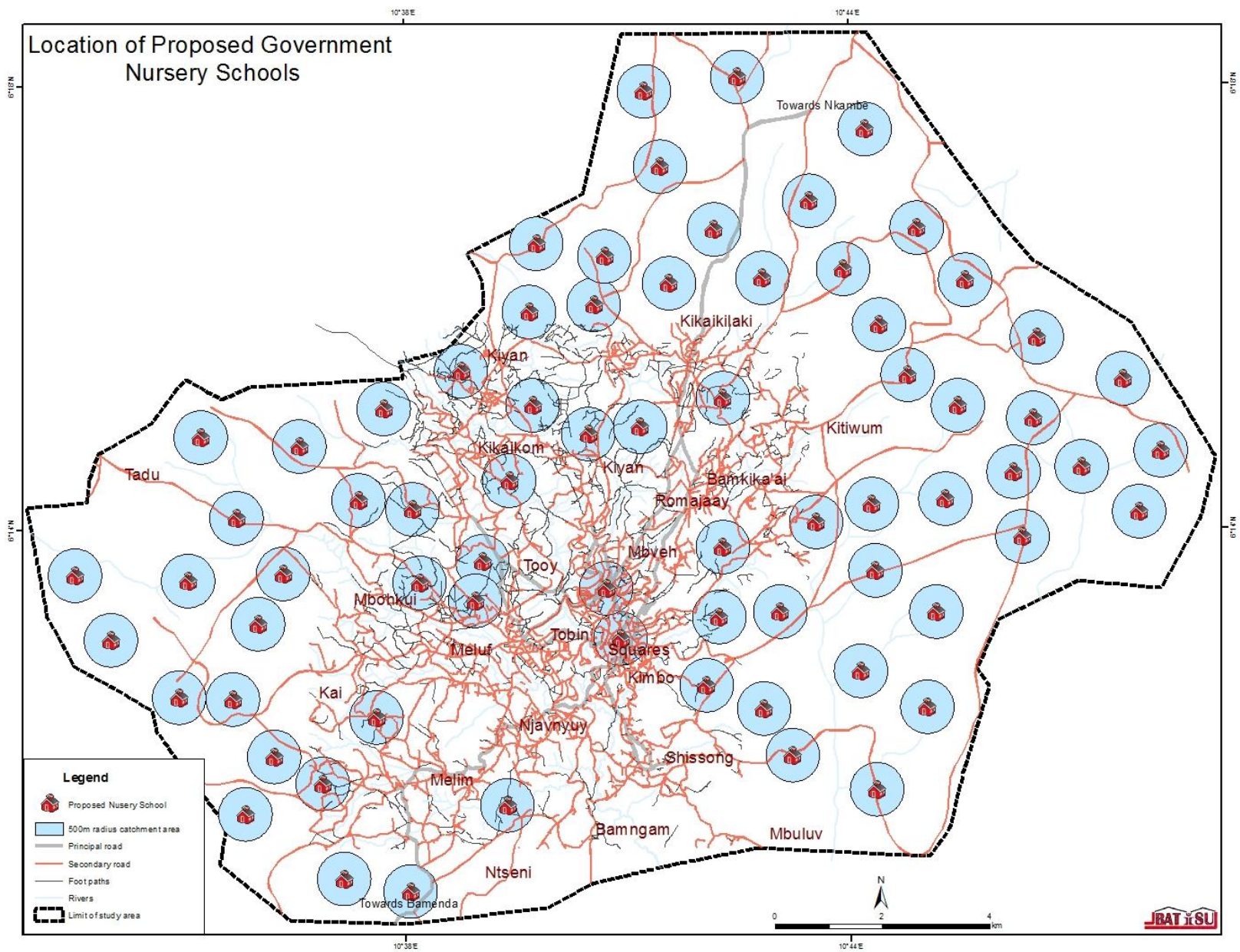


Figure 13 : location of existing government nursery schools

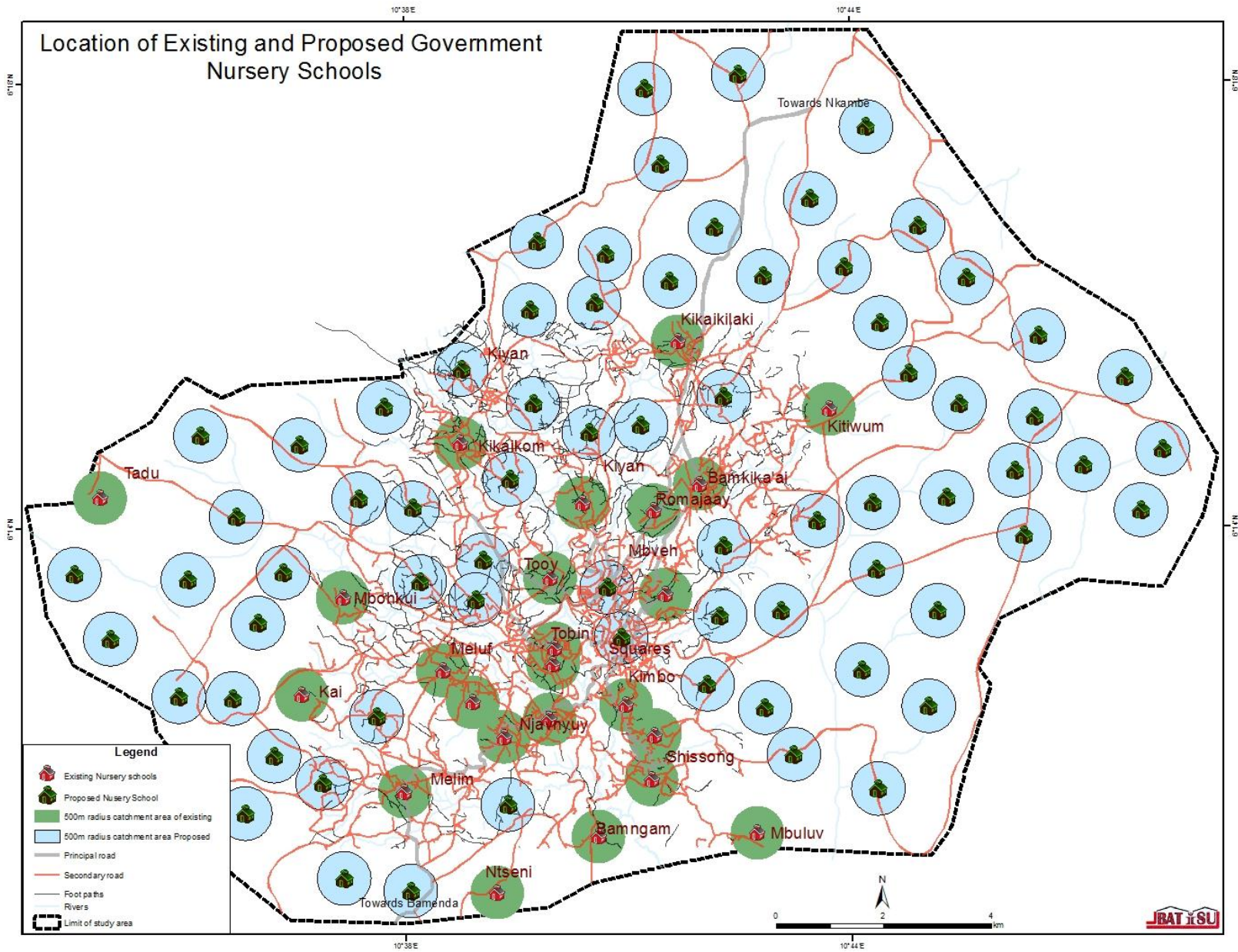


Figure 14 : location of existing and proposed government nursery schools

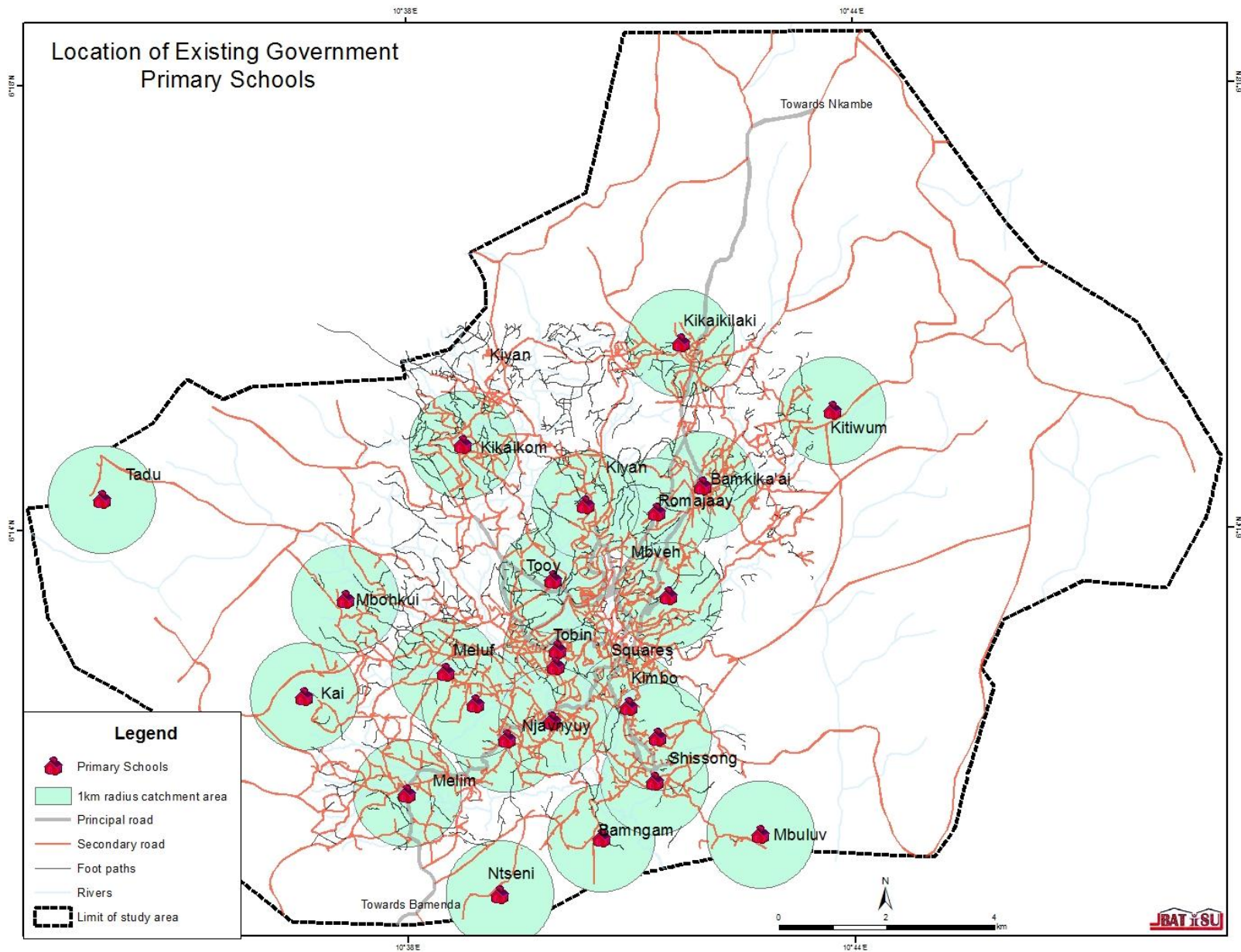


Figure 15 : location of existing government primary schools

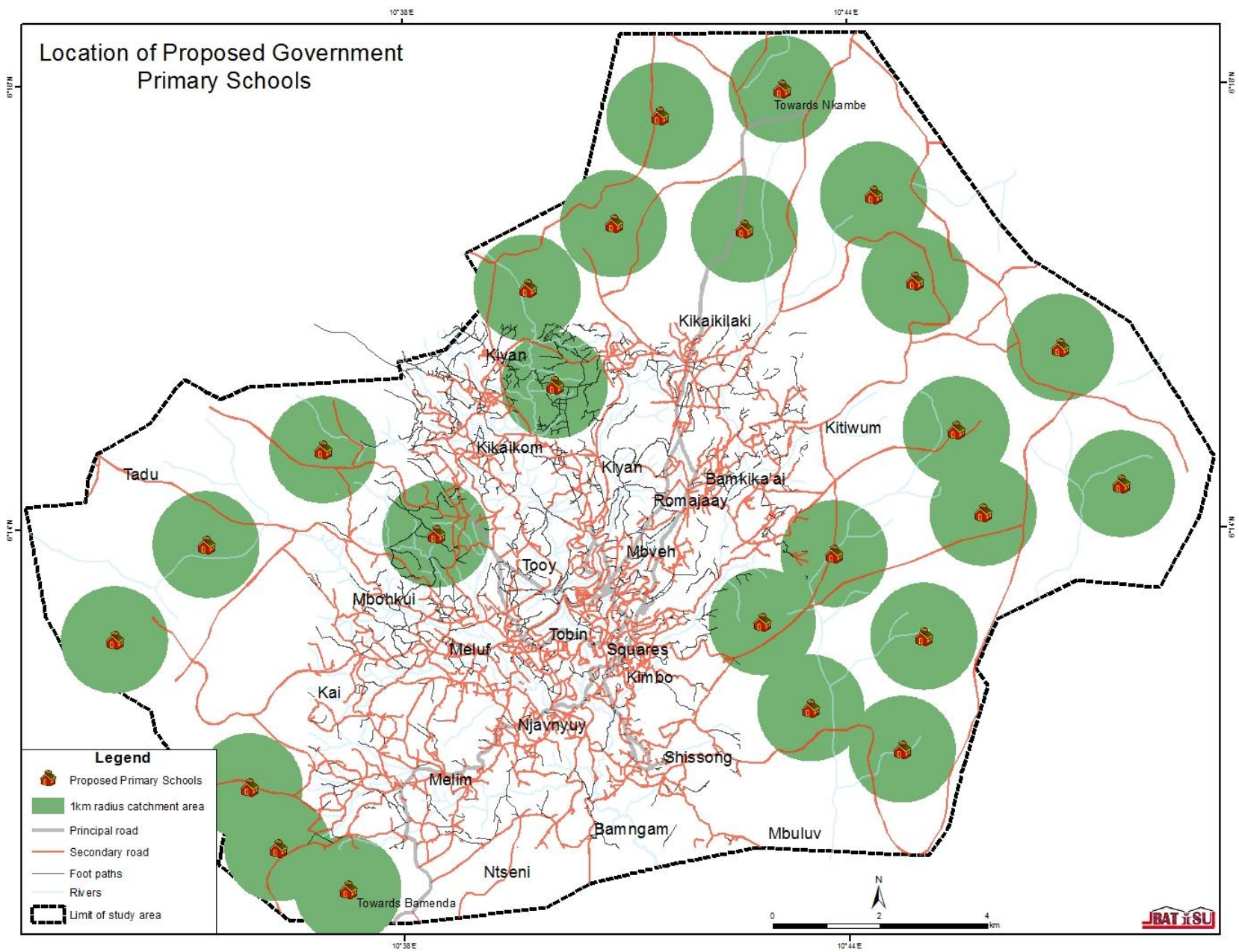


Figure 16 : location of proposed government primary schools

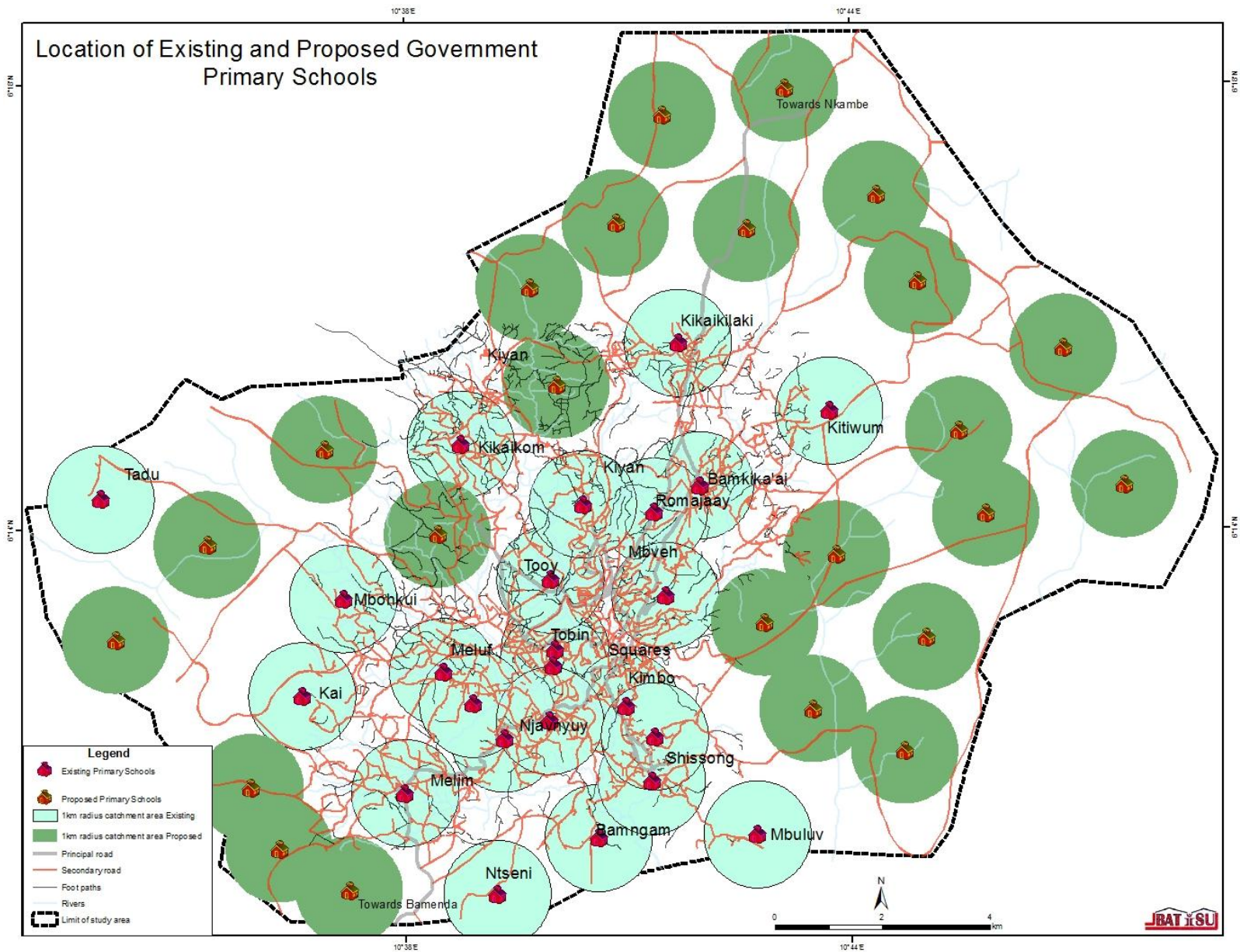


Figure 17 : location of existing and proposed government primary schools

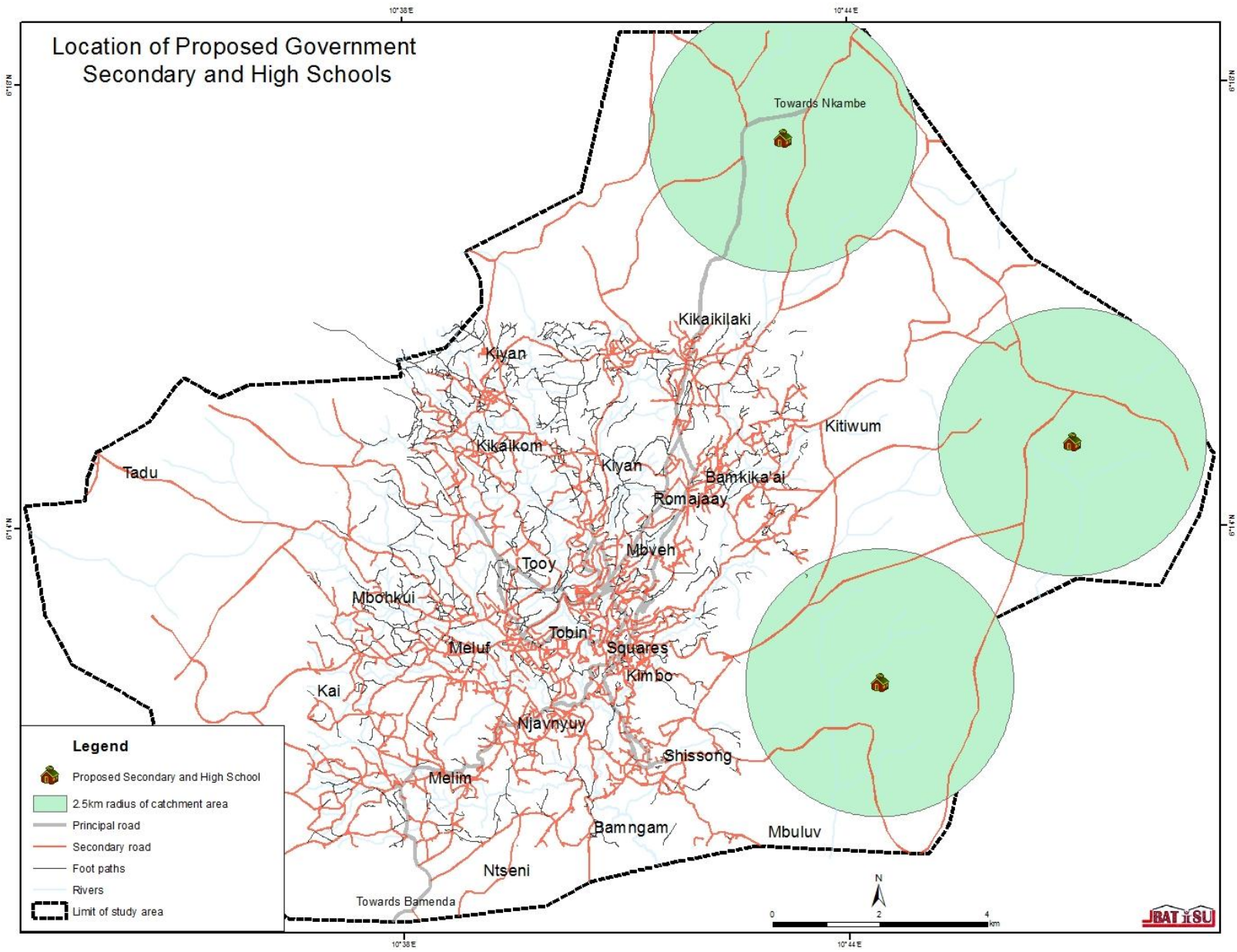


Figure 19 : location of proposed government secondary and high schools

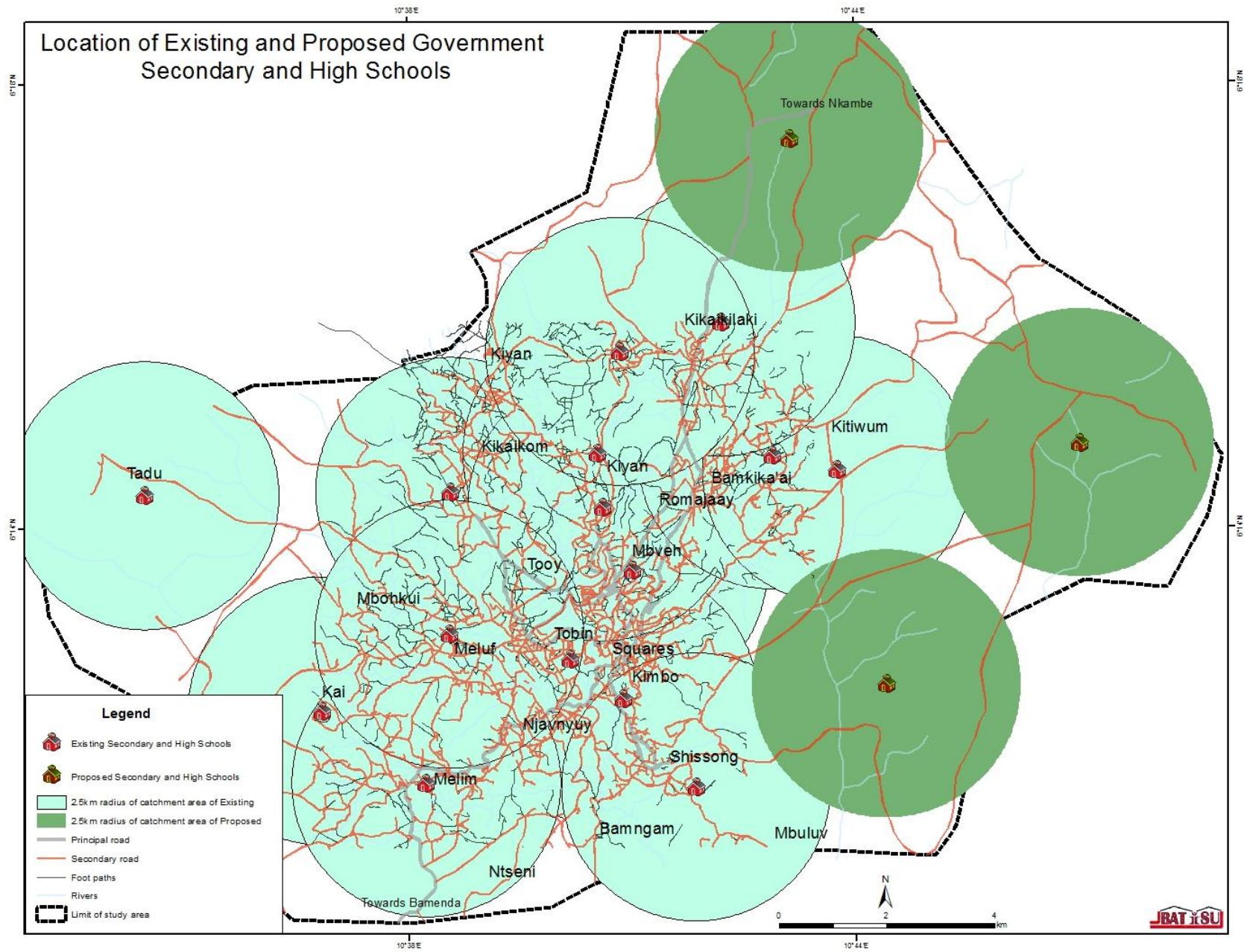


Figure 20 : location of existing and proposed government secondary and high schools

8.4 HEALTH FACILITIES

Table N° 26 : Proposed Standards for Health Facilities

Item	Level of Health Facilities	Level of Provision	Population Threshold	Catchment Radius	Space Allocation (hectares)
01	Health centres	Districts	40-50 000	2.5km	2
02	District hospitals	Towns	40-50 000	4.0km	5
03	General Hospitals	Town	200-500,000	5.0km	7-10
04	Reference Hospital	Region	More than 500,000	More than 10.0km	10 -15

Source: BATISU sarl

Table N° 27 : Projected Demand for Public Health Facilities

Year	Health Centres			Districts hospitals			General Hospitals		
E	5			1			0		
	T	G	P	T	G	P	T	G	P
2012	3	0	0	1	0	0	0	0	0
2017	4	0	0	1	0	0	0	0	0
2022	5	0	0	1	0	0	0	0	0
2027	8	3	3	2	1	1	0	0	0

