

# **Summary**

Intro	oduction	7
1.1.	The context and object of the study	7
1.2.	The Geographical location of the town of Akwa	
1.3.	The historical Reference marks	
1.4.	The overall problems of the development of the zone of Bakassi	13
1.5.	Poorly exercised urban function	
1.6.	The Definition and technical approach of the zone of study	
1.7.	The definition of the zone of study:	14
1.8.	Synthesis of the study of the site	17
1.9.	The technical approach of collecting and processin g urban data	17
1.9.1. 1.9.2.	The method ofurban data-gathering: The advantage of this method:	18
1.9.3. 1.10.	The disadvantages:  The application of the method to the town of Akwa:	
1.10. 1.	Chapter I: The datas of the natural site	
1.		
1.11.	The elements of the natural site of the peninsula of Bakassi	
1.11.1. 1.11.2.		
1.11.2. 1.11.3.		
1.11.4.	The vegetation and fauna	23
1.12.		
1.13.	The Synthesis analysis of the natural site	
2.	Chapter 2: The datas of the created site	26
2.1.	Organization of urban space	26
2.2.	Habitat and public Equipment	29
2.2.1.	the characteristics of the habitat	
2.2.2.	the public equipment	
	2. Health	
	3. The market	
2.3. <i>2.3.1</i> .	The infrastructures	
	Regional road service	
	2. Local road service	
2.3.2.	Potable water	
2.3.3.	The electricity network	
2.3.4. 2.3.5.	Telecommunication and communication	
2.3.6.	Transport	<i>3</i> 8
<b>3.</b>	Chapitre3: The Demographic datas	39
3.1.	The general demographic datas	39
3.1.1.	Generalities:	



<ul> <li>3.1.2. The population of the South-west Area and the division of N</li> <li>3.1.3. Opportunity Demographic evolution of the Akwa Sub-division</li> <li>3.2. Hypothesis of peopling of the town of Akwa</li> </ul>	140
3.2.1. The ethnique composition in the area and the linguistic aspe 3.2.2. The characteristics of the head of household	ct:
3.2.3.2. The hypothesis of increase	
3.2.3.3. The low hypothesis (trend):	
3.2.3.4. The average hypothesis:	
3.2.3.5. The maximalist hypothesis:	
3.2.4. The demographic recapitulative projections	
4. Chapter 4: The socio-economic, environr	nental and communal
management datas	48
4.1. The economic realities of the zone of Bakassi	48
4.2. The economy of the zone of Akwa	48
4.2.1. The Primary sector	
4.2.1.1. Agriculture:	
4.2.1.2. Fishing	
4.2.1.3. The exploitation of hydrocarbons	
4.2.2. The secondary industry	
4.2.3.1. The administration	51
4.2.3.2. Trade	51
4.2.3.3. Transport	51
4.2.3.4. Small trades	52
4.3. Environment 52	
4.3.1. Environmental management	
<ul><li>4.3.2. Land management</li></ul>	
4.4.1. Datas of household investigation	
4.4.2. The given diagnosis of the datas of participative investigation 4.4.3. The three-dimensional Comparison of the datas of space deviations.	
4.5. Communal management of the town of Akwa	•
4.5.1. Organization of the Council	55
4.5.2. The activities of development	
4.6. Activities generating low rentable revenus	
4.7. Low communal Budget	
4.7.1.1. The tree of problems	57
4.8. The diagnosis report	58
4.8.1. General observations:	
4.8.2. <i>The sectoral observations:</i>	
4.8.2.2. The relief, climate and environment:	
4.8.2.3. The infrastructures and road way and various serv	
4.8.2.4. The habitat:	



4.8.2.5.	The economy:	59
4.8.2.6.	The administration:	59
4.8.2.7.	The roadway system:	60
4.8.2.8.	The cleansing and drainage:	60
4.8.2.9.	The health:	60
4.8.2.10	. The socio anthropology of the zone	60
4.8.2.11	The education:	60
4.8.2.12	. The management of the town and weakness of council finance	60
4.8.3.	The assets to be exploite:	61
Conch	เร่ากา	62



# List of pictures

Picture $N^{\circ}$ 1 : The River Akwayafer or one side with the town of Akwa and Ikan on the ot side	
Picture $N^{\circ}$ 2 : The collective session of participative diagnosis carried out with the inhabite of the town of Akwa with Isangélé	ants
Picture $N^{\circ}$ 3: Community house of the Nigerian epoch in Akwa in high Akwa (bar dance)	hal
in Akwa II) in bottom	
Picture N° 4: Sub-Divisional office of Akwa	
Picture N° 5: Administrative residences of Akwa	
Picture N° 6: Primary school of Akwa	
Picture N° 7: Typical habitat of the campings of Akwa. It is rather a precarious habitat, on the walls, with a roof generally in tatch. Only the public buildings are built in permanaterials such as, the Community hall below built by the MINADER	ieni
Picture $N^{\circ}$ 8: the community hall built by the MINADER at the disposal of the Municipa and the populations	-
Picture N° 9: The public school of Akwa	. 32
Picture $N^{\circ}$ 10: A class of secondary education with only one student. In the same way, Master on the blackboard teaches at least four out of the six classes of the school	. 33 e oj
Picture $N^{\circ}$ 12: Water tower (high) nonfunctional and Primary school (below) with an building not finished and built by the administration of Nigeria in Akwa II	. 35 one y to ase
·	
List of diagrams and cards	
Card 1: Situation of Bakassi at the bottom of the Gulf of Guinea	9
Card 2: Territory of the nine districts of the department of Ndian	
Card 3: Vestige of the occupation Nigerians in Akwa. Here, writings on the cage of	
nonfunctional electric generator	
Card 4: Perimeter of study	. 16
Diagram N° 1 : The ombro-thermics diagram of the zone of Bakassi	. 21
Diagram $N^{\circ}$ 2 : The of increase in population	. 46
Diagram N° 3: Local development priority	. 54
List of tables	
Table n° 1 : Synthesis analyzes natural site	
Table n° 2 : Characteristics of the habitat	
Table n° 3: The Inventory of the basic socio collective equipment and infrastructures:	. 31
Table n° 4 : Other equipment	
Table n° 5: The access to equipment and basic infrastructures	
Table n° 6: the practised transport modes and costs	
Table n° 7: the costs of transport by boat towards Nigeria	
Table n° 8: The population of Ndian Division	
Table n° 9: Population of the of health district of Bakassi	
Table n° 10: The origin of the heads of household	
Table n° 11: The characteristics of the head of household	
Table n° 12: The summary of demographic projections	
Table n° 13: Some market products in the shops and bars of Akwa in NAIRA or francs CFA	
Table n° 16: Management and environmental protection	
	5 2



# Bibliographie:

# **Appendices:**

Appendix n° 1: Initiation of the Summary Urban Land Use of Akwa and Isangele

Appendix n° 2: Invitation of population and urban actors to the official launching ceremony of the SULUP of Akwa and Isangele

Appendix n° 3: Program official launching of the SULUP of Akwa and Isangele

Appendix n° 4: Word of welcome by the mayor during the programme of the official launching ceremony of works of SULUP of the town of Akwa

Appendix n° 5: Presentation of the project of SULUP by the Head of Mission Cameroon HTR to ceremony of launching of work of development of the SULUP of Akwa and Isangele

Appendix n° 6: Speech of the DO of Ndian

Appendix n° 7: Minutes of the triple meeting of restitution of the urban diagnosis, collective planning and choice of the sites for the urban equipment

Appendix n° 8: The survey files

Appendix n° 9: List of the members of the Advisory Working group of the PSU of Akwa

Appendix n° 10: Travel to Bakassi area

Appendix n° 11: Public survey file

Appendix  $n^{\circ}$  12: Synthesis of the elaboration of Summary Urban Land Use Plan of Isangele and Akwa



# Introduction

# 1.1. The context and object of the study

When cities are created and built without initial plans, it generally leads to anachical occupation of space and a disorder in the distribution of the urban functions, thus creating disfunctionning which can mortgage the future of such cities. Later installations or improvements therefore become more expensive to the community and the urban managers.

With the aim of previewing the installation of the structures of development, and beyond the objectives of territorial monitoring and the promotion of the border trade, the Government wants to take care of the wellbeing of the population of the border areas, through the installation of the basic urban infrastructure and socio-collective equipment.

This is very true for Akwa and Isangele which are sub-divisional headquarters in a zone that is potentially rich and full with urban development opportunities. They are part of the Bakassi peninsula which is gradually recovering from the covetousness of the large neighbor Nigerian and of the long period of war which has marked it most. These cities legitimately aspire for a wellbeing which begins with the planning of the city and the forecasts of space installation.

The object of this Summary Plan of Town planning for the town of Akwa is to be used as a general framework of orientation for the urban development in the short and medium term. A Summary Plan of Town planning is a document of realization, control and follow-up of the urban development of a city as stipulated by law n° 2004/003 of 21 April 2004 governing town planning in Cameroon.

Under this law, the Mayor of the council initiates, look for financing, engages the services of an approved Town planning cabinet and follows the development of the Summary Plan of Town planning of his city, which he then submits to his municipal council for deliberation before approval by municipal. As a preliminary, this plan must be prescribed by the competent divisional officer to give it an administrative act, which in addition forces a stop of proceedings for all new request to build in the city until the 'approval of the committed documents of planning. Once this plan is approved, it has the power of and its regulations are imposable to everyone.

The summary plan of town-planning makes it possible to set up all the forecasts of town planning and at the same time, to avoid disorder in urbanization and to organize the future development of the agglomeration.



The realization of this instrument of space management necessitates a methodological approach in two phases:

- the phase of investigations, analysis of the current situation, establishment of the programs of installation;
- the phase of establishment of the final document of the Summary Plan of Town planning.

This document outlines an analysis of the current situation of Akwa, while being based on the results of the participative investigation carried out in consultation with the population, the observations on the field and the investigations carried out in situ, with the households and the various public, parapublic, confessionals and private services represented or not in the city.

The fundamental interest of such an analysis is the description of the main current problems of urban development, recomposed as a tree with problems, which are in addition closely related to its future development.

The identification of these problems will fur the permit to proceed to the definition of the top priority objectives of improvements and to justify the pertinent different management variable of improvements or actions to be undertaken by the local authorities and the other actors of urban development.

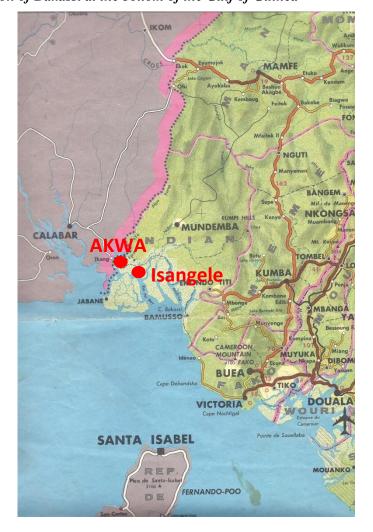
The contents of this report are thus articulated around four chapters:

- chapter I which presents the data of the natural site with a particular accent on the layout;
- chapter II which gives a report on the data of the created site, in particular the data on the infrastructures and the sociocollectives equipments;
- chapter III which gives a report on the demographic data, basic instruments of the process of programming and planning of the urban development;
- chapter IV which is interested in the socio-economic data, environmental data and the capacity of council management.

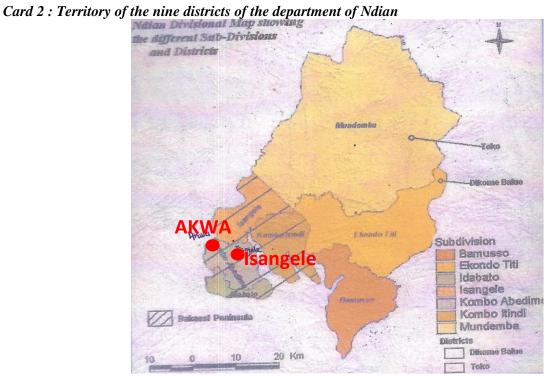
The tree with problems and the assessment diagnosis summarize the problems of urban development which underlies the diagnosis study of urban development of the town of Akwa.



