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## Introduction

This document of Justificative report is registered following the first entitled Diagnosis repport of the summary urban plan land use of Akwa which has drafted an analysis of the actual situation, while being based on the results of work in groups, the technical observations through the town and the surveys carried out in situ, at the households and of the various private, public and parapublic services represented or not in the town. Fundamental interest of such an analysis being the description of the principal problems of current urban development, which are in addition closely related to its future development. The identification of these problems will allow in this document entitled Justificative Repport of the Summary urban land use Plan, to proceed to the definition of the top priority objectives of installation and to justify the relevance of the various actions to be undertaken by the local authorities and the other actors of urban development.

The content of this Justificatif Report of the SULUP are articulated thus around four chapters:

- Chapter I which recalls the great urban data with a particular accent on the adjustment constraints;
- Chapter II which makes proposals for an arrangement comprising the definition of the top priority objective, the programs and the principles of arrangement.
- Chapter III which develops the party of arrangement;
- Chapter IV which makes the preliminary study of the priority projects of urban development of the town of Akwa.

In the conclusion of this Justificatif Report, we reconsider the conditionnalities of the realization of a durable urban development of the town of Akwa.



## 1. Chapter 1: RECALL OF THE GREAT URBAN DATA

## 1.1. Problematic of the development of the town of Akwa

The problematic of the development of the peninsula of Bakassi are posed in terms of effective occupation of the territory and of exercise of the kingly role for the Cameroonian, State through the establishment of services, of equipments (merchants and non merchants) and of institutions. This being due to the particular statute of the frontier towns whose urbanization calls with certain preoccupations which go beyond the simple establishment of the infrastructures: it is necessary indeed, to equip these Cameroonian localities with equipment and any other institution which it will need, while making safe the border, in order to affirm national sovereignty.

Beyond the socio-economic infrastructures and equipment and of production, one will need the application of a grid of equipment adapted to their urban functions (administrative and economic) and to specificities of frontier market.

The town of Akwa is the chief town of the Sub-division connected to the town of Mundemba, chief town of the Ndian Division located at approximately 75 km by an overland route passing through Isangele, built by the Military Engineering is in 2010, in very bad state, in particular because of the frequency of precipitations (10 months out of 12 in the year). Well before this road was opened, the town of Akwa was linked to the interior towns only by inland waterways, in particular with Ekondi Titi and Limbé through the mangrove, and with much of insecurity due to the tortuous routes, with the nature of the boats manufactured manually, the uncontrolled and nonprotected river navigation, and with the Nigerian pirates who prevail in the aforementioned mangroves. The town of Akwa, in an original manner is created like a camping of fishing by the Nigerians, and is called in an original manner Archibong and making part of the cross river states, was to however be a very large frontier market, if the enclavement and the lack of the infrastructures and equipment of connection were not constraining for this economic function. By defect, it opened it self rather to Ikang in Nigeria, which is its metropole of reference.

## 1.2. Problem of spatial development of Akwa

The assessment diagnosis of the urban development of the town of Akwa reveals three types of observations with more or less of impacts on the local development and of which it is necessary to hold in account in urban projections:

- Observations of general order;
- Sectoral observation



Avantages to be seize.

## 1.3. Observations of a general order:

Opening of the locality of Akwa rather on Nigeria (to 20 mn by boat in Ikang in Nigeria), because of the difficulties of accessibility with the Cameroonian localities, in spite of the waterways (Akwayafe), the opening on the mangroves and the overland route in bad state connecting Mundemba;

The main part of the services of drinking water supply is deteriorated:

- The electric power supply is not operational in spite of the existence of the installations, including street lighting
- The administrative quarter in the center of the town comprises buildings which remain most of the time closed. There is disfunctioning of the public services which has insufficient personnel;
- One can note the omnipresence of the armed men who patrol in the urban perimeter, making part of the BIR (Fast Brigade of Intervention) installed in the town at the edge of the river Akwayafe;
- Lack of means of urban mobility (absence of motor bike, taxi boats). The only means of transport being trekking... etc.

## 1.3.1. Sectoral observations:

Sectoral observations are made at several levels:

Noted sectoral observations are made on several levels:

#### **1.3.1.1.** At the level of the population:

One notes the depopulation of the town of Akwa which is a resultant of the frontier conflict which is perpetrated today by the activity of the pirates in this zone. The depopulation is especially due to the fact that certain populations of Nigerian origin choose to return definitively to Nigeria following the agreements of Green Tree. Those who remain on the spot have their center of interest on the other side of Nigeria, or then in the mangroves where they carry on gainful employments on fishing. The depopulation of the town of Akwa is also due to the absence of equipments and basic infrastructures, therefore most of these were destroyed by the Nigerian armed forces and the populations at the time they left the locality. There is also, in spite of the presence of the BIR, a kind of insecurity in the town, worsened by the enclavement and the lack of street lighting, particularly in the night.



#### 1.3.1.2. At the level of the relief and climate:

The locality of Akwa comprises zones of low pressure invaded by the mangrove, the marshes and the forest. Moreover, this zone is very rainy and comprises a long rainy season (10 months) and a short dry season (2 months) whose consequences are amongst, fast destruction of the land roadway systems.

#### 1.3.1.3. At the level of the habitat:

The habitat is very precarious, at the same time in the urban quarters of Akwa I and II, and in the hamlets village of Mbenmong and Nwanyo. It lacks accesses, infrastructures and basic equipment, and obviously a certain comfort in the residence.

### 1.3.1.4. At the level of the urban economy:

One notices the absence of urban activities. The populations of Akwa rather attend to the market of Ikang in Nigeria, to where is devoted activities of smuggling. The Youth is abandoned to itself.

### 1.3.1.5. At the level of the urban roadway system:

The roadway system is summary and does not permit access to all the districts which are rather open to the river. It was put in place by the Military Engineering like the main part of the infrastructures and socio-collective equipment of the zone of Bakassi. Its dimensioning is not normal and there are no systems of cleansing, which causes a strong degradation of this roadway system and makes it quickly unexploitable. This roadway system is not on a hierarchical basis either. The existing ways become tracks of circulations connecting the houses, the farms, the single quay and the villages. There is no system of cleansing and drainage in the town.

#### 1.3.1.6. At the level of Education:

The inadequacy of teachers in the whole zone of Bakassi constitutes a major problem. Added to this is the absence of commodities linked to the good functioning of the school establishments in terms of effective equipment of the classrooms, of the existence of residences for teachers. This causes a failure on the pupils and the exodus of the school populations.

### 1.3.1.7. At the level of health:

One notices the presence of Developed Health Centers (Akwa II and Mbengmong) with lack of equipment. The personnel here is often a soldier. The infirmary of the BIR sometimes redistributes drugs to the populations, but it is observed that some prefer to be treated by the native or rather go for treatment in Nigeria. They lack sensitization.



#### 1.3.1.8. At the level of communal finances:

The Council of Kombo Abedimo almost does not have a budget, although it has large chances of development. To implement these chances be it on the financial, material and human level, 2013 will have to be waited for. The possibilities of intercommunality are also limited. Meanwhile, it will be well necessary to invest and to be able to count on the additional taxes and the support of the FEICOM, which is not always fullfilling.

The weakness of local finances, the technical staff shortage and the little municipal enthusiasm of the team towards the local development of Akwa are thus at the origin of the weaknesses of urban intervention to regulate the daily problems of populations.

These observations of general nature and sectoral order are constraints to surmount to envisage the urban development of Akwa. But it will be necessary to take account of the chances which this locality possesses.

#### 1.3.2. Chances to be seized:

It will be necessary however to take in to account of certain chances indispensable to circumvent in the resolution of the local problems of urban development of Akwa. Among these chances one can retain:

- the frontier situation of Akwa favorable for the development of a large frontier market with close Nigeria;
- The preexistence of the infrastructural networks, particularly the embryonic roadway system, electricity networks and drinking water... etc;
- the existence of administrative buildings and several socio collective equipment, in particular sub divisional delegations of MINDEF, MINATD, MINPROF, MINEDUB, MINEFOP, MINSANTE... etc.
- natural richness of the zone of Bakassi in fish;
- the existence of embryonic administrative structures of framing of the populations in the site, following the example of the special police station in construction, gendarmerie brigade, BIR and military engineering which intervene in the framing of the populations;
- the availability of the SULUP of Akwa comprising of the projects of urban development realizable in a short and medium term.



# 2. Chapter 2: Proposition of arrangement/adjustment

Following the analysis of the current situation highlighting the principal problems of the town of Akwa, problems having a precise incidence on her current and future development, one has a viable scientific base allowing, this stage, to justify the relevance of the various proposals for an arrangement.

In a more precise way, it is now a question of formalizing the various options of urban development by 2026 by developing the party of arrangement starting from the choices operated by the populations during the restitution and of the collective planning of the 05.03.2011 in the Community hall of Akwa. This part of arrangement resulting from the collective scenario will have to be refined from the perspective of elaboration of the final documents, following the formulation of the top priority objective of arrangement

## 2.1. Top priority objectives of arrangement

## 2.1.1. General objective

"To make the population of Akwa love Akwa by equipping it with an economic function".

Vis-a-vis the emigration of the population of Akwa towards other horizons due to insecurity, but as for the bad equipment of the town in infrastructure of development and economic activities, the principal objective is to make the population of this town not to emigrate any more, by setting up an urban function other that the administrative, which could justify with the eyes of the populations, the choice to remain there. This urban function with can save the town of Akwa durably can only be "economic", with bases on the local riches, particularly the proximity of the frontier river (Akwayafe) with Nigeria and its large frontier markets such as Ikang, the oil of the basement with the capacity of construction of the factories and the platforms of storage, of refinery and export, the tourist riches.

Indeed, the development of an urban economic function supposes a will to develop more the economic role of the town, to accentuate its equipment in infrastructures and equipment to support the social, economic, industrial, tourist and cultural development. This function requires making of Akwa a large frontier market with the image of Ikang in Nigeria, a great economic center for the development of tourism and oil industry, with the creation of thousands of employment for a durable urban development. It is also a question of affirming at the regional level the role of opening of Akwa on the interior towns in order to attenuate the enclavement of this locality and to offer to its population of varied employment and the taste to live there. This does not exclude the agricultural promotion and the development likely to offer to the population a structured



employment, the development of the craft industry for the reanimation of the poles of activities, administrative and commercial activities to be set up in the town.

At the urban space level, this objective of economic development of the town of Akwa must result in the will to improve the framework of life and work for the reception of new populations. To this effect, it is necessary to put in place:

- a balanced distribution of the habitat:
- socio-collective equipment and varied infrastructures;
- an interconnection between the commercial pole, the industrial pole, the tourist pole and the administrative pole.

## 2.1.2. Operational objectives

The operational objectives are aimed at circumscribing the types of concrete actions which will be necessary to engage in specific fields of intervention to solve the problems of current and future urbanization and at various levels:

- to create and develop a frontier market;
- to set up a policy of promotion of tourism;
- to develop agriculture (tuber products, fruit-bearing products, revenue products);
- to create and develop an industrial zone of petroleum products;
- to open the town on the big urban centres (Mundemba, Kumba, Buea, Ekondo Titi, Limbé, Douala) and to open the town on the river and the sea;
- To develop socio-collectives equipments.

### 2.1.2.1. At the level of the organization of space

One of the strategies of organization of space resides in the creation of poles of centrality. These poles are concentrations of public equipment intended to mark the cores of the urban zone. They Equally have as objective:

- to structure the agglomeration;
- to avoid the obstruction of certain zones and to direct the global movement of urbanization overall;
- to avoid the creation of the dead urban sectors and to promote functional and balanced urban spaces;
- to stimulate the concentration of the real estate because of the concentration of equipments and their effect of attraction;



to attract the populations by the concentration of certain services...

The achievement of the objectives above must be based on certain criteria of localization of the poles of centrality:

- the localization in a zone being able to accommodate great zones of habitat;
- the localization allowing the promotion of a balanced space growth of the town;
- the localization near a primary infrastructure allowing to facilitate the connections with the other branches of industry of the town;
- the preexistence of certain public equipments.