Source: BATISU sarl

Keys: T = total G = Gap P = Proposed E = Existing

8.4.1 Location plans

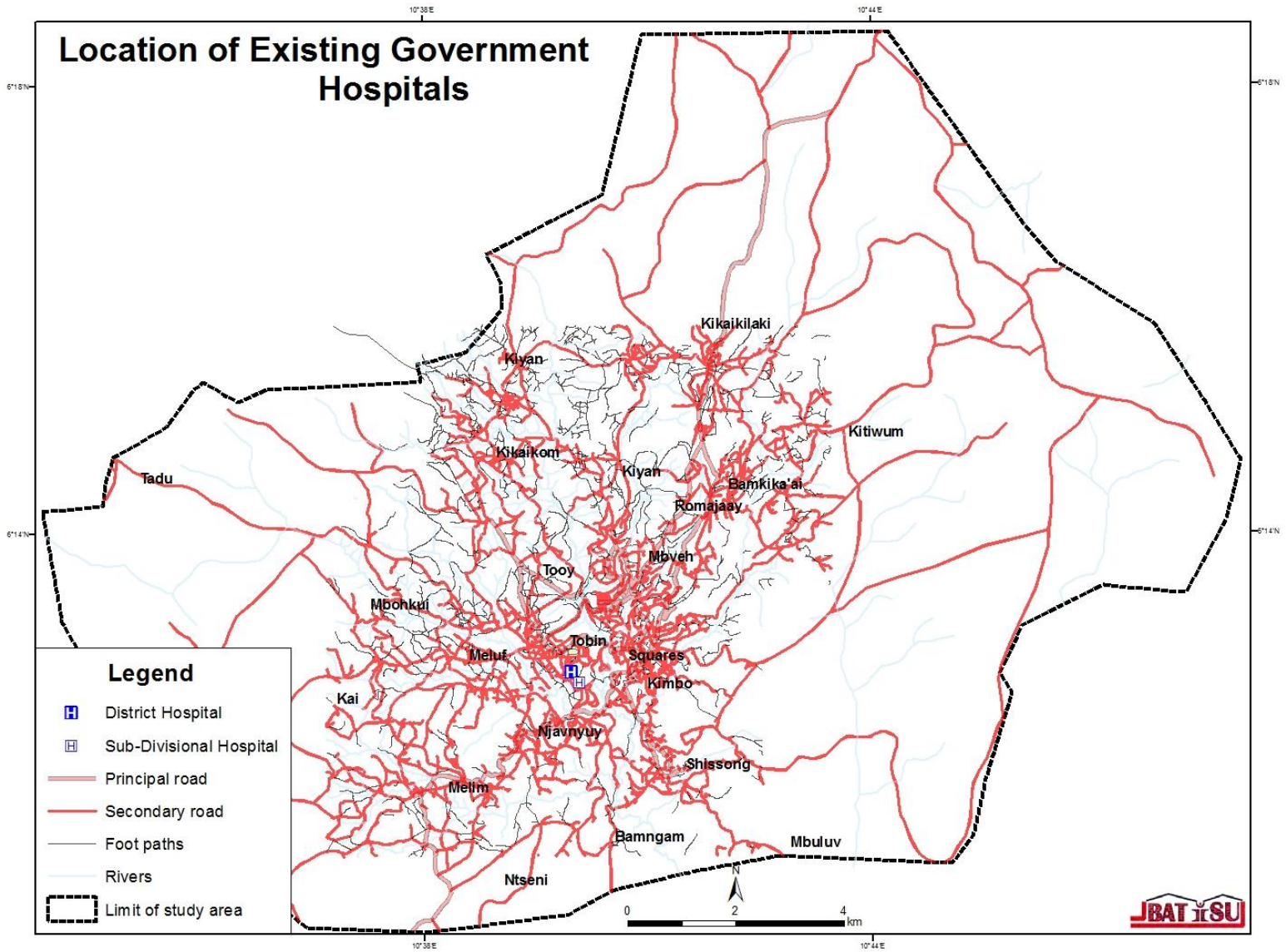


Figure 21 : location of existing government hospitals

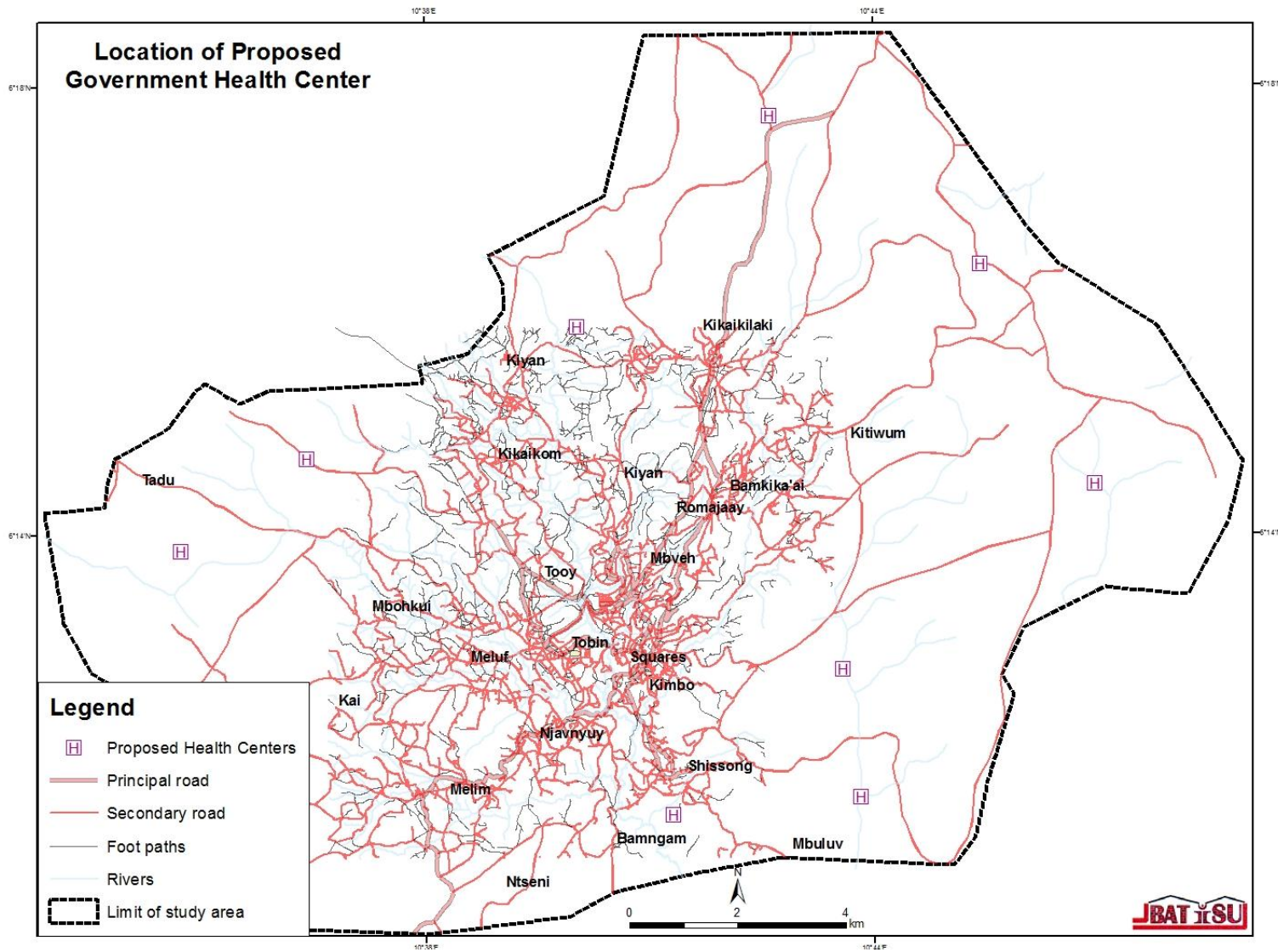


Figure 22 : location of proposed government health centers

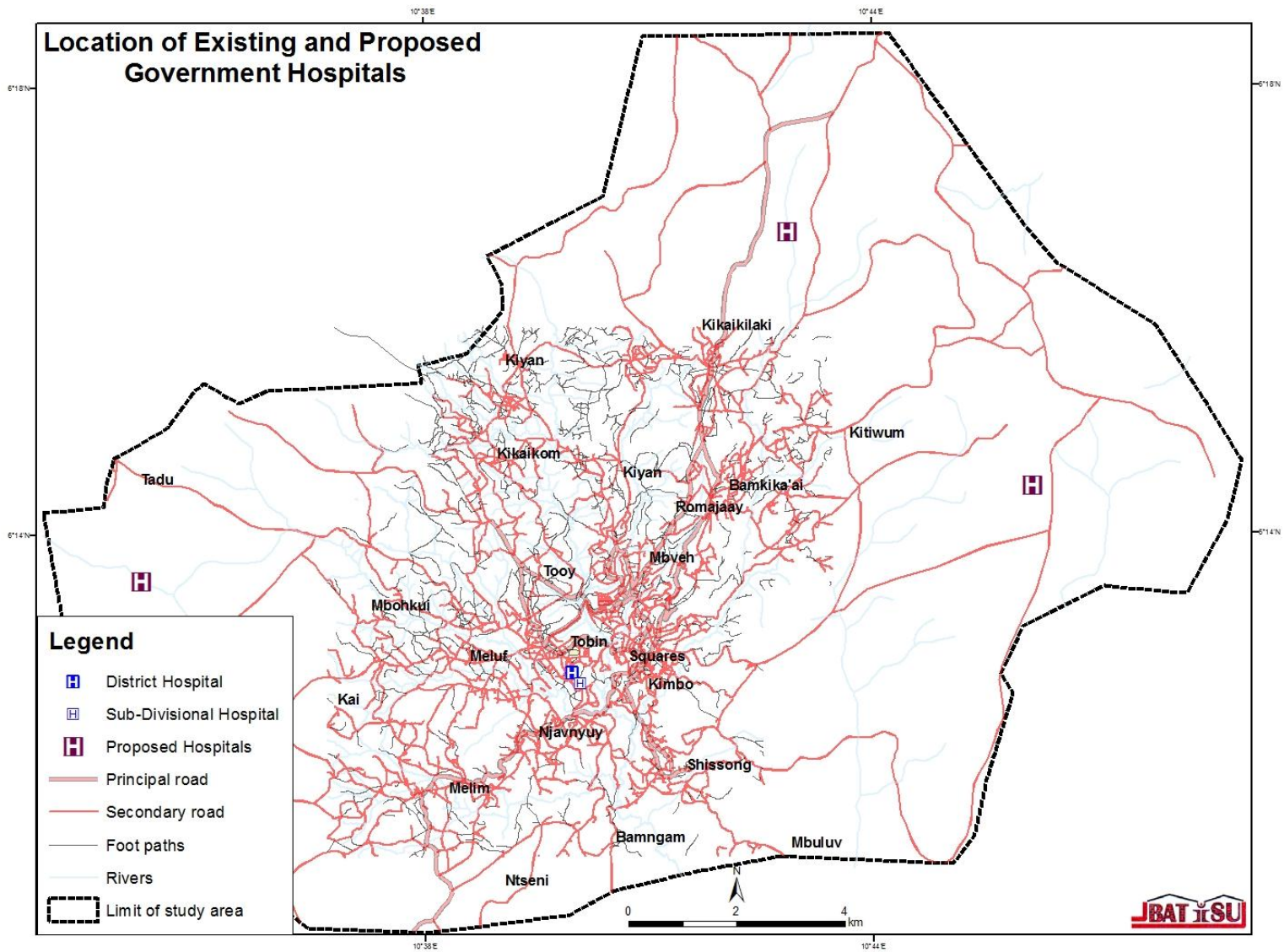


Figure 23 : location of existing and proposed government hospitals

8.4.2 Recommended Projects

- ❖ Rehabilitate and upgrade existing public health facilities.
- ❖ Acquire and reserve sites for future public health facilities.
- ❖ Provide new public health facilities to match growing demand.

8.5 MARKETS AND SHOPPING CENTRES

Table N° 28 : Proposed Standards for Markets and Shopping Facilities

Item	Markets and Shopping Facilities	Level of Provision	Population Threshold	Catchment Radius	Space Standards
1	Corner stores	Cluster	1000-2 ,000	500m	200m ²
2	Neighborhood Shops	Quarter/Neighborhood	7500-10,000	1.5km	500m ²
3	District Markets and Shops	District	40-50 000	2.5km	1.0hectares
4	Town markets and Shops	Town	100-150,000	3.5km	3.0hectares
5	Central markets and Shops	City	200-500,000	5.0km	5.0hectares
6	Regional Markets and Shopping mall	Region	–	–	More than 5.0hectares

Source: BATISU sarl

8.6 PARKING FACILITIES

Table N° 29 : Proposed Standards for Parking Facilities

Item	Parking Facilities	Level of Provision	Population Threshold	Catchment Radius/Distance	Space Standards
1	Taxi Stops	Busy streets and Junctions	N.A	150m	40m long
2	Bus Stops	Arterial and Primary roads	N.A	500m	30m long
3	Motorcycle parks	Strategic road junctions(off-street)	N.A	300m	50m ²
4	On-Street parking	City and Town Centres/Corners Stores	N.A	10m from road junction	Between road junctions
5	Off-street	Activity areas	5 000 - 10 000	N.A	500m ²
6	Intra-Urban bus stations	Towns/Districts	40 000 - 50 000	2.5km	1.0hectares
7	Commuter motor park	Towns	100 000 - 200 000	3.5km	1.5hectares
8	Central motor park	City	200 000 - 500 000	5.0km	3.0hectares
9	Lorry(cargo) parks	City/Region	More than 500 000	More than 5.0km	5.0hectares

Source: BATISU sarl

8.6.1 Rules and Regulations for the Location of motor, lorry and bus parks

- ❖ All motor, lorry and bus parks are prohibited from locating along arterial and primary roads within the planning area.
- ❖ All existing motor, lorry and bus parking facilities along arterial and primary roads must be removed to convenient locations in conformity with these parking rules and regulations.