#### The Geographical location of the town of Akwa 1.2. Card 1: Situation of Bakassi at the bottom of the Gulf of Guinea









The town of Akwa is located in the Peninsula of Bakassi, South-west Région ,Division of Ndian, sub-division of Kombo Abedimo. It is located on left bank of the river Akwayafe which is a maritime border with close Nigeria.

Picture  $N^{\bullet}$  1: The River Akwayafer or one side with the town of Akwa and Ikan on the other side



#### 1.3. The historical Reference marks

#### In 1967

Amadou Ahidjo borrowed the use of Jabane to his Nigerian conterpart (Gowon) to cut the routing of resources and to subdue the revolution of the biafras. Which was successfully, achieved.

Nigeria benefited from it thereafter to exploit the oil reservoirs of Bakassi and wished to control this strategic zone which carries an entry and exit of the South-east of its territory: Bakassi is very important for the port of Calabar and, it is a strategic point of monitoring of navigation in the Gulf of Guinea:

- The population forecasts of Nigeria at horizon 2015 gives her 200 million inhabitants: a good part of this population is sheltered in the zone of Bakassi;
- The pretexts of the covetousness of the Peninsula of BAKASSI by Nigeria are:
  - **o** On the demographic level: The human and Economic pression of Nigerian along the border justifies the occupation of the Cameroon's



islands. It was a question of ratifying an accomplished fact, because Nigeria is the most populated county in Africa, with nearly 200.million by 2015. It was thus necessary to find the possibilities to pour the overflow of this population elsewhere.

- **o** On the politico-military plan: Nigeria would hardly accept the presence of Cameroon in the estuary of the Cross river. She would like to reign there without sharing and to have the lone control of this estuary which constitutes the main door of entry and exit for the South-east of its territory.
- **o** From the economic point of view: It is about the appropriation of the oil-rich wells of Cameroon by Nigeria as soon as the Peninsula becomes theirs. Nigeria therefore, heavily invested in the zone ,like the building of the infrastructures of economic production (exploitation of hydrocarbons) and socio-economic equipment and infrastructure.
- December 21, 1993: The armed forces of Nigerians attacked the Peninsula of Bakassi.
- Between the 18 and on February 19, 1994: The troops of cameroon pushed back the attackers;
- March 29, 1994: Cameroon complained to the international court of justice (ICJ);
- October 10, 2002: The verdict of the (CIJ) in favour of Cameroon;
- **June 2006:** The Greentree agreement between Cameroon and Nigeria for the handig over of Bakassi;
- August 2006: Transfer of the authority of Bakassi and withdrawal of the troops of Nigeria in the locality of Akwayafe;
- August 2008: Handing over of the Peninsula of Bakassi, in application of the agreements of Greentree;
- **August-September 2013:** The Effective handing over of Bakassi.

Meanwhile, the present situation is that of a transition state of limitation of the power of functions of the State of Cameroon such as (Agreement of passage of Nigerian civilian ships, on payment of taxes and duties non taxation of the exploitation of the riches, particularly fishing).

This situation is compromising local development and provoking the permanent social disturbances orchestrated by the pirates from Nigeria in the area.



Card 3: Vestige of the occupation Nigerians in Akwa. Here, writings on the cage of the nonfunctional electric generator



Significance: Rural Electrification Project –Achibong Town Akpabuyo L.C.A

Undertaken by the Cross-river state Government – AKO Gregory Commissioned by his Excellency the

Military Administrator of Cross river State - Today, 27 Jully 1996.

Project of rural electrification-Achibong town Akpabuyo L.C.A

Chaired by the State of the Cross-country race to rivet represented by AKO GREGORY representing the military administrator of cross-river on July 27, 1996.

Akwa had its particular status through the institution with the administrative office by the recent creation of a sub-divisional headquarter. The under development of this locality is a result of the conflict between Cameroon and Nigeria which makes it a zone regarded as dangerous and insecured. Because of the war, this locality did not have time to develop.



# 1.4. The overall problems of the development of the zone of Bakassi

In application of the decision of the International Court of Justice (ICJ) of October 10 2002 which specifies the layout of 2.000 km border between Cameroon and Nigeria, the CMCN (Joint Committee Cameroun Nigeria) was elected, by the heads of the two States and the Secretary General of the United Nations, for the construction of this layout and the installation of boundary stones. This process of frontier demarcation is the result of seven year of activities and of intense negotiations, during which the CMCN and its Sub-commission of demarcation showed great diplomacy vis-a-vis the stakes of a delicate frontier dispute, allowing the mixed technical committee of experts of the two countries and the United Nations to agree on the course of the layout and the progressive placement of more than 2.400 terminals. Within this framework, the demarcation of a common border specifies the limit of competences of each administration. Cameroon will be able, however, to play its legal role on the territories handing over only after 2013, following the Agreement of Greentree.

The work of the Joint Committee under the guide of the United Nations constitutes an essential tool to the diplomatic resolution of the frontier problems and the consolidation of the dialogue between both countries. From this point of view, the Cameroonian authorities called on the international community to renew its support with this significant guaranteeing process of co-operation for a lasting peace.

The problems of the development of the peninsula of Bakassi are posed in terms of effective occupation of the territory, through the establishment of the services, of the equipment (commercial and non-commercial) and institutions. This being a consequences of the particular status of these frontier cities whose urbanization calls for a certain concern which goes beyond the simple establishment of the infrastructures: it is necessary indeed, to equip the Cameroonian localities with equipment and any other institution which it will need, while making the border safe, in order to affirm national sovereignty.

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

# 1.5. Poorly exercised urban function

Akwa is a subdivisional heaadquarter. It is an administrative center open to Nigeria on the geographical and functional level.

The town of Akwa however is connected to the town of Mundemba, chief town of the Ndian Division located at approximately 75 km by an overland route built by the Military Engineering in 2010 and which passes through Isangele. The raod is in very bad condition today, because of the high frequency of precipitations (10 months out of 12 in the year). In addition, the connections with Ekondi Titi, Limbe and Douala by sea are possible, but with much insecurity due to the nature of the canoes manufactured locally, the non controlled river navigation and nonprotected, and due to the pirates



from Nigeria who prevail in the sector. Akwa should have been a very bigfrontier market of exchange between Cameroon and the neighbouring countries, just little Amchidé in the North-West or as Baïboum in the East of the country, if the enclavement of the area compared to the other areas of cameroon and the inadequate infrastructures and equipment of connection were not a constraint for the expression of this economic function.

# 1.6. The Definition and technical approach of the zone of study

The launching of the work of development of the Summary Plan of Town planning of Akwa was not preceded by its approval by prefectoral decree, neither of the delimitation of the urban perimeter as it had to These two operations must be done in urgency to allow normal unfolding of the studies.

The approval enables to formalize the process of planning, while making it possible for the Mayor to proceed with any new request for construction in the urban perimeter, until the approval of the document of planning by-law.

The delimitation of the urban perimeter allows:

- to define a perimeter of equipment for better exploitation and a better follow-up of urban equipment: integration of socio collective equipment (school establishments, dispensaries...) and infrastructural equipment in the urban perimeter;
- to define in the need **a perimeter of sovereignty** for a better future functionality of urban space: possibility of which leads to the various quays (beaches), or centers it which leads to Isangele nearby, town;

a better securisation of spaces and the possibility of avoiding the disorder occupations which are generally gradually extended in the urban peripheries.

While waiting for a competent committee to be put in place by the divisional officer of Ndian to carry out this official delimitation of the urban perimeter of the town of Akwa, during the popular consultations of the official launching to the determination of a provisional perimeter corresponding to the zone of study as seen below.

## 1.7. The definition of the zone of study:

The provisional urban perimeter corresponding to the zone of study of the PSU of the town of Akwa decided during the popular consultations of the Official Launching of the Town-planning measures approximately 1.146 ha. This zone of study has a triangular form, in conformity with the model desired by the inhabitants themselves during the consultations, it is delimited in the North by the lands of the zone known as "Freeland" which is an integral part of the site, in the West by a point located at nearly 5 km of the bank of river Akwayafe on the Isangele axis and the high lands of the Nkwa village, in the South by the low and coastal lands of Nwanyo. It



is indeed a triangle, whose coastal base measures approximately 5 km. being some sort of a equilateral triangle.

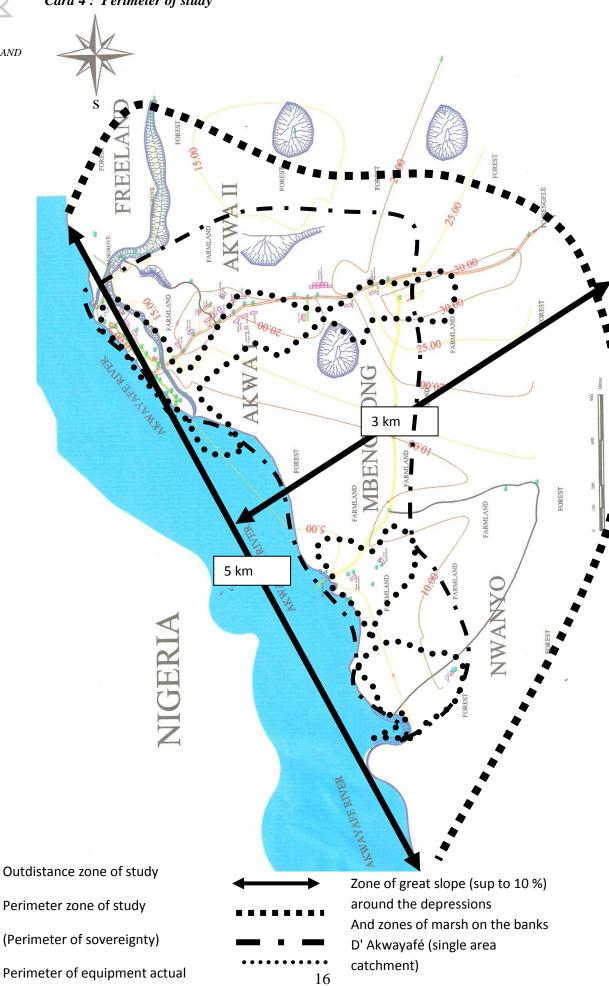
On the 1.100 ha of the zone of study less than of 200 ha are currently urbanized (The Akwa quater I, of Akwa II, recent administrative, the fishing villages of Mbenmong and Nwanyo). This defined surface, goes beyond the requirements in lands for the town of Akwa by the horizon for 2026, in relation to the report the maximalist scenario of demographic projections and the improvement .

Indeed, it is about the progressive occupation of the perimeter of sovereignty of the town, starting from a perimeter of equipment which is expected to measure approximately 800 ha. However, until 2026 the population and urbanized space will have increased considerably, if the measurements under consideration by the plan are applied. The effective occupation of space takes into account the urban density on the one hand, and, the adjustment of non aedificandi green space.



urbanised zone

Card 4: Perimeter of study





# 1.8. Synthesis of the study of the site

The analysis of the site reveals that 28,9 % of the land is made up of mangroves, in the slope and troughs of pressure, higher than 10 % are not aedificandi. Generally, nearly 70 % of the grounds are exploitable for the setting up of equipment, the infrastructures and the habitat in accordance with the table below. The only catchment area is that of Akwayafe where the main part of surface waters runs. In the event of construction of station of purification, this one will be located at the edge of Akwayafe in the zone more in the South (beyond Nwanyo).