The criteria and objectives above exposed result in retaining four poles of centrality:

- A pole of principal centrality known as commercial and industrial, materialized by the junction between Akwa I and Akwa II of the actual center;
- Two poles of secondary centrality of which that of the East (administrative), materialized by the administrative buildings (gendarmerie squad, Sub-divisional office), of the socio-collective equipment and administrative residences, and that of the South, touristic, materialized by Mbenmong and Nwanyo.

The **pole of centrality of commercial** activities and industrial activities will have to be arranged and reconfigured to better support the traffic and the reorganization of the economic activities, in particular, the industrial and commercial zones. It will be increased by the creation of a commercial zone and an industrial zone in relation to the current quay, which will have to be transformed into a commercial port on one side and an industrial port on the other. The localization of the central market of Akwa, the road station, the activities of warehouse of hydrocarbons, oil mill industry or equipments of agricultural processing industry will have to justify the quantitative affection of the grounds.

The **pole of administrative centrality** is materialized by the existence of several administrative equipment. It will be increased by the installation of the domanial layout and town hall under realisation and the development of contiguous zones of habitat (communal layout).

The **pole of centrality of tourist activities** in the south will be based between Mbenmong and Nwanyo and will have to be structured to accommodate tourist activities.

Each pole of centrality will have to be structured within the framework of a Plan of Sector. Their choice does not exclude it from the creation of service centers or districts for better animation of the residential zones.



#### 2.1.2.2. At the level of the collective equipments.

The town of Akwa has some collective equipment installed at the time of the management of Nigerian of the Cross river states. One will study their importance at the level of the poles of centrality, and the need for creating some taking into consideration the type of equipment adapted. From where the need for defining the following objectives:

- to create collective equipments of first importance regrouped in the poles of centralities, and having connections privileged with the rest of the agglomeration;
- to create public gardens and public parks, wood walks with public benches... thus some can be localised in the heart of the principal small lost dwelling, or in the center of the quarter;
- to exploit spaces of depression to increase the green spaces and leisure spaces.

#### 2.1.2.3. At the level of the habitat

The diagnosis of the problems linked to habitat in Akwa authorizes to consider the objectives hereafter:

- to integrate the existing constructions by a smooth strategy of pacification and taking into account of the standards of construction, land management and improvement of the habitat. The contribution of the infrastructures and urban equipment must play like an integrating element;
- to control the urbanization of the lands of urban expansion (communal layout), in order to avoid the anarchized development of new quarters;
- to envisage land reservations in the administrative zone, of industrial activities and tourist activities;

to transform the coastal sector into a port zone with tourist predominance (tourist port of Friedland, naval navy bases (BIR), commercial port, industrial port and tourist ports of Mbenmong and Nwanyo), and to allow the population to obtain lands of dwelling in the communal layout of which at least three will be launched in various zones of urban extension.

#### 2.1.2.4. At the level of the road infrastructures

The objectives defined below aim overall at developing the network of urban roadway system:

- to facilitate the communications with the whole of the area, by privileging the principal poles of entry in the town of Akwa;
- to support the economic development by privileging the connections between administrative spaces, spaces of activities and residential spaces;



- to facilitate intra urban displacements by taking into account of the localization of the generating centers of displacements, in particular the quays, the zones of employment, the zones of activities, the zones of habitat, the zones of urban expansion, the large equipment, the road station... etc;
- to create road way turning points to solve traffic congestion at the level of the centre town and to permit to control the evolution of urbanisable surfaces;
- to develop and to organize circulation networks.

#### 2.1.2.5. At the level of the various networks:

### 2.1.2.5.1. Drinking water

- To carry out the project of drinkable water conveyance (CAMWATER) as from river Bekwe at the entrance of the town of Isangele, then to ensure the canalisation into the town of Akwa (10 km);
- To build a network of drinkable water conveyance in the whole town;
- To initially exploit the existing water towers for distribution in the various quarters of the town
- To promote a systematic policy of individual connections in order to allow the population to use water CAMWATER. This policy supposes an exemption from payment of connection with possible recovery of the expenses on the costs of consumption.

## 2.1.2.5.2. Electricity

- To put a Medium tension electric feeding line connecting Mundemba to Akwa (Aessonel) or then to set up on a purely provisional basis a power generating unit of great capacity to ensure the electric power supply of the town;
- To install transformers of sufficient capacity to supply the town with electric energy;
- To put in exploitation the powerlines and the connections available for distribution in the dwellings;
- To extend the network of street lighting in the administrative pole, the pole of activities and the centres of population in general.

#### 2.1.2.5.3. Telephone

• To create a post office (CAMPOST) for the communications, but also for the mail and the transfer of money;



- To promote the Cameroonian mobile networks by the installation of MTN and Orange antennas for Cameroon;
- Installation of a telegraphic telephone and a systematic policy of connection in order to allow the use of the fixed telephone (optical fibre);
- To build a Tele Community Center in Akwa.

#### 2.1.2.5.4. Drainage

- To use the existing rivers as natural discharge system for the primary networks of drainage;
- To increase the system effectiveness of rain drainage by the creation and the maintenance of the secondary and tertiary networks established along the ways in the form of gutters.

#### 2.1.2.5.5. Leasing of used waters

To promote the use of septic tanks in the zones of habitat.

#### 2.1.2.5.6. Household refuse

- To create a municipal service charged with urban waste and green spaces;
- To install refuse cans in specific places of the town;
- To arrange a zone of communal discharge.

## 2.1.2.5.7. Green spaces

- To create a municipal seedbed and to create green spaces at a surface of 1 m² per inhabitant;
- To plant the streets to obtain a green profile of the town;
- To create a Municipal Garden in the administrative center, in connection with the land reserve.

## 2.1.2.5.8. Commercial equipment (road Station...)

- To create a central road station at the level of the central market for interurban transport;
- To promote the river transport;
- To organize transport by mototaxi for intra urban transport.



## 2.2. Arrangement or installation or ameliorating program

The achievement of the objectives of installation above will not be possible only by starting from a clear and realistic program which takes into account the constraints and the social, economic, environmental, technical and financial forces. The fields of this programming concern in particular:

- Collective equipments
- The habitat
- Diverse roadway networks.

This programming will also have to be based on an objective evaluation of the present needs and future needs for the town of Akwa, needs expressed in terms of estimated population in the urban perimeter delimited herebefore at approximately 800 ha.

## 2.2.1. Recall of demographic projections

Table n ° 1: Demographic summary and projections to take into account

Year	Negative hypothesis		Average hypothesis		High hypothesis	
Year	Increase.	Popul.	Increase.	Popula.	Increase.	Popul.
2011	2,54	879	2,54	879	2,54	879
2016	4	1.164	5	1.293	6	1.435
2021	5,5	1.781	10	3.474	12	4.635
2026	6,5	2.837	20	34.780	24	69.243

Table n°13 of the diagnosis Report gives us the summary of demographic projections, on which we chose the high hypothesis of demographic growth for the next 15 years.

## 2.2.2. Demographic capacity of reception of the site

#### 2.2.2.1. Perimeter rules

- Total surface of the site of the town corresponding to the zone of study: 1.146 ha;
- With about 70 % of land constructible, there will remain 802,2 ha;
- Surface intended for the specific equipment, infrastructures and other specific zones (zones of frontier market, industrial zone, botanical garden...), approximately 50 %, that is 401,1 ha;



Surface intended for the habitat in all its forms, approximately 50 %, is 401, 1 ha, or then 4.011.000 m². For an average of the surface of parcel of land of 400 m², there are 10.027, 5 parcels to be distributed to a population of 50.138 people in the horizon 2026, for a household size of 05 people like suggested by the household surveys.

This figure of 50.138 inhabitants expresses overall the demographic capacity of reception of the site of the town of Akwa as delimited in its perimeter rules (sovereignty) corresponding to the zone of studies.

### 2.2.2.2. Perimeter of immediate equipment

It can be calculated starting from demographic projections considered above. If one accepts a population of 35.000 inhabitants in 2026 such that the scenario of average growth proposes it, the number of persons by constant household (05) and one size of the average parcel equalizes with 400 m<sup>2</sup> like above, one approximately obtains 7.000 families to be lodged and a surface which they would occupy of about 280 ha.

To this surface is added the lands for the realization the infrastructures and of collective equipments, of economic production, and the other approximately to 50 %, of 280 ha, as well as nonconstructible spaces which would occupy 30 % of the lands normally, that is to say 240 ha, for a total of **800 ha** for the perimeter of equipment.

In a whole, we have a regulatory perimeter of 1.146 ha for a perimeter of equipment of approximately 800 ha. The Perimeter of equipment is that necessary for urban development for the 15 next years, whereas the perimeter rules is that of sovereignty which will be taken into account only after 2026, except exceptional case of surplus of a demographic and economic growth of the town which is completely possible. We recommend this last perimeter to the Commission of delimitation of the town which will be put in place.

### 2.2.3. Programming of the habitat

The interventions at the level of the habitat include two complementary strategies:

- strategy for improvement of the existing habitat in terms of restructuring in the campings of fishing, the village hamlets and the old sectors;
- strategy for organization of the extensions in terms of layouts.

#### 2.2.3.1. Zones of village protection and of urban reorganization (30 ha)

There exists in the urban site being studied of the village zones of Nwanyo, Mbenmong, AkwaI and Akwa II located on low lands of the mangroves. These villages with the pace of camping of fishing should be the subject of an evolutionary reorganization.



They must be delimited by integrating there in the space of activities of the new town (zones of trade, tourism and industrial) and the possibility in all the cases will be given to the villagers to attend all the urban equipment (water, electricity, telephone), at the same time as it will be offered to them to move for a land of dwelling in the new zones of layout.

The existing habitat tissue presents a number of defects:

- precariousness and out datedness of constructions as a whole;
- anarchistic and spontaneous aspect of the establishments of the rest of the constructions.

The process will require a joint action in the direction of its functional improvement and the installation of the network of cleansing, widening of the ways and plantation of trees.

It refers to a complex action, integrated, combining several modes of space treatment, in particular the demolishing in the zones of extension of roadway system, the reorganization, the rehabilitation, the regrouping and parcel recutting.

### 2.2.3.2. Zones of layouts (urban extensions: 250 ha)

Appendix 1 The new zones of habitat are intended to accommodate the newly migrant populations or those touched by the removal from the industrial zone or then of the consecutive demolishing to the operations of improvement of the existing urban tissue. This second type of strategy aims to master or manage the rhythm of consumption of the soil in the faces of urbanization. To this effect, it should be recalled that the total surface for this class of action was calculated at approximately 250 ha of lands to arrange between 2011 and 2026.

It can be said that the achievement of the objective of improvement in the framework of life of the urban population requires that the programme of adjustment of the zones of extension must as possibly be adapted to the financial capacity of the various layers of the population. The discussions in focus groups made it possible to define three communal zones of layout for a total of 300 ha distributed in the town:

- The zones of economic habitat have to be arranged summarily, with sizes of pieces ranging between 300 m² and 350 m². One will have to hold for this category 50% of the surface of the zones of extension.
- The zones of habitat of average standing will have to be arranged in a complete way or synopsis. This category will account for approximately 30% surface reserved for the zones of extension. The size of the parcel will lie between 400 and 500 m².
- The zones of habitat of high standing will be also summarily arranged, and will be consisted of the parcel of surface higher than 500 m². Approximately 20 % of the surface of the zones of extension will be reserved for this category.



It is advisable to recall that the distribution of the various categories could be rectified in operational phase according to the request and of the evolution of the level of incomes of households.

The adjustment of these zones will be done in a gradual and harmonious way, according to the request. But with each stage, one will have to take into account all the categories of habitat, so that the space growth is balanced. The council will be able to cover to the strategy with the large areas of urbanization which is based on the principles hereafter:

- concertation with the customary owners, in particular of the traditional chieves implied in land proprietor;
- participation and/or partnership with the aforementioned customary proprietors;
- recovery of the costs of installation;
- gradual arrangement and flexibility of the interventions...