- ❖ Motor, lorry and bus parking facilities can be located at least 50 meters from the edge of secondary and tertiary roads.
- ❖ Each motor, lorry and bus park must have a separate entry and exit not less than 50 meters apart.
- ❖ The minimum area of a motor, lorry and bus park is 2500 meters square.

8.7 CIVIC AND CULTURAL FACILITIES

Table N° 30 : Proposed Standards for Public Libraries and Creativity Centres

Item	Public Libraries	Level of Provision	Population Threshold	Catchment Radius/Distance	Space Standards
01	Reading Room	Cluster	1000-2000	200m	20-40m ²
02	Neighborhood Library	Neighborhood	7500-10 000	500m	80-100m ²
03	District library	District	40 000-50 000	2.0km	500m ²
04	Town Library/Creativity Centre	Town	100 000-150 000	2.5km	1,000m ²
05	City Library/Technological museum	City	200 000-500 000	5.0km	1-2hectares
06	Regional Library/Archives	Region	Over 500 000	Over 5km	2-5hectares

Source: BATISU sarl

Table N° 30 below shows standards for planning and providing public and community halls which should be used in further detailed planning of urban space.

Table N° 31 : Proposed Standards for Table Public and Community halls

Item	Public and Community Hall	Level of Provision	Population Threshold	Catchment Radius/Distance	Space Standards
01	Meeting Room	Cluster	500-1 000	200m	20-40m ²
02	Neighborhood Hall	Neighborhood	5 000-10 000	500m	100-120m ²
03	District Hall	District	50,000-100,000	1.5km	500m ²
04	Town Hall	Town	100 000-200 000	2.5km	1hectares
05	City Hall	City	200 000-500 000	5.0km	2-3hectares
06	Conference Centre	Region	Over 500 000	Over 5.0km	3-5hectares

Source: BATISU sarl

8.8 WELFARE FACILITIES

Table N° 32 : proposed standards for Welfare Facilities

Item	Welfare Facility	Level of Provision	Population Threshold	Space Standard
01	Orphanages	Urban district	50 000	250- 500m square
02	Handicapped centres	Kumbo Town	Over 100 000	250 500m square
03	Old people's homes	Urban district	50 000	1000- 15000 m square
04	Reformatory centres	Kumbo Town	Over 100 000	250 500m square
05	Blind and deaf centres	Kumbo Town	Over 100 000	250 500m square
06	Welfare homes	Urban district	50 000	1000-1500m square

Source: BATISU sarl

8.9 SPORTS AND RECREATION

Table N° 33 shows proposed standards for providing sports and recreational facilities. These standards should be used in further detailed planning to provide for sports and recreational facilities. The difficulty is usually who shall provide the means, acquire the land, plan and develop sports and recreational facilities and ensure that they are well maintained and managed.

