**COMMUNE DE KUMBO** 



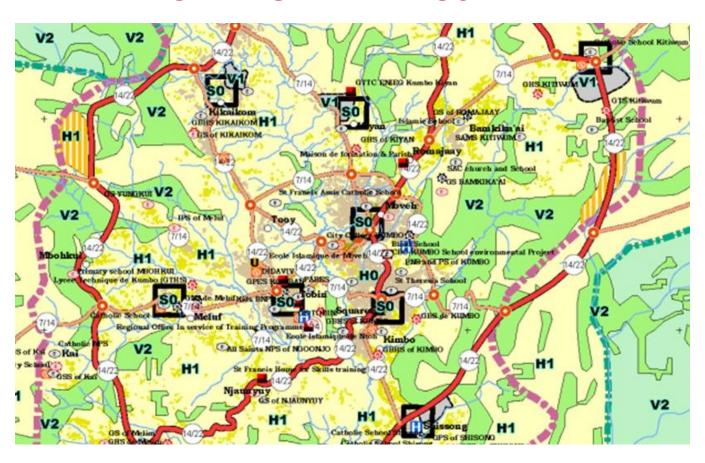
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KUMBO COUNCIL

## **KUMBO LAND USE PLAN**



## RULES AND REGULATIONS 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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#### PART I: GENERAL DISPOSITIONS

#### ARTICLE 1: Territorial scope of the Land Use Plan

This Regulation, of which the provisions are binding to private individuals as well as to public moral persons or private right, applies to the whole territory including the interior of the urban perimeter of Kumbo town.

It is established in order to improve upon the population's activities framework within.

This Regulation will be completed as a need, by the Regulation of the sector plans and by the particular Regulation of the Layouts.

In the event of contrary provisions contained in several Regulations, the order of presence will be as follows:

- Particular Regulation of Layout.
- Regulation of the Sector Plan.
- The present regulation of the land use Plan.

#### **ARTICLE 2: Purpose and scope of the Regulations**

The land use Plan and its regulation affect:

- 1) The special character of each part of the territory and their extensions according to the successive development of the city.
- 2) the various zones with special assignment;.
- 3) The tracing of circulation ways.
- 4) The hygienic and esthetic constraints justified by the local needs.

#### **ARTICLE 3: Allocation of protected Areas**

#### 1. Aspect of constructions

The Layout plans will be able to envisage all dispositions having as aim of creating urban assemblies, which is simply about the unity of color or materials, height, volume or style, or of urban ordinance. These obligations will be able to strike alignments of places, ways, lots or whole sectors.

#### 2. Protection of sites and monuments

The classification of certain sites and monuments could be carried out by the proper authorities, in accordance with the regulation in force. The decrees of classification will specify the particular rules and constraints to impose on the constructions built in the vicinity of a monument or a classified site.

#### 3. Behavior of Lands and installations

The buildings, whatever the destination, the Lands, the yards and visible plantations of the public way, must be arranged and maintained in such a way that the property, the aspect and the character of the landscape are not altered.

It will be periodically decided that obligatory operations be restored and maintained, in accordance with the specific regulation in force. The parts of the accessible properties, the margins of

retreat treated in pavements in particular, must be established and maintained like public open spaces of comparable nature.

#### 4. Plantations

Constructions must be built so as to respect the existing trees , as they do not compromise their safety. Each compound must be planted of at least two trees. These trees will be planted following a precise alignment.

Car parks to the free air, as well as the circulation ways must be equipped with trees in a sufficient number in the spaces envisaged for this purpose, in order to ensure a satisfying shade and thus to constitute a factor of approval and a break to violent winds which blow into the zone.

#### 5. Posters and adverts

The billboards must satisfy the rules into force bearing on the general regulation of the billboards in the Republic of Cameroun.

#### 6. Quarries and excavations

The opening of all new quarries is prohibited within the perimeter of the land use plan. Exemptions from the present article could be granted by the Minister of Mines, subject to the presentation of a plan indicating the aspect of places and the land use after work.

The excavations in the parcels are authorized only for personal use. After extraction, the ground will have to be filled and carefully leveled.

#### 7. Public Discharge

No Public discharge is authorized within the limits of application of the land use plan, except in the zone prescribed for this purpose.

Every Public discharge in progress within the urban perimeter will have to be closed and necessary measures to the good cleanliness of the Land will have to be taken.

#### 8. Evacuation of waste

The evacuation of waste (household refuse, industrial waste, hospital, used water, etc.) will have to be carried out in accordance with the dispositions and regulation in force.

#### PART II: PROVISIONS APPLICABLE TO CONSTRUCTIBLE AREAS

#### **SECTION 1: NATURE OF OCCUPANCY AND LAND USE**

In all the zones without exception, and more generally in their most attended parts, all the precautions must be taken so that security, cleanliness, public hygiene and sanitation are respected, and that the sites be conserved and improved upon for the up keep of the places.

#### **ARTICLE 4: Definition of the legend of additional graphic documents**

The Zoning Plan is located by a code including, a capital letter, a figure and a small letter.