One will have to privilege here the summary adjustment of the primary and secondary infrastructures, while reserving lands for the large collective equipments.

The interest will be to master the quality of the new extensions, to propose parcels corresponding to the socio-economic characteristics of the households to shelter. Layouts of quality will be defined compared to the central axis, with the tarred accesses or the degree of installation. They will have 500 m<sup>2</sup> for average standings and 500 m<sup>2</sup> and more for high standing.

For the economic layouts, they will be summarily arranged and will have between 300 and 400 m<sup>2</sup>.

## 2.2.4. Program of collective equipments

In the approach of definition of the collective equipments, one will have to balance the indications at the level of the grids and standards of equipment in force. According to the nature of the equipment, one will take into account the demographic factors, the immediate or distant environment, the political good-will to affirm or reinforce the role of chief town of the Sub-division, the role of frontier market, the role of development pole in the peninsula of Bakassi and South-west region.

In other words, the equipment to be programmed will have to make it possible to constitute in the zone a center of local radiation and Sub divisional office from the political and administrative social and economic point of view. One will take into account the wishes of the Advisory Working group, of the elite and of the population and one will take to account of the possible existence of a Committee of Development of the locality of Akwa. More particularly, a particular importance must be attached to the political good-will of arrangement of the frontier zones.



To this effect, one will have in this approach to be based on the deficiencies identified during the diagnosis of the current situation, but more especially, to take into account of the function of frontier market and of petroleum industrialization and tourism of the locality, of the place which one wants to make him play in the urban reinforcement and the management of the peninsula of Bakassi, in particular that of commercial products from Cameroon, of foreign products and to condition petroleum products and of reception of visitors.

The collective equipments in question here relate to those identified during the analysis from priority. The currently existing equipment and not presenting any major concern from the point of view of their capacity, their localization or their architecture, or that they are those created by the Nigerian administration before August 2008, date of retrocession from the Peninsula of Bakassi or those created by the Cameroon administration after this date, will not be the subject of particular programming, apart from their handing-over with the completion or operating condition of construction.

### 2.2.4.1. Administrative equipment

The town of Akwa having an administrative zone located at the single entry east of the town. For the localization of new administrative equipment, in particular the communal administrative structures and the new administrative equipment to be created and which requires new sites, they will be done in enlarging of this zone:

- The city hall (6 to 9 ha). This site will have to integrate a zone of construction of a municipal inn (0,5ha) and the creation of a municipal botanical garden (03ha);
- The creation of the non existing administrative equipment in Akwa, in particular services of Sub divisional offices of all the Ministries (2.000 m²/per administration). This is valid for the Sport and Physical Education, the Mines and Energy (CDE/CAMWATER, Aes-sonel...);
- sites of construction of the chieftaincies ...

For the new administrative equipment to lodge, as well as the construction of the residences of obligations, the ideal would be to locate them all in this administrative pole. Moreover, each service will benefit from a minimal land reserve.

#### 2.2.4.2. School facilities

The programming of the school facilities will take into account the norms set by UNESCO with some local adaptations related to the problems of localization or balance of the zones. One will distinguish three levels of teaching (Nursery, primary and secondary).

It is as advisable to recall as there is no correlation between the demographic growth and the growth of the enrolled pupils, especially with regard to the secondary level. The majority of the pupils of this level come from the other towns of the division or even of the other Areas, and even from the close country. The parental relation having shown



obvious complicities of family exchanges. From where need for basing the program on the rates of UNESCO, while remaining rather optimistic.

### 2.2.4.2.1. Nursery Education

It is about the equipment of proximity. According to UNESCO, one should have 1 class for 1.700 inhabitants and 25 pupils per class. One currently does not have any nursery structure, in spite of the presence of three Public Schools with complete cycle (AkwaII, Mbenmong and Nwanyo). These schools should see their extended capacity, and the maternal sections with complete cycle of at least 4 classrooms of 25 pupils each, should be born in their centre. Until 2021, this capacity would be sufficient for the needs for the locality. It will consequently be necessary to consider the creation of two new nursery schools beyond 2021, to prepare the reception of the 35.000 inhabitants of the horizon 2026. These new nursery schools will have to be placed with approximately administrative or communal layout, on a surface of 0, 3 ha. They will be used for the service road of the extensions and the town.

### 2.2.4.2.2. Primary education

The norms of UNESCO envisages 1 class of 50 pupils for 300 inhabitants, 18 to 24 classes by establishment and 1 ha by establishment of 20 classes with administration and adventure playgrounds.

Taking into consideration these norms, the requirements in 2026 for Akwa will be of an additional public school of 24 classes, after the increase in the current schools with 24 classes.

The new public school to be created will be also located in the sector east of the town for space balance, in particular on the plate at the right entry of the actual town, on the zone of the city hall, in combination with the nursery school.

### 2.2.4.2.3. Secondary education

For the 15 years horizon with a population of more than 35.000 inhabitants, and by taking into account of the needs for the town of Akwa, it will be necessary well, apart from C E S in forecast in the administrative zone, to consider the creation of a bilingual school, a CETIC and a SAR/SM, for the purpose of giving the possibility to the pupils of having the unit of the secondary options of formations in the town of Akwa.

## 2.2.4.3. Health facilities

There are two Health Centers Developed in Akwa (Akwa II and Mbenmong). One will make sure that the military personnel in place are sufficient for their operation. It will be necessary moreover to envisage a Medical centre of the Sub-division with at least a doctor, laboratory assistants and nurses who are currently lacking. The problem will consist in encouraging the population to use this equipment, at the same time as it will be necessary to set up the completions of equipment necessary (hospital beds, small surgery, drugs... etc). In general, WHO requires:



- a medical formation for 5.000 to 10.000 inhabitants,
- 25 to 30 m² for a bed,
- 0.5 to 1 ha for a medical formation.

Land reservations will have to be made of almost 1 ha in balanced localization, in particular in the northern zone of the town.

## 2.2.4.4. Other Equipments

### 2.2.4.4.1. Cultural Equipment:

One notices the existence of several religious vaults in the zone of Akwa. But the totality does not have structures, or then they are summarily built. The needs are real. In the zones of extension, one should envisage land concerning each religious vault, in particular for the apostolic church (catholics) and the Protestants and the Moslems inter alia. The Localised Apostolique church at the level of the quay will have to benefit from a wider site in the zone of extension. It will benefit thus from two new localizations in the east zone and the Southern zone for a space balance which the faithful ones will appreciate.

As regards the graveyards, a land reserve will be envisaged at a rate of 5 m<sup>2</sup> graveyard per inhabitant (that is to say 5 ha) in the East of the town.

### 2.2.4.4.2. Hotel, tourist and sporting facilities

The municipality will be able to consider the construction of a municipal inn attached to the complexity of the City hall and to reabsorb the problems of lodging of the town. The private sector will have in all the cases in the zones of Friedland, Mbenmong and Nwanyo to program and build hotel structures of high class.

A Municipal Botanical garden will be created at the level of the administrative center, and of green spaces at a rate of 5 m<sup>2</sup> of green space for each inhabitant will be created (5 ha on average). A municipal stadium will have to be created in the northern zone of the administrative center. The Plan should moreover envisage that as regards the sporting equipment, in addition to municipal stadium and of the adventure playgrounds in each quarter apart from school establishments.

## 2.2.5. Infrastructure Programmes

## 2.2.5.1. Adjustment of the roadway system

The programming road way system will include the categories of the following ways:

- primary ways
- secondary ways
- tertiary ways or of service roads



footpaths.

## 2.2.5.1.1. Characteristics of the primary roadway system from 18 to 22 m

The town of Akwa does have for the moment only that of a single entry track from the East which does not meet the standards of an urban roadway system, with ramifications in the various quarters. It should be noted that to reach the Camp of the BIR, it is necessary to cross the entire town and to follow tortuous ways.

This central wary will have to benefit from a transformation into triumphal roadway system with improvement in enlarging and correction of the layout as well in plan as in length, in order to take into account the data of traffic and urban development. This way would give on the River Akwayafé, in forecast of a possible bridge which could be built to connect Cameroun to Nigeria. One could also plan to build the road beack with the same characteristics to connect the various ports and to promote the exchanges and the coastal urban functions.

The roadway system of 22 m is that triumphal of marking of the importance of the urban centre whose characteristics are as follows:

■ Influence: 22 m

2 roads with 2 ways of 3 m

bilateral carparks or not

Length: see the corresponding variants arrangement

class of traffic: T3

Space parking and of delivery: 2 m

Pavements: 2 m planted on both sides of the two ways

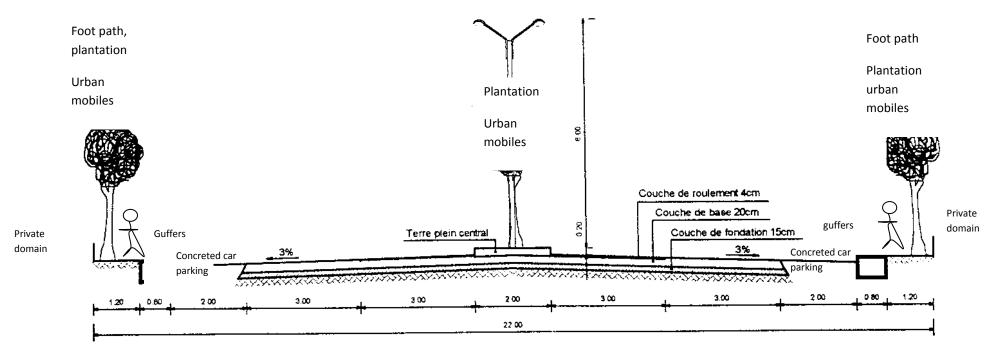
planted central full ground : 2m

• Structure of the roadway: rolling layer 5 cm, base layer 20cm,

foundation layer of 20 cm...



Diagram  $N^{\bullet}$  1: Transverse standard profile from 18 to 22 m, following removal of lateral carparks of 2x2 m or not. (Scale: 1/100 E)





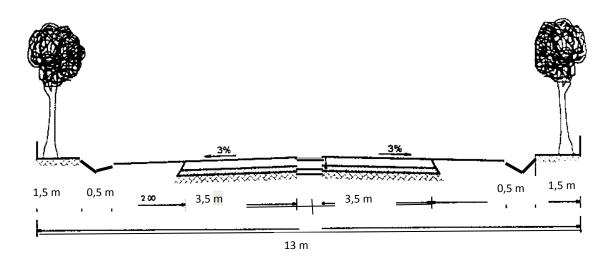
### 2.2.5.2. Characteristics of the secondary roadway system

It is programmed to retie the quarter of the primary networks, with two essential functions:

- to limit physically and disenclave the blocks constituting the quarters,
- to collect intermediate flows.

In this case one distinguishes two types of ways according to their influence and their localization in urban tissue or their environment from the point of view of the activities. There will be the secondary roadway system of 15 m for urban skirting and the opening of a new quarter, and the secondary roadway system of 15 m for the other connections.

Diagram  $N^{\bullet}$  2 : Secondary roadway system in transversal profile from 13 to 15 m



■ Influence: 12 to 15 m

■ Roadway: 2x3,5 m X 1 ways

■ Gutters: 2x0,5 m

planted lateral Pavements: 2x1,5 m

lateral Carparks or not: 2x2 m

Length: see the corresponding variants arrangement

class of traffic: T3

It will make it possible to circumvent the centre town, or then to connect the center of the town to the zones of extension or to connect between them the centers of services or

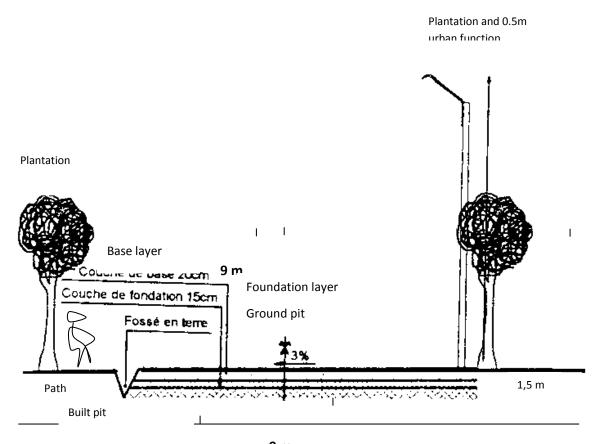


quarters. It limits physically and disenclaves the blocks constituting the quarter, and collects intermediate flows.