Table n° 1: Synthesis analyzes natural site

Designation of spaces	Surface concerned in ha	Percentage
Zones not aedificandi	334	
Mangrove zone	174	
Depression zone	85	30 %
Zone of slope higher than 10 % (Not easily constructible)	75	
Constructive zones	800	70 %
Total surface of the site	1.146	100 %

## 1.9. The technical approach of collecting and processin g urban data

#### 1.9.1. The method ofurban data-gathering:

The methodology of urban data-gathering comprises three combined approaches of investigations:

- the participative diagnosis through public consultation;
- the urban observations in situ or on the spot
- the investigation of households.

The participative diagnosis through public consultation made it possible for the populations itself to collectively identify and to classify, the problems which compromise the development of their locality. We benefitted from it to take note of their point of view compared to the solutions to be considered. This step would be made for more credibility, confronted with the method of specific observations and



with the results of household investigation survey, in particularly with what concerns the priorities of urban development.

Picture  $N^{\bullet}$  2: The collective session of participative diagnosis carried out with the inhabitants of the town of Akwa with Isangélé



The principle of the technique of participative diagnosis consists of selecting a representative number of urban actors; this is followed by an interactive session of questions and answers on the problems of urban development. This step needs a preliminary over view of the town through observation by the urban expert, in order to better appreciate and /understand the reactions of the actors. It also enables the expert to better direct the questions that are to be asked to the groups to consult.

# 1.9.2. The advantage of this method:

This method makes it possible to be fast, by limiting the sample household survey size, which makes it possible to simplify it, to reduce the duration and the costs of the survey, as well as the work to follow-up and supervision.



#### 1.9.3. The disadvantages:

The method can have erroneous results if the urban actors are not representative enough. This difficulty is circumvented by the integration of the main actors of urban development in the group (mayor, divisional officer, sub-divisional officer, heads of divisional services...) for a priorty control of the interventions.

In most of the cases, one observes a coparatively beneficial effectiveness to the simple random sampling. It is usually preferable to survey a group rather than individuals, so that the answers obtained should reflect more of general interest than private interest.

# 1.10. The application of the method to the town of Akwa:

The Mission for the Development of the PSU of Akwa, before the arrival on the site, intended to make its stay useful. As a result, there was the convocation of the urban actors for the Official Launching of the afore mentioned plan. This made it possible to organize a technical transfer of participative diagnosis session with the participants, after the coffee break. During this session, the population were given the open floor forum to define the urban problems of their locality, under the control of their mayor and sub-divisional officer.

This enable the choice of method to clear a path for the research of the urban problems, and also enable us to sensitize the populations on the work to be done on the field, as announced in the speeches of the divisional officer and the Head of the Mission.

The passage of about fifty files of investigations with the heads of household was thus made very easy, particularly in terms of communication, management of time and the means available. Nevertheless some difficulties were encountered:

- Ignorance of the locality in term of the customs and habits by the experts. Many inhabitants of Akwa generally speak pidgin English or their local dialect (Efik) tinted with Anglicism, which did not make the task easy to the investigators who therefore had to recruit guides on the spot;
- The size of the town which proved much more smaller on the demographic level, but much wider on the space level, particularly to the nearest villages such as Mbenmong and Nwanyo located at more than three km from Akwa on left bank of Akwayafe.
- The absence of some population from the town because of their activities.

The data-processing program set up by BATISU (Technical Office of Support to Real estate and Urban Services) enable an instantaneous analysis of household the data of investigations coupled with the technique of sampling. This generated instantaneous results for the unit of the locality of Akwa, and made it possible not only to find a kind of similarity with the data of the participative diagnosis on the level of the priorities of development, but also to obtain tendencies which made it possible to prepare the "in situ" restitution of the urban diagnosis, to



give the opportunity to refine them for the alternative urban development presented to the population.

On the operational level, the town was divided or partioned in three working areas: the central Eastern sector of dwelling and administration (AkwaI and Akwa II, the very steeped and accidented nonoccupied Northern Sector (Freetown) and the Southern low lands Sector (Mbenmong, Nwanyo).



# 1. Chapter I: The datas of the natural site

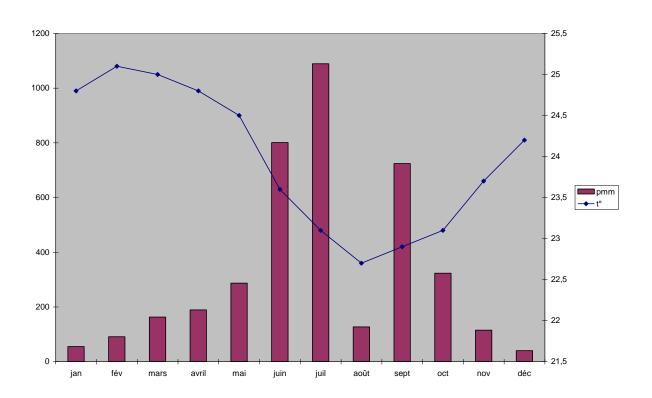
# 1.11. The elements of the natural site of the peninsula of Bakassi

Located at the bottom of the Gulf of Guinea, in the South-west Region, Ndian division, and at the upper angle of bay of Biafra, the Peninsula of BAKASSI which is the object of the covetousness of Nigeria belongs to the estuary complex of Rio del Rey in Cameroon. This complex extends a length of 60 km between the Akwayafe river and the western edge of mount Cameroon. It is 30 km below sea level and has a total surface of almost 1 800 km2.

# 1.11.1. The physical environment (relief, climate, geomorphology, vegetation and fauna)

On the physical perpective, the whole of this complex is, essentially an amphibious milieu, characterized by a hot and very rainy climate (10 months of rains per annum on 12), a low relief and marshy grounds (mangroves), an abundant hydrography and a vegetation essentially made up of mangroves.

Diagram  $N^{\bullet} 1$ : The ombro-thermics diagram of the zone of Bakassi.





On the climatic level, this sector is situated in the zone of the guinea monsoon climate strongly influenced by the presence of the large volcanic solid masses of mount Cameroon and the Rumpi Mountains. With a total of 5 to 6 meters of rain falling practically all the year, with a maximum from July-August and a more or less marked reduction from December-January. The temperatures oscillate around 25° C.

On the geomorphological level, the zone as a whole is parceled out in several tens of islands of sizes and varied forms. Four great sets of similar islands can be distinguished: from the East to the West:

- the Pelican peninsular;
- the Peninsular of Fiari;
- the Peninsular of Erong;
- the Peninsular of BAKASSI.

The Peninsula of Bakassi on its part is articulated on rivers: Andokat, Ngosso and Akwayafe. The latter in particular ,meets with the large estuary of the cross river in the south.

Limited to the West by the Akwayafe river and the East by Rio del Rey, the Peninsula of BAKASSI itself is formed by many small islands delimited by a network of creeks having width of at least 100 meters. Altitudes are low (lower than 1 meter). As a whole, these small islands have the shape of depressed basins in which water is stagnant or sub-levelling and muddy grounds. Channels of draining are organized there in a characteristic branch-line system which parcels out the alluvial liftings at the edge of the creeks.

On the biogeographic level, the zone is primarily covered by a vegetation of mangrove (forest of mangroves), characterized by the scheduling of Rhizophora recemosa (red mangrove) and of Avicennia (white mangrove), developed rather often well along large channels, particularly on the convex banks of the many meanders which twist the network of creeks.

The watery fauna is also abundant and is diversified in fish species which justifies the development of many villages of fishermen and the immigration of the fishermen of neighbouring Nigeria.

## 1.11.2. The geological potentials

The Peninsul of BAKASSI with its continental shelf constitutes one of the oil-bearing zones of Cameroon. Oil and gas discoveries were recorded. These layers are in the course of exploration and of exploitation by three great international trusts: ADAX PETROLEUM, EURO OIL and COSMOS EXPLORATION.



# 1.11.3. The hydrography

The whole of this zone is essentially an amphibious melieu characterized by an abundant rainfall. The hydrological conditions are relatively stable: mass of surface hot water all the year  $(25 -28 \, ^{\circ}\text{C})$ ; salinity is moderate, always lower than 35 % due to high rainfalls which reduces the salinity in the estuaries where it seldom reaches 20 %. The tide has a diurnal semi mode with amplitudes which can reach 3 m.

#### 1.11.4. The vegetation and fauna

The Peninsula of Bakassi is primarily covered by a vegetation of mangrove (forest of mangroves), characterized by the abundance of Rhizophora recemosa (mangrove red) and of Avicennia (white mangrove), developed rather often well along large channels, particularly on the convex banks of the many meanders which twist the network of creeks. The recent field studies enable the identification of ten units of vegetation which surround water and the emerged sedimentation zone. There are amongst other things:

- the pionneer zone with young growths and propagules of rhizophora;
- the open forest of avicennia and phoenix;
- the high dense forest dominated by avicennia and rhizophora;
- the forest of large rhizophora riparian;
- the homogeneous forest with rhizophora adults;
- the periodically flooded forest with arecaceae and guibourtia;
- the closed forest area which is exceptionally easily flooded, and made up of elaeis of the plantations;
- the degraded mangrove with rhizophora rabougris and pandanus with deformed port;
- the shrubby mangrove with alternatively dalbergia, drepanocarpus, hibiscus;
- the herbaceous mangrove with acrostichum and sometimes associated with ormocarpum accompanies.

# 1.12. The relief and geomorphology of the town of Akwa

The town of Akwa which is recently created as sub divisional headquarter, was initially a camping of fishing. The Chief Town of Kombo Abédimo had initially been car marked of in Kombo Abédimo village, before undergoing displacement following the current choice located out of water. The locality of Akwa is organized in three distinct physical zones:



- Accidented land of the Northern zone with Akwa II and its surroundings including the zone of installation of the BIR, the nonoccupied zone of Freeland, the recent administrative zone (private field of the State) and multiple troughs of low pressure of the Northern sector of the town;
- Low lands of Akwa I (agglomerated zone, zones of marshes bordering the river Akwayafe, multiple surrounding troughs of low pressure lowlands of Mbenmong and Nwanyo, with the erosion of the banks of the river;
- The highlands of the Eastern sector.

The average altitude of 15 meters, creates a flatness of the relief and micro depressions, particularly in the zone close to the river Akwayafe. This situation causes many easily potential flooded zones and generates serious problems of cleansing which constitute constraints of urbanization.

# 1.13. The Synthesis analysis of the natural site

The site of the urban agglomeration of Akwa is an almost flat space, wedged on the left bank of Akwayafe which runs towards the south in Rio Del Rey, by separating Nigeria from Cameroun.

The site of study extends towards the east, on the more urbanisable land along which skirt the road of Isangele.

The whole of the urbanized surface can be estimated at 100 ha. An assembly of flat land comprising very few significant undulations and irregularities of relief, except on the level of the depressions which particularly encumber the northern sector of the town. This configuration gives the possibility of urbanizing nearly 50 % of the land.

The zone of extension towards the south is already occupied by the villagers hamlets of Mbenmong and Nwanyo, with marshy zones along the banks, fallow and cassava farms and amonyst ethers where crops are farmed around not far from the huts.

A small analysis of the topography of the site makes it possible to locate the whole of the land between the lowest level of 05 and the level highest of 30 m compared to the sea level. There are in fact very few slopes.

In terms of constraints imposed on improvement, the analysis of the various elements of the natural site of the town of Akwa makes it possible to locate the following main factors:

• by its relief, the zone of akwa is not favorable to the development of habitat there is a need to plat form avoid of the silty soils of the depressions and the marshy zones and the edges of the akwayafe river, which will be indicated less for heavy constructions:



- the existence of lowlands and the micro depressions make the urbanization complex in several sectors of the town, particular in the northern sector;
- the site of the town is blocked in its northern and southern fringes, thus conferring to the town, an eventual shape thus directs the urban expansion preferably towards the east, along the road of akwa;
- a constraint of improvement linked to water bodies is marked by the erosion of the banks of akwayafe perpetually reduces the urbanisables surface area and constraints habitations or the bordering dwellings and river side activities;
- the richness of the basement in oil and gas amongst others is a pledge for futur development of the zone and town of akwa, as well as the potentials of a large frontier market link to its frontier position with the large neighbor(nigeria).