- The capital letters represent the zones:

A : Administrative zone
AZ : Administrative zone

CC : City Centre

DC : District Centre

H : Habitation zone

I : Industrial Zone

PF : Parking Facilities

MK: Market

**PG**: Parks and Garden

**S** : Secondary pole zone or services

V : Zone of Green spaces

#### 1. Different zones and sectors of the land use Plan (LUP)

Kumbo has a population of about 111370 people and likely to grow to over 314108 by 2027. The proposed elements of urban structure for Kumbo should be made up of the following:

Table N° 1: Proposed populations sizes of elements of urban spatial structure

Article	Spatial Structure	Population
1	Kumbo Town	More than 200,000
2	Urban Districts	50,000 – 100,000
3	Residential neighborhoods	5,000 – 10,000
4	Residential clusters	500 – 1,000
5	Residential blocks	50 – 100

Source: BATISU sarl

#### 2. Regulation applicable to the dwelling zone H

#### 2.1 Character and vocation of the zone:

The dwelling zone H is constituted of the parts of the territory where the grouping of the dwellings and constructions intended to shelter the activities which are the natural complement of the dwelling, or this one must be maintained, developed or created. This zone includes the major part of the urban sable site profiting from several operations of arrangement, particular:

- **1.** The sector HO occupied by precarious constructions for the majority and where prevails the commercial activities and artisanal. Activities the arrangement of this sector will allow the creation of a harbor zone, in particular the industrial quays, commercial for the development of the tertiary sector, and a naval base with its specific quay.
- **2.** The H1 sector of the sector of extension not differentiated from the dwelling zone of the horizon 2026. The authorizations relative to the realization of new constructions could be delivered only after elaboration of this document which will have to specify the dispositions of the plan and the regulation of the LUP.

#### 2.2 Type of occupation prohibited Soil utilization

#### a) Are prohibited in all the sectors of the zone H:

- 1. Establishments known as dangerous, unhealthy or inconvenient featuring reduced on the list annexed in the decree  $n^{\circ}$  76/372 of the 2/9/1976 bearing regulation of these establishments;
- 2. New constructions with use of artisanal activity whose whole would occupy a surface on the ground of more than 1000 m2;
- 3. Undermining and raisings of the grounds which are not necessary to building work;
- 4. The opening and exploitation of the quarries;
- 5. Hydrocarbon deposits;
- 6. Deposits of scrap, of combustible materials, solid or liquids.

#### b) Are prohibited in the H1 sectors:

Layout of any nature without the authorization of a competent authority.

#### 2.3 Types of occupation or Soil utilization authorized under condition

Can be authorized in all the sectors of the zone H:

- 1. Their appendix and residential buildings;
- 2. The enlarging of the their appendix and residential buildings, provided that it respects the dispositions of this regulation;
- 3. Stations of painting and hydrocarbon deposits when they constitute the functional appendix of a garage for cars or a service station. Particular provisions must then be taken to limit the fire hazards and to avoid the propagation of this;
- 4. Social and cultural Establishments, adventure playgrounds and services related to the dwelling;
- 5. Constructions with usage of trade, of craft industry and their appendices;
- 6. Establishments open to the public, after preliminary authorization and provided that they do not bring any subjection in security matters for the accesses and any embarrassment for the vicinity.

#### Soil influence

#### 1. HO Sector

The total soil influence of constructions will not be able to exceed 70% of the total surface of the land unit.

#### 2. H1 Sector

The total Soil influence of constructions will not be able to exceed 60% of the total surface of the land unit.

#### Height of constructions

#### 1. Sector HO

The maximum height of new constructions will not be able to exceed 14 meters under sand pit.

#### 2. Sectors H 1

#### Individual constructions

The maximum height of new constructions will not be able to exceed 10 meters under sand pit. . The maximum height of new constructions will not be able to exceed 10 meters under sand pit.

Going beyond height could be allowed for the structural components of very weak influences such as chimney, etc.

If constructions to be built are touched by the passage of the corridor AES- SONEL, it will be advisable to consult AES-SONEL in order to know the maximum height of constructions under the line.

#### **ARTICLE 5: Occupation and Authorized land uses**

- 1. Dwelling houses of the private individuals provided that they respect the dispositions of this regulation;
- 2. Stations of painting and hydrocarbon deposits when they constitute the functional appendix of a garage for cars or a service station. Particular dispositions must then be taken ,to limit the risks of fire out break and to avoid the propagation of this;
- 3. Cultural, social establishments and playgrounds areas;
- 4. Establishments open to the public, after preliminary authorization and provided that they do not bring any subjection as regard security for the accesses and any embarrassment for the neighborhood.

#### **ARTICLE 6: Prohibited land uses**

The Land Use Plan of each sector will bring precision of prohibited land use inside each zone of the land use Plan. Nonetheless, Land uses which are prohibited are:

- 1. Establishments classified as dangerous, unhealthy or inconvenient appearing on the list annexed in the decree bearing n° 76/372 of the 2/9/1976 on the regulation of these establishments;
- 2. Hydrocarbon deposits, except those which are strictly related to the service of the automobile uses are, car park and service station;
- 3. Inns of camp-site and caravanning; Fields of caravanning and camp sites
- 4. The opening and exploitation of quarries;
- 5. Undermining and raising of the grounds which are not necessary to construction works;
- 6. Public or private building installed on the public domain.

