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PREAMBLE

The town of Buea is one of the cities where the uncontrolled urbanization date from the colonial era, due to the absence of a planning document, thus the need to prepare one. This development is made possible by the production of a justification report. The production of this report is possible only by a thorough knowledge of the current state of the city as well as knowledge of the mechanisms of its development. We cannot lose sight of the fact that above all there is a need to define the broad guidelines of development as well as the priority objectives and the programmes of actions arising there from. The achievement of these objectives command an appropriate methodological approach that involves:

- The analysis of the current situation; -

The proposal of the guidelines of the Land Use Plan (LUP).

The importance of these phases lies in the identification of the main problems in the city and the definition of the priority objectives of spatial planning in the short, medium terms. It aims at understanding the current urban environment, its constraints and its potentialities of urbanization in the medium term (15 years).

- To identify these problems, investigations had been carried out on the the field at two levels: Household surveys in order to actively involve the population in the process of elaboration of the LUP of the locality. The exploitation of the results made it possible to supply and to enrich the thinking on the development prospects of the city.
- Surveys of administrations, public agencies, quasi-public, private and other local communities involved in the process of urban development in order to identify their concerns and to assess the current level of equipment and infrastructure in the city.

I. GENERAL INTRODUCTION

I.1. DEFINITION OF THE LAND USE PLAN

The Land Use Plan is a document which fixes and precises:

- The framework of the guidelines of the Governing patterns of urban planning or Director Plans of Urban Planning if they exist, without contradicting them;
- The general rules and the easements for the use of the soil that they might contain,
- The prohibition or permission to build.
- To this end, it must:
 - delineate the urban areas or to urbanize especially taking into consideration the agronomic value of the soil, agricultural structures, land with superior qualities, the existence of predictable natural hazards and technological risks, the presence of special equipment important and determine the areas of assignment of the soil according to the main use which must be done or the nature of the predominant activities which can be carried out.
 - Taking into consideration the local situations, set the rules concerning the right of establishment of constructions, and their nature
 - Determine the rules on the external appearance of buildings, their dimension and the development of their surroundings
 - Attach to each zone or each part of a zone according the ability of collective facilities existing or in the process of implementation and of the nature of the constructions to build, and or of the coefficients of occupation of the soil (COS) which determine if necessary for each type of construction, the density of construction which is admitted.
 - Determine the areas or parts of areas in which the reconstruction of the development of existing building for reasons of urban planning or architecture, may be imposed or allowed with a density or more equal to that which was built
 - Specify the tracks and the characteristics of the traffic to keep, to modify or to create, including the streets or pedestrian paths and cycle tracks.
 - Delineate the neighborhoods, streets, monuments, site and sector to protect or to put in value for aesthetic, historical, or ecological reasons.
 - Fix the reserved slots for tracks and public works, facilities of general interest as well as the green spaces.
 - Locate in the urbanized areas cultivated areas to protect and inconstructibles whatever the potential equipment which may serve it.
 - Delineate the areas in which the issuance of the permit to construct or locate can be subject to demolition of all or part of the existing buildings on the ground where the implantation of the construction is envisaged.

It is based on this knowledge and basic principle that must be developed the LUP of the city of Buea.

I.2. BACKGROUND AND RATIONALE

In the framework of the implementation of the activities of the Department of Housing and Urban Development (MINHUD) in Cameroon and in the framework of the preparation of planning documents for the Public Investment Budget in the year 2013, LE

COMPETING-BET enterprise was hired as a consultant to accompany the Buea Council in the elaboration of a Land Use Plan (LUP) of the municipality

The government of Cameroon in July 2004 decreed the decentralization law applicable to Councils. This act mandated the Councils to make provision for basic services in the municipality in several areas. Since then, the government has strengthened the process through other instruments such as the Strategic Document for Growth and Employment (SDGE).