# 2. Chapter 2: The datas of the created site

# 2.1. Organization of urban space

The functional space of the town of Akwa can be broken up into four distinct zones:

- the district of Akwa I with its quay;
- the district of Akwa II with the Military Camp of the BIR;
- the new administrative zone in the sector center-is;
- the district outsides Mbenmong and Nwanyo in the extreme south.

Apart from the administrative zone at the entry east of the city, all these districts are next to the bank of the river Akwayafe. There is however only in Akwa I which disposes one lays out of a landing stage of fishing and trade with Ikan on the other side of Nigeria.

The districts of Akwa I and II still comprise socio collective equipment of the time of the occupation of Nigeria, for which many name remained abandonment. It is the case of the electric generator which provided electric power to the city, towers of drinking water supply which is not operational any more; or rather buildings remained abandonment.

Picture  $N^{\bullet}$  3: Community house of the Nigerian epoch in Akwa in high Akwa (bar dance hall in Akwa II) in bottom





The Camp of the BIR is installed in the Northern zone of the town, on the banks of Akwayafe, with its canons pointed on bank (right) opposite (Ikan), as if the war with Nigeria were not finished yet. In any case, it is about a dissuasive device supplementing the patrols which furrow the town of Akwa, army of rifle in all the directions. This device hardly prevents the pirates from Nigerians from kidnapping the Cameroonian personalities which ventures without protection in the mangroves in the southern zone, apparently unverifiable.

Picture N

4: Sub-Divisional office of Akwa



The military site of the BIR shelters the Primary school and the CETIC with Akwa. It is an insecured vicinity for the children. In addition, the access to this military camp crosses the center of the city. this is not normal for a security structure which would have in fact remained discrete.

The central administrative zone is on the Eastern side of the entry of the town. This slightly elevated zone (20 m), has a private land of the State which comprises the main part of the administrative facilities: Sub-divisional office, the residence of the Sub-divisional officer, gendarmerie..., of the official residences and a state land awaiting constructions.

The quarter of Mbenmong and Nwanyo are decentered and located at about 2 km in the South of the town of Akwa.. They are the village campings which in addition have received basis socio-collective equipment such as the health center and the primary schools. These are all elements to be necessarily integrated, according to the goodwill of the inhabitants, in the future development of the town of Akwa. The last quarter not inhabited in the north of the town is



Freetown which obtained this name following the seat of the Nigerian troops during the war, just as of Freetown in Liberia, obtained following a war.

Picture  $N^{\bullet}$  5: Administrative residences of Akwa



Picture Nº 6: Primary school of Akwa





# 2.2. Habitat and public Equipment

If one were to carry out an evaluation of the current situation of the habitat in Akwa, one would observe that the whole of the installations are absolutely poor and very temporal. These conditions of habitat are not acceptable. Already there is no electricity and no drinking water, nor a system of conventional cleansing. the majority of the houses are built out of provisional materials. Just by looking at the houses from the outside, they appear uncomfortable and unsuitable for human dwelling, too low, with roofs in tatch, as in a camping of fisherman. The majority of the houses are built with mud (poto-poto). Akwa, especially the quarter of Akwa I kept, the pace of a camping of fisherman.

Picture  $N^{\bullet}$  7: Typical habitat of the campings of Akwa. It is rather a precarious habitat, low on the walls, with a roof generally in tatch. Only the public buildings are built in permanent materials such as, the Community hall below built by the MINADER.



Picture  $N^{\bullet}$  8: the community hall built by the MINADER at the disposal of the Municipality and the populations





## 2.2.1. the characteristics of the habitat

According to the household investigation spares, the characteristics of the habitat are illustrated in the table below.

Table n° 2: Characteristics of the habitat

Designation	Elements of the dwelling	%	Average
	permanent (blocks, bricks, stone)	57,7	
	Semi-permanent (beaten ground + cement)	0	
Building materials	Beaten ground	30,8	
	planck	7,7	
	Materials of recovery (barrels, sheets, etc)	0	
	others	3,8	
Habitat	A number of parts		5
	Interior with water system	3,8	
	Interior without water system	0	
Toilets	External with water system	3,8	
	External without water system	0	
	Concreted pit	19,2	
	Lost pit	73,1	
	Owner	100	
Status of occupation of	Tenant	0	
housing	Other	0	
	State Allowance	11,5	
	Council	3,8	
Mode of acquisition of the	Purchase	19,2	
land	Heritage	65,4	
	Others	0	
Accessibility to the road	Yes	73,1	
	No	26,9	

57, 7 % of constructions are with permanent material, because of the many public buildings existing in the town. However, 30, 8 % of the habitats are out of beaten ground and 7, 7 in planks. The habitats normally have 5 parts, because the average rate of people in the household is also 5.

## 2.2.2. the public equipment

The inventory and the evaluation of the public equipment are listed in the table below.



# Table $n^{\circ}\,3$ : The Inventory of the basic socio collective equipment and infrastructures:

Nature of the equipment	numbers	Type of materials used for construction	Present state	Characteristic of the equipment	owner
HEALTH CENTER	1	Permanent materials (final materials)	nine in good condition but not function al at their optimum	Building found in a fence on a capacity of 1000 m <sup>2</sup> including/ a large building and an additional building	MINSANTE
THE GOVERNMENT PRIMARY SCHOOL OF AKWA	2(two buildings)	Permanent materials (final materials)	built but not maintained some classrooms are in state of dilapidation we will note also it's position too close to the sea and the camp of the BIR	Teaching block compose of 2 blocks of 3 classrooms including an office for the head teacher, a mini football field, plus a latrine block. Some classrooms are used as housing for the teachers	MINEDUB
CETIC OF AKWA	2 (two buildings)	into hard (final materials)	Under construction considering that, the current site will become a military camp because of its position near the sea and the current camp of the BIR	Teaching block composes of 2 blocks of 4 classrooms including an office for the director, plus a latrine block. a large yard. Some classrooms are used as housing for the teachers	MINESEC
SUB-DIVISIONAL OFFICE OF AKWA	1(one building)	Permanent materials (final materials)	in very good state	build on a surface of more than 2000 m² including/ a building which shelters the offices of the sub-divisional officer	MINATD
POLICE STATION	1(one building)	Permanent materials (final materials)	in very good state but nonfunctional	On a capacity of 1500 m <sup>2</sup> it is composed of a building containing offices	
GENDARMERIE	1 (one building)	Permanet materials (final materials)	in very good and functional state	Build on a surface of more than 2000 m <sup>2</sup>	MINDEF
MILITARY BASE (BIR)	1	Tents and permanent materials	functional	Installation on a surface of more than 20.000 m <sup>2</sup> made up of 02 metal hangars and the tents and building in permanent materials	MINDEF
RESIDENCE OF THE SUB- DIVISIONAL OFFICER	1 (one building)	Permanent materials (final materials)	in very good state	Build on a surface of more than 2000 m <sup>2</sup>	MINATD
ADMINISTRATIVE RESIDENCE	6 (six building)	Permanent matirials (final materials)	in very good state	Build on a surface of more than 2000 m <sup>2</sup>	MINDAF
DIVISIONAL DELEGATION OF MINEF	1(one building)	Permanent materials (final materials)	in very good state		MINEF
RESIDENCE OF THE DIVISIONALE DELEGATION OF MINEF	1(one building)	Permanent materials (final materials)	in very good state	On a surface of more than 2000 m <sup>2</sup> Building of 100 m <sup>2</sup>	MINEF
OTHER ADMINISTRATIVE BUILDINGS	1 (a building)	Permanent materials (final materials)	in very good state		MINDAF



MINISTRY OF URBAN DVELOPMENT AND HOUSING

Table  $n^{\circ}$  4 : Other equipment

January 2012

STATE LAND	1	not occupied in the course of use	Already cut out and validated by the MINDAF	Allotment made on hectares at the entry of the town of Akwa	MINDAF
MARKET	0	nothing			Council

# 2.2.2.1. **Teaching**

At the level of education, the zone of Akwa has three government primary schools; that of Akwa II, that of Mbenmong and that of Nwanyo. In the public school of Akwa II, the total population is approximately 200 pupils including 98 boys and 102 girls. At the level of the infrastructure, there are approximately 7 classes which are in bad condition and are not ventilated.

Picture  $N^{\bullet} 9$ : The public school of Akwa





Picture  $N^{\bullet}$  10: A class of secondary education with only one student. In the same way, the Master on the blackboard teaches at least four out of the six classes of the school



For secondary education, there is a Technical College. The Military Engineering does the work of extension and repair of the whole of these establishments, yet all the school still face the serious problems of teaching personnel, social housing and equipment of the classroom in term of tables, benches and other materials.

#### 2.2.2.2. Health

There is a Health Center in Akwa II and another in Mbenmong. Moreover, there is an infirmary at the base of the BIR which, generally, help the population, sometimes in the sale of certain drugs. The number of beds are insufficient, as well as the nursing personnel. There is therefore need to reinforce the number of doctors and nurses. It is completely normal to see a great number of people who, under critical conditions of sickness, choose to go to Nigeria for their treatment.

#### 2.2.2.3. The market

Akwa does not have an open market. Nevertheless there are small stores which are integrated in the dwellings or the bars and other groceries. The bar "Akwa Palace" is the only place of rejoicing which one can find in Akwa. It only functions in the night and makes it possible for the soldiers of the military base BIR to relax themselves. The tourist aspect seems non-existent in Akwa.



#### 2.3. The infrastructures

## 2.3.1. The road system and circulation

# 2.3.1.1. Regional road service

The access in the town of Akwa is done through the East with the new Mudemba-Isangele-Akwa road. It is the only single track of access to the town and it is unfortunately only made out of ground, therefore nonusable in the rainy season. It was carried out by the Military Engineering in 2010 and is usable only in dry seasons. The town of Akwa is open on the river Akwayafe and one can by dugout, join certain destinations. The only problem is the high cost (see table on the costs of transport).

#### 2.3.1.2. Local road service

The local access roads are also out of ground and in bad condition. These other village tracks and overland routes are the main service road to the houses and the villagers hamlets. There are two perpendicular main roads in T crosses the town from the of North to the South and the East to the West. The North-South stretches to the skirts of river Akwayafe. It is about a narrow gauge route which is in addition borrowed by the BIR to get to its seat (4 to 5 m broad for the majority of its path from the internal service roads and 8 to 10 m for the main roads). One can note the absence of a system of drainage of rainwater. This accelerates the degradation of the pavement with the appearance of the undulations and the potholes reinforced in period of rains (approximately 10 months per annum).

Picture  $N^{\bullet}$  11: Street road to the bank of the river Akwayafe and leading to the head office of the BIR.





#### 2.3.2. Potable water

The main problem of urban development of Akwa is water.the populations had talked about it during the popular consultation and the household investigations revealed that, it is the first preoccupation of their development.

Indeed, in Akwa, there is the total absence of pipe borne water, in spite of the existence of the water tanks and the public fountains which are in almost all the urban zones. This situation can be explained as well by a poor geotechnical study, a poor control of work on the level of construction, a so by a bad installation of the equipment and their maintenance, without forgetting the lack of political good-will for a true drinkable water conveyance. With this observation, Akwa's main source of supply, is ground water which is not surely clean because of the proximity of the course and the porosity of the sandy soil.