Any occupation of the right of public way, whether they are public or private as from the moment when they are opened to circulation must be the object of an authorization of Council authorities on a purely precarious and revocable basis, and with the help of the payment of a royalty of use.

Regulations determine the norms to observe for this occupation and the procedure of their delivery.

No installation could be authorized for purely private uses. These installations should not in any case bring an embarrassment to the movement of the pedestrians for whom a continuous free passage of at least 2 m must be reserved on the pavements.

The dispositions of this article concern, to the installations in overhang of the public domain such as balconies, signs and covered galleries

#### 1. Permission of roadway system

The scaffolding and deposits of material on the public way will have to be the subject of a permission of roadway system. They will not have to in any case; block the water run-off on the way and its dependences, nor to bring an embarrassment to circulation and pedestrians. They will be informed, day and night in accordance with the regulations of the Highway Code.

The building sites will be surrounded by a continuous palisade with a minimal height of 2 meters and provided in its apparent part of a sign carrying the name and the residence of the Contractor.

The trenches on the public way will be carried out under the control of an agent of the Administration which will be able to indicate those which will have to be carried out only in the presence of the competent authority.

The permissions concerning these works are of pure tolerance and can be modified or revoked when the Municipal administration judge it of public interest. In this case the person on leave can claim with no allowance.

#### 2. Adjustment of the public domain

The bordering owners can, with the authorization of the Council administration carry out the adjustment of the ground depending on the public domain, with the right of their property.

The nature of adjustments and the nature of materials employed will be specified by the 3rd stop authorizing these works.

The Municipal authorities will have the right to carry out interesting work on part of the private domain struck of alignment without it being necessary that incorporation with the public domain was being marked.

#### SECTION 2: PROVISIONS RELATING TO THE CONDITIONS OF LAND USE

#### **ARTICLE 7: Access and Roads**

#### 1. Access

Those Lands not having a privative access on a common public or private way can be the subject of no construction.

#### 2. Roadway system

Apart from the primary and secondary roads, whose characteristics are specified in the key within the zoning plan, the opening of the new public ways of road service is subjected to the following conditions:

#### 2.1. Size of the platforms

#### a) Ways in dead end (Cul de sacs)

- 11 meters for the ways in dead end serving an administrative building or with more than 6 dwellings;
- **16 meters** when there is more than one administrative building or the number of individual dwellings is higher than 6.

#### b) Other ways

- **13 meters** for the ways with only one direction of circulation;

16 meters for the two-way roads of circulation.

#### 2.2 Size of roadway

#### a) Ways in dead end

- 7 meters for the ways in dead end serving an administrative building or with more than 6 individual dwellings;
- **12 meters** when the way serving more than one administrative or individual building or when the number of individual dwellings is higher than 6.

#### b) Other ways

- 9 meters for the ways with only one direction of circulation;
- 12 meters for the two-way roads of circulation.

#### 2.3 Arrangement of the ways in dead end (Cul de sacs)

The ways in dead end must be arranged in their final part, so that the heavy vehicles can turn, according to a ray of at least 11 meters. The length of the ways in dead end should not exceed 80 meters including the terminal point.

#### **ARTICLE 8: Service networks**

#### I - ROAD SERVICE

#### 1. Generalities

The influence of the principal and secondary roads is materialized within zoning by a pastille with two numbers separated by a bar of fraction. The lower number indicates the total influence of the way and the higher number the influence of the roadway.

#### 2. Road Service of the agglomeration

The road service of the agglomeration is ensured by

#### ❖ Arterial Roads

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

#### Primary Roads

- Melim-bamkikai Junction By-pass
- Kimbo Squares-Shisong road
- Melim-Tobin Road
- Tobin-Mbveh road
- Tobin-Kimbo squares road
- Mbveh-Kimbo Squares road
- Mbveh-Kikaikom road
- Tobin-Meluf road
- Mbveh-Kiyan road

#### **❖** Secondary Roads

Secondary roads shall be provided within each urban district.

Table N° 2: 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 2012

Table N° 3: 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 2012

#### 1. Road Service of the buildings

It is prohibited to build construction not directly accessible, that is, a public highway or a private way suitable for motor vehicles, in a state of viability and having to comprise cleansing and water pipelines.

When the access is done by private way, the land used for this purpose will have to be included in the properties to be deserved.

These access roads should comprise neither walk neither slope over 10%, nor obstacle likely to prohibit the circulation of the material against fire, ambulances and police cars.

#### 2. Access road

The tracing of these ways will have to be approved, the time of the request for Layout or building permit.

The total influence of the access roads will have to be equal or higher than 7 m and the roadway arranged for the circulation of two files of cars at least equal to 5 M. If these ways finish in wrong end, they will have to comprise a platform and reversal of a sufficient size.

#### 3. Footpath or pedestrian ways

The footpath will be established so that the means of approach can allow an effective fight against fire. Their minimum influence will be 3m. Their length from the principal service road to the most distant construction will not have to exceed 40m.

#### II. WATER SERVICE ROAD

#### a) Drinking water

Any construction or installation must be connected to the public network of drinking water distribution.

#### b) Industrial water

The land use Plan for industrial water drilling likely to satisfy without damage for the environment, the needs foreseeable, is allowed and must be made in agreement with the qualified administrative services.