The Ministry of Housing and Urban Development (MINHUD) makes its contribution to reducing poverty in using participatory strategies at the level of the Councils through the elaboration of documents of urban planning called LUP. In this framework a partnership protocol was signed between the Municipality of Buea and the MINHUD, in which the MINHUD offered technical and financial support to help LE COMPETING-BET to accompany the Council of Buea for the preparation of its Land Use Plan (LUP).

The realization of a report justifying the LUP is seen in this context as one of the key steps leading to a LUP for Buea

I.3. OBJECTIVES OF THE STUDY

The prime objective of a Land Use Plan (LUP) is to provide a strategic framework to guide the development of land in Buea. The major objective of a LUP is to assist the financial resources to be directed toward the purposes of optimal use of the land. The LUP is a form of prescription, because it seeks to partition the zones of the Council of Buea for the particular use of the land and also to suggest a number of options for the particular areas that can guide policy makers and attract investment from within. In agreement with what has already been stated, the other purpose of the LUP is to provide a spatial element to the development plan, to show on a map, or a series of maps, the current situation, the location of resources, the existing potential and the necessary points to develop the resources.

I.4. APPROACH METHODOLOGY AND STRUCTURE OF THE REPORT

I.4.1. Approach methodology

- The methodology adopted after the approval of the diagnostic report consisted of the mobilization of different experts of the Consultant in the framework of:
- the rereading of the diagnostic report in view of the elaboration of a synthesis exploitable in the framework of the present justification(rationale) report -
- working sessions with the stakeholders that involves the Council, the decentralized or deconcentrated services of the State, the populations through its opinion leaders that are the heads of neighborhoods, the religious leaders, the leaders of associations ;
- the sectoral surveys directly carried out or supervised by the various experts; -

- the continuation of the surveys of the observation of current situation
- The pursuit of research and exploitation of documents.

I.4.2. Structure of the report

The present justification report is structured around the main points presented, below which will be analyzed in meticulous manner. It is a question of:

- THE GENERAL INTRODUCTION;
- REVIEW OF THE CURRENT SITUATION AND PERSPECTIVE OF DEMOGRAPHIC AND ECONOMIC DEVELOPMENT;
- DEVELOPMENT OBJECTIVES;
- PROGRAMMMES TO BE REALISED;
- PRIORITY INVESTMENT PROGRAMME;
- ENVIRONMENTAL RATING.

**II. REVIEW OF THE CURRENT SITUATION AND
PERSPECTIVE OF DEMOGRAPHIC AND
ECONOMIC DEVELOPMENT**

II.1. PROFILE OF STUDY AREA (BUEA)

Buea, headquarter of the South West region of Cameroon was created on the 29th of June 1977 by a Presidential decree No. 77/203. The municipality of Buea has a surface area of 870 sq km, with 67 villages, four distinct areas identified in the urban space (The Buea Station, Molyko, Soppo, /Mile 17 and Muea). It is a very complex Council taken between a mixture of urban, semi-urban, rural and the traditional parameters.

The municipality of Buea is bounded on the north by the tropical forest on the slope of Mount Cameroon (4100m above sea level). This mountain extends to the beautiful sandy beaches of the Atlantic Ocean. The city also shares its boundaries with other major cities such as the city of Limbe in the south-west, in the East, the municipality of Muyuka and Idenau district to the West. With an equatorial climate, temperatures are moderate with a slight seasonal variation (a dry season and a rainy season) .Buea has a moderated economy with agriculture, administration, business, tourism and the financial sector taking the central area of the city.

Buea is composed mainly of the Bakweri (Natives) in the villages and a very cosmopolitan population in the urban space involving native people in the minority. The Bakweri language spoken by the indigenous people is also written and documented. English and French are the two official languages used for the general interaction while pidgin is the lingua franca as a secondary language. The average life expectancy of this zone is 50 years (statistics of 1999). Literacy rate is on the rise with some 60-75% of young people having access to education.