Picture N<sup>o</sup> 12: Water tower (high) nonfunctional and Primary school (below) with an old building not finished and built by the administration of Nigeria in Akwa II



No system of potable water supply is operational in Akwa. Nevertheless, there is only one well with human motricity being used as the point of "drinkable" water supply for the whole of the agglomeration. The BIR is supplied at the same point. The only installations of drinkable water conveyance existing are those built by the Administration of Nigerian, but which were sabotaged by the populations at the time of their withdrawal .it is highly requesting the Camerounaise des eaux (CDE) and CAMWATER should intervene in this locality.



Picture  $N^{\bullet}$  13: Human motricity pump for drinking water supply. This pump is the only one which supplies all the town of Akwa and the BIR. In the event of breakdown, it is necessary to go by dugout in Ikan G to seek the stare parts for the breakdown service. This was the case here and the whole day, there was no water to drink in the whole town.



# 2.3.3. The electricity network

Akwa has a linear electric connection which was formerly fed in electric power at the time of the administration of Nigeria by an electric generator. The corporation incharge of electricity in Cameroon AES - SONEL has not up to date takenover this responsability. Almost all the households use illuminating oil lamps. For those who are a little financially viable especially the trade of (bars), the power generating units consuming gas oil are used in the night. This device is expensive in the long run.

The entire town is in darkness in the night and this worsens the problems of insecurity, the emigration of the population and the economic underdevelopment of the town.

#### 2.3.4. Telecommunication and communication

With regards to telecommunications, there is the absence of Cameroonian television and radio signals. In the town of Akwa, there is no Cameroonian using mobile telephone network. One unfortunately rather notices the use of Nigerian mobile network like MTN Nigeria which is imposing a double invorcing on the same call by the caller and recipient in the locality.



No Cameroonian television channel is available, no radio frequency and even no newspaper. However it is to be noticed with sadness the presence of a multitude of Nigerian television and radio channels. This shows the limits of the social integration commitment by Cameroon in the process of recovering this Peninsula of Bakassi.

## 2.3.5. Drainage, cleansing and household refuse

With its ten months of rainy seasons per annum, the town of Akwa has serious problems of rain water run-off. This should require systems of drainage and consequent cleansing, particularly along the main, secondary and tertiary roadway systems. But the precarious state of the route network does not allow this device: consequently, rain water is not collected at all. The rain water dig the roadway at all levels, and the road maintenance should be made every day.

The household refuse is disposed into nature, according to the household investigation. However, up to now, this does not yet constitute a problem to environment. However, for the urban development, it is necessary to consider its collection and to envisage a garbage dump.

Table n° 5: The access to equipment and basic infrastructures

			Total	%
		fountains		0
		Taps		0
		Wells		50
19	Water Carel	Running water		19,2
19	Water Supply	Backwater or source		30,8
		Others		0
		Paraffin oil		92,3
20	Course of anomay (lighting)	Electricity		0
20	Source of energy (lighting)	generator		15,4
		firewood		92,3
		Electricity		0
21	Course of anomary used for	Paraffin oil		3,8
21	Source of energy used for	Domestic gas		3,8
	cooking	Others		0
		Private clinic	0	
		Hospital	0	
22	Access to the health services	Health Center	1	
		Others	0	
		Nursery school	0	
		Primary education	1	
		Secondary	1	
23	Access to education (establishment)	Higher	0	
		Coranique	0	
				0
24	The management of solid waste			100
24	The management of solid waste			0
		Pedestrian		100
		élo		0
		Mototaxi		0
25	Mode of displacement	Taxi		0
		Bus		0
		Personal vehicules		0
		Others		0



# 2.3.6. Transport

In the locality of Akwa, people move on foot as shown by the household investigation carried out in the town. Indeed, the level of road traffic in Akwa is practically zero, (UVP < 3 vehicles) and for the intra-urban transport, it is ensured by two motos bikes which generally offer their services only after a preliminary request. This situation handicap and restricts the town to itself.

The river traffic ensures the connection between Akwa, Limbé and Ikan (Nigeria) and other localities. But following the kidnapping orchestrated by the pirates, this traffic from now on is reserved to the commercial people known in Nigeria.

Table n° 6: the practised transport modes and costs

Town of	Town of arrival	means of transport	Cost of transport (FCFA)
departure			_
Yaounde	Kumba	land (car)	5.000
Kumba	Mundemba	land(car)	5.000
Mundemba	Isangele	landl (car, motor bike)	3.500
Mundemba	Akwa	land (motor bike, car)	4.500
Isangele	Akwa	land(motor bike)	1.000
Yaounde	Isangele	landl (car, motor bike)	13.500
Yaounde	Akwa	land(car, motor bike)	14.500
Akwa	Ekondo titi	boat	15.000
Akwa	Mundemba	boat	15.000
Akwa	Limbe	boat	20.000

Table n° 7: the costs of transport by boat towards Nigeria

Town of	Town of arrival	Means of	Cost of transport in FCFA
departure		transport	
Akwa	Ikan (Nigeria)	By boat	2.000
Isangele	Ikan (Nigeria)	boat	16.000



# 3. Chapitre3: The Demographic datas

# 3.1. The general demographic datas

#### 3.1.1. Generalities:

On the human level, the division of Ndian in which the zone of Bakassi is found, made up of 74. 724 inhabitants. This population is distributed in 9 sub-divisions that make up this division. The Peninsula of BAKASSI which is the subject of covetousness of Nigerian extends on. 3 out of the 7 sub-division of Ndian thus: Isangele, Kombo Abedimo and Idabato. Following the RGPH of 1987 it has a population of approximately 8.563 inhabitants divided as follows: Akwa (4. 517), Idabato (3. 250), Kombo Abedimo (796).

This population is distributed in about thirty small villages disseminated along the principal water ways: Rio dei Rey, Akpa Yafe, Akpa Bana, BAKASSI Creek, etc.

## 3.1.2. The population of the South-west Area and the division of Ndian

On the demographic level, the region of the South-west according to the GPHC of 2005 has 1.316.079 inhabitants. Thus 666.622 men and 649.257 women, for a rate of masculinity of 102,7 %. This imbalance between men and woman is justified by male migration from other areas and the large neighbor, and female emigration towards the large cities, particularly Douala and Yaounde, and towards the neighboring countries, Gabon and Equatorial Guinea.

Table n° 8: The population of Ndian Division

Population	Total
Ndian	42 604
Bamusso	19.230
Ekondo Titi	56.503
Dikome Ballue	13.364
Kombo Abédimo	2.146
Idabato	3.466
Akwa	3.476
Mundemba	14.385
Kombo Itindi	2.958

As regards the Division of Ndian and compared to the RGPH 2005, there is a total population of 122.579 inhabitants, for an urban population of 30.345 (Bamuso, Ekondo Titi, Idabato, Akwa, Kombo Abedimo (Akwa), Kombo Itindi, Mundemba, Toko) and for a rural population of 92.234 inhabitants.



Table n° 9: Population of the of health district of Bakassi

Health District	Populaiton 2011	Birth	0 to 5 months	5 to 11 months	6 to 11 months	12-59	9 month at 14 years	Pregnant women
Idabato	3.721	168	149	75	670	521	1.749	187
Akwa	3.714	168	149	75	669	520	1.746	186
Kombo Abedimo	2.293	104	92	46	413	322	1.078	115
Kombo Itindi	3.162	143	127	64	569	443	1.486	159
Total	12.889	583	517	260	2.321	1.806	6.069	647

One observes in this population of the of health district of Bakassi a migratory phenomenon related to the mobility of the women and children in the youthful age, either for reasons of safety, or for reason of schooling, or for cultural beliefs, particularly linked with Nigeria. This fact was established at the time of the household investigations. This fact led to the complexity of management of the socio-collectives equipment. To a certain age, these children return to enlarge the number of the young people in the locality.

#### 3.1.3. Opportunity Demographic evolution of the Akwa Sub-division

The population of the district of Kombo Abédimo is estimated at 2.146 inhabitants with approximately 756 inhabitants in the urban zone (town of Akwa) and 13.92 in the rural zones according to the last General Census of the Human Population (RGPH 2005).

According to the investigation in the field, the probability that this population will decreased in five years is strong. Infact one noted during the investigation, that most of the dwellings are closed, services are closed, that the utility services are not fully exploited and that the markets do not generally function. One observed a general laxity with regards to activities. The main reason this situation remains the insecurity related to the situation of war which took place between Nigeria and Cameroun, perpetrated today by Nigerian pirates who sow terror everywhere, particularly in the mangroves. The other reasons which are quite significant are; the poor direct connection with the interior of the country with regards to the transport ways (maritime, terrestrial, air). Indeed, the infrastructures in the town of Akwa are in poor condition, for example; the roads, electricity, water etc. There is also the Agreements of Green Tree which does not make it possible for Cameroon to play its state's role until after 2013.

If these blockings can be raised, the locality has strong potentials for a significant increase in population and a spatial followed up development. These potentials are fishing, agriculture, forestry and the mining richness of the basement. The large neighbor with her large markets and industrial and commercial functions also constitutes a great potential for the development of this economic pole in the West coast of Cameroon.



# 3.2. Hypothesis of peopling of the town of Akwa

#### 3.2.1. The ethnique composition in the area and the linguistic aspect:

The population of the Peninsula of Bakassi is mostly made up of the Bateke people. They are spread in four communities which are Isangele, Kombo Itindi, Kombo Abedimo and Idabato. In these councils, one finds a predominance of Isangele, E fik, of Ibibio, as well as a minority of Oroko, a sub clan of Bateka clan.

English is the administrative language used in the area and incidentally French. But the language of communication and exchange between the communities is the "pidgin english". But inside the communities, diversed African languages proper to each ethnique group or tribal are used. In the Nigerian communities for example, one finds the iboh, the idjoh, the idjale, the orock, yoruba, Ogoni, etc, corresponding to distinct ethnic groups.

#### 3.2.2. The characteristics of the head of household

Table n° 10: The origin of the heads of household

AKWA				
Departure zone	The number of nationals	%		
Akwa	2	7,7		
Mamfé	1	3,8		
Nigeria	1	3,8		
Bamenda	2	7,7		
Menji-Febiale	1	3,8		
Bafang	1	3,8		
Kalabar	1	3,8		
Nkambé	1	3,8		
I kan	1	3,8		
Douala	1	3,8		
Oyo state	1	3,8		
Kumba	1	3,8		



According to the investigation carried out in the town of Akwa, the characteristics of the household heads are those shown on the table above, with a rate of masculinity of 81 % and an average age of 26 years. There is a significant residential mobility , due to the displacement of the populations towards Nigeria. As regards nationality, we obtained only 20 % of Nigerian origin. Certain people, for problems of reprisals, preferred not to say the truth. On this fact, the Assistant of Sub-division officer revealed to us that nearly 80 % of the population is of Nigerian origin. A significant part of the population is unmarried. This is a characteristic of the zones where insecurity prevails and which does not encourage the making of a family. The number of independent to the family is three, corresponding to the national average Size of the family which is 5 people including the father and the mother. At the educational level. in fact, one notices that very few people are not educated and that, a good part of the population have at least had primary education (27 %). the prevalent religion is Catholicism, then the Baptists and Protestants. There are no Moslems.

Table n° 11: The characteristics of the head of household

	THE SITUA	TION OF THE HEAD OF FAMI	LY	
			%	Average
1	Sex	Masculine	81	
		Female	19	
2	Age			26
		Cameronian	80,8	
3	Nationality	Nigerian	19,2	
		Others	0	
		Married	38,5	
		Divorced	0	
4	Marital status	Widower	3,8	
		Single person	57,7	
5	Numbers of couple			1
6	Independent Number	Children		3
		Others		0
		Not provided education	3,8	
		Coranique	0	
_		Primary education	26,9	
7	Educational level	Secondary 1st cycle	42,3	
		Secondary 2nd cycle	15,4	
		Higher education	7,7	
		Without answer	3,8	
		Islamic	0	
8	Religion	Catholic	42,3	
		Protestant	23,1	
		Apostolic	3,8	
		Baptist and others	30,8	
		Administration	19,2	
		Industry	0	
		Building and Public Works	3,8	
		Transport	0	
9	Socio-professional category	trade	0	
フ	Socio-professional category	Agriculture	7,7	
		Fishing and reaning	7,7	
		Wood works	0	
		Pupils and without activities	61,5	



The main economic activity is the administration, even though the civil servants are not often present at their station. It should also be noted that fishing constitutes the activity which occupies most of the population. On the table above this is not very visible, because this activity, just like agriculture, is practiced out of the locality, possibly in the mangroves or the fields for days or weeks. This is why; we found the majority of the houses closed.