These characteristics are as follows:

- Influence: 8 to 9 m
- 2 roads with 1 way of 2,5 m X 2
- Planted lateral pavements: 1,5 m or 1 m
- Gutter on one side/plantation and urban Mobiles on the other: 0,5 m x2
- Length: see the corresponding variant of installation
- Class of traffic: T3
- Structure of the roadway: rolling layer 4cm, base course 15m,
- Foundation layer 20 cm...

Diagram N° 3: Transversely roadway system in pansversu profit from 8 to 9m, scale: 1/100e



9 m



Table n ° 2: Assessment of the characteristics of the roadway system

Roadway systems Characteristics	Primary		Secondary		Tertiary
	22 m	18 m	13 m	15 m	8 to 9 m
Sol/trafic couples	53/T3	53/T3	53/T4	53/T4	53/T4
Roling layer	5 cmBB	5 cmBB	-	-	-
Base course	20 cm	20 cm	15 cm	15 cm	15 cm
Foundation layer	20 cm	20 cm	20 cm	20 cm	20 cm
number of ways	2x2x3 m	2x2x3 m	1x2x3 m	1x2x3 m	1x2x2,5 m
Central plain land	2 m	2m	-	-	-
lateral Carparks (Verge)	2x2 m	2x2 m	2x2	2x2	1,5x2 or not
Lateral foot pains	2x2 m	2x2 m	2x2 m	1,5x1, 5m	1,5 x1, 5m
Plantation	Yes	Yes	-	-	-

#### 2.2.5.3. Drinkable water conveyance

With a population of approximately 1.000 inhabitants approximately till date, Akwa normally needs 100 m3 of water each day, for an individual consumption of 100 L per day. With the increase in population, this need gradually will reach 3.500 m3 days in 15 years. This in the long term requires the construction of the water tower of a total capacity of approximately 3.500 to 5.00 m3, with a reserve from two to three days. Till the date of today, the two water towers in centre town and that of Mbenmong would have only one maximum capacity of 20 m3 water, largely insufficient in capacity to serve the whole of the population. It will be necessary to consider a new water tower of a great capacity at the entry east of the town (level of curve 34 m) and to envisage the supply of the zones of extension, Mbenmong and Nwanyo.

The network of water conveyance which will arrive from the east could be 150 or 200 mm and will have to supply the various water towers, in particular the largest to be built at the entry east of the town, then to follow in the second time the principal road axes before ramifying for the service road of the small islands, the various quarters and the various companies and structures of habitat.

A power station of storage, treatment, and pumping in these towers will have to be arranged with the source of collecting on the river Bekwe at the entrance of the town of Isangele, out of the urban perimeter to avoid pollution.

## 2.2.5.4. electricity and Public lighting

For a minimal consumption per individual in BT of 4 kWh, it will be necessary to envisage for the town at the present time a total capacity of 4.000 kWh per day of domestic consumption, without taking into account the industrial exploitations, in particular the eventual responsibility of suppliers of networks of mobile telephone. With such a level of consumption, the installation of a power generating unit of great capacity will be with feasible course terms. But it would be better that AES-sonel plans to draw the high voltage line as from Mundemba by Isangele to feed this locality and to facilitate the development of the companies.



Transformers of electric distribution of the urban zones and zones of extension will be envisaged, with the street lighting along the primary roadway systems and on all the public places and collective spaces of regrouping in the quarters.

The supply of the dwellings in electricity, in particular for certain houses will not pose particular problems, or the effective connection, the installations having already been carried out during Nigerian management.

#### 2.2.5.5. Drainage and cleansing

The network of the actual drainage is primarily consisted of the principal mangrove and rivers which drain the town in direction of the marshes along Akwayafe. For the secondary network of drainage, there will be recourse to ditches or gutters along all the ways. The roadways will be arranged so as to allow an easy flow of water (approximately 3%). On the primary roadway systems, the gutters will be rectangular and out of final materials (reinforced concrete). Elsewhere, one will be able to resort to triangular ditches in masonry (cf diagrams crosses in through-type of the ways above). For the crossing of the roadway systems, one will have of the concrete channels reinforced or the tubes with sufficient diameters.

As to the network of cleansing of used water, one must resort systematically to the individual system in the dwellings: septic tanks.

### 2.2.5.6. Other networks

A site of controlled refuse discharge will be arranged on a land not far from the urban perimeter, preferably in the Northern zone (beside the municipal cemetery). So actually waste does not seem to constitute an urgent problem, with the urban development, it will be necessary to be preoccupying.

A road station of organization of intra and interurban transport will be arranged, in the zone of the central market.

## 2.3. Principles of installation

This paragraph has as an aim the definition of the principles of organization and structuring of space. It must lead to the party of installation and comprises three essential parts:the principle of progressive equipment and perished double measuring of the town, the legibility of the urban structure, the installation of the diverse roadway networks.

#### 2.3.1. Principle of progressive equipment and peri double meter

The urban perimeter delimits at the same time a zone of sovereignty (1.146 ha) and a zone of equipment (800 ha). The perimeter of equipment is less vast than that of sovereignty which is nevertheless useful for the future development of the town. Indeed,



the principle of progressive and gradual equipment poses the problem of the thickening or the effective urbanization as bases of delimitation of the urban perimeter, its revision or its extension.

The perimeter of equipment will be that where will have to be carried out all the immediate and coordinated efforts of urbanization with short and with medium term (15 years horizon). It is delimited by a crown which plays the role of land concerning the long term, while allowing rural activities and of environmental protection.

The prospects for settlement of the town of Akwa and creation of economic activities will in the long term involve a complete occupation of the 1.146 ha of the town (perimeter of sovereignty). The efforts of equipment will be concentrated inside the 800 ha defined in the horizon 2026 (perimeter of equipment). The concentric progression of the urbanization thus seems a requirement of harmonious development of the town.

One of the advantages of progressive equipment of the east side of the town of avoiding the accumulation of a too significant number of vacuums in urban tissue, as well as the useless multiplication of the distances compared to the collective equipments and the infrastructures.

## 2.3.2. Principle of lisibility of the urban structure

The principle of lisibility of the urban structure is based on the definition of the homogeneous entities of urban space:

- Sector of administrative and socio-collectives equipment;
- Central industrialo-commercial sector:
- North-South axial evolutions along the bank;
- Parcel division of extension zone.

### 2.3.2.1. Sector of administrative and socio-collectives equipment

Concentration of the administrative equipment and the socio collective equipment in this zone is in fact a secondary development pole which comes in support from the Western principal pole on the banks from Akwayafe. With the construction of the triumphal way and city hall, this zone will have to take the space characters identities town of Akwa. Indeed, it is here that is found platforms of festivals, the great structures such as the sub-division, the gendarmerie squad, the future college and the future CETIC, among others.

#### 2.3.2.2. Southern industrialo-commercial sector

This sector includes the old shopping Centre, its radiation around the crossroads AkwaI/Akwa II, like its prolongation towards the single quay on the edge of Akwayafe, in integration of an industrial zone to develop to connect the zone of the Central market localised in the geographical center of the town of Akwa. It includes the main part of



the industrial plants (refineries, storage, offices) and commercial, of activities of urban centrality, hotel trade and the central urban habitat (this zone integrates the domanial layout of Akwa), including some administrative equipment like the structures of customs. In the event of displacement of the structures of habitat, consequent rehousings will be done in the zones of western communal layout, east and north in project.

## 2.3.2.3. North-South axial evolution along the banks of Akwayafe:

The potential of future development of the town of Akwa is undoubtedly its coastal situation which should facilitate river and maritime mobility in and out of the town. To this effect, it is place to consider a series of ports specialized along the edges of Akwayafe. The operation of this harbour system depends on the surface transports. That is why, it is necessary to consider a bank road to facilitate the operation of the ports and the supply of the factories, the zone of the BIR, the companies and the equipment based on the ground. This bank road will have to integrate the localization of the trade, of the equipment and services of centrality, the factories, of the various companies, as well as the hotel structures. It should also connect the various urban development poles, in particular the central administrative pole, the commercial industrial pole, the tourist pole and even the site of the Aerodrome of Akwa under consideration in the zone of Nwanyo. It will be about an axis of urban animation having to comprise elements of change of the frame work in the town. The council will be able to consider along this axis of the commercial layouts, with requirement of construction on level (R+1 and more), within the framework of the development of a plan of urban sector. This axis will be relayed in north and the south by the roadway.

#### 2.3.2.4. Parcel division of zones of extension

The urban extensions will have to be done by the means of the layouts. These layouts will have to take into account the green urban aspect, so as to unify their image with a dominant vegetal and scrape in order to affirm a lucid and ecological town. This orientation will have to allow the creation of urban spaces to furnish (places, public garden, green spaces, planted miles...). One will seize the opportunity offered by the rivers to create piscicultural spaces or reserves of agreement to organize landscape prospects or to mark the specificity of certain urban zones.

The hamlets and other campings will undergo complex operations of town planning, without systematic questioning of their existing structure. The major problem to solve will consist in harmonizing the structure of the old boxes with the total urban structure, without questioning of their cultural nature (Community boxes). It will be out of question of considering the massive displacement of the populations, not to worsen their situation of extreme poverty and to reduce the economic and social costs of the urbanization. The best strategy will consist in leading the residents themselves to operate the essential changes, in particular to freely choose to move into the zones of layouts and to yield their ground in the old villages for the development of the urban economy. One should consider the framing of the populations in improved ground brick



construction, like in practice of the techniques improved on farm, piscicultural and forestry (bee-keeping), in harmony with life.

## 2.3.3. Principle of general organization of space

The general organization of the town will be based on the hierarchisation of the poles of centrality (primary centrality, secondary centrality, tertiary centrality...)

The actual principal shopping centre, exentialy made up of the actual center town (crossroads of Akwa I and Akwa II), will undergo a slip towards the South, in enlarging to integrate the industrial zone connecting the current quay, and a slip towards the East in integration of the new commercial zone in creation to constitute the animation of the future centre town of Akwa.

Secondary centrality unfolding in two, of which the first made up of the administrative pole which will take support on the central market and the central road station like principal points of animation, before extending towards the east on the triumphal axis, the second made up of the tourist activities to promote it between Mbenmong and Nwanyo, in connection with the principal center, by the penetrating one since the administrative pole, and by the road bank or by the roadway system of the southern skirting and east.

The tertiary centrality will respectively take into support on each quarter or each unit of vicinity.

In all the cases, the distribution of the space components will take into account preoccupation with the functional and aesthetic coherence (landscapes and urban connections).

The space changes will concern in particular:

- the diversification of the economic activities, precisely the development of the services of national defense by sea (naval bases), of frontier market, oil industry, tourism and agricultural processing industry;
- the construction of a triumphal axis connecting the road coming from Isangele to the bridge to be built between Cameroun and Nigeria;
- The crossings of this triumphal axis at the level of the road bank, of the roadway system of skirting and penetrating which will have to be treated in a round about to express the Ludic character of the town of Akwa;
- the construction of a network of roadway system of service road of the centres of population;
- the creation of new socio collective equipment and of infrastructures... etc.



## 2.3.4. Principle of affectation of the zones

The various assignments of grounds take into account the assets and space constraints, the capacity of the site and the preoccupation of animation or a total functional coherence.