According to a study conducted in 2004 by the Ministry of Public Health in Cameroon, approximately 40 per cent of the population does not have access to quality health care services while nearly 60 per cent are in financial difficulties to have access to basic health services. This situation is currently the case for the rural areas of the municipality and far less realistic for the urban areas.

Buea is one of the cities with the most rapid growth in Cameroon today with a cosmopolitan mixture and a constellation of about 67 villages. These villages are inhabited by the Bakwerians who, according to social scientists, have lived near Mount Cameroon for at least 4,000 years. Its urban areas now include: Molyko, Buea Station, Muea, GRA, Mile 16, the Clerks and Federal quarters, Great Soppo, Bokwaongo, Likoko-Membea, and Bonduma. Buea is currently the head quarter of the South-West Region of Cameroon.

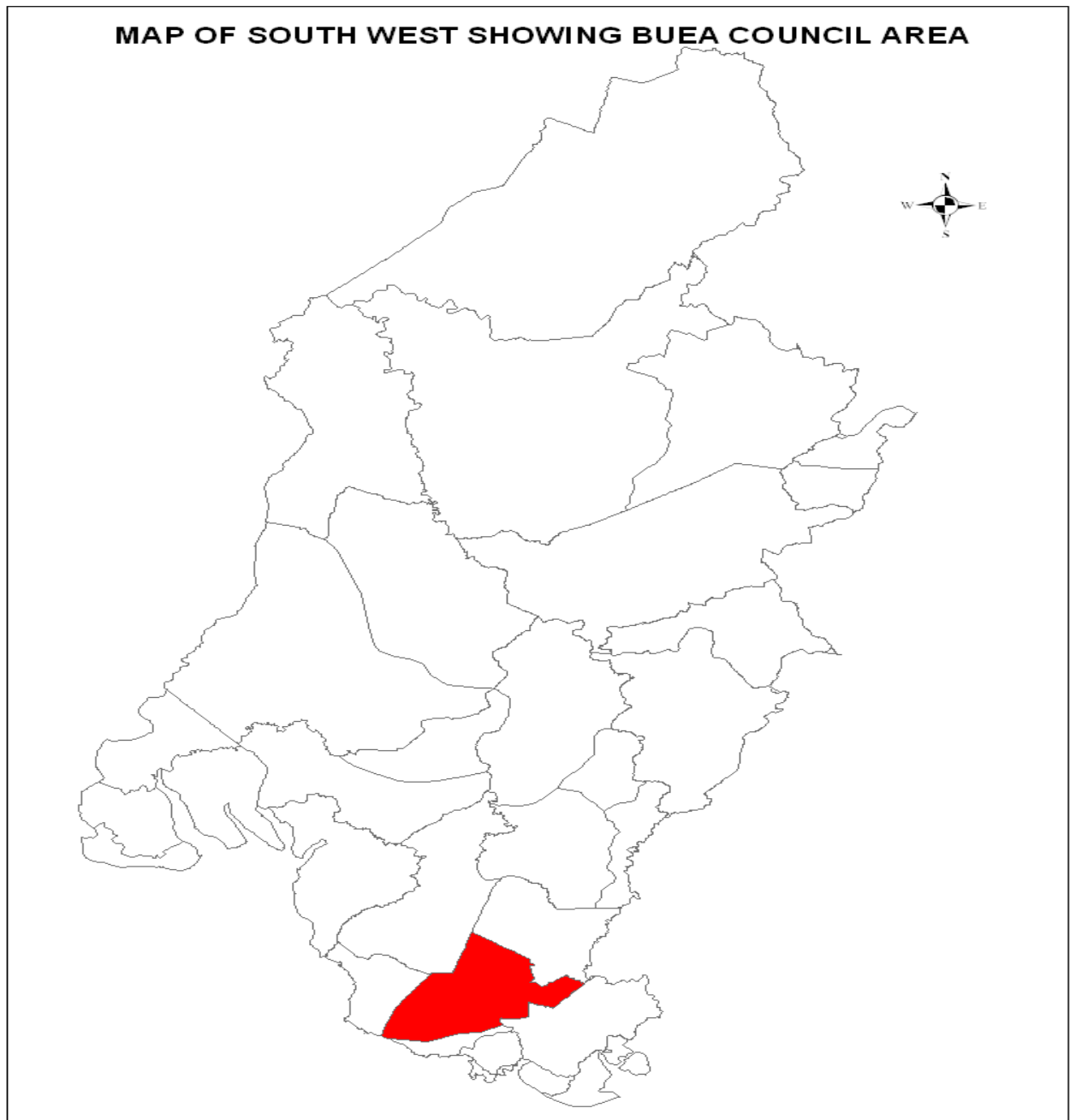
Buea is one of the most famous cities that served as the capital of Cameroon during the German colonial period since 1901-1909, (Ngoh 1996). It has also served as the capital of the United Nations (UN), Territory of Trust of Southern Cameroon from 1919-