#### 3.2.3. The hypothesis of population increase in Akwa

# 3.2.3.1. The formular of calculating of the increase in population:

Pop of the year 
$$x = \left(1 + \frac{T}{100}\right)^n \times Pop$$
 of the year of origine

$$T = 100 \left( \frac{Pop\_of\_the\_year\_X}{Pop\_of\_the\_year\_of\_origine} - 1 \right)^{n}$$

Where,

- $\blacksquare$  T = rate of increase in the population
- $\bullet$  n = number of year
- 1 = constant

#### 3.2.3.2. The hypothesis of increase

In 1987, the town of Akwa did not exist, but Kombo Abedimo had a population of 674 people which evolved/moved to 2.146 in 2005. That is to say, a demographic rate of increase of 6,65 %, compared to the increase in the rural population. With the census of 2005, the town of Akwa has a population of 756 inhabitants, whereas the urban zone only has 1.392 inhabitants, corresponding to an increase of 4,11 %. One can thus deduce that, the urban zone profits from an increase of (6,65-4,11) 2,54 %. One deduces that the increase in population in the town of Akwa is not different from the national average, and this situation will continue until beyond 2013, when Cameroon will be able to entirely have the zone of Bakassi. From this moment, one will be able to carry out the installation of the infrastructures, the effective occupation of space, the development of the infrastructures and the development of trade.

According to the RGHP of 1987, the town of Akwa did not exist. With that of 2005, its population was only 756 inhabitants, again a population of the rural zone of 1.392 inhabitants. This situation is explained by the context of war and insecurity which reigns in this zone from 1975 up to date.

The urban population has all the same evolved with a percentage of 2,54 % per annum.



Demographic projections will be made from this percentage. At present, the town itself lost many of its inhabitants because of insecurity and the attraction of best living conditions on the other side (Nigeria).

This rate of increase is not far from the national average of about 2,5 %. This means a situation that will continue to persist till 2013, when Cameroon will be able to entirely have the zone of Bakassi. From this moment, one will be able to carry out the installation of infrastructures, but also of the effective occupation of space, with the development of the infrastructures and the development of trade, tourism and industries. Three hypothesis of development are possible:

- The low hypothesis;
- The averages hypothesis and
- The maximalist hypothesis.

# 3.2.3.3. The low hypothesis (trend):

For the low hypothesis, the rates of increase are varied. One would pass from a rate of increase of 2,54 % between 2005 and 2011, to 4 % between 2012 and 2016, then to 5,5 % between 2017 to 2021, and finally to 6,5 % between 2022 to 2026, for a respective population in 2005 of 756 inhabitants, then 879 in 2011, then 1.164 in 2016, 1.781 in 2021 and 2.837 inhabitants in 2026.

This hypothesis corresponds:

- with the maintenance of the status beyond 2013, where the armed bands of pirates will continue with impunity to sow terror in the mangroves and making life insecured for the population;
- No voluntary policy of operation of the administrative services and creation of socio- collective equipment;
- Limitation of the investments in the improvement of the urban infrastructures and the habitat;
- Limitation of the investments in the development of commercial activities and companies;
- Increase in unemployment and the shift of the population to agriculture and fishing for survival... etc;
- Emigration towards the interior cities of Nigeria.

According to this hypothesis, the town of Akwa with 879 inhabitants in 2011, will see its population progressing slowly to 1.164 inhabitants in 2016, then to 1.781 inhabitants in 2021 to 2.837 Inhabitants only in 2026. In the first years, the stagnation of the



locality will be obvious, and the situation will hardly be more than what it is at the present time: that is, a dormitory town for the traffickers of Ikan, the fishermen of the mangroves and farmers.

# 3.2.3.4. The average hypothesis:

For the average hypothesis, the rates of increase are also quite variable. One would pass from a rate of increase of 2,54 % between 2005 and 2011, to a doubling rate of increase every year, of 5 % between 2012 and 2016, then to 10 % between 2017 to 2021, finally to 20 % between 2022 to 2026, for a respective population in 2005 of 756 inhabitants, then 879 in 2011, then 1.293 in 2016, 3.474 in 2021 and 34.780 inhabitants in 2026.

For this hypothesis of average growth, there is a relative engagement of the State and the municipal team concerning their capacity to make Akwa a priority place of investment. The vision is however an optimistic one for the urban development. This hypothesis supposes the taking into consideration the following parameters:

- The realization of the great project of tarred roadway system connecting to Mudemba, the project of electrification and drinkable water conveyance;
- improvement of the urban equipment and the priority infrastructures, particularly the tarring of the central axis towards the beaches and the junction linking Akwa, by water and land;
- significant investments in the creation of small and medium-sized enterprises;
- Improvement of the water connections with the near towns and the near Subdivision (Ekondo Titi, Limbe...);
- Improvement of the living environment by the development of the habitat and the promotion of economic residences, with the application of a calculated policy of settlement (placed at the disposal of usable land).

The combined action of these various parameters will result in the dynamism of the economic activities of the town and the acceleration of its demographic growth.

According to this hypothesis, the town of Akwa would have a population of approximately 70.000 inhabitants in 2026.

The current increase in population of 2,54 % will increase to 5 % in the next five-year period, then 10 % and afterwards 20%, giving an unquestionable impulse of development and space expansion to the town , corresponding to an obvious development of the socio-collective equipment and infrastructures.

# 3.2.3.5. The maximalist hypothesis:

For the maximalist assumption, the rates of increase also remain variable. One would pass from a rate of increase of 2,54 % between 2005 and 2011, with a doubling of the rate of increase every year, that is to say 6 % between 2012 and 2016, then to 12 %



between 2017 to 2021, and finally to 24 % between 2022 to 2026, for a respective population in 2005 of 756 inhabitants, then 879 in 2011, then 1.435 inhabitants in 2016, 4.635 inhabitants in 2021 and 69.243 inhabitants in 2026.

Whith regards to the political good-will to take control of the Peninsula of Bakassi, the riches of the basement in term of hydrocarbon, gas and others, the richness in the mangroves (fish, wood...), the potential of immigration even of the natives of Nigeria following their overpopulation, this scenario is realizable. One will thus notice a true emergent town between 2021 and 2026, requested by several currents of urban transborder immigrations. Apart from being a frontier market, Akwa will be transformed gradually into a tourist, commercial and industrial town.

We will therefore retain, following the dimentionment of the future town of Akwa, by this maximalist scenario, a town with a population of 70.000 inhabitants in the next 15 years.

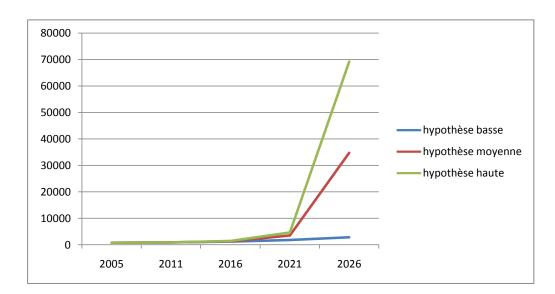


Diagram  $N^{\bullet}$  2: The of increase in population

This hypothesis of high population growth corresponds to a very optimistic vision of the urban development of Akwa. It supposes the taking into account of the following parameters:

- the taking of control of Akwa by the State and the council as a place of preferential investment as from 2013, with the effect of bringing back the populations emigrated from Nigeria and the mobilization of the local resources for development;
- considerable investments, public as well as private in the rehabilitation of the urban networks system, drainage system, electricity and drinking water, in the road link with Loum, Douala and the other cities, the linking bridge with Ikang in Nigéira, the construction of an aerodrome to Buster tourism;



- considerable investments, by the state and the private sector in the installation of the industrial free zone, the development of tourism and the construction of an aerodrome and a bridge connecting the town of Ikan to Nigeria;
- improvement of the economic equipment of production, particularly the creation of the terrestrial connection, not only with Mundemba its divisional head quarter, but also with Loum, Nkongsamba, Douala;
- the development of new commercial functions;
- improvement of the living environment of the populations by the development of planned habitat and the promotion of economic residences, the application of a true policy of settlement of the town.
- The creation of a petroleum refinery zone like the one in Limbe

The combined action of these various parameters will result in the dynamics of the economic activities of the town and the acceleration of its demographic growth. The town would become a net importer of migrants thereafter, with the creation of new jobs and the improvement of the living environment of the population.

According to this hypothesis, the town of Akwa would shelter a population of approximately 70.000 inhabitants in 2026. This hypothesis, in comparison with the economic potential of the zone and especially of its proximity with Nigeria, seems most plausible. It will henceforth constitute the hypothesis of reference to be considered for the future urban development of Akwa.

#### 3.2.4. The demographic recapitulative projections.

Table n° 12: The summary of demographic projections

Year	Negative assumption		Average as	ssumption	High assu	ımption
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



# 4. Chapter 4: The socio-economic, environmental and communal management datas

#### 4.1. The economic realities of the zone of Bakassi

From the economic point of view, three principal potential spheres of activities can be distinguished in the zone of Bakassi: These are

- fishing and related activities;
- trade;
- the maritime transport;
- oil exploitation.

Fishing is the main activity of the population. It is especially artisanal and the main fish is smoked before being sent to the market, mainly in Ikan in Nigeria. The activities of fishing and drying imply a considerable exploitation of the wood of the mangrove. *Rhizophora* is more preferred ,because of its hard wood for the smoking of fish and very resistant for the construction of the dwellings in marshy zones.

Smuggling has, for a long time, been one of the most significant human activities of the peninsula of Bakassi. The inorganization of the transport network routes along the Nigérian- cameroon border militates amply in favour of this situation. In theory, Akwa is a frontier market like the others of Amchidé in the Extreme North, BaÏboum in the East or Kie Ossi in the South of the country.

# 4.2. The economy of the zone of Akwa

It is a traditional economic system with the presence of small trades and the absence of industries and artisanal economy. One notices a strong presence of the informer economy such as the sale of foodstuffs and of liquors coming from Nigeria. The economic system and the businesses are commonly directed towards Nigeria because it offers an easy access in cost, distance and time. The absence of electric power constitutes a very serious hinderance to the development of the local economy, Indeed, the multitude of economic activities related to this energy cannot be operational. The economy being the base of any development, the electric power is the base for the development of the agricultural processing industry and various branches of industry.

However, the economic system of the town of Akwa can be compared to that made up of a traditional economy divided made up in three distinct sectors: the primary, the



secondary and tertiary sectors. During the field investigation, these three sectors were highlighted.

#### 4.2.1. The Primary sector

The primary sector comprises the agricultural branches of activities fishing and hydrocarbons.

#### 4.2.1.1. Agriculture:

The agriculture is slash and burn. It is done traditionally and with rudimentary tools. The production, which too has less impact on the economy of the town, and is exclusively used for the subsistence. The little surplus is exchanged on the local market for fish offered by the local fishermen. Some of the food crops exchanged are cereals (corn), the tubers (cassava, cocoyam, yam) banana and plantain. The consequence of subsistence agriculture through burning is, its negative impact on the urban environment. In addition, the farms are several kilometers from the city, whereas there is no means of transport.