#### Cleansing

#### a) Industrial waste water

The industrial facilities should not dispose on the public network of cleansing only pre effluents purified in accordance with the regulatory legislative provisions.

The cooling waters as well as industrial waste water not requiring a pretreatment could be rejected into the public network of cleansing under the conditions envisaged by the legislation and the regulation in force.

In the event of absence of network of cleansing, the technical conditions of the rejection will have to be envisaged in agreement with the qualified services.

#### b) Used water

Any construction or installation must be connected by underground canalizations at a treatment station in conformity with the lawful regulations into force.

#### III. DRAINAGE

Arrangement on any ground must be such that they guarantee the rain water run-off in the public network of drainage.

In the absence of rain water network, constructions will not be allowed, - except if the manufacturer realizes with his load and with the agreement of the qualified administrative services arrangements allowing the free rain water run-off.

#### **ARTICLE 9: Characteristics of the land**

In general, the land unit, to be constructible, must have a length on street at least equal to 10 meters and a depth at least equal to 20 meters.

#### 1. Alignment and leveling

Temporarily, while waiting for the establishment of the related plans, and in order not to differ the delivery with the users from alignments and regulatory leveling, alignments will be specified on request of the owner of the Land.

#### 2. Quality of the Land

It is prohibited to build on marshy, unhealthy grounds or whose cleansing is not satisfactory, as on those which are unstable or are threatened by erosion, crumbling or landslide.

The administration will be able to impose that the cleansing, the stability and the solidity of the grounds are, before any use, studied and realized.

It will be able to also require, if necessary, that the owners concerned gather in association, in order to complete this joint work according to an overall project approved by the commission of building permit.

#### 3. Rain water run-off

The arrangement carried out on a ground should never make obstacle with the free rain water run-off.

#### 4. Surface and forms of parcels

To be constructible, the land parcels will have to be of suitable forms and of size. It is necessary in particular:

- That it is possible to register a quadrilateral of a surface there at least 70 m<sup>2</sup> whose smallest coast cannot be lower than 7 meters.
- That they do not have separate lines of less than 10 meters length starting from alignment, this line being able to form an angle lower than 60° with this last.
- \_ That they have a frontage on street of at least 7 meters.

The minimum Surface of the pieces will be defined further for each zone. In the zones where the parceling out are authorized, they could be realized only in the condition of being in conformity with the dispositions above.

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° 4: Plot development norms and standards

Item	Parameters	Low Income	Medium Income	High Income
01	Area of plot	300-400m <sup>2</sup>	400-600m <sup>2</sup>	600-1000m <sup>2</sup>
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

#### ARTICLE 10: Location of structures in relation to the tracks and public ways

Any new construction will have to be established for all its levels with the straight track or the limit of public influence substituted for this alignment.

#### 1. Obligatory withdrawal

The construction of buildings located in the withdrawal is obligatory when the land unit is located on both projected construction. Sides one or two constructions are built in the withdrawal on alignment. Projected construction will have then to be established according to one of the two withdrawals and obligatorily according to the withdrawal corresponding to the construction built in side limit if it exists.

#### 2. Possible withdrawal

A withdrawal is possible when the size of the piece is higher or equal to 35 meters and on condition:

- That construction comprises wings in return (of the same height than the principal building) built in compartmental limits until alignment;
- That the distance between the wings is at least equal to 20 meters.
- This withdrawal on alignment will have to be lower than 13 meters.

#### 3. Other establishments:

Establishments other than those envisaged above are possible when the project of construction interests is the totality of a small lot or a land unit having a surface of at least a hectare.

#### 4. School buildings

The school building installation is not subjugated with the dispositions stated above.

#### ARTICLE 11: Location of structures in relation to reserved areas

#### 1. Lateral separative limits:

In a band of 15 meters counted as from the alignment evoked in article III. Any new construction must be established on all its height, from one lateral limit to another.

In the case they are built in withdrawal, they must deviate from these limits of measured perpendicular distance to this one and at least equal to the height of the interested frontage with a minimum of 6 meters if this one comprises by ensuring the illumination of the rest and work rooms.

In the depth of the band of 15 meters and on the parcels of Land whose size of frontage does not exceed 8 m, constructions will be obligatorily be built from one Lateral separative limit to another.

#### 2. Land parcels and other separative limit:

Any construction must be established in such a way that the distance separating it from the land parcels and other limit is at least equal to half the height of this construction.

Any time, construction in bottom of parcels is authorized provided that the height of projected construction does not exceed a 3, 50 meters height.

#### 3. Parcels of angles:

The dispositions to be respected along the separative limits are those which apply to the close parcel for the limit considered.

#### 4. Assembly of dwelling:

The establishments other than those defined above are possible in the sets of dwelling except for the buildings to be built on the batches being next to the limits of the land unit of the operation.

#### ARTICLE 12: Location of constructions from each other on the same plot

Two noncontiguous constructions established on the same property must be in a way such that the distance separating them is at least equal to the height of the building more raised and never lower to it than 4 meters.

#### **ARTICLE 13: Footprint**

The total influence on the ground of constructions will not be able to exceed 60% of the total surface of the land unit.

#### **ARTICLE 14: Building Heights**

The maximum height of new constructions will not be able to exceed 14 meters.