1961. Prior to assuming the status of the head quarter of the South-West Region of Cameroon, it was the seat of the province of British Cameroon (1949-1961), then as the capital of the seat of government of the West Cameroon in 1961-1972, when the organizational structure of the country changed from a federal State to a unitary system of government.

Buea hosts the University of Buea. There are still a few traces of colonialism as some colonial buildings including the beautiful ancient residence of the German Governor, Jesko Von Puttkamer. Buea is a small rural town due to its delay in the socio-economic development, the most important being the absence of good markets; the lack of motor parks and the lack of roads linking the farms and markets.

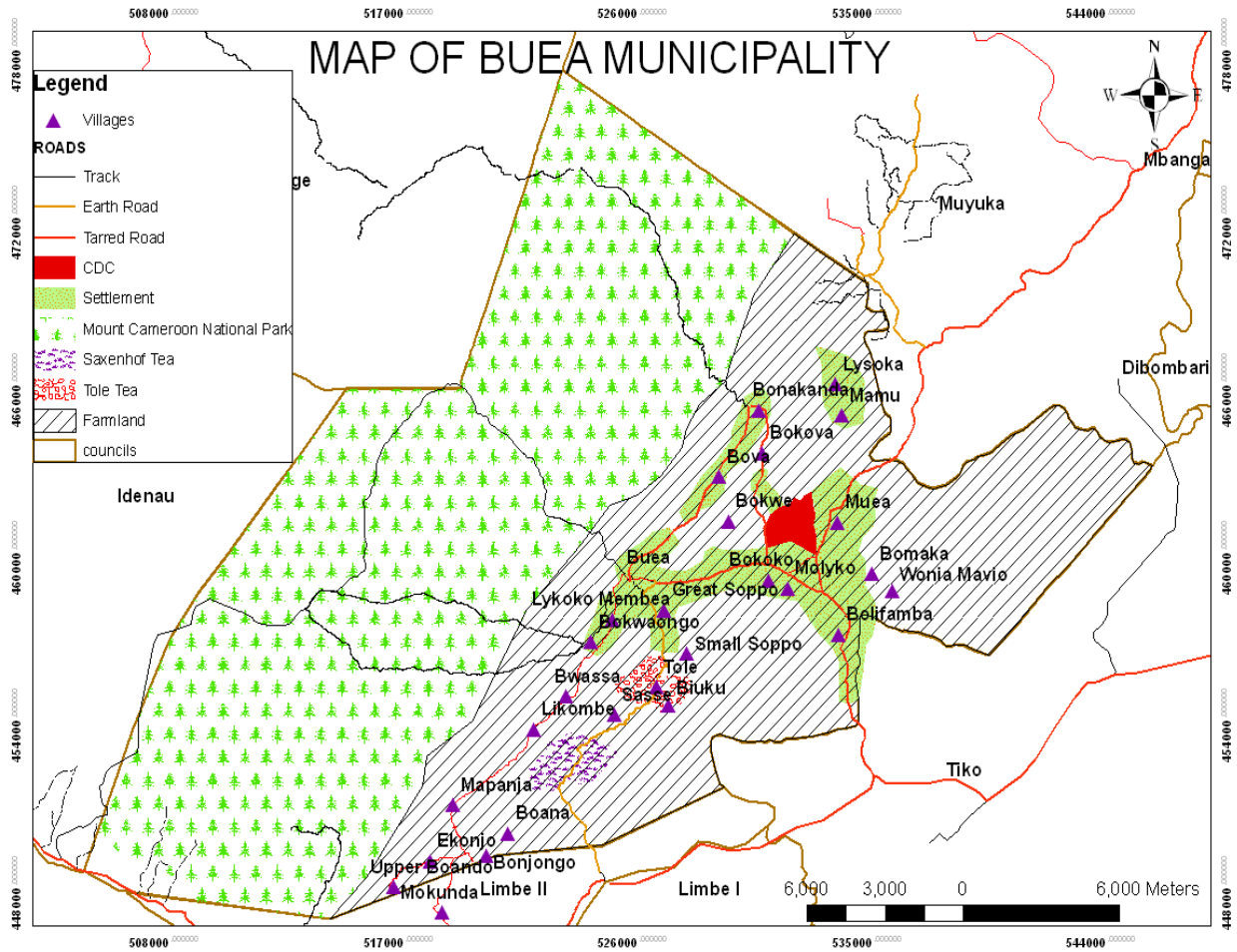
X. Some of the features that differentiate Buea with the rest of the country are: Buea hosts the famous annual race of hope of Mount Cameroon. It attracts many migrants and tourists to the region. The presence of certain colonial antiquities is an attractive point for many. It is a sub-section, composed of several villages. It represents the geographical and cultural diversity of the country. In this regard, the ethnic composition of Buea is diversified. In addition, contrary to other rural areas where the young people (the active and productive force of the soil) migrate to the cities in search of jobs to leave only the elderly and children, Buea evolves, with a dynamic population which is made up of students, young graduates without employment, the small traders and many other actors of the formal or informal world.