Considering these difficulties, the situation requires the development of the usual agricultural programs of the MINADER:

- the Programme for the development of oil palms;
- the Programme for the development of the banana and plantain;
- the Programme for the development of corn;
- the Programme for the development of tubers.

Generally the agro-industrial development of the town of Akwa can be founded only on its raw materials of agriculture and fishing.

It would be possible to condition the tubers through the transformation of the cassava into (gari and starch) on a large scale or into other marketable by-products at the international level. This is the same for cocoyams and yam, which are very appreciated in Nigeria.

#### 4.2.1.2. Fishing

Fishing is practised intensely by the populations living in the mangroves or the campings of fishermen. The profession of fisherman is difficult to control, more especially as it is practised by the foreigners who directly convey their products to the market of Ikan in Nigeria. Fishing is not modernized. It is done with rudimentary tools, like old nets and woodworks boats of local manufacture. One some modern boats the only signs of a profession, which, for a long time should have been equipped with large fishing vessels and a modern fishing equipments.

Considering the difficulties which this activity faces, it would be necessary to set up a programme for the development of fishing carried out by the Ministry in charge of fishing and animal industries in relation to:



- the regrouping and training of the fishermen in the campings into organised structures:
- the classification and coding of the products of fishing;
- the creation of control units of fishing;
- the modernization of the tools of fishing and boats.

In collaboration with the Council of Akwa, the Ministry in charge of fishing and animal industries could organize:

- the social and economic protection of the fishermen to facilitate their national integration;
- the creation of a local factory for the conditioning of fish;
- the creation of a large market for the sale and redistribution of the products of fishing;
- a programme of development for the piscicultural sector in the town.

# 4.2.1.3. The exploitation of hydrocarbons

The zone of Akwa has a very high mining potential whose prospection is carried out by three large international firms which are ADAX PETROLUEUM (Danish and American), EURO OIL (cameroonian with American capital), COSMOS EXPLORATION (French).

In the exploitation phase, they should have equipment (Office) in land of Akwa. The management of the extraction of hydrocarbons will enable the Council of Akwa, through oil royalties, to develop on the infrastructural and technical plans.

This function calls for:

- the creation of an institution of training for development and oil research;
- the creation of a point of refining such as that of limbe;
- creation of a development fund related to oil extraction.

#### 4.2.2. The secondary industry

The secondary industry is represented by forestry and pre-transformation of wood, citrus fruits and other forest products. Practiced clandestinely, this sector is very detrimental to the ecosystem of the town of Akwa, and its environmental economy. The illegal cutting of the valuable forest species is done in the forest belts and the mangroves. It does not offer any income to the Council and the State. For this reason, it would be urgent to set up in collaboration with the Ministries in charge of forestry and nature:



- a plan of management and control of the activity of cutting or lumbering;
- the creation of transformation and treatment units of local wood;
- the setting-up of regular control units and local taxes on lumbering.

#### 4.2.3. The tertiary sector

The tertiary sector should have been able to remove the economy of the town of Akwa from under development; unfortunately it is confronted with multiple problems involved such as in the enslavement of the town and its lack of infrastructures. The tertiary sector is made up of the administration, trade, transport and small trades.

#### 4.2.3.1. The administration

They are mainly the services of the State materialized by working stations which are essentially or mostly vacant or whose offices are always closed. This defection of the administrative staff is likely to block the economic development and infrastructure of the town. Indeed, the administrative representatives are never there and in time to serve the public providers and other users, neither to deliver the authorizations of intervention, nor to validate the services rendered, and even carry out controls. Senior officials of the administration have definitively lost their working stations due to this tendency of absenteeism in the town.

#### 4.2.3.2. Trade

With an urban population which tends to decrease, a local market which does not exist, the economy of the town of Akwa almost died. One notes in the town some grosseries with food products of basic necessity which do not encourage the constitution of a local purchasing power (see table n° 16). The economic reawakening of the locality of Akwa will require the development of trade and even the creation of a central market with the image of that of Ikan.

#### **4.2.3.3.** Transport

Space mobility is a sign of an obvious economic development. Because of the enslavement, space mobility in Akwa is done only on water and with boats. These are mostly the machines used by the BIR and the sea pirates. Be it by the overland route connecting Akwa to Mundemba through Isangele, or on the Akwayafe river, displacements out of the town of Akwa are complicated, risky and expensive (see table n° 15 and 16).

The economic development of the town of Akwa will only be reawaken through the setting-up of a triple system of transports land, air and maritime. It is these systems which will be able to support the development of several other sub-sector such as tourism.



#### 4.2.3.4. Small trades

The small trades are rare in the town of Akwa. This is because of the absence of electricity. With the installation of this energy infrastructure, the development of the administrative offices, commercial and transport sectors will follow and one will realize the expansion of the town automatically through the creation of the small trades (hairdressing, seamstressing....).

The economic system of the town of Akwa is strongly centered on that of the town of Ikang in Nigeria. Trade and transport are closely related and their impact is reflected on the products and food products of basic necessity originating from Cameroon, considering the easy and fast access to Nigeria.

It will be necessary with the Ministry in charge of Transport and that in charge of Trade, to set up a plat forms of reflexion on the development of the trade in border areas.

Table  $n^{\circ}$  13: Some market products in the shops and bars of Akwa in NAIRA or francs CFA

Designation of the product	Area of origin	Sample of product	price	observations
Soft drink	Cameroon (SABC produc)	Top pamplemousse	550	Bad state of the road which increases the price of the product
Portland cement	Nigeria (from Ikan)		5.000	Bad condition of the road at the level of Cameroon and ease at the level of Nigeria to have it in 30 minutes whereas from Mundemba it takes 3 hours of traveling
Moulinex	Nigeria (From Ikan)	Making juice	11.000	Possibility of having it at reduced cost and also quickly
Ventilator on stand	Nigeria (from Ikan)	Ventilator on stand	15.000	Possibility of having it less expensive considering the cost of transport
Liquor and alcohol	Nigeria (from Ikan)	King jonathan, pilot	1.000	Possibility of having it less expensive considering the cost of transport and quickly in 30 minutes
Soft drink 2	Nigeria (from Ikan)	soda	150	Possibility of having it less expensive considering the cost of transport

#### 4.3. Environment

The environmental problems are:

- subsistence agriculture through burning ;
- the massive destruction of the forest for wood of heating, in particular the mangroves for the drying of fish and the illegal cutting of the forest species for sale in Nigeria;



The non treatment of waste water (the mode of evacuation of excreta through rejection in nature or the nearest bush with the risk of diseases), the household refuse is also rejected into nature.

#### 4.3.1. Environmental management

Environmental management in the town of Akwa can be taken into account considering the agricultural activities in progress. Subsistent agriculture through burning, affect the ecology of the town negatively. According to the investigation made on the ground, the population of this town does not have any knowledge or information as regards environmental protection. It would then be necessary by the channel of the Ministry in charge of forestry, to set up strategies of sensitization and information on the wild cutting of wood and the destruction of the mangroves.

#### 4.3.2. Land management

Table n° 14: Management and environmental protection

<b>Environmental questions</b>		Total		%	Average
Have you ever planted a tree in	Yes			50	
city?	No			50	
Are diseases related to water	Yes			88,5	
frequent in AKWA?	No			11,5	
		malaria			malaria
Which are these diseases?		Typhoid			Typhoid, Cholera
		Cholera			
		Cut in	the		Cut in the forest
Procuration of wood for heating		forest			
Is the cutting of wood prohibited?	Yes			15,4	
_	No			84,6	

#### 4.4. The priorities of development

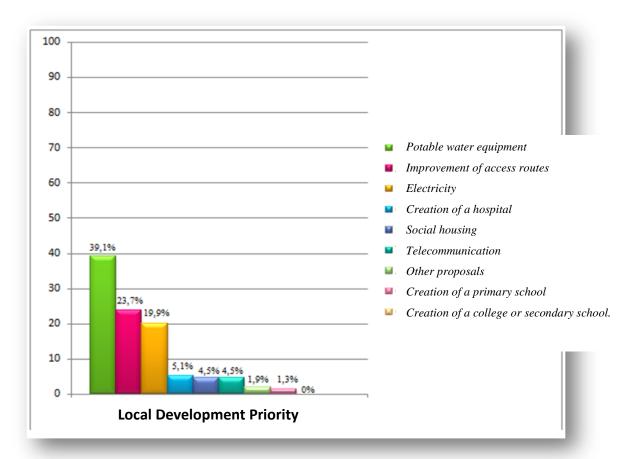
#### 4.4.1. Datas of household investigation

Table n° 15: The priorities of local development

	The priority of local development	Percentage
1	Drinking water equipment	39,1
2	Adjustment of the access roads	23,7
3	Electricity	19,9
4	Creation of a hospital	5,1
5	Social housing	4,5
6	telecommunication	4,5
7	Other proposals for a project (none, adventure playground and leisures)	1,9
8	Creation of a primary school	1,3
9	Creation of a college	0



Diagram  $N^{\bullet}$  3: Local development priority



#### 4.4.2. The given diagnosis of the datas of participative investigation

The priorities of development of Akwa following the participative consultation in order of importance;

- 1. Adduction in potable water
- 2. transportation route and other networks
- 3. electricity
- 4. telecommunication, radio and television diffusion, mobile telephone
- 5. commercial infrastructure
- 6. protection of the banks of the Beach
- 7. town planning and installations
- 8. cultural space
- 9. security
- 10. mail service and banks.



#### 4.4.3. The three-dimensional Comparison of the datas of space development

The pooling of the three types of data (participative investigations data, household given investigations data and technical visual investigation data) consolidates the adopted technical approach and legitimates the process of planning engaged, because these will underlie the phase of the total planning of the town of Akwa.

# 4.5. Communal management of the town of Akwa

#### 4.5.1. Organization of the Council

The Council of Kombo Abedimo was born from the old Council of Isangele which covered amongst others, the current territory of Bakassi, with the sub-division of Idabato, Kombo Abedimo, Kombo Itindi, in addition to the sub division of Isangele itself.

With regards to the common organization, there is a mayor assisted by two (2) assistants, and some five (5) other members of the personnel.

# 4.5.2. The activities of development

The Council of Akwa does not have many resources, apart from the additional taxes. The council is thus confronted in the collection of the communal revenue, in effect, many people in the maritime zone refuse to pay the taxes related to fishing because they are still protected by the Agreements from Green Tree which is supposed to end in 2013.

#### 4.5.3. The evolution of the communal budget of Kombo Abedimo

The council of Kombo Abedimo almost does not have financial resources. Compared to the year 2009 the council budget was estimated at 95.220.432fcfa. The council only had two payments of C.A.C of about 800.000fcfa in the first quarter and 1.800.000 FCFA in the second quarter is a total of 1.850.000 FCFA with a remainder for the C.A.C of 4.390.864 FCFA. While integrating the budgetary remainder of the passed year i.e. 1.331.956 FCFA, one arrives at a recovering total of 3.181.956 FCFA. Compared to the expenditure, 66500fcfa was devoted for the purchase of registers, 90000 FCFA to the transport of the council accountant, 250000fcfa for the expenses of maintenance and 350000 FCFA for ceremonies making a total of expenditure of 856500fcfa unto which is to be added the unforeseeable expenditure of 200000fcfa and refundings of debts of 792644 FCFA making a total expenditure of 1849144FCFA and a remainder of 1332812 FCFA valid for the year 2010. Concerning the whole budget estimates nothing was done:

- No indirect council communal tax (500000FCFA);
- No official folding back (11000000FCFA);
- No revenue subsidies by the state (3000000FCFA);
- No equipment promised by FEICOM (4000000FCFA).



This is why the council cannot do anything as regards social assistance to the population, nor of companies of the urban development projects.