#### **ARTICLE 15: External views**

#### 1. Frontages:

The Lateral frontages or the left apparent pinions will have to be treated with care and in harmony with the principal frontages.

The materials not presenting a convenient finish like ordinary brocks could not be left apparent in frontage whatever the nature of this one if interested construction gives a main road.

The use of materials of re-employment or recovery such as the developed barrels, cans, worn sheets, etc... is formally prohibited whatever the nature of construction, including additional constructions.

#### 2. Fences:

The fences on the public ways or in the margins of shifting in edge of those which will have to present an aspect in harmony with the frontages of constructions

#### **ARTICLE 16: Parking**

The parking of the vehicles corresponding to the needs for constructions and installations must be ensured outside the public ways and is defined below by the functions:

- On each parcel, it must be arranged moreover with ways sufficient to ensure the parking and the evolution of the vehicles of delivery and service for all the functions except those of dwelling;
- For the industrial plants and the authorized artisanal companies, it requires a minimum parking bay for 10 working stations.

The rule applicable to constructions or establishments not envisaged above is that to which these establishments are most directly assimilable.

This article relates to all constructions. The parking of the vehicles corresponding to the needs for constructions and installations must be ensured outside the public ways and is defined below by functions.

On each parcel, it must be of arranged surfaces sufficient to ensure the parking and the evolution of the vehicles of delivery and service for all the functions except those of dwelling.

#### 1. Dwellings:

Consultation of collective dwelling:

A parking bay per section of 6 m<sup>2</sup> of floor except work of construction with a minimum of a place by housing.

Consultation of individual dwelling: a parking bay by housing, located apart from the influences of the roadway system and more possible close to each dwelling.

#### 2. Offices:

It requires a parking plate for 40 m<sup>2</sup> of floor space out of work.

#### 3. Trade:

For the trade of more than 100m<sup>2</sup> of surface for sale, it requires a parking bay by 40m<sup>2</sup> of floor space except work.

#### 4. Hotel facilities and restoration:

It requires a parking bay for 10 m<sup>2</sup> of restaurant hall width, if not a minimum of a parking bay per hotel room.

#### 5. Hospitals

For the hospitals, it requires a parking bay for 2 beds.

#### 6. School establishments

For the school establishments, it is necessary to envisage one or two bays parking per class according to whether it is about an establishment of the 1 st or 2<sup>nd</sup> cycle.

#### 7. Other establishments

The rule applicable to constructions or establishments not envisaged above is that to which these establishments are most directly assimilable.

In addition to the dispositions above, it must be arranged on each parcel, of the surfaces sufficient to ensure the parking and the evolution of the vehicles of delivery and service for all the functions except those of dwelling.

#### 8. Car parks

In all the sectors of extension, the parking of the vehicles will have to be obligatorily carried out of the roadway of circulation, either in over size of the way, or on the sites arranged for this purpose. The owners or the communities will have to envisage the car parks necessary to any private or public building.

The spaces reserved for parking will be envisaged at a rate of 15 m<sup>2</sup> per motor vehicle and of 25m2 for the calculation of the areas of car park (site + circulation).

#### 9. Collective covered garages and others

#### Artisanal and commercial enterprises.

For these enterprises, the parking spaces must be sufficient to ensure the evolution and the parking of delivery and service vehicles, as well as personnel and customers vehicles.

#### Collective and individual covered garages

The collective garages of a commercial character cannot be established at the edge of a way of great circulation or unlike a 10 m broad way, without the special provisions being taken in order to not bring any disorder to circulation on these ways.

The groups of the individual garages must be laid out in the parcels in order to arrange a space of evolution inside those and to present only one access on the public highway, if the number of garages is lower than 20.

If the number of garages is higher than this figure, two exits will be necessary for protection and for fire. The exits will have to be carried out so as to avoid the workers and not to emerge with let us move back on the public highway.

It is obligatory to take access on the least busy Way, if the parcel intended to receive individual garages is served by two ways.

# ARTICLE 17: (Open/Public Spaces, Tree planting & classified woodland spaces / landscape planning)

#### 1. General dispositions:

- The trees of high-stem must be preserved or replace.

- For the buildings established in withdrawal, the space ranging between alignment and buildings must be arranged in Lawn and planted gardens.
- The public and private parking spaces must comprise at least a tree of high-stem by 4 sites. The trees will be distributed on the parking space.
- At least 10% of the land unit will be arranged in green space.

#### 2. Particular dispositions to dwelling lots

In the sets of dwelling, it will be created green space for central accompaniment on 10% of the land unit.

#### 3. Maximum possibilities of occupation of the Soil

The maximum possibilities of occupation of the Soil are those which result from the application for the equipments.

#### 4. Going beyond the coefficient of Soil occupation

The going beyond the coefficient of Soil occupation is authorized for constructions with the use of offices, services or hotels and provided that, this is going beyond done in the respect with the rules envisaged.

#### **ARTICLE 18: Transport**

- 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.