Table N° 33 : Proposed Standards for Sports and Recreational Facilities

Item	Sports and Recreational Facilities	Level of Provision	Population Threshold	Catchment Radius/Distance	Space Standards
01	Toddlers playgrounds	Block	500- 1000	50m	100m ²
02	Infants playground	Cluster	1000-2 000	200m	200m ²
03	Football Pitch	Neighborhood	7500-10 000	1.0km	6000m ²
04	Neighborhood parks and recreation	Neighborhood	75000-10 000	500m	1.0hectares
05	Sport Complex	District	40,000-50 000	2.0km	2.0hectares
06	Town Stadium	Town	100,000-200 000	2.5km	3.5hectares
07	City Stadium	City	200,000-500 000	5.0km	10.0hectares
08	City park and gardens	City	Over 500 000	Over 5.0km	Over 10hectares

Source: BATISU sarl

8.10 OPEN SPACES AND GREENS

The demand and need for open space varies with income groups, level of education, cultural background, lifestyles and age groups within the life cycle. As such, the trends and pattern of demand for open spaces changes over time and space with changes in recreational habits.

At the moment, the demand and need for urban open spaces are low but would certainly increase in future. As such, sites for open spaces must be acquired, reserved and eventually develop and managed by local council authorities.

Table N° 34 : project sheet for Welfare Facilities

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Rehabilitation and upgrading of existing schools	2013-2015	Run down school infrastructure	Make optimum use of existing schools	<ul style="list-style-type: none"> ▪ MINEBASE ▪ MINESEC ▪ KC 	<ul style="list-style-type: none"> ▪ Pupils ▪ Students ▪ Parents ▪ Teachers 	3 000 000 000
2	Acquire and reserve sites for educational facilities	2015-2017	Inadequate and poorly located school sites	Ensure the proper location of schools	<ul style="list-style-type: none"> ▪ MINDAF ▪ KC 	<ul style="list-style-type: none"> ▪ School communities ▪ MINEBASE ▪ MINESEC 	500 000 000
3	Provide new educational facilities to match growing demand	2015-2022	Schools usually allocated belatedly	Meet growing demands for education	<ul style="list-style-type: none"> ▪ MINEBASE ▪ MINESEC ▪ KC 	<ul style="list-style-type: none"> ▪ Pupils ▪ Students ▪ Parents ▪ Teachers 	500 000 000
4	Rehabilitate and upgrade existing public health facilities	2013-2015	Run down health infrastructure	Make optimum use of existing health facilities	<ul style="list-style-type: none"> ▪ MINSANTE ▪ KC 	<ul style="list-style-type: none"> ▪ Health district communities 	2 000 000 000
5	Acquire and reserve sites for future public health facilities	2015-2017	Inadequate and poorly located health facilities	Ensure the proper location of health facilities	<ul style="list-style-type: none"> ▪ MINSANTE ▪ MINDAF ▪ KC 	<ul style="list-style-type: none"> ▪ Health district communities ▪ MINSANTE 	500 000 000
6	Provide new public health facilities to match growing demand	2015-2022	Health facilities usually allocated belatedly	Meet growing demands for health facilities	<ul style="list-style-type: none"> ▪ MINSANTE ▪ KC 	<ul style="list-style-type: none"> ▪ Health district communities 	20 000 000 000

Source: BATISU sarl

KUMBO LAND USE PLAN

9.0 ENVIRONMENTAL MANAGEMENT PLAN

PLANNING REPORT



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9.0 ENVIRONMENTAL MANAGEMENT PLAN

9.1 OBJECTIVES

The overall objective is to prevent and mitigate undesirable environmental outcomes of all planning and development actions and activities.

9.2 SOLID WASTE MANAGEMENT

9.2.1 Existing Situation

- ❖ Unorganized solid waste management.
- ❖ Random solid waste disposal.

9.2.2 Objective

Develop Kumbo town Council capacity to effectively manage solid waste.

9.2.3 Management Processes and Procedures

- ❖ Pre-collection.
- ❖ Collection, transportation and disposal.
- ❖ Treatment and disposal.
- ❖ Sanitary inspection of premises.

9.2.4 Rules and Regulations

- ❖ Kumbo town Council by-laws for solid waste management.

9.2.5 Recommended Projects

- ❖ Sensitization of the population on pre-collection management of solid waste.
- ❖ Selection and development of waste disposal site.
- ❖ Acquisition of waste management materials and equipment;
- ❖ Kumbo town Council capacity building in solid management.

9.3 SEWAGE MANAGEMENT

9.3.1 Existing Situation

- ❖ Poorly constructed individual toilets and latrines.
- ❖ Poorly constructed and managed septic tanks.
- ❖ Several households without toilets.
- ❖ Few public toilets.

9.3.2 Objective

- ❖ Provide Kumbo town area with save and reliable individual and public sewage facilities.

9.3.3 Management Processes and Procedures

- ❖ Sanitary inspection of individual and public sewage facilities.
- ❖ Procedures for control of construction individual and public sewage facilities.

9.3.4 Rules and Regulations

- ❖ Kumbo town Council sewage management by-laws.

9.3.5 Recommended Projects

- ❖ Construction of public toilets and conveniences.

9.4 POLLUTION

9.4.1 Existing Situation

- ❖ Watercourses and water bodies polluted with solid, liquid and chemical waste.
- ❖ Air is continuously polluted by exhaust fumes, smoke and dust.
- ❖ Rampant uncontrolled noise from motor repair garages and commercial enterprises.
- ❖ Unpleasant visual environment.

9.4.2 Objective

- ❖ The overall objective is to continuously minimize water, air, noise and visual pollution within the Kumbo town planning area.

9.4.3 Rules and Regulations

- ❖ Land use zoning regulations.
- ❖ Solid and liquid waste by-laws and control measures.

9.5 PROTECTED AREAS

9.5.1 Existing Situation

- ❖ Unprotected water catchment.
- ❖ Irregular occupation and construction on public right-of-ways.
- ❖ Occupation and construction along watercourses.
- ❖ Destruction of land forms and scenic sites.

9.5.2 Objective

The overall objective is to prevent the occupation of protected and risky sites and eventually reclaim those that have been occupied.

9.5.3 Management Processes and Procedures

- ❖ Identify all protected areas and delimit them.

- ❖ Prepare a text declaring protected sites.
- ❖ Carry out feasibility studies on reclaiming occupied protected areas.
- ❖ Control the occupation of declared protected areas.

9.5.4 Rules and Regulations

See sectoral grill and standards.

9.5.5 Recommended Projects

- ❖ Reclamation of occupied protected areas.
- ❖ Resettlement of those displaced by reclamation schemes.

9.6 ENVIRONMENTAL IMPACT ASSESSMENT

9.6.1 Existing Situation

- ❖ Macro and micro environmental impact assessment not regularly carried out.
- ❖ Undesirable environmental impacts.

9.6.2 Objective

The overall objective is to develop Kumbo town Council capacity in macro and micro environmental impact assessment.

9.6.3 Processes and Procedures

- ❖ Prepare and approve Kumbo town Council macro and micro environmental assessment bye-laws.
- ❖ Carry out public sensitization on macro and micro environmental assessment.
- ❖ Develop Kumbo town Council's capacity in macro and micro environmental impact assessment;
- ❖ Institute an environment impact tax for Kumbo town Council area.

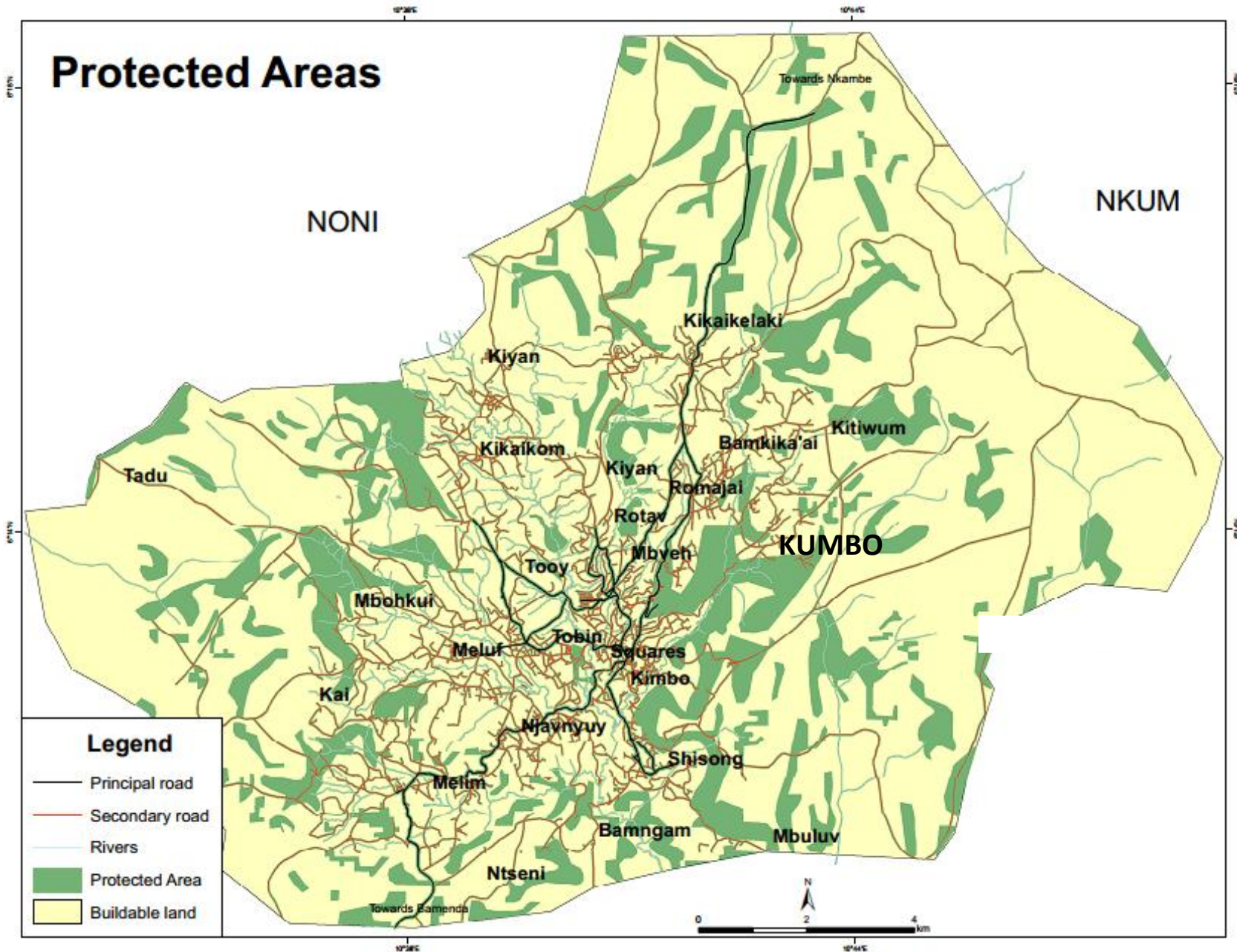


Table N° 35 : project sheet for Environmental Impact Assessment

Code	Nomenclature	Time Frame	Present State	Objectives	Activities	Potential Sponsors	Beneficiaries	Estimated Cost
1	Reclamation of occupied protected areas	2015-2027	Continuous occupation of risky areas	Protect risky areas	<ul style="list-style-type: none"> ▪ MINH DU ▪ KUMBO COUNCIL 	<ul style="list-style-type: none"> ▪ General public ▪ Occupants 	<ul style="list-style-type: none"> ▪ General public ▪ Occupants 	50,000,000
2	Resettlement of those displaced by reclamation schemes	2017-2027	Not displaced yet	Permanently settle those displaced	<ul style="list-style-type: none"> ▪ MINH DU ▪ KUMBO COUNCIL 	Those displaced	Those displaced	50,000,000
3	Selection and development of solid waste treatment and disposal site	2013	Site identified and not formally selected and acquired	Safe treatment and disposal of solid waste	<ul style="list-style-type: none"> ▪ MINH DU ▪ KUMBO COUNCIL 	<ul style="list-style-type: none"> ▪ MINH DU ▪ KUMBO COUNCIL 	Residents of Kumbo town	50,000,000