Most significant are:

- the commercial industrial center;
- the central administrative zone:
- zones of southern tourist activities:
- zones of habitat.

#### 2.3.4.1. Industrial commercial Center

The transformation of the centre town of akwa into a shopping and industrial centre with extension towards the East and the South starting from the crossroads of AkwaI and Akwa II, as its reorganization in connection with the single quay of the town answers the preoccupation with a search for a true urban centrality.

### 2.3.4.2. Central administrative zone

With regard to the secondary administrative pole, the existence of the administrative equipment, city hall, municipal stadium and place of the festivals will make it possible to animate all the central sector of the town of Akwa and the road service of the various contiguous districts.

In the urban extensions, the topography of the site, the surface and the nature of the plates will authorize the localization of the council layouts and the localization of other large equipment, in particular the center of services of the quarter, hotel trade....

#### 2.3.4.3. Southern Zones of artisanal and tourist activities

The zone of artisanal and tourist activities will be localised in the Southern zone between the two human settlements of Mbenmong and Nwanyo. The artisanal activities having a potential of harmful effect will be localised in a peripheral way to the variation of the residential zones.

The other zones of commercial activities will be localised along the bank road or of the roadway system of skirting and penetration, in particular the service road of the Aerodrome.

#### 2.3.4.4. Zones of habitat

The localization of the zones of habitat will be based on the orientation in the existing zones and the new zones.



In the existing districts, one will Endeavour to maintain the maximum existing constructions. It will be necessary however to resort the regrouping to restructure certain quarters. If they are the existing villages, the effort will consist in integrating them in a flexible way into new dynamics by possibilities of slow changes. The regulation should hold account of it.

The load factor will be decreasing towards the periphery, and the zones of economic habitat will be localized not far from the zones of centrality, services and activities.

## 2.4. Principle of installation of diverse roadway networks

The adjustment of the roadway systems will be based on the principle of hierarchisation of the ways. The primary ways will have to directly ensure the connection between the towns in its immediate environment. They must have 22m or 18m, according to whether they have integrated functions of urban animation or not (carparks), and will have to be bituminized and planted. These roadway systems could also be used as connection between the centers of services.

The role of the secondary roadway systems will be to allow disenclavement of the centers of quarter or to connect certain zones to the centers of services. They could also be useful to connect the immediate surroundings of the town. According to the geographical and socio-economic circumstances, these secondary roadway systems will be able with their whole being hierarchical in ways of 13 with the ways of 15 m.

The tertiary ways will play the role of disenclavement of the parcels or small islands. Their influences will lie between 8 and 9 m.

The adjustment of all these categories of ways will take into account the preoccupation with an easy flow of rain water. The perfect control of the rain water run-off will also be based on the principle of hierarchisation of the networks.

The equipment in street lighting and telephone will be done in a progressive way starting from the primary education axes.

The points of collection of the household refuse will be arranged per units of vicinity and on the basis of tolerable distance being able to vary between 50 and 150 m of ray.

For the networks of electricity and drinking water, the individual connections will be favored as much as possible (campaigns of connection).



## 3. Chapter 3: The party of Arrangement

### 3.1. Collective choice of the variant of installation to be retained

The choice of the alternative of arrangement to be retained was the subject of a special transfer of the Advisory Group of Follow-up of Work of the SULUP on Saturday 05.03.2011, session to which took part several observers of local development of Akwa, in particular the Divisional officer in person, Madam Mayor and her assistants inter alia, at the side, the Group of Advisory Follow-up was put in place the day of the official launching of the Plan (Wednesday 03.03.2011)...

The variant of arrangement retained confirmed the existence of an administrative zone east, a southern zone of industrial-commercial activities, of a zone of Southern tourist activities and zones of Southern extension, East and northern, in terms of Layout. The participants in addition made a point of choosing the sites for the administrative equipment (site for town hall, places for festivals) collective (gov't school of Akwa, CETIC, communal Stadium...) and the traditional heads made a point of yielding them same to the council of Akwa the lands for the layouts in the urban extensions of which in total 300 ha of land.

They appreciated much this party of arrangement which thus comprised a significant communication network between the north and the south, east and the West of the town, the intense space relations. There will be in this case many investments to put in the infrastructures of direct road link and skirting, in the collective equipments, following an obvious increase in population.

This variant held the attention of the members of the Advisory Working group for other reasons:

- It was an integrating solution between the four living communities since the beginning in Archibong, today Akwa, of which AkwaI, Akwa II, Mbenmong and Nwanyo. Thus the space functionality which emerges guarantees the psychosocial functionality;
- it framworks with the actual development of the town as wished by the members of the Committee of advisory Follow-up.

## 3.2. Specific orientations

The party of arrangement thus chosen should take account of an increasing dynamics in terms of space organization and operation. It will take into account the space development tendentially negative to the town of Akwa, with however of the significant investments in the urban projects. The space changes will concern:



- desenclavement of the town of Akwa by a good bituminized road of connection with Isangele and Mundemba, beyond the connection with Ekondo-Titi, Loum, the bulding of a bridge or of connection with its sister town of Ikang in Nigeria and the opening of the whole of the coast to the coastal traffic by a system of public river transport;
- the creation of a great zone of industrial commercial activities relating to the frontier market with Nigeria, agro-industrial and artisanal, in connection with the existing commercial zone;
- the creation of a Municipal Botanical garden, inter-connected with the city hall and the administrative center;
- the construction of a city hall;
- the electrification and the drinkable water conveyance with construction of the drivers and a large water tower;
- the construction of a central triumphal axis, a bank road to serve the ports and of two loop lines to open the zones of extension.

#### 3.2.1. Mechanisms of urbanization

The general orientations of this party of arrangement result in retaining on the space level a whole of mechanism of development which rests primarily on the urbanization of the whole of the site of the town including:

- the creation of a road bank and the Northern loop lines Southern to take account of the importance of internal circulation;
- the creation of an aerodrome to facilitate the connection with the rest of Cameroun and to promote tourism;
- the creation of autonomous socio collective equipments (Colleges, CETIC, etc).

#### 3.2.2. Organization of space

The mechanisms of urbanization above are translated graphically on the document of the Summary urban land use plan of Akwa whose specific principles of organization and structuring of space are:

- importance of a density of the network of roadway system on the infrastructural plan;
- importance of the East-West connections for the service road of the zones of extension:
- importance of the market zone combined with the industrial park;



- importance of the zone of administrative power station. This administrative zone will gather the activities of central animation (communal market, road station...) outside the whole of the administrative and socio collective equipment of the town.
- importance of the zone of southern economic activities. This industrial zone will gather the oil, agro-industrial and artisanal activities.
- Such are the specific principles which underlie the orientations of the party of arrangement of the Summary urban land use plan of the town of Akwa.

## 3.3. Economic option of development

The party of arrangement described above corresponds to a well determined economic orientation: it is based on the concentration of the current investments in the town, in particular for the creation of equipments (socio collective equipment) and of the infrastructures (great roadway system necessary for the working procedure, drinking water, electricity), and the efforts which can deploy the municipal team to convince the potential investors, like on the action of the Committee of Development of Akwa to encourage the local urban actors. This party of arrangement supposes the availability of the considerable investments to seek on the national and international level and to inject into the economic development of the town, in construction of the equipment of industrial production, in particular at the end of 2013, according to the agreement of Green Tree, but also in the organization and follow-up of the urban development on behalf of the Council of Akwa. If the industrial zones are fruit full, the Nigerian investor will be well interested in this town.

# 3.4. Option of structuring of space

On the space level, this party of arrangement presents an evolutionary image of the situation which currently prevails by 2026. It affirms the will of decentralization of the public services and concentration of the investments on this locality, inducing the increase in population, economic and space. It presents a futuristic image of the town of Akwa at the horizon 2026, marked by the multipolar structuring whose road network is intended to relieve congestion and disenclave the urban zones, while facilitating the interurban connections. Its advantage remain the profitability and the economy of the investment in the urban development, with a multiplication of the economies of scale.



## 3.5. Summary urban land use plan of Akwa

### 3.5.1. Graphical presentation

The taking into account of the objectives, the programs and the principal orientations of arrangement exposed previously driven, in this last part of the study, to graphically present the options retained of the Summary urban land use Plan of Akwa at the horizon 2026.

It is in particular advisable to say that the development of the Summary urban land use Plan of Akwa for the horizon 2026 particularly aims at circumscribing the priority actions of installation which it will be necessary to engage with short and medium term to facilitate the implementation of the principal provisions of this Plan and to thus control the evolution of the consumption of space.



# Summary urban land use plan of Akwa



The Graphic Document of the Plan appears:

- the tracing of the North-South and East-West axes structuring, meant to allow the concentration of the commercial activities and the participation in urban animation;
- localization of the programmed equipment (school Establishments, medical establishments, sporting equipment, green spaces);
- localization of the zones of habitat (to be restructured in the coastal zone and the layouts of extension in the prolongation East and South of the town);
- localization of the central zones of activities (trade, craft industry, industries) and of the intermediate zones of exchange activities (road station, central market);
- localization of the development poles thus that of the commercial activities, industrial, agro-industrial, administrative and that of artisanal and tourist.

These elements were spatialized by holding account not only objectives and principles of installation stated higher, but also while being based on a certain number of criteria of localization such as the relief of the site, the desired levels of densities and especially the degree of vicinity or compatibility between the various localised elements.

#### 3.5.2. Metric elements of the new town of Akwa

Table n ° 3: Metric elements of the new town of Akwa

Type of		Area	Dimensioning
measurement			
	1	Study area	1.227 ha
	2	Urban area demarcation	1.100 ha
	3	Equipment area	760 ha
	4	Future extension	340 ha
	5	Housing area	510 Ha
Surface	6	Communal layout area	195 ha
	7	Urbain Park area	91 ha
	8	Administrative area	50 ha
	9	Industrial area	80 ha
	10	Industrial extension area	60 ha
	11	Mangrove	45 ha
	1	Road of 22 m	7,3 kml
Length (kml)	2	Road of 18 m	8 kml
	3	Road of 15 m	12 kml

### 3.5.3. Justificatives report/(S ULUP)

This justifying report the Summary urban land use Plan of Akwa is the result of a conciliation work between the Technical Engineering and design department HTR and the various urban actors, in particular those gathered within the Steering committee of



Work of the Summary urban land use Plan set up at the Launching of Work of the PSU by the Sub Divisional office of Ndian.

The main trends of installation which are exposed there aim overall at supporting a coherent and harmonious development of the town. The Summary urban land use Plan graphically concretizes these various orientations while revealing:

- the general organization of circulation;
- the general destination of the grounds;
- reservations of influence for the public equipment;
- reservations of influence for the public ways;
- localization of the services and the activities;
- localization of the zones of habitat;
- green spaces to be preserved or created;
- land resserves.

The provisions thus envisaged are supplemented by a zoning together with a regulation of town planning which specifies among others the general conditions of use and occupation of the lands.

Only a political good-will clearly expressed by the municipal authorities can guarantee the success of the program of installation suggested in this document. From this point of view, the implementation of this program will have to conform as much as possible to the regulations of the Summary urban land use Plan, will envisaging from the departure the implementation of the priority projects, defined below by this study of the SULUP, with the follow-up of the Council of Akwa and the Committee of Development set up for this purpose. Quite before, the initial regulation of this document will have to make it possible to the Mayor of the Council of Akwa to be subject it to the deliberation of its municipal council and of the approval by municipal decision to confer its statute of imposition to it on all.