#### **ARTICLE 19: Urban Densification and Revelation of the Urban Spatial Structure**

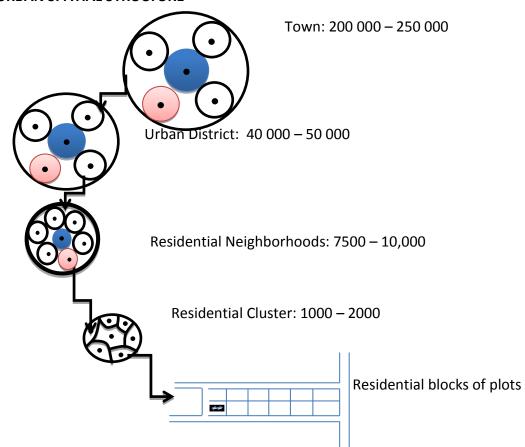
Kumbo has a population of about 111 370 people and likely to grow to over 314 108 by 2027. The proposed elements of urban structure for Kumbo should be made up of:

Table N° 5: 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

#### **CONCEPT OF URBAN SPATIAL STRUCTURE**



Graph N° 1: Elements of Spatial Structure and Organization of Kumbo

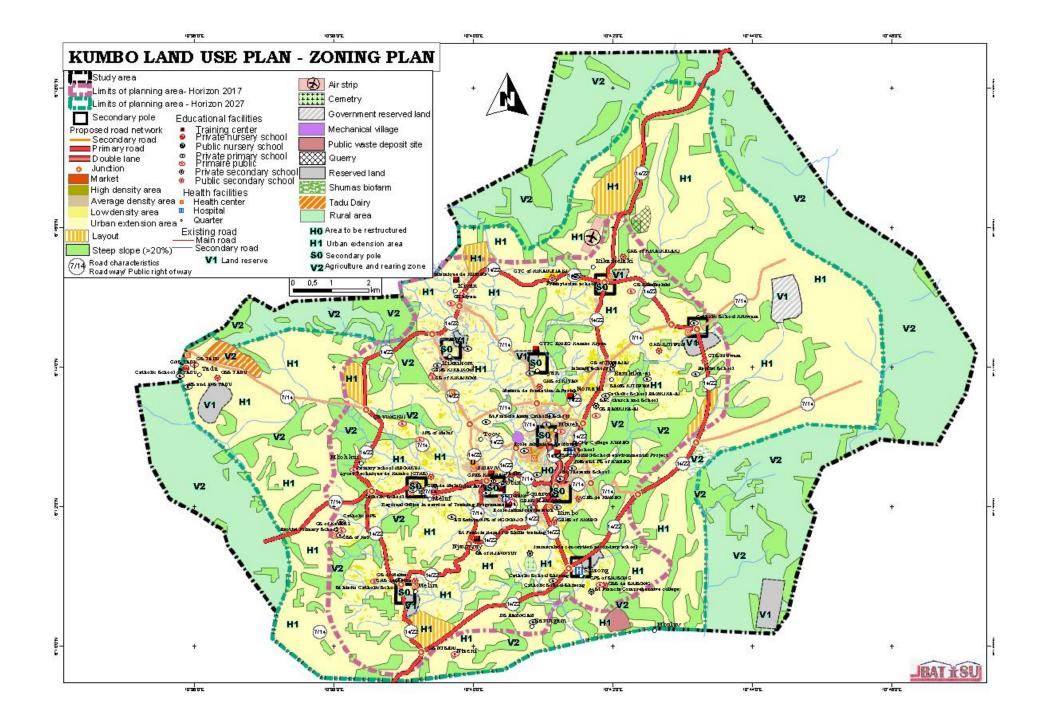
#### **SECTION 3: POTENTIAL LAND USE POSSIBILITIES**

#### **ARTICLE 20: Land Use Coefficient (LUC)**

The LUC applicable is fixed between 0, 6 to 3 depending the affectation of the soil.

#### **ARTICLE 21: Exceeded Land Use coefficient**

For constructions of office and service, the exceeding of the coefficient of Soil occupation is authorized.



## **APPENDICES**

## RULES AND REGULATIONS REPORT



#### I. MEASURES OF EXECUTION

#### **ARTICLE 22: Obligation of conformity of public or private works**

Any public or private work to be undertaken in the perimeter to which the Master Plan applies cannot be carried out if it is compatible.

#### **ARTICLE 23: Incidence on the proprietors**

The constraints established in application to the land use Plan will be able to give right no allowance.

However, an allowance could be granted if it results from these constraints a modification in a former state of the places determining a direct and unquestionable material damage.

The constraints imposed by this land use Plan could be raised only by modifications regularly made to the approved plan.

#### **ARTICLE 24: Derogation**

Derogations could be granted to tattle rigorously exceptional to the rules and dispositions of this regulation and for reasons of public or general interest exclusively.

These derogations are granted by local by-law. The decree can impose to the recipient the payment of one royalty to the local community or the concessionary company of the installation of the ground if it is necessary. This royalty is calculated by difference between the value of the fictitious ground necessary to the realization of the project without exemption and the value of the real ground.

#### **ARTICLE 25: Sanctions**

The infringements with the rules, principles and provisions of this regulation are liable to the sanctions envisaged by the regulation in force.

The demolition with the expenses of the contraveners will be continued all the times that a building carried out in contradiction with this payment will be likely to compromise the good realization of one of the operations of town planning envisaged in the land use Plan.

It could be the same for if when a building is built without authorization in the reserved zone. In a zone different from that corresponding to the use of the building, or on a ground struck of a constraint "non aedificandi".