Source: BATISU sarl

KUMBO LAND USE PLAN

10.0 ECONOMIC BASE PLAN

PLANNING REPORT



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10.0 ECONOMIC BASE PLAN

10.1 EXISTING SITUATION

The current state of the economic base of Kumbo is weak and unstable and characterized by:

- ❖ Over dependence on a largely primary subsistent agricultural production and natural resource exploitation.
- ❖ Weak secondary sector whereby raw materials are simply exported or sold locally without adding value through processing;
- ❖ Largely informal tertiary sector based on buying and selling and offering of rudimentary services.
- ❖ Timid quaternary sector of research, consultancy and information technologies.
- ❖ Un-exploitation of available local, sub-regional and regional economic potentials.
- ❖ More money leaves Kumbo than it enters and the circulation of money locally is slow and unsteady.

The ultimate undesirable outcomes of the current economic base of Kumbo are entrenching poverty resulting from extremely low incomes, unemployment and under employment as returns to production and rendering services are extremely low.

10.2 OBJECTIVE

The overall objective of the economic base plan of Kumbo is to strengthen, diversify and stabilize the economic base from a largely primary and rudimentary secondary to a modern tertiary sector by:

- ❖ Increasing and valorizing agricultural production and natural resource exploitation within the sub-region so as to increase returns for local produce and products.
- ❖ Transforming local produce and raw materials for local consumption and export so as to add value to the produce and natural resources of the sub-region.
- ❖ Developing and expanding the industrial and manufacturing base of Kumbo and its environs;
- ❖ Optimising the exploitation of touristic potentials of Kumbo and its environs as a main source of generating revenues.
- ❖ Expanding and upgrading the service and quaternary activities so as to increase the circulation of money and attract external capital into the economy.
- ❖ Creating a functional, stable and reliable financial and capital market by expanding local savings and attracting external capital.
- ❖ Reorganizing informal economic activities while also restructuring and upgrading formal economic activities.
- ❖ Ensuring that money flows and circulates in Kumbo more than it leaves.

10.3 ECONOMIC BASE STRATEGIES

10.3.1 Agricultural Production and Natural Resource Exploitation

Increase and improve on agricultural production and raw material exploitation by:

- ❖ Establishing a branch of chamber of agriculture, livestock and forestry in Kumbo.
- ❖ Extending credit and investments to agricultural production and natural resource exploitation.
- ❖ Modernizing agricultural production and natural resource exploitation techniques and technologies.
- ❖ Increasing the scale of agricultural production and raw material exploitation from individual to medium and large size production:
 - Cash crop production.
 - Food crop production.
 - Livestock production.
 - Horticulture.
- ❖ Ensuring access to affordable and appropriate inputs into agricultural and raw material exploitation.
- ❖ Guaranteeing the marketing of agricultural produce and raw materials.

10.3.2 Processing of Produce and Raw Materials

Expand and upgrade agro-industrial processing and raw material transformation in the sub-region:

- ❖ Establish a branch of chamber of commerce, trade and industry in Kumbo .
- ❖ Agro-industrial processing of:
 - Citrus fruit juice
 - Oil palm products
 - Shear butter
 - Confectionary
 - Cassava and sweet potato flour
 - Spices
- ❖ Processing of non-timber forest products.
- ❖ Wood processing.
- ❖ Animal feed inputs and products.

10.3.3 Industrial and Manufacturing Base

Expand and upgrade the industrial and manufacturing sector in the sub-region:

- ❖ Manufacturing of inputs into production.
- ❖ Maintenance and repair industry.
 - Auto mechanic
 - Electronic
 - Electricity
 - Digital

10.3.4 Tourism

Upgrade and improve touristic facilities and services in Kumbo and environs:

- ❖ Town Cultural Centre.
- ❖ Kumbo Town Green.
- ❖ Kumbo Town Parks and Gardens.

10.3.5 Service Activities

Expand and upgrade service activities in Kumbo and environs:

- ❖ Trade and commerce.
- ❖ Wholesale services.
- ❖ Retail stores.
- ❖ Government services.
- ❖ Transportation facilities and services.
- ❖ Training and education services.

10.3.6 Quaternary Services

Reinforce and expand quaternary services in Kumbo and environs:

- ❖ Consultancy.
- ❖ Contracting.
- ❖ Research.
- ❖ Information technology centre.

10.3.6 Financial and Capital Market

Expand and upgrade financial and capital services in Kumbo:

- ❖ Sub-regional banking centre.
- ❖ Sub-regional stock exchange.
- ❖ Sub-regional micro finance centre.

10.3.7 Informal and Formal Economic Activities

Organize and provide financial and management assistance to informal economic operators while upgrading and increasing formal economic activities and providing financial and management assistance to formal economic operators.

10.3.8 Money Flow

Accelerate the circulation of money within the sub-region:

- ❖ Internal circulation of money.
Curb the unnecessary out flow of capital from sub-region.
- ❖ Out flow of money:
 - Transmittances.
 - Investments out of Kumbo .

Increase and accelerate the inflow of capital into the sub-region:

- ❖ In flow of money :
 - Transmittances.
 - External investments.

10.3.9 Corporate Investments

Create conducive conditions for promoting corporate investments in the sub-region:

- ❖ Kumbo stock exchange.
- ❖ Cooperative societies.
- ❖ Small and medium size enterprises.
- ❖ Registration of business enterprises.

10.3.10 Construction Industry

Expand and upgrade the construction industry in the sub-region as a major source of employment and income generation:

- ❖ National projects in Kumbo and environs .
- ❖ Regional projects;
- ❖ Kumbo Town Council projects.
- ❖ Private sector construction projects.
- ❖ Community projects.

10.4 RECOMMENDED PROJECTS

- ❖ Carry out an industrial and manufacturing base study of Kumbo and its sub-region.
- ❖ Carry out a financial market feasibility study for Kumbo.

Table N° 36 : project sheet for Economic Base Plan

Code	Nomenclature	Time Frame	Present State	Objectives	Activities	Potential Sponsors	Beneficiaries	Estimated Cost
1	Carry out an industrial and manufacturing base study of Kumbo and its sub-region	2013-2015	Not done	Improve understanding of industrial potentials	KUMBO COUNCIL	Potential investors	Potential investors	100 000 000
2	Carry out a financial market feasibility study for Kumbo	2013-2015	Not done	Increase understanding of finance and capital market potentials	KUMBO COUNCIL	<ul style="list-style-type: none"> ▪ Residents ▪ Investors 	<ul style="list-style-type: none"> ▪ Residents ▪ Investors 	50 000 000

Source: BATISU sarl

KUMBO LAND USE PLAN

11.0 INSTITUTIONAL CAPACITY BUILDING PLAN

PLANNING REPORT



11.0 INSTITUTIONAL CAPACITY BUILDING PLAN

11.1 EXISTING SITUATION

11.1.1 Ineffective local governance and partnership

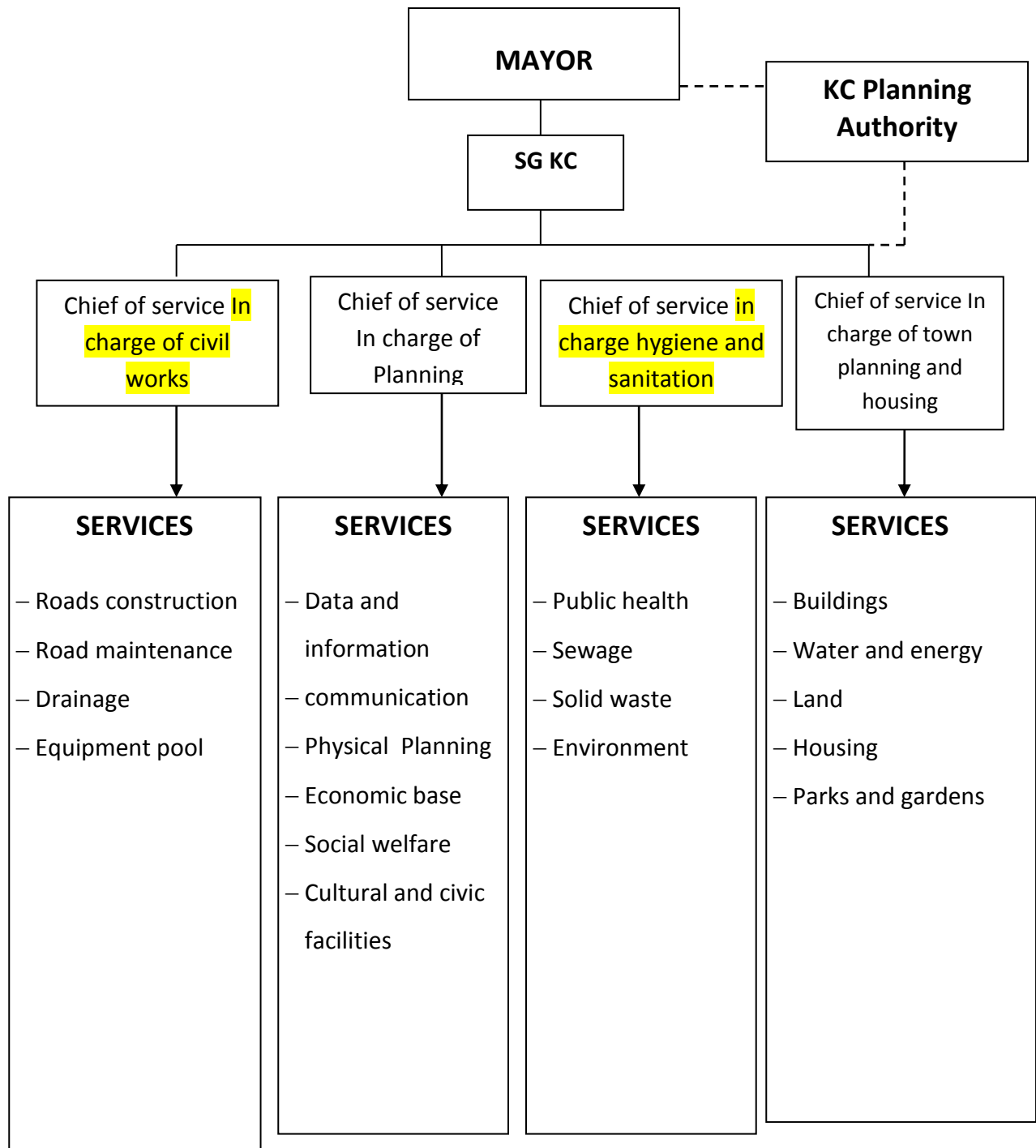
- ❖ Ineffective public participation in decision making.
- ❖ Inadequate transparency.
- ❖ Inadequate accountability to the public.
- ❖ Weak and unproductive local partnership.
- ❖ Unsustainable external partnership.
- ❖ Unsatisfactory communication with the public.