# 4. Chapter 4: Priority projects for the urban development of the town of Akwa

### 4.1. Projects of urban development of the town of Akwa

The priority projects of urban development of the town of Akwa, following the development of its Summary urban land use Plan must be logically carried out according to a precise chronology (Very short term-VST, short terms-ST, average term-AT and long terms-Lt) and comprise among others, the actions and projects below:

- the installation of the committee of development of akwa by declaration, and by specifying its program and its means of intervention;
- restarting of the existing infrastructures of water, public electricity and lighting in the town;
- the recruitment of a council technician for the urban development of the town in support to the divisional delegate of minduh in mundemba and the reorganization of the technical departments of the council of akwa in general;
- the reservation of the influences of the public ways in extension or creation, of the zones of assignment of the equipment and reservation layers conforms to the present plan;
- the project of electrification and construction of water conveyance of the water tower;
- studies of the plans of sector and layout of the urban extensions (establishment of the plan of sector of the commercial industrial pole, the administrative sector, the plan of urban roadway system and the plan of the green city, the various council plans of layout in urban expansion);
- the project of tarring of the central axis and the principal road axes;
- the project of asphalting of the central axis and the principal road axes;
- studies and creation works of the central market (frontier market);
- studies of construction of the city hall;
- studies and creation works of the road station;
- studies and creation works of the communal commercial equipment (municipal stadium of akwa, municipal inn,..);



- the installation of a system of communal transport by boat and bus;
- studies of construction of the akwa-isangele-mundemba road;
- feasibility studies of the construction of a physical connection with ikang (nigeria);
- the feasibility studies of a system of river transport and coastal transport by boats will intra and inter urban;
- studies of construction of the connection of akwa-isangele-ekondo titi loum;
- studies and creation works of the municipal equipment (creation of the site of discharge of the town, creation of the municipal cemetery,..);
- studies of creation of the artisanal and industrial commercial zone:
- studies of creation of the tourist zones:
- the feasibility study of a port of akwa on akwayafé, with several quays (naval bases, border trade with nigeria, industry of hydrocarbons, agricultural processing industry, tourism... etc.)
- studies and building work of construction of the port of akwa, protection of the beaches, construction of the various quays, as well as work of dredging of the ways of river navigation on the river akwayafe;
- studies of the roadway system of skirting and opening of new ways of urban extensions and connection of inter quarters;
- studies of creation of an aerodrome of akwa.

These various projects will be the subject of specific programming necessary to their realization. The dashboard below, with the address of all the urban actors and in particular of the Council of Akwa, of the Divisional Delegate of MINDUH and the Inter ministerial Commission for the Development of the zone of Bakassi, will have to allow visualization and the corresponding follow-up. It comprises in column n°1 the number of priority, in column n°2 the project to be engaged, in column n°3 the field of intervention, in column n°4 the urban actor responsible, in column n°5 the urban actor in charge of animation and in column n°6 the convenient expiry for the realization of the project. It goes without saying that the engagement of a project gives birth to new actions to reprogram and reinstate in the dashboard of the urban development which should be reactualized permanently.



### 4.2. Priority projects of urban development of Akwa

# 4.2.1. Project of creation of the Association of Development of Akwa and fight against poverty and unemployment

This project firstly comprises the installation of the apolitical Committee of Development of Akwa, the definition of its tasks and its means of actions.

In the installation of the Committee of Development of Akwa, it is necessary to define its objectives, its object and its finality.

Like objective, it is on the urban development of Akwa, while carrying a particular interest to the resolution of the problems of its populations, of its socio-economic and space-time development. It is also a question of implementing or of contributing to the implementation of the whole projects and programs envisaged and to envisage, necessary to its development and the blooming as of its populations or to its members.

To this end, the object of the Association of Development of Akwa is initially its population under all her components, gathered or not within local, association's professional, composed of the nationals or sympathizers of Akwa, with for finality the human and space development of Akwa.

On the operational level, the role of the Association of Development of Akwa will be to mobilize the whole of the urban actors, each one in what relates to it, for the urban development. In particular, it will have to recruit among its members of the volunteers and other craftsmen so as to:

- to support the urban actors, in particular the city hall in their respective tasks;
- to create in support with the city hall the spaces planted along the streets and to maintain the green spaces and other urban parks;
- to contribute to the social framing of the populations disaster victims or not, confronted with the difficulties of urban development (vulnerable socio-urban).
- the means of action of the Committee will be human, technical and financial resources at the disposal of its members. One will also be able, to create mutual aid funds for the development of Akwa.

On these conditions, the Association of Development of Akwa (ADA) will need an administrative organization, with technical and financial structures. It should have precise programmes of meeting of information and training of its members (on the organization, its objectives of development, its actions, its immediate projects, its future projects, its difficulties...). The TDCI will have to be supported by MINAS, the MINATD among others, and to work in close cooperation with the Council of Kombo Abedimo. Its means of actions will also be the requests for control on the sectors of development formulated with the appropriate authority, with regard to the official and semi-official urban actors.



For the means of financial actions, it will be about the contribution of these members, of the expenses of registration, the gifts, the aids.....etc.

# 4.2.2. Projects of handing-over in operation of the infrastructures and social collective equipments in the town of Akwa

- justification
- description of the socio-urban problems caused by the absence of the infrastructures and basic social equipment;
- identification of the existing and unexploited equipment
- mobilization of the ADA installed during the official launching of the SULUP to animate the handing-over according to the equipment.

#### 4.2.2.1. Justification

The preexistence of the town of Akwa under the name of Archibong, town under administrative Nigerian mode of the cross river states, with:

- an administration, local institutions and the external Federal State of Nigeria,
- functional social equipment: Primary schools and Secondary Schools under Nigerian system, with continuity on the Nigerian territory;
- school and hospital buildings;
- basic drinking water infrastructures: Water towers, public taps, drillings, drains...
   etc.
- basic infrastructures in electricity and street lighting: Power generating unit of great capacity, electric installation in the town, electric installation in the institutions, economic structures and in the houses, installation of the street lighting.

With the frontier disputes between the two states, there was abandonment of the whole:

- from Nigerian Administration and name of Archibong to the initial profit of Archibong of the South-west region of Cameroun, then of Akwa;
- Nigerian administrative system at the profit of the Cameroonian administrative system of which part of the inhabitants are not recognized there;
- school system and Nigerian hospitality for a Cameroonian system which interests very little the inhabitants who remained in place, sometimes for reasons of followup, effectiveness or performance;
- socio collective equipment for reasons of effectiveness, availability of the personnel, of normative conformity, no objectivity and even of the real utility;



• infrastructures which saw destruction by the Nigerian army, certain populations emigrating or simply by the acts of war or the lack of initiative of the new Cameroonian administration, or of dynamism of the population who remained on the spot.

In all the cases, the town of Akwa is disaster and her population vulnerabilized by the lack of water, electricity, hospital, road... and in spite that of the multiform existence of the supports of Military Engineering and the BIR.

#### 4.2.2.2. Identification of some equipments unexploited in the town

Perception of some recurrent problems due to the lack of water, electricity and residences of workers:

- water problems;
- problem of electricity;
- residences of school teachers.

#### 4.2.2.2.1. Water problem:

For the problem of water in Akwa, everyone is with the same sign, the military men of the BIR like the ordinary citizens with their Mayor and their elite. The basic problem is that the zone of Akwa does not have a usable river for drinking like the town of Isangele. There are only mangroves and swamps in all the surroundings. The water from the ground does not seem better for consumption. The Only solution is public taps and drillings which all fell down and whose majority were damaged during the war. In the whole of Akwa (excluding MBelmong located at 3 km downstream the CSD has of a drilling and an operational water tower), there is only one pump with human motricity. This pump broke down the day of our survey in the town and everyone was at bay, until the local responsible technician who went to Ikang to buy the instrument to repair the tap.

#### 4.2.2.2.2. Problem of electricity:

The town of Akwa disposes of a power generating unit broken down by the managers who migrated to Nigeria, of electric installations in the town and in the institutions, like in the houses and the streets in terms of street lighting. Unfortunately, nothing functions. The town is plunged in the night by darkness, and the power generating units, in particular of the BIR, does not lighten the town. This can only reinforce the ambient insecurity, make the populations vulnerable, prevent the socio-economic development of the town and favour the emigration of the populations.

#### 4.2.2.2.3. Residences of school teachers:

Certain teachers of the primary school of the town requisitioned a classroom newly built to transform it into housing. This preoccupation is significant of lack of the school facilities, in particular of the residences of workers, the town having no other possibility



of shedding, was even private. However, it was highlighted during our survey a multitude of Community buildings not being used. Also abandoned works in the town which could be completed and put in exploitation

### 4.2.3. Project of construction of a physical connection Akwa-Ikang

#### 4.2.3.1. Political justifications

In order to alleviate the tensions after the handing-over in Cameroun of the peninsula of Bakassi, a motorway connecting the two countries must be built to stimulate the exchanges between the inhabitants of the two parts. The idea is of the Permanent Secretary of the Nigerian Minister of Foreign Affairs, Hakim Baba-Ahled, who declared amongst other things, during the retrocession of Bakassi in Cameroon in 2008, that the motorway was "part of measure at founding a mutual confidence for a lasting peace". "Nigeria respected its engagements as for this highway which in design, in the long term, will become a segment of a motorway connecting West Africa to Central Africa ", he affirmed. Indeed, a tarred road arrives at the bank of Akwayafe on other side of Nigeria. The Nigerian authorities and Cameroonian will have, according to an analyst, to make many efforts to bring closer their populations and, to integrate their national economies more thereafter.

As one will be able to note it, the signature of the agreements of Green Tree is supposed to put an end at a frontier disagreement inherited in the colonial era and which was envied in 1993, giving place to armed confrontations between the two neighbors with the gulf of Guinea.

Indeed, "Nigeria and Cameroun are two countries linked by geography, a common historical heritage and cultural and major ethnic bonds". For Nigeria, it gives this territory "to make it possible for lives to develop", because they "are precious and irreplaceable", while being "conscious that the only alternative to peace is war and its corollary destruction of lives and goods", according to the Nigerian minister of Justice during the retrocession of Bakassi. He added in continuation that he would not sacrifice the lives of their people in order to preserve artificial borders which become more and more out of matter in a globalized world. This situation clarifies clearly, if it were necessary, that the profile of the relations which, henceforth, will exist between Cameroon and Nigeria, with a need for installation of infrastructures of communication, in particular those physical, in fact a physical connection between the two countries.

#### 4.2.3.2. Interest of the physical connection Ikang-Akwa.

The zone of Akwa is an area located at the South-west region of Cameroun. This one is being particularly wedged because of absence of means of connection. That is why the installation of this is necessary. Moreover, this connection will bring much it with to countries directly concerned, but also in other nearby countries, in particular West Africa, Central Africa ... etc.

The interests of this connection are of several orders for each country:



- improvement of the exchanges as well social and economic;
- improvement of the diplomatic relations;
- creation of new activities and new jobs;
- desenclavement of the zones;
- development of tourism;
- developpement/urbanisation of the zones;
- accessibility to the close countries and for the latter;
- opening on the external world;
- possibilities of increase in population;
- regularization of the commercial traffic between ikang and akwa;
- sécurisation of the river transport.

#### 4.2.3.3. Disadvantages of the actual system

In the river domain, the traditional carriage of goods and persons exists but still remains badly or little known. However, the offer of the service of transport is relatively significant and the activities of river transport play a dominating role in the economy of the area. Currently, the principal offers of the service come especially from the dugouts out of wood, with or without engine. In spite of their reduced dimensions, these boats ensure a great part of the offer of service.

The principal disadvantages of these dugouts out of local manufactured wood are as follows:

- un controlled unloadings and loadings;
- difficulty of adaptation during the first uses;
- reduced dimensions;
- physical effort of the paddlers;
- low corrying capacity;
- low speed;
- discomfort;
- insecurity;
- disorganisation;
- load breakages.



Because of these many disadvantages, it would be necessary to think of other solutions. For that, we have to ensure the connection between Akwa in Cameroon and Ikang in Nigeria:

- be it the installation of a bridge;
- be it the installation of ships.

Comparison analysis costs advantages between: bridges and ships.