#### II. PLANNING RULES AND REGULATIONS

#### TITLE 1: RULES AND REGULATIONS OF URBAN SPATIAL STRUCTURE

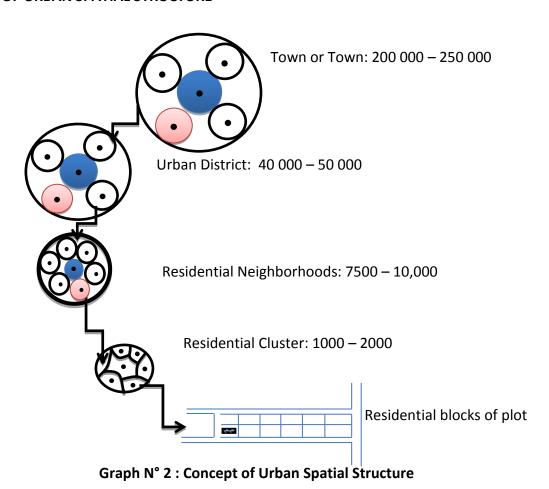
Kumbo has a population of about 111370 people and likely to grow to over 314108 by 2027. The proposed elements of urban structure for Kumbo should be made up of:

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

Article	Spatial Structure	Population
1	1 Kumbo Town More than 200,000	
2	Urban Districts	50,000 – 100,000
3	Residential neighborhoods	5,000 – 10,000
4	Residential clusters	500 – 1,000
5	Residential blocks	50 – 100

Source: BATISU SARL

#### 1. CONCEPT OF URBAN SPATIAL STRUCTURE



#### TITLE 2: LAND USE ZONING REGULATIONS

#### **SECTION 1: CONCEPT OF URBAN SPATIAL STRUCTURE**

Specific land use zoning regulations shall be prepared for each urban district and neighborhood plan.

# ARTICLE 26: Processes and procedures of land use control measures shall be clearly defined for:

- Location and sitting of activities
- Control of land subdivisions
- Control of land transactions
- Planning certificate
- Building permits
- Modification of land uses

# ARTICLE 27: Micro land use rules and regulations shall be prepared and adopted as council planning bye-laws

ARTICLE 28: Land use Standards shall be prepared and enforced by kumbo council.

#### **ARTICLE 29: 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° 7: rules and regulations for residential land uses

Article	Parameters	Low Income	Medium Income	High Income
1	Area of plot	300-400m <sup>2</sup>	400-600m <sup>2</sup>	600-1000m <sup>2</sup>
2	Minimum width of plots	15m	20m	25m
3	Setback of plots from road curbs	3.0m	5.0m	10.0m
4	Setback from axis of road	10.0m	15.0m	20.0m
5	Side setbacks	1.5m	3.0m	5.0m
6	Rear setback	3.0m	5.0m	7.5m
7	Plot occupation ratio	80-90%	60-70%	40-50%
8	Height of buildings	One floor	1-3 floors	1-2 floors
9	Maximum dwelling units	2	6	1

#### TITLE 3: KUMBO PUBLIC RIGHT-OF-WAYS (PRW'S)

#### **SECTION 1: KUMBO PUBLIC RIGHT-OF-WAYS**

Table N° 8: Kumbo Public Right-of-ways (PRW's)

Article	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	Provincial highways	50m	25m	No roadside parking
5	Divisional highways	40m	20m	No roadside parking
6	Farm to market roads	10m	5m	-
7	Primary distributors	40m	20m	-
8	Secondary distributors	30m	15m	-
9	Tertiary toads	25m	12.5m	-
10	Access roads	10m	5m	-

Source: BATISU SARL

#### **SECTION 2: TECHNICAL DETAILS**

Table N° 9: Technical Details for road network

Article	Hierarchy of Roads	Carriage -ways	Islands	Drainage	Side walks	Total width
1	Arterial roads	14.0 m	-	3.0m	3.0m	-
2	Freeways	28.0m	3.0	3.0m	3.0m	37.0m
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

# TITLE 4: SPECIFIC RULES AND REGULATIONS FOR STORM DRAINAGE FACILITIES SHALL BE PREPARED FOR:

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

# TITLE 5: SPECIFIC RULES AND REGULATIONS FOR SEWAGE FACILITIES SHALL BE PREPARED FOR:

- Individual real estate sewage facilities
- Real estate sewage facilities
- The Council and the Government

#### TITLE 6: 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

#### TITLE 7: 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

#### TITLE 8: RULES AND REGULATION FOR COMMUNICATION FACILITIES SHALL INCLUDE:

- Operational procedures and conditions for subscribing for fixed and mobile telephone facilities

#### TITLE 9: 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.

#### TITLE 10: BASIC PUBLIC FACILITIES

#### **SECTION 1: PUBLIC EDUCATIONAL FACILITIES**

Table N° 10 shows planning grill for government educational facilities which should be applied to Kumbo town.

Table N° 10: Proposed Standards for Public Educational Facilities

Article	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	Neighbourhood	5,000-10,000	1.0km	2.0hectares
3	General Secondary and High Schools	District	40,000-50 000	2.5km	5.0hectares
4	Technical Secondary and High schools	District	40,000-50 000	2.5km	5.0hectares
5	University college	Town	More than 100,000	5.0km	10.0hectares
6	University	City	More than 200,000	N.A	50.0hectares

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.