With regards to the evolution of the council budget, the financial investigation shows that, since 2005, the council budget is in a constant drop. Indeed, the insecurity in the town, combined with the perpetual surge of the sea pirates in the mangroves does not encourage people, neither the tradesmen, nor the municipal managers

# 4.6. Activities generating low rentable revenus

The communal management of the town of Akwa is supposed to be entirely updated. The income generating activities for this Council are non-existent. There is only the FEICOM which, by the intermediary of the CAC gets some resources for the Council. This is largely insufficient for any undertaking.

# 4.7. Low communal Budget

This situation enables the creation of new opportunities for the development of this council. That is:

- the reorganization of the administrative and technical services;
- the equipment of the material park of the council;
- the creation of income generating projects;
- the installation of a communal system of river and land transport;
- the search for financing for the construction of the town hall, the market the parks and public gardens;
- the search for a joint action in relation to decentralized co-operation.

Table n° 8: Merchants Equipment lacking in Akwa

Station	0	Null	Council
Parks and garden	0	Null	Council
Markets	0	Inexistance	Council
Slanghter house	0	Inexistence	council



# 4.7.1.1. The tree of problems

# Table n° 19: Tree with Problems (Akwa)

Causes	Urban problems	Consequences
<ul> <li>Absence of drinkable water conveyance;</li> <li>Absence of a station of pumping and treatment</li> <li>Absence of functional drilling or arranged source</li> </ul>	Drinking water problem	<ul> <li>Development of water diseases;</li> <li>Limited development of tourism establishments of;</li> </ul>
<ul> <li>Absence of investments in the sector of electricity, especially for the construction of a HT or MT from Mundemba, or installation of a generator of great capacity for the local supply;</li> </ul>	Problems of Electricity	Difficulties of economic development;
<ul> <li>Physical configuration (geography) unfavourable as seem with enclavement of the locality (peninsula open on the sea and in Nigeria) by road;</li> <li>Locality created at the origin as a camping of Nigerian fishermen;</li> <li>Insufficient investment on the system of transport and communication terrestrial, air and maritime and coastal</li> </ul>	Problem of enclavement	<ul> <li>Space underdevelopment;</li> <li>Development turned towards the neighbouring country;</li> <li>Development of frontier criminality;</li> <li>Difficulty of tourism development;</li> <li>Difficulty of survival for the local populations and the workers (personnel of the State, the companies).</li> </ul>
<ul> <li>Lack of immediate assumption of responsibility of the civil servants by the public offices and finances;</li> <li>High insecurity;</li> <li>Problem of wages due to the absence of banks or places of distraction</li> </ul>	Shortage of teachers	Migration of the populations towards other destinations;
<ul> <li>Defect of national media of information (Radio ,newspapers, television;</li> <li>Absecence of mail service and connexion (CAMPOST, Centre Multi-media, Télé Community center)</li> <li>Absence of communication networks (C amtel, Orange-Cameroun, MTN)</li> </ul>	Problems of communication	<ul> <li>Cultural insulation;</li> <li>Poor national integration;</li> <li>Influence of external cultures on the local population</li> <li>Lack of interest concerning nationalissues.</li> </ul>
<ul> <li>Absence of improved plot to be put at the disposal of the elite and populations;</li> <li>Ignorance and poor knowledge on of the rules of town planning;</li> </ul>	Problems of urban development	<ul> <li>Prevalence of constructions not complying with the rules of town planning;</li> <li>Less attractitive town;</li> <li>Low level of equipment and comfort of the dwellings</li> </ul>
<ul> <li>Frontier conflicts are characteristic of the zone of Bakassi;</li> <li>Non existence of a special police station;</li> <li>Existence of groups of traffickers and pirates who prevail in the mangroves;</li> </ul>	Problems of insecurity	<ul> <li>Depopulation;</li> <li>Poor development of economic activities;</li> <li>Absenteeism of the personnel of administration and poor functioning of the services;</li> </ul>
<ul> <li>Weakness of local finances;</li> <li>Inadequate technical staff;</li> <li>Little municipal enthusiasm of the team for the local development</li> </ul>	Shortage of social housing	<ul> <li>Absence of structure to guide the populations;</li> <li>Miss urban interventions and of payment of the problems of proximities for the inhabitants.</li> </ul>
<ul> <li>lak of leisure space or play ground for the young people</li> <li>Absence of places of distraction or sports</li> </ul>	Lack space of plays	<ul> <li>the young people are not distracted</li> <li>Reversal towards (dangerous, drug, crime) activities</li> </ul>
Lack of small equipments;     Lack of personnel;	Problems of equipment of the hospitals	<ul> <li>Poor demand of local hospital services;</li> <li>Soliciting of Nigerian hospital services;</li> </ul>



#### 4.8. The diagnosis report

The diagnosis report reveals three types of observations with more or less impacts on the local development which should be noted concerning the urban projections,

- General observations ;
- noted sectoral and
- assets to be exploited.

#### 4.8.1. General observations:

- Akwa is a frontier town turned towards Ikang in Nigeria. It however did not develop
  a frontier market as in the other frontier towns (Amchidé), because of its
  enclavement in relation to Cameroon;
- Akwa has of some basic urban services (public drinking water, roads, cleansing, lighting, telegraphic telephone...) and socio-collectives equipment (schools, center of health...), which are unfortunately notfunctional, because of the war situation according to the Green Tree agreement which will only be possible after 2013;
- Akwa is confronted with the poor condition of its regional connections;
- Akwa is confronted with the hazardous installation of equipment and public services in urban space;
- Akwa is confronted with the absence of the various networks (water, telephone, street lighting...);
- Akwa is confronted with the insufficiency of job opportunities to retain the population, in spite of the existing commercial and tourist potentials.

#### 4.8.2. The sectoral observations:

# 4.8.2.1. At the level of the population:

The depopulation of the town of Akwa is the result of the frontier conflict which took place between Cameroon and Nigeria and the activity of the pirates in the zone. This is provoking the departure of the fishermen population from living the zone .there is also the deportation of the

economy due to enclavement and considering that 90 percent of the population in the zone are of foreign nationality (Nigerian) Present, considering the aloetic richness which abounds the zone with an interest particularly related to the close country with the sight of its great industrialization.



#### 4.8.2.2. The relief, climate and environment:

The town of Akwa located at the mouth of the river akwa yafe comprises of mangroves and marshes that are rich in water resources, the dry season in this zone lasts for 2 months and the rainy season for 10 months. The consequence is, the scrubbing of the slopes and the degradation of the roads due to the absence of a discharge system and drains. There is equally the gullying of the banks by the pressure of the river which is causing the land reduction of the Beach of the town .

The exiting forest is devastated everyday by acts of vandalism through an uncontrolled exploitation to the profit of Nigeria through smuggling. A part is used for cooking of food by the population and the agriculture by fire regulary degrades this richness and the environment.

# 4.8.2.3. The infrastructures and road way and various services:

Road of nonconventional size, inexistence of drainage system roadway system intersected and financing in bottom with bag or track enters the villages. Poor geological profile that is supporting a fast scrubbing of surface land.

The road infrastructures; various network present in the town of Akwa are summary and do not function normally, they have a single form (track without system of cleansing) which do not allow urban development planning.

#### **4.8.2.4.** The habitat:

The habitat is precarious and dispersed in relation to the socio- anthropological position of the zone.

The traditional habitat in mangrove swamps are in mud, covered with roofs out of plaits and old sheets for the case of old houses; only the administrative buildings are made up of final materials.

#### **4.8.2.5.** The economy:

One notes in the town of Akwa an absence of economic activityies due to the enclavement of the zone, the population deal with agriculture practiced through manual and precarious ways in distant farms from their zone of residence. There is also of fishing which is practised at the level of the mangroves.

#### 4.8.2.6. The administration:

There is the presence of certain administration but nonfunctional due to staff shortage caused by the problem of lack of water and electricity and poor roads to reach the area (MINDEF, MINATD, MINPROF, MINEDUB, MINEFOP, MINSANTE).



# 4.8.2.7. The roadway system:

There is the inexistence of a route network and the roadway system which intersects between the farming tracks of circulations connecting the villages.

## 4.8.2.8. The cleansing and drainage:

The system of cleansing and drainage are inexistent and these are causing a strong degradation of the environmental and the roadway system.

#### 4.8.2.9. The health:

There is the presence of health centres with staff shortage and equipment and, some inhabitants prefer to be treated traditionally due to the existence of the forest in the region and its richeness in several pharmaceutical species and the presence of witchdoctor and herbalists. Information concerning disease such as AIDS is less known and some prefer to be unaware of this disease which could be a factor causing the reduction of the population considering their forward and movement between Cameroon and Nigeria.

As regards the social backward aspects there is a place where the populations can be listen to because ,all the services are present but there is the non presence of their personnel.

# 4.8.2.10. The socio anthropology of the zone

- There is presence of the churches of various denomination (apostolic church, catholic church, Protestant church)
- Others belief in the spirit of water which protects and support the fishmen.
- based on rites and customs of Nigeria as a result of the poor link of the area to the interior of Cameroon.

#### **4.8.2.11.** The education:

The shortage of teachers in the zone constitutes the main problem in to which in some cases are added the absence of the facilities related to the good functioning of school. This explains why there is a ligh rate of failure of pupils in schools and exodus to Nigeria.

# 4.8.2.12. The management of the town and weakness of council finance.

The Council of Akwa almost does not have a council budget, although it has large assets of development. To implement these assets on the financial, material and human lands, the council has to wait until 2013. The possibilities of intercommunality are also limited. Meanwhile, it will be necessary to invest and be able to count on the additional taxes and the support of the FEICOM.



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

These noted general orders and sectoral observation are constraints to be surmounted in invisaging the urban development of Akwa.

#### 4.8.3. The assets to be exploite:

It will be necessary however to take note of certain vital assets to resolve the local problems of development.

There are interesting assets to be exploited in relation to the natural site as well as the created sites. These include the following:

- that 50 % of the surface of the town is exploitable, with the help of resolving the problem of drainage of the land;
- a preexistence of the infrastructural networks of;
- the existence of the basic infrastructures and the socio- collective facilities inherited from the period of occupation by nigeria or resulting from the anticipation from the government of cameroon to take possession of the area, which need to be quickly put in place, to extend the capacity to meet the needs of the population and to solve the social problems;
- the existence embryonic administrative structures for the guidiance of the population in the site, for example the special police station, gendarmerie station, the military personnel and military engineering which intervene in the guiding of the population;
- the availability of the psu of akwa and the projects of urban development realizable at short and medium terms.



# Conclusion

This Diagnosis Report is the result of a concerted work on a very broad scale. On the basis of the official launching ceremony of this work for the development of the PSU organized on Wednesday March 02, 2011 in the Conference Room of the Subdivisional officer of Isangele under the chair person of the Sub-divisional officer, local and external urban actors also took part from, the town Akwa and Isangele, participative diagnoses was carried out, the investigations carried out through the town, for the purpose of identifying the urban problems and the difficulties which the population are confronted, was done after setting up the Advisory Working group for this purpose.

The three-dimensional confrontation of the urban data justifies this Diagnosis Report which will underlie the planning of the town of Akwa.

The tree of problems for the town of Akwa, was established characterized by the following:

- Lack of running water whose consequence is the recurrence of water borne diseases and difficulties of development of tourist activities and the economy in general;
- The enclavement of the zone of Akwa which blocks any possibility of development in relation to the interior of the town;
- The weaknesses in the management of the council due to the lack of financial resources and generable, in particularly because of the requirements of the Agreement of Green Tree which will end only in 2013... etc.

In accordance with this diagnosis of urban development, the Justifying Report to be an elaborated work out will initially have to lay down the orientations of urban development in terms of objectives, and secondly, in terms of programs and principles of improvement, before working out the aspect of improvement especially as, the preliminary dialogues for the choice of the alternatives of development have already taken place during the popular consultations of Saturday March 05, 2011.



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