Table n  $^{\circ}$  4 : Table of the cost-benefit analysis of the physical project of connection Akwa+Ikang

Means parameters	ships+quays		Bridges	
	Advantages	disadvantages	Advantages	disadvantages
Technology	Time of startup has is good. Limited carrying capacity. Time for putting in place is good	Construction of the quays (unloading landing on both sides) Mobile;	Fixed; Solid; Better carrying capacity	Duration of realization long enough Diplomatic complexity, in particular for the financing
Costs	- low investment costs	- Construction of quays	- Financing of the partners to the development (transafrican roads)	Very high investment cost; High maintenance costs
Diplomacy	- Collaboration of the two States	- necessity of an accord from the two beneficiary countries	amelioration/creation of better relations between the two countries	-obliged Collaboration of the two beneficiary countries
Double management	Toll gate at the time of the departures and the entries.		Perception of customs costs at the entry of each country	Increase in the expenditures for the transportation of people
Safety	Presence of control at each loading phase	Difficulty of monitoring the ships	Control of entries and exits.	
Displacements	With precise schedules	Rupture of load; Slower.	- at the desired time	

Within sight of all this, we can notice that the bridge is better an option. But constraints of the ground (time, diplomacy, costs... etc.) direct the choice of the option of the vat. The solution bridge will intervene with more or less long terms, according to the technical needs, socio-economic and diplomatic at the regional level.







**Bridge** 

Ship

## 4.2.4. Project of promotion of tourism in the town of Akwa

This reflexion is founded on a study of the MINTOUR concerning the fiseability of the tourist installation of the peninsula of BAKASSI within the framework of the implementation of the public investment budget of 2009

#### 4.2.4.1. Justification of the project:

The peninsula of Bakassi was for long time a zone of tensions between Cameroon and Nigeria. The duration of this conflict caused a delay in the development of this zone compared to the rest of the country. This litigation was carried before the International Court of Justice by the Cameroonian government in 1994 for a peaceful resolution. October 10, 2002, the International Court of Justice returned the verdict by defining the new borders between Cameroun and Nigeria from the Lake Chad to the peninsula of Bakassi located at the south-west of Cameroun; since then, the peninsula of Bakassi is a Cameroonian territory and concerns sovereignty.

June 12, 2006 this territorial sovereignty was materialized and specified by the terms of the agreement "Green tree Agreement" signed between Cameroun and Nigeria which lays down the methods of withdrawal and transfer of authority in the peninsula of Bakassi between the two States and this at the profit of Cameroon.

The retrocession of the peninsula of Bakassi in Cameroun obliges the State to deal with the political, economic, social and cultural development of the whole of the peninsula of Bakassi. According to agreements' of Green Tree, the year 2013 constitutes the effective date for the effective exercise of power of the State of Cameroun on the whole of Bakassi. Cameroon will however have to take account of the decision of the Nigerian



communities to remain by making waves with their activities in the peninsula all while conforming to the Cameroonian regulation. To this effect the natural and human riches of the peninsula of Bakassi confer to him among others, of the tourist potentialities and touristic activities which are important.

In this context, tourism being a sector with strong intensity of creation of employement and consequently of reduction of poverty, requires for the achievement of its objectives of the suitable investments. Benefitting from its geographical situation and stability of its institutions, Cameroun retained the sector of tourism as one of the priority sectors likely to contribute to increase in a durable way its development at the same time this sector would reinforce the public finance to make it possible for Cameroon in the very short term to satisfy the criteria enabling him to be retained among the States with intermediate incomes.

#### **4.2.4.2. Objective:**

#### 4.2.4.2.1. Quantitative objectives

- Increase in demand which leads to the strategies of promotion of the zone;
- Improvement of the productivity of structures of upstream as well as inside and outside;
- Improvement of the image;
- Development of synergies of the administrations and all the partners;
- Achievements of the collective investments in the zone.

#### 4.2.4.2.2. Qualitative objectives

It is a question of improving the supply of the products and the increase of security of the production.

#### 4.2.4.2.3. Economic objectives

- Increase in the sales and the household and state revenues;
- Creation of employment;
- Promotion of the private initiative;
- Promotion of the various activities;
- Construction of ports to serve as entry to the other tourist zones.



#### 4.2.4.3. Organisational objectives

It is a question of determining orientations and structures of framework.

#### 4.2.4.4. Evaluation of the forces and weaknesses of the Bakassi destination

The study announced above proposed the table below which show the forces and weaknesses for the development of the tourist activities and eco-tourist in the peninsula of Bakassi. This table remains valid for the town of Akwa.

Table n ° 5: Profile forces and weaknesses

	Advantages	Evaluation					
Order		0	1	2	3	4	5
1	Geographical situation			Х			
2	Economic situation		<b>X</b> /				
	Infrastructures						
	Tarred roads	K					
3	Telecommunications	X					
	Airports	X_					
	Others						
4	Cultures			X_	/		
5	Biodiversities				//	<b>X</b>	
6	security			X			
7	Hotel trade	X	/				
8	Néo hotel trade			X			

(5): Excelent

#### 4.2.4.5. potential realisations

The natural forces of the town of Akwa would offer tourist achievements and multiple eco touristic activities.

#### 4.2.4.5.1. Local historical tourism:

It is a question of presenting the vestiges of the frontier dispute between Cameroon and Nigeria, disputes of which market remained visible everywhere in the town, the culture, and the behavio of the populations. Certain urban sites bear specific names (Friedland), the marks of the Nigerian administration are visible everywhere (Box Community, infrastructures), the behavior of the people in the town took a blow (to have a dual nationality and to live like such,...). Of course, it is appropriate to identify the vestiges and to foresee a possibility of conservation or documentation, in particular the opening of a meseum.

#### 4.2.4.5.2. Balneal tourism:

It would offer products such as: the beaches, the water sport, arrangement of foot paths hotels, sea sighting.

#### 4.2.4.5.3. eco tourism:

it refers to: eco - lodges, of vacation villages, arrangement of cricks;



#### 4.2.4.5.4. Scientific tourism:

It refers to: the visit of the sites, the bases of observation of terrestrial fauna, marine fauna and the avifauna, drilling and followed endemic and exogamic species, the floristic and Faunic inventories;

#### 4.2.4.5.5. Tourism of vision

With watchtowers adequately equipped (telescopes, binoculars, etc.) These same watchtowers could initially be used as securisation of the sector against the pivates sea.

#### 4.2.4.6. Intervention Approach on the Land

#### 4.2.4.6.1. The study of tourist installations in the town of Akwa

The tourist installation of the town of Akwa requires the setting-up of a certain number of infrastructures, services and of acquisition of various equipment. This program of installation imposes an order according to the identification of the tourist potentials and places of interest and eco touristic likely to be arranged, the construction of infrastructures of communication, imobile infrastructures and other receptives, the purchase of the rolling stocks and sailing, the realization of the collective investments (the water conveyance, electricity, schools, health center, police, various administrations, etc).

#### 4.2.4.7. Proposal for a priority program of intervention

The priority activities for the touristic installation of the town of Akwa include:

- the sensitizing and the information of the party attendants;
- the zoning and registration of touristic sites;
- the construction of the transportation routes;
- the signaling of sites in the region;
- the construction of immobile infrastructures;
- the electrification and the water conveyance in the town;
- the purchase of the various equipment.



# 4.3. Dashboards of the urban development of the town of Akwa

Table n  $^{\circ}$  6 : Dashboard on projects of the urban development of the town of Akwa

Ν°	URBAIN PROJECT	Person in charge	ANIMATION	Financing	EXPIRY
1	Regulation of the SULUP by prefectoral decree, Presentation of the SULUP to the municipal council for validation by the municipal council, then approval by prefectoral decree to confer the force of text to him.	Mayor	SS MINDUH	Council	VST
2	Creation of an Association of Development of Akwa, development of its program and proposal for its means of action and intervention.	Mission HTRCouncil - DD MINDUH	Population of Akwa - Divisional office	Common Population	ST
3	<ul> <li>Restoring of the existing infrastructures of water, public electricity and lighting in the town.</li> </ul>	Aes-sonel Military CAMWATER Engineering	Mayor / Divisional office	MINEE Council FEICOM	ST
4	<ul> <li>Recruitment of a Technician for the urban development of the town in support to the divisional Delegate of MINDUH and reorganization of the engineering departments of the Council of Akwa.</li> </ul>	Council of Akwa	Divisional office	Council FEICOM	S T
5	■ Negotiation of town Contract with the MINDUH for better follow up of the urban projects	Mayor	DD MINDUH	Council	S T
6	Reservation of the influences of the public highways in extension or creation, of the zones of assignment of the equipment and land reservations.	Council, DD MIDUH DD MINDAF	Mayor	Council FEICOM	S T
7	■ Construction of a feeder in electric power High voltage starting from Mundemba	MINEE (AES=SONNEL)	Mayor	MINEE	A T
8	■ Water conveyance and construction of a water tower of great capacity.	MINEE (CAMWATER)	Mayor	MINEE	ΑT
9	• the reservation of the influences of the public highways in extension or creation, of the zones of assignment of the equipment and reservation layers conforms to the present plan;	Council	DDMINDUH	Council FEICOM.	ST
10	* Studies of the Plans of Sector (Establishment of the Plan of Sector of the central administrative zone, the industrial commercial south zone establishment of the plans of communal layouts, the Plan of Cleansing, the Plan of Urban Roadway system and the Plan of Urbain green face). Council Layouts	Council	DDMINDUH	Council FEICOM/MIND UH	ST
11	• Studies and work of widening of the central axis (triumphal way), of opening of new ways of urban extensions and connection of inter quarters.	Council	Military Engineering. DDMINDUH	Council FEICOM	АТ

12	<ul> <li>Project of reshaping and asphalting of the central axis and the principal road axes.</li> </ul>	Council	Military engineering DD MINDUH	Council FEICOM	АТ
1 3	Studies and work of creation of the communal commercial equipment (Creation of a frontier market (central market), Municipal Stadium of Akwa, Municipal Inn, Creation of the site of discharge of the town, creation of the municipal cemetery, creation of road station etc.>).	Council	Mayor	Council FEICOM	ST
14	■ Studies and work of construction of the City hall.	Council	Mayor	Council FEICOM	ST
15	<ul> <li>Study of creation of the port of Akwa with several quays (naval bases, border trade with Nigeria, industry of hydrocarbons, agricultural processing industry, tourism etc).</li> </ul>	Council	MINTRANSP	MINTP	MT
16	■ Studies and work of creation of the industrial zone	MININDUSTRIE	Mayor	MININDUST	
17	■ Studies of promotion of tourism in the town of Akwa.	Council	Mayor	MINTOUR	ΑT
18	■ Feasibility studies of the construction of a physical connection with Ikang (Nigeria);	MINTP/Génie MILLET.	Mayor	MINTP/Defen.	ΑT
19	■ Studies and construction of the Akwa-Isangele-Mundemba road;		Mayor		
20	■ Project of construction of the port of Akwa	MINTP	MINTRANSP	MINTP	ΑT
21	■ Installation of a system of communal transport by boat and bus.	Council	Mayor	Council - FEICOM	
22	<ul> <li>Installation of the agricultural programs: PNVRA (Programme National of Popularization of Agricultural Research),</li> <li>PNDRT (Programme National of Development of the Roots and Tubers), PRFP (Programme of Revival of the field Plantain), PACA (Program of Improvement and Agricultural Competitiveness), corn Project</li> </ul>	Council	MINADER	MINADER	АТ
23	■ Studies and road works of skirting and opening of new ways of urban extensions and connection of inter districts.	Council	DDMINDUH	Commune/MIN DUH	ΑT
24	■ Studies of construction of the connection Akwa-Isangele-Ekondo-Titi-loum;	MINTP	Mayor	MINTRANSP	ΑT
25	■ Feasibility studies of a system of river transport and coastal transport by dugouts will intra and inter urban;	MINTP	Mayor	MINTRANSP	LT
26	■ Feasibility study of construction of an Aerodrome of Akwa.	MINTP	MINTRANSP	MINTP	LT
1					