#### **SECTION 2: PUBLIC HEALTH FACILITIES**

Table N° 11: Proposed Standards for Health Facilities.

Article	Level of Health Facilities	Level of Provision	Population Threshold	Catchment Radius	Space Allocation (hectares)
1	Health centres	Districts	40,000-50 000	2.5km	2
2	District hospitals	Towns	40,000-50 000	4.0km	5
3	General Hospitals	City	200,000-500,000	5.0km	7-10
4	Reference Hospital	Region	More than 500,000	More than 10.0km	10-15

Source: BATISU SARL

#### TITLE 11: PROVISION OF COMMUNITY FACILITIES

#### **SECTION 1: GRILLS FOR PROVIDING COMMUNITY FACILITIES**

Table N° shows grill for providing Markets and Shopping Centres

Table N° 12: Proposed standards for Markets and Shopping Centres

Article	Markets and	Level of Provision	Population	Catchment	Space	
Article	Shopping Facilities	Level of Provision	Threshold	Radius	Standards	
1	Corner stores	Cluster	1000-2 ,000	500m	$200m^{2}$	
2	Neighborhood	Quarter/	7500-10,000	1.5km	$500m^2$	
	Shops	Neighborhood	7300-10,000	1.38111	500 <i>m</i>	
3	District Markets	District	40,000-50,000	2.5km	1.0hectares	
3	and Shops	District	40,000-30,000	2.58111	1.onectares	
4	Town markets and	Town	100,000-150,000	3.5km	3.0hectares	
4	Shops	TOWIT	100,000-130,000	3.38111	5.0Hectares	
5	Central markets	City	20,0000-500,000	5.0km	5.0hectares	
	and Shops	City	20,0000-300,000	J.OKIII	J.onectares	
6	Regional Markets	Region	_	N.A.	More than	
U	and Shopping mall	Wegion	_	IN.A.	5.0hectares	

#### **SECTION 2: CIVIC AND CULTURAL FACILITIES**

Table N° 13: Proposed Standards for Public Libraries and Creativity Centres

Article	Public Libraries	Level of Provision	Population Threshold	Catchment Radius/Distance	Space Standards
1	Reading Room	Cluster	1000-2000	200m	$20-40m^2$
2	Neighborhood Library	Neighborhood	7500-10 000	500m	80-100 <i>m</i> <sup>2</sup>
3	District library	District	40,000-50 000	2.0km	$500m^2$
4	Town Library/Creativity Centre	Town	100,000-150 000	2.5km	1,000 <i>m</i> <sup>2</sup>
5	City Library/Technologi cal museum	City	200,000-500 000	5.0km	1-2hectares
6	Regional Library/Archives	Region	Over 500 000	Over 5km	2-5hectares

Source: BATISU SARL

#### **SECTION 3: PUBLIC AND COMMUNITY HALLS**

Table N° 14 below shows standards for planning and providing public and community halls which should be used in further detailed planning of urban space.

Table N° 14: Proposed standards for public and community halls

Article	Public and Community Hall	Level of Provision	Population Threshold	Catchment Radius/Distance	Space Standards
	Community Hall	Provision	inresnoia	Radius/ Distance	
1	Meeting Room	Cluster	500-1,000	200m	$20-40m^2$
2	Neighborhood Hall	Neighborhood	5,000-10,000	500m	$100-120m^2$
3	District Hall	District	50,000-100,000	1.5km	$500m^2$
4	Town Hall	Town	100,000-200,000	2.5km	1hectares
5	City Hall	City	200,000-500,000	5.0km	2-3hectares
6	Conference Centre	Region	Over 500,000	Over 5.0km	3-5hectares

Source: BATISU SARL

#### **SECTION 4: WELFARE FACILITIES**

Table N° 15: proposed standards for welfare facilities

Article	Welfare Facility	Level of Provision	Population Threshold	Space Standard
1	Orphanages	Urban district	50 000	250- 500m square
2	Handicapped centres	Kumbo Town	Over 100 000	250 500m square
3	Old people's homes	Urban district	50 000	1000- 15000 m square
4	Reformatory centres	Kumbo Town	Over 100 000	250 500m square
5	Blind and deaf centres	Kumbo Town	Over 100 000	250 500m square
6	Welfare homes	Urban district	50 000	1000-1500m square

#### **SECTION 5: SPORTS AND RECREATION**

Table N° 16: proposed standards for sports and recreational facilities.

Article	Sports and Recreational Facilities	Level of Provision	Population Threshold	Catchment Radius/Distance	Space Standards
1	Toddlers playgrounds	Block	500- 1000	50m	$100m^{2}$
2	Infants playground	Cluster	1000-2 000	200m	$200m^{2}$
3	Football Pitch	Neighborhood	7500-10 000	1.0km	$6000m^2$
4	Neighborhood parks and recreation	Neighborhood	7500-10 000	500m	1.0hectares
5	Sport Complex	District	40,000-50 000	2.0km	2.0hectares
6	Town Stadium	Town	100,000-200 000	2.5km	3.5hectares
7	City Stadium	City	200,000-500	5.0km	10.0hectares
8	City park and gardens	City	Over 500 000	Over 5.0km	Over 10hectares