11.2 OBJECTIVE

11.2.1 Effective local governance and partnership assured

- ❖ Effective public participation in decision making assured .
- ❖ Adequate transparency assured.
- ❖ Adequate accountability to the public assured.
- ❖ Strong and productive partnership assured.
- ❖ Sustainable external partnership assured.

11.3 ORGANIZATIONAL STRUCTURE OF KUMBO COUNCIL TECHNICAL DEPARTMENTS



Graph N° 5 : Organizational Structure of Kumbo Council Technical Departments

11.4 KUMBO TOWN PLANNING AUTHORITY (PA)

11.4.1 What is a Planning Authority?

A Planning Authority is an independent body of committed, experienced and competent persons with demonstrated stakes who have been selected and have accepted to serve the residents and officials of Kumbo Town Council with respect to the planning and development of the town.

11.4.2 Terms of reference for a Planning Commission

The proposed terms of reference for Kumbo Town Planning Authority shall include among others the following: -

- ❖ Provide a realistic vision for the planning and development of Kumbo.
- ❖ Receive all applications for development within Kumbo Town planning area.
- ❖ Send all applications to KUMBO COUNCIL planning and design department.
- ❖ Receive recommendations from KUMBO COUNCIL planning and design department.
- ❖ Make recommendations to Government Delegate for approval or reject.

11.4.3 The members of Kumbo Town Planning Authority (PA) should include:

- ❖ Chair person : independent
- ❖ Vice Chair person : independent
- ❖ Secretary : independent
- ❖ Kumbo councilors : members

11.5 PLANNING AND LAND DEVELOPMENT PROCESSES AND PROCEDURES

- ❖ Delimitation of Kumbo Town planning area.
- ❖ Delimitation of Kumbo urban districts.
- ❖ Declaration of priority planning areas (PPA).
- ❖ Preparation of urban district plans.
- ❖ Preparation of neighborhood plans.
- ❖ Planning certificates.
- ❖ Building permits.
- ❖ Certificate of fitness and conformity.
- ❖ Declaration of protected areas.
- ❖ Acquisition and preservation of land for public and community use.
- ❖ Planning appeal procedures.

11.6 DEVELOPMENT OF PARTNERSHIP

- ❖ Local partnership:
 - Kumbo Town Council and sub-divisional councils.
 - Council and land owners partnership.
 - Council and private investor partnership.

- Community development.
- Real estate promoters.
- Cultural and development associations and groups.
- Partnership with local financial institutions.
- ❖ Inter-council partnership:
 - Twinning with other councils in Cameroon.
- ❖ Partnership with government ministries and departments:
 - MINHDU
 - MINDAF
 - MINPAT
 - MINATD
 - MINTP
 - MINMAP
 - MINEPNDD
 - MINEBASE
 - MINESEC
 - MINSANTE
 - MINEE
 - CAMWATER
 - AES-SONEL
- ❖ Partnership with Public Agencies.
 - MAETUR
 - SIC
 - MAGZI
 - PNDP
 - CFC
 - FEICOM
 - GPDERUDEP
- ❖ External partnership.
 - Funding partners
 - Twinning with councils out of Cameroon

11.7 KUMBO TOWN COMMUNICATION PLAN

- ❖ Kumbo Town Planning Workshop.
- ❖ Public information instruments.
 - Kumbo Town Council weekly news letter.
 - Kumbo Town quarterly magazine.
- ❖ Radio and television programmes.
- ❖ Workshops and seminars.
- ❖ Kumbo Town Council public relation officer.

11.8 PRIORITY PROJECTS

Table N° 37 : project sheet for Institutional Capacity Building Plan

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Employment of adequate and competent technical personnel	2015-2022	Inadequate, inexperienced and incompetent technical personnel	Provide KKC with an operational organizational structure and adequate technical person for planning, development and maintenance of Kumbo	<ul style="list-style-type: none"> ▪ MINATD ▪ KUMBO COUNCIL 	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL ▪ Community 	1 000 000 000
2	Setting up of Kumbo Town Planning Authority	2015	Ad hoc development committee	Empowering an independent body to guide the planning and development of Kumbo	<ul style="list-style-type: none"> ▪ PM Office ▪ MINATD ▪ MINHDU 	<ul style="list-style-type: none"> ▪ Residents of Kumbo ▪ Officials of Kumbo Town Council 	10 000 000
3	Kumbo Town planning and development processes and procedures	2013-2015	Unavailable and ineffective	Provide operational procedures for planning and development	<ul style="list-style-type: none"> ▪ MINHDU ▪ MINATD ▪ KUMBO COUNCIL 	<ul style="list-style-type: none"> ▪ Officials of KUMBO COUNCIL ▪ Land developers ▪ Residents 	25 000 000
4	Kumbo Town communication plan	2013-2015	Weak communication channels	Effective communication programme assured	<ul style="list-style-type: none"> ▪ MINATD ▪ KUMBO COUNCIL ▪ NGO's 	<ul style="list-style-type: none"> ▪ Residents ▪ Land developers and investors ▪ KUMBO COUNCIL 	50 000 000
5	Creation of kumbo town partnership platform	2013-2015	Weak level of partnership platform	Effective partnership platform assured	<ul style="list-style-type: none"> ▪ MINATD ▪ KUMBO COUNCIL ▪ NGO's 	<ul style="list-style-type: none"> ▪ Officials of KUMBO COUNCIL ▪ community 	25 000 000

Source: BATISU sarl

KUMBO LAND USE PLAN

12.0 FIVE YEARLY PROGRAMME OF IMPLEMENTATION

PLANNING REPORT



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12.0 FIVE YEARLY PROGRAMME OF IMPLEMENTATION

Table N° 38 : Five Yearly Program of Implementation

Code	Projects	2012-2017	2017-2022	2022-2027
01	Preparation of urban district plans	██████████		
02	Preparation of neighborhood plans		██████████	
03	Upgrading of hierarchy of urban roads		██████████	
04	Development of priority urban district infrastructure			██████████
05	Development of priority neighborhoods			██████████
06	Priority housing programs		██████████	██████████
07	Upgrading of slum areas			██████████
08	Redevelopment of Kumbo CBD			██████████
09	Development of district service centers			██████████
10	Development of Kumbo industrial zone		██████████	██████████
11	Development Kumbo shopping mall			██████████

Source: BATISU sarl

12.1 2012-2017 IMPLEMENTATION PROGRAMME

Table N° 39 : Implementation program

projects	2012	2013	2014	2015	2016	2017
Official delimitation of Kumbo town Planning Area		=====				
Delimitation of proposed urban districts		=====				
Carry out five yearly censuses of Kumbo town Area				=====		
Acquisition of satellite images to cover the whole planning area				=====		
Preparation of Urban District Development Plans		=====	=====	=====		
Preparation of Neighborhood Plans in Priority Development Area (PDA)		=====	=====	=====	=====	=====
Preparation of CBD and Urban District Service Centre Plans		=====	=====	=====	=====	=====
Preparation of Kumbo town land use rules and regulations				=====		
Rehabilitation of tarred urban roads				=====	=====	=====
Design of natural drainage networks				=====	=====	=====
Construction of adequate public conveniences		=====	=====	=====		
Effective and regular control of private sewage facilities				=====	=====	=====
Protection of water catchment		=====	=====	=====		
Rehabilitation and regular maintenance of water supply networks and installations				=====	=====	=====
Put in place water quality assurance measures				=====		
Carry out studies for upgrading the water supply capacity				=====	=====	=====
Diversification of sources of energy				=====	=====	=====
Extension and upgrading of existing electricity networks				=====	=====	=====
Public street lighting				=====	=====	=====
Extend communication fiber network to Kumbo		=====	=====	=====	=====	=====

Rehabilitate and upgrade existing fixed telephone networks and installations						
Upgrade mobile telephone facilities						
Selection, acquisition and reservation of sites for Council motor and lorry parks						
Rehabilitation and upgrading of existing council motor parks						
Preparation of Kumbo town parking rules and regulations						
Facilitate access to housing finance and construction techniques and technologies						
Facilitate access to housing land for the poor						
Facilitate access to basic services and utilities in housing areas						
Construction of 1000 social houses yearly						
Rehabilitation and upgrading of existing schools						
Acquire and reserve sites for educational facilities						
Provide new educational facilities to match growing demand						
Rehabilitate and upgrade existing public health facilities						
Acquire and reserve sites for future public health facilities						
Carry out an industrial and manufacturing base study of Kumbo and its sub-region						
Carry out a financial market feasibility study for Kumbo						
Setting up of Kumbo council Planning Authority						
Kumbo council planning and development processes and procedures						
Kumbo council communication plan						
Studies for Widening Kumbo council development tax bases						
Kumbo council Development Platform						
Feasibility study for community participation in development						

Source: BATISU sarl

KUMBO LAND USE PLAN

13.0 FINANCIAL PLAN

PLANNING REPORT



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13.0 FINANCIAL PLAN

13.1 EXISTING SITUATION

- ❖ Inadequate, unreliable and unstable local finance
- ❖ Inadequate transparency in public expenditure
- ❖ Weak local tax base
- ❖ Leakage in public revenue collection
- ❖ Inadequate government credits to Bui Division

13.2 OBJECTIVES

- ❖ Adequate, reliable and stable local finance assured
- ❖ Adequate transparency in public expenditure assured
- ❖ Strong local tax base assured
- ❖ Leakage in public revenue collection reduced
- ❖ Adequate government credits to Bui provided