# Table n $^{\circ}~7$ : Dashboard on Urbain Actors Of The Urbain Development Of The Town Of Akwa

N°	URBAN ACTORS	URBAIN PROJECT	ANIMATION	EXPIRY
		• Recruitment of a Technician for the urban development of the town in support to the Divisional Delegate of MINDUH and reorganization of the		
		engineering Division of the Council of Akwa.		
1		■ To contribute to the putting in place of ADA (followe up file of declaration, organization of the office, organization of the activities)		S T
		Setting up of the council projects:		
		■ To contribute to the setting up of ADA (followed declaration file, organization of the office, organization of the activities,)		
2	Kombo Abedimo	■ Studies and work of widening of the Central Market.	-	ΑT
3	Council	■ Studies and work of creation of a road station	-	ΑT
4	Council	• Studies and work of creation of the communal commercial equipment (Municipal Stadium of Akwa, Central Market, Municipal Inn,).	-	ΑT
5		• Studies and work of creation of the municipal equipment (Creation of the site of discharge of the town, creation of the municipal cemeteries,);	-	ΑT
6		Study of creation of a fish market  Study of creation of a fish market	MINCOMMERCE MINEPIA	ΑT
7		■ Studies of the Plans of Sector (Establishment of the Plan of Sector of the administrative central zone, establishment of the plans of communal layout, the Plan of Cleansing, the Plan of Urban Roadway system and the Plan of Urbain face Becoming green).	DDMINDUH	ST
8	MINDUH	<ul> <li>Sasine of the Commission interministerial of the Development of the zone of Bakassi for transmission of a SULUP and a copy of the dashboard of urban development of Akwa, with insistence on the need for the regional projects except competence MINDUH, in particular the project of construction of the Bridge of the Cameroon-Nigerian Friendship, the highway design of désenclavements of the town of Akwa, the project of installation of a system of river transport and coastal transport in the zone of Bakassi</li> <li>Sasine of the MINEPAT (Direction of the adjustment of the border areas) for the handing-over according to the infrastructures of water, electrification of the city and re-use of the utility services of the period of management Nigerian given up in the town of Akwa)</li> <li>Support with the Town hall of Akwa for the following projects (Study of restarting urban infrastructures and of their extension: water, electricity, public lighting, Studies and urban road works, studies of plans of sector and plans of Layout, studies of installation of the urban parks etc.)</li> </ul>		ST
9	Delegated MINDUH DDMINDUH	<ul> <li>To follow the dashboard of the urban development of Akwa and to challenge the urban actors to take their responsability each in what relates to it;</li> <li>To contribute to the setting up of ADA (follow up file declaration, organization of the office, organization of the activities,)</li> <li>To work in close cooperation with the Mayor of the Council and to submit a report to give full details of advance of the realization of the actions and operation to the attention of its hierarchy (Sub-Divisional officer, Regional Delegate.</li> </ul>		ST
10	Geni MILIT.	• Studies and work of widening of the central axis (triumphal way), of opening of new ways of urban extensions and connection of inter quarters.	Council	A T
11	Population of Akwa	• Establishment of a Committee of Development of Akwa, development of its program and proposal for its means of action and intervention.	Mission HTR DD MINDUH	S T

	(1)			
12	Senior chivisional officer Divisional officer	<ul> <li>To help the creation, with the installation and the operation of Assaociation de Développement of Akwa (ADA);</li> <li>To assist the mayor of the Council and any other urban actor in the realization of the tasks of urban development.</li> </ul>		
13	DD MINDAF	<ul> <li>Finalization of the Domanial layout</li> <li>Reservation of the influences of the public highways in extension or creation, of the zones of assignment of the equipment and reservation layers;</li> <li>Sécurisation of the private field of the State, in particular of newly wide spaces;</li> <li>Auditing of the land rights in the zones of projects or land speculations.</li> </ul>	Council	ST
14	Dealer water MINEE/CAMWAT ER	IEE/CAMWAT    Handing-over according to drillings   Construction of water conveyance and of water tower.		ST
15	Electri Dealer. Minee/aes-sonel	■ Construction of water conveyance and of water tower.	CD/ Council	S T
16	Dealer Tel Fix/mobile (MINPTT)	■ Study and construction of an antenna and relay of fixed telephone call (CAMTEL) and mobile (MTN, ORANGE Cameroun	CD/ Council	ST
17	Military engineering MINDUH	■ Reshaping of the urban roadway system and asphalting of the principal axes.	-	A T
18	MININDUSTRIE MNCOMMERCE	■ Studies and work of creation of the industrial park of conditioning of fish.	-	АТ
19	MINEPIA	■ Promotion of the breeding, in particular creation of the piscicultural ponds	MINEPIA	ΑT
15	MINADER	■ Installation of the agricultural programs: PNVRA (Programme National of Popularization of Agricultural Research), PNDRT (Programme National of Development of the Roots and Tubers), PRFP (Programme of Revival of the Die Plantain), PACA (Program of Improvement and Agricultural Competitiveness), corn Project	MINADER	АТ
20	Council	• Municipal projects: Creation of a municipal sand-preparation plant, Creation of market equipment (road stations, 2, 1, the municipal inn), Construction of the town hall, Reorganization of the communal services, Creation of a municipal park and urban, parks To develop terrestrial and 3, 1, 4, 5, Organization of the fisheries in the mangrove through: the census of the fishermen, the creation of the trade union of the fishermen, the quantification of the products of fishing, the follow-up of the treatment of the products of fishing and the control of the evacuation of the products of fishing etc.	Council	АТ
21	Populations (ADA)	■ Projects of the Association of development of Akwa: To declare the association to legalize the acts to be posed, organize the members, to set up a structure of management and collection of the funds, to take care on the cleansing and the cleanliness of the town, to take care of the plantations and the parks in support of the Council, To frame the human investment of the populations in the quarter, to contribute to preserve safety in the quarter, to formulate a point of view on the execution of the urban projects, to attract attention the of political leaders and administrative autorities on the problems of urban development etc.	Elite Kombo Abedimo	AT



# 4.3.1. Programming of the projects of urban development of the town of A kwa

## Table n $^{\circ}$ 8 : Short-term realization

N°	URBAIN PROJECT	Person in charge	Financing	EXPIRY
1	<ul> <li>Regulation of the SULUP by prefectoral decree, Presentation of the SULUP to the municipal council for validation by the City council men, then approval by prefectoral decree to confer the force of text to him.</li> </ul>	Mayor	Council	VST
2	<ul> <li>Creation of an Association of Development of Akwa, development of its program and proposal for its means of action and intervention.</li> </ul>	Mission HTR - Council - DD MINDUH	Common Population	VST
3	Restarting of the existing infrastructures of water, public electricity and lighting in the town.	Military Aes-sonel- CAMWATER Engineering	Common –MINEE - FEICOM	VST
4	■ Recruitment of a Technician for the urban development of the town in support of the Divisional Delegate of the MINDUH and reorganization of the technical service of the Council of Akwa.	Council - of Akwa	Council - FEICOM	ST
5	■ Negotiation of town Contract with the MINDUH for better follow up of the urban projects	Mayor	Council	S T
6	Reservation of the influences of the public ways in extension or creation, of the zones of assignment of the equipment and land reservations.	Council, DD MIDUH DD MINDAF	Council - FEICOM	ST
9	• the reservation of the influences of the public highways in extension or creation, of the zones of assignment of the equipment and reservation layers that conforms to the present plan;	Council	Council - FEICOM.	ST
10	• Studies of the Plans of Sector (Establishment of the Plan of Sector of the administrative central zone, the 4, 1, 2, 3, establishment of the plans of communal layout, the Plan of Cleansing, the Plan of Urban Roadway system and the Plan of Urbain Becoming green).	Council	Council - FEICOM/MINDUH	ST
13	Studies and work of creation of the communal commercial equipment (Creation of a frontier market (central market), Municipal Stadium of Akwa, Municipal Inn, Creation of the site of discharge of the town, creation of the municipal cemetery, creation of road station etc.>).	Council	Council - FEICOM	ST
14	■ Studies and work of Construction of the City hall.	Council	Council - FEICOM	S T



# Table n $^{\circ}$ 9 : Medium-term realization

N°	URBAIN PROJECT	Person in charge	Financing	EXPIRY
7	■ Construction of a feeder in electric power High voltage starting from Mundemba	MINEE (AES=SONNEL)	MINEE	АТ
8	■ Water conveyance and construction of a water tower of great capacity.	MINEE (CAMWATER)	MINEE	АТ
11	Studies and work of widening of the central axis (triumphal way), of opening of new ways of urban extensions and connection of inter quarters.	Council	Council - FEICOM	АТ
12	<ul> <li>Project of reshaping and asphalting of the central axis and the principal road axes.</li> </ul>	Council	Council - FEICOM	A T
15	Study of creation of the port of Akwa with several quays (naval bases, border trade with Nigeria, industry of hydrocarbons, agricultural processing industry, tourism etc).	Council	MINTP	АТ
16	■ Studies and work of creation of the industrial park	MININDUSTRIE	MININDUST	
1 7	■ Studies of promotion of tourism in the town of Akwa.	Council	MINTOUR	ΑT
18	■ Feasibility studies of the construction of a physical connection with Ikang (Nigeria);	MINTP/Génie MILLIT.	MINTP/Defen.	АТ
19	■ Studies and construction of the Akwa-Isangele-Mundemba road;			
20	■ Project of construction of the port of Akwa	MINTP	MINTP	A T
21	■ Installation of a system of communal transport by dugout and bus.	Council	council - FEICOM	
22	<ul> <li>* Installation of the agricultural programs: PNVRA (Programme National of Popularization of Agricultural Research), PNDRT (Programme National of Development of the Roots and Tubers), PRFP (Programme of Revival of the Die Plantain), PACA (Program of Improvement and Agricultural Competitiveness), corn Project</li> </ul>	Council	MINADER	АТ
23	■ Studies and road works of skirting and opening of new ways of urban extensions and connection of inter quarter.	Council	Council /MINDU	ΑT



Table n  $^{\circ}$  10 : Long-term realization

N°	URBAIN PROJECT	Person in charge	Financing	EXPIRY
	Studies of construction of the connection			
24	Akwa-Isangele-Ekondo Titi - Loum (in	MINTP	MINTRANSP	LT
24	relation to the whole of the towns of	WIIINIF	MINIKANSE	LI
	Bakassi);			
	Feasibility studies of a system of river			
25	transport and coastal transport by dugouts	MINTP	MINTRANSP	LT
23	with intra and inter urban (in relation to	WIIINIF	MINIKANSE	LI
	the whole of the towns of Bakassi);			
26	Feasibility study of construction of an	MINTP	MINTP	LT
26	Aerodrome of Akwa.	IVIIINIF	IVIIINIF	LI



#### Conclusion

While choosing to work out the Summary urban land use Plan of the town of Akwa located in the border area and conflict zone of Bakassi, the government chooses:

- Adjustment and the protection of the border areas which remains in the exercise of its duty;
- improvement of the living conditions of the populations to reduce precariousness in order to ensure their national integration;
- The promotion of good governance.
- In conformity with the Document of Strategy of Growth and Employment, we took the concern, with regard to the town of Akwa:
- to consider the development of **the infrastructures** and **the urban services**;
- to consider the development of the economic potential;
- to consider the total socio-economic development and the improvement of the assumption of responsibility of the environment;
- to consider the improvement of **the supply of** decent **residences** for the greatest number by the installation of the diversified council urban layouts and the improvement of the conditions of construction;
- to ensure the access to all the best **displacement and urban** transport conditions;
- to improve **strategic management of the urban development by the installation of the priority projects, while** allowing the participation of the populations and by encouraging the organizations of framing of the populations.

We also took the initiative to add some to the durable dimension of urban development of the town of Akwa, by helping the urban actors and other townsmen to organize their mode of life that is social and economic as from:

- difficulties of the authorities of reabsorbing in a durable way the urban problems;
- persistence of the problems and urban environmental pollution;
- effectiveness of the urban actors to find resources and means of information, framing and reinforcement of capacity of the townsmen to help themselves;
- various dashboards from urban development with periodic follow-up.