Figure 1: Buea Council Area, in the context of the South West Region



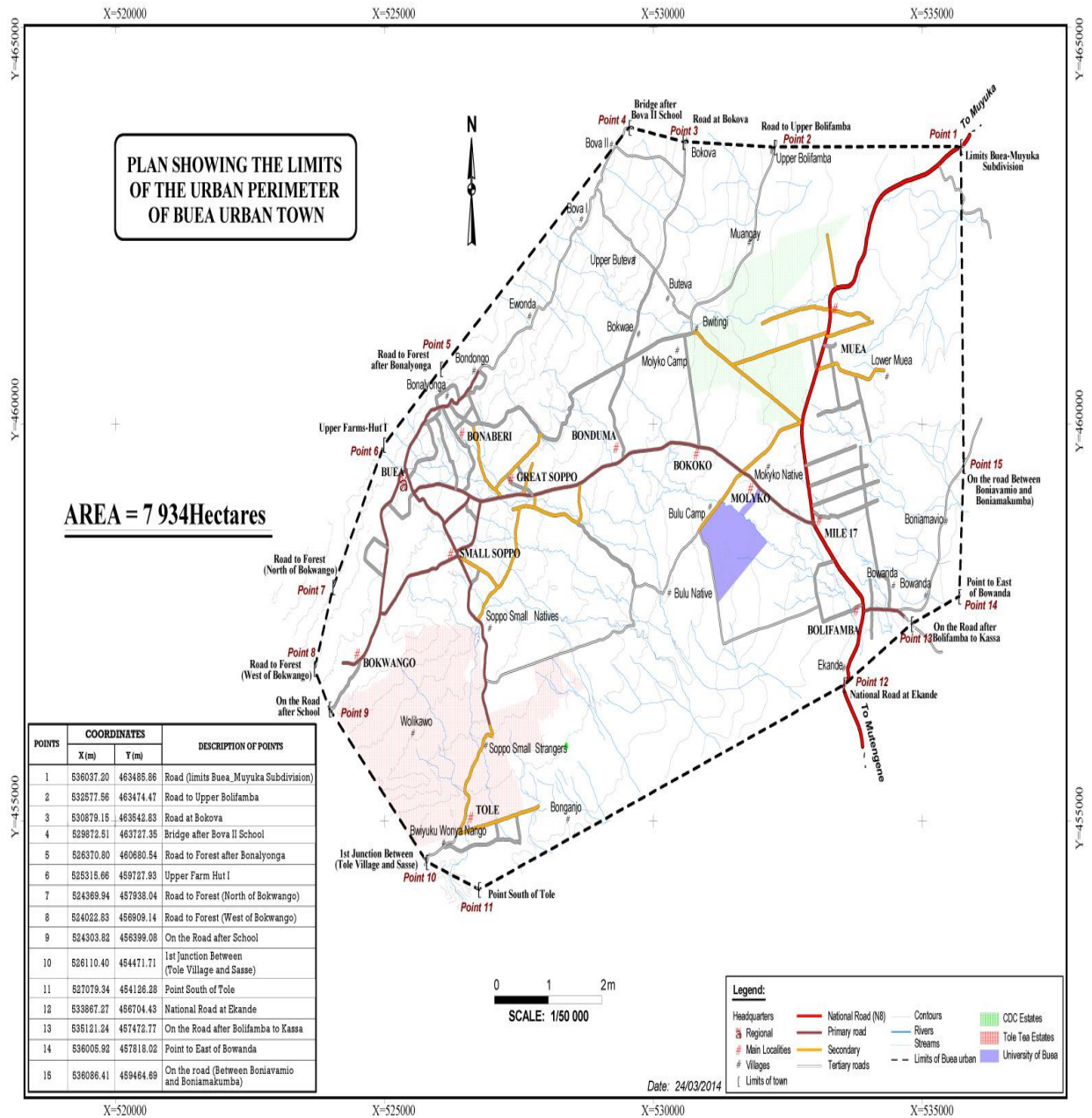
Source: Le BET COMPETING/BEFA, 2014

Figure 2: Map of the municipality of Buea



Source: PNDP, 2012

Figure 3: Map of the boundaries(limits) of the urban perimeter of Buea



Source: LE BET COMPETING/BEFA, 2014

II.2. THE HISTORY OF THE DEVELOPMENT AND URBANIZATION OF BUEA ACCORDING TO THE ANALYSIS OF ORSTOM.

From the origin, Buea was a small town of 11,000 inhabitants located 55 km from Douala, 20km from Victoria according to bird's flying speed, spreading at an altitude between 800 m and 1,100 m on the slopes of mount of Cameroon. At the time, former capital of the federated state in the west of Cameroon, it attracted very early Europeans because of its temperate climate and the absence of malaria. This city is located at a latitude of 4° 09' north. She was chosen for a brief period between the years 1901 and 1909 as the capital of the German colony of Cameroon. The volcanic activity of the mountain led them to transfer the capital of Buea to Douala in 1909.

The natural conditions that have fostered the development of the city are numerous. First of all the climate: the temperature rarely exceeds a monthly average of 25°C (77°F) however, the humidity is very high, the rainy season is long and heavy and the sky brightens rarely-except toward the end and the beginning of the rainy season. Secondly, the almost total absence of malaria.

In fact, the city is built on mudslides separated by many ravines and the slopes are sometimes relatively steep. The villagers (Bakweri) fought the arrival of the Germans who only managed to subjugate Buea in 1894. The village was destroyed by the reprisals and was rebuilt on the current location of the Buea Town quarter. The Germans took the land between Buea Town, SMALL SOPPO and BOKWANGO for the construction of the station and the establishment of plantations. At the beginning of the XX th century, Buea was on the road of the German penetration which went from Victoria to Buea through the W. A. P. V plantation. Buea was more than a village: its central position and its leaders assured it of its leading position in the whole of the Bakweri area.