13.3 FINANCE MOBILIZATION PLAN

- ❖ Widen Kumbo Town development tax base
- ❖ Increase Kumbo Town and annual capital investment for planning, development and maintenance
- ❖ Increase public investments in the sub-region
 - MINH DU
 - MINDAF
 - MINTP
 - MINTP
 - MINMAP
 - MINEPNDD
 - MINEE
 - MINEBASE
 - MINMAP
 - MINSEC
 - MINSANTE
- ❖ Increase level of public agency investments
 - MAETUR
 - FEICOM
 - SIC
 - MAGZI
 - CFC
 - PNDP
 - FEICOM
 - GPDERUDEP

- ❖ Increase level of external funding of development projects
 - World Bank
 - ADB
 - UN-HABITAT
 - Shelter Afrique
 - EU
 - French Cooperation Mission
 - Islamic Development Bank
 - Etc.
- ❖ Increase level of community participation in development

13.4 FINANCE PLAN

- Kumbo Town Council Financial Needs for Planning and Development
- Projected Kumbo Town Council Revenue for planning and development

13.5 PRIORITY PROJECTS

Table N° 40 : project sheet for financial plan

Code	Nomenclature	Time Frame	Present State	Objectives	Potential Sponsors	Beneficiaries	Estimated Cost
1	Studies for Widening Kumbo Town development tax bases	2013-2015	Never done	Increase sources and levels of council revenue	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL ▪ MINATD 	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL 	50 000 000
2	Kumbo Town Development Platform	2015	None existent	Attract technical and financial assistance for KUMBO COUNCIL	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL ▪ MINATD 	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL 	50 000 000
3	Feasibility study for community participation in development	2013-2015	Inadequate community involvement and participation	Enhance community ownership and contributions	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL ▪ MINATD ▪ MINH DU 	<ul style="list-style-type: none"> ▪ KUMBO COUNCIL 	25 000 000

Source: BATISU sarl

KUMBO LAND USE PLAN

I 4.0 APPENDICES

KUMBO LAND USE PLANNING

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KUMBO LAND USE PLAN

WORKSHOP OF THE DRAFT PLANNING REPORT

10 – 12 - 12

Workshop moderation team:

- **Dr François Nanfack: General Manager, BATISU Sarl**
- **Mr Zachary Fru Nsutebu : Chief of mission**
- **Mr Sendze David Layili : Chief of project**
- **Mr Nchouwat Mouchili Idrissa : Town Planner**

INTRODUCTION

The draft planning report is the third amongst the two others that were being presented before. The first was that of the presentation of the urban diagnosis, the second consisted of the presentation of the development scenarios and development perspectives. This third workshop took place on the 10th of December 2012, at about 11:45 a.m and ended at about 3:30 p.m in the Kumbo Council Hall.

PROGRAM OF THE WORKSHOP

- A word of welcome from the Divisional Delegate of MINHDU, the SDO, the chief of mission and the Consultant;
- Technical presentation of the workshops report through a power point
- Presentation of the draft planning report (see the appendix)
- Synthesis of the workshop

The workshop began with the singing of the Cameroon national anthem that was being conducted by a lady and at the end there was a very big applause. Immediately after the singing of the anthem, a number of speeches were being made before the proper presentation of the draft planning report itself.

The divisional delegate of the ministry of Housing and Urban Development (MINHDU) took the floor in the first place and made a briefing on all the work that has been done so far by the consultant and his team. Also, the delegate also highlighted the members of the steering committee on how the work was to be done.

The Senior Divisional Officer for Bui Division in the course of his speech thanked everyone that was present for the meeting. He also said that the land use plan of Kumbo town is being elaborated within the framework and process of development of the nation. He equally said that everything should be done and put in place to make the land use plan of Kumbo successful.

The chief of mission during his speech began by thanking greeting and thanking all those that here present for this important meeting. He said that the report we are presenting is not yet the final report but just a draft planning report and that the draft planning report simply gives a feed back of the last meeting and workshops that was held last time. The chief of mission also emphasized on the fact that in the course of the meeting, all the members should be able to react and make observations and comments and equally that there be brainstorming as a group. He finished by asking that each member should participate and bring about contributions in the course of the meeting.

The consultant of BATISU SARL presented the entire working team present. He equally thanked everyone present for the meeting and that he expects that in the course of the meeting, more people will have to come. He ended by presenting the representative of the ministry of Housing and Urban Development from Yaoundé who was present for the meeting and making sure that everything was being done as stated.

TECHNICAL PRESENTATION OF THE WORKSHOP BY THE CHIEF OF MISSION

The Chief of Mission explained the main reasons of a Master Plan (MP), the project methodology, and the consulting team. He equally presented all what had been done so far and what was still left to be done. He made a recall of the urban diagnosis that had already been done .He technically presented

the draft planning report and said it is a very important phase since it shows the realities of Kumbo on the field. Immediately he finished, he switched to the presentation of the draft planning report through a power point.

POWER POINT PRESENTATION ON THE DRAFT PLANNING REPORT

The power point presentation was combined with a good series of questions as well as remarks from the various participants of the piloting committee. Some of these questions and remarks which were most outstanding are outlined below following:

SYNTHESIS OF THE WORKSHOP

A) Reactions from the secretary general of Kumbo council

❖ The secretary general of Kumbo council asked to know how the new Melim-Bamkikai by-pass road was going to pass on a map.

The chief of mission used the map that was pasted on the wall and tried to explain the possibility of the road passing from Melim through Meluf, Kiyan to Bamkikai using the existing road networks.

- ❖ The secretary general of Kumbo council complained of the fact that the public security and in particular the police body is the principal promoter of public insecurity because they are the ones that collect money from passengers and drivers on the road.
- ❖ The second reaction came from another participant who complained of the fact that the heavy duty vehicles during the day cause a lot of problems and accidents in the town especially for the little school children who have to cross the road before moving to their schools. Equally, the haphazard location of lorry parks in Kumbo is a very big problem.
- ❖ Also, there was another suggestion and proposal that instead of the Melim- Kitiwum by-pass, we should talk of Melim-Bamkikai by-pass.

B) Reactions from the Regional Delegate of the Ministry of Housing and Urban Development

- ❖ The Regional Delegate of the Ministry of Housing and Urban Development for the North West region also present for the workshop suggested that it is good that there be several water sources in Kumbo and also that Kumbo water authority (K.W.A) should be able to supply the already existing water sources in the various zones.

The chief of mission equally reiterated that let the water sources be well maintained in terms of quality and quantity.

- ❖ The regional delegate again emphasizes on the fact that with the various roads that are going to be constructed, we should take into consideration the infrastructures whereby all the water pipes be buried in to the ground before all the roads are constructed. He insists that the plan be well followed up and respected.

The chief of mission responded to this by suggesting that there should be consultation amongst every organ and services in order to avoid confusion. He insists that this is going to be taken into account.

- ❖ The regional delegate intervened in the same light by proposing that the water sources be well maintained in terms of quality and quantity. He insists on the fact that water should not only be

sent to places that are populated but that we should also send water in places that are not yet populated in order to avoid future water problems in the coming future in Kumbo.

- ❖ The regional delegate called on the attention of the various participants of the workshop that water supply projects should be carried out only in the dry season and not in the rainy season. He further explained that when water projects are being carried out in the rainy season, the problem might not be solved because the soil is usually very moist and in the dry season, the soils are very tasty.
- ❖ The chief of mission complained of the fact names of services are being changed in Cameroon but nothing changes on the field he took the example of the ministry of urban development and housing which has been changed to the ministry of Housing and Urban Development.

The regional delegate intervened by saying that the name of the ministry was changed because they wanted to give more priority to housing and shelter in the first place before paying much attention in the domain of urban development.

- ❖ The regional delegate also pleaded that the public right of way and the distance from the all the roads be respected by everyone because when the ring road will pass, houses that are found beside the road are going to be destroyed and compensation will only be given to those that are in possession of land titles.
- ❖ The regional delegate rounded up by calling on the population of Kumbo to protect the little they have, the council should sensitize the population and that the existing infrastructures in the town be well maintained and equally we should respect the land use plan that is going to be elaborated.
- ❖ The regional delegate made mention of the fact that in the domain of hygiene and sanitation, public toilets be kept clean and well inspected and that when one uses them they should be well inspected before the person gets out.
- ❖ In the domain of transport and traffic, the regional delegate took the floor and complained of the fact when 7 passengers are being carried in a small vehicle; it becomes a very big risk to the population.

He proposes that the council should take the obligation to talk to the various transport syndicates and drivers about the situation. Also a fixed price of about 3000 FCFA should be agreed upon per passenger for safety and security purposes.

- ❖ The regional delegate proposed that the population should agree on the number of passengers that should be carried in the vehicles and also a fixed transport fare should be agreed upon.

C) Reactions from the 4th deputy mayor of Kumbo council

- ❖ In the domain of water supply, the 4th deputy mayor of Kumbo council brings light to the idea that the integrated water management system has already earmarked upon getting into contact with (KWA) and that with this the town of Kumbo is going to be cover several other zones in the town.
- ❖ He equally asked to know if there was a means and a possibility of having water from another gigantic source that will fortify Kumbo in terms of water supply.

The chief of mission responded that there are means to put in place water infrastructures that are capable of supplying the town of Kumbo with reliable water. Also Kumbo needs a giant water project because KWA will not be able on her own to supply the entire town in the future.

- ❖ A question was being raised up to know where the present site for garbage disposal is located

Precision was being made that there exist a waste disposal site in Kumbo found around Shisong but which is not well developed.

D) Reactions from the other participants of the workshops

- ❖ A participant intervened in the domain of water supply and said there are several water courses within each quarter and that these sources are being managed by different community networks which do not control quality and quantity.

As a suggestion, it was suggested that there be conceived a gigantic project that can be able to cover the whole of Kumbo town.

- ❖ A participant intervened and stipulated that the main problem here is that these water sources are not safe and are not properly managed but that they should not be abandoned.

The chief of mission contributed by emphasizing that in the course of the planning and programming, all the existing water sources are going to be taken into account and a proper management water system is going to be put in place.

- ❖ A question was asked if the plan has taken into account the creation of green belts and also town greens.

The consultant reacted to this question by précising that it is not necessary to put in place infrastructures at the level of the population of which it will be of no use to them.

- ❖ The chief of mission asked the delegate for environment about what is being done at the level of impact assessment in the domain of environment.

The delegate for environment precised that there is the need for an environmental impact notice whenever there is a given project to be executed. He further went on to say that there is still much that has to be done at the level of impact assessment.

- ❖ There was a complaint that there is inadequate and irregular supply of fuel in Kumbo.

It was equally proposed that there should be the construction of a new petrol station in Kumbo in order to increase upon the quantity of fuel throughout the town.

- ❖ There was also another participant who suggested the creation of a botanical and zoological garden in the town. He suggested his proposal by saying that fauna should be conserved for future generations.

The chief of mission supported his idea and said that a space for this is going to be reserved so that in the future, there will be space for its implantation.

The meeting was concluded by the delegate for housing and urban development whereby he thanked everyone that was present for the meeting then passed the floor to consultant who congratulated the various participants and promised to do something for them in the next coming week.

LIST OF PARTICIPANTS OF THE DRAFT PLANNING REPORT