BUEA started to come out of the lethargy in which she had fallen after the departure of the Germans when the first local government was created in 1958, and continued to grow since independence. The choice of Buea as the political capital made it an urban center. Without this choice the city should not be more important than MUEA. Because neither the plantations nor the commercial activities were there to give the city a decisive spark.

The agglomeration of Buea shows well differentiated aspects despite its small size; first of all by his scattered habitat which corresponds to the nature of the terrain and the taste of the English colonizer; by its buildings of various periods which give to the station its particular character ; by the area of 'no man's land' isolated from different quarters of the city; by the ravines dividing the city on its length ; by the fences surrounding the native neighborhoods and those of foreigners.

The desire of the inhabitants to delimit sociologically different areas is reflected in its development. The government's efforts to control the development of the city by the creation of camps and places restrained to a type of construction contribute to strengthen the impression of the urban division more or less determined by the natural conditions but also sought by the people.

IX. The sociological profile of the city reflects its functions: more than a thousand public servants, some 2,500 employees of the government or the federated government or public.

Such a large number of employees in a relatively small town according to the Cameroonian standards has created a kind of special society as regards its desires, its way of life, and its system of hierarchy which is manifested in the way in which land is occupied.

This population with incomes higher than the regional average poses many problems because of their recent arrival. The demand for housing has been important and has led to the disorderly construction in the suburbs of plank or 'calaboat' houses without the provision of basic equipment for collective accommodation. It has also resulted in a strong desire for the construction of residential houses partially controlled by the government in the station, and finally to an accumulation of persons in the precarious homes of the foreigners quarters in the city of Buea. This situation has led to an increase in the cost of living accelerated by the absence of modern shops, and the weakness of small traditional business.

Consequently Buea from 1970 quickly became an urban center whose character was quickly changed and which we will analyze the space and social components by the geographical study of its urban area.

II.3. REVIEW OF THE URBAN DIAGNOSIS

The diagnostic assessment is a summary of the overall strengths and constraints of the various components of the urban development. It is especially of the natural site, the created site, the socio-economic base and urban governance.

II.3.1. The strengths to exploit in the implementation of the LUP of Buea

- The town of Buea has strengths which may be decisive in the implementation of development projects. They are, for example:

For the natural site

- The climate

The climate of the town of Buea is mild and attractive; the temperature rarely exceeds a monthly average of 25°C.

- The Relief

- The presence of Mount Cameroon is a major asset for the city of Buea. Because the Mount Cameroon offers large capacity in the area of ecotourism;
- The low lands or shallow areas offer unlimited possibilities of development of aquaculture ponds, and market gardening agriculture
- The hydrography

HYDROGRAPHY in the town of Buea is a major asset in daily operation of the populations. Because it allows:

- The collection of water for daily consumption taking into account the fact that not everyone has access to the water network of the CDE ;
- The water course can be used for irrigation of plants; -
- The outskirts of rivers can be arranged and dedicated to tourism.
- Vegetation

The vegetation in the city of Buea is marked by the presence of several rare species of trees that are found much more on the heights of Mount Cameroon. It gives the city a pleasant environment and also allows the development of tourism.

- The fauna

The presence of many species of animals is a major asset to the city in the direction of the development of the parks or Zoo and by ricochet the development of tourism.

- The soil

The soil is a basalt soil which allows the development of agricultural activities as well as the vegetation

For the created site

a) The land tenure

Land tenure in the city of Buea is marked by:

- Existence of vast unoccupied land;
- Existence of vast lands good for construction;
- Existence of land reserves belonging to the State or to the decentralized territorial communities.
- Housing
- Trend of more and more heads of households becoming owners; -
- Transition of wood to blocks or stones
- Highways and various networks
- highways in good condition along the major axis; -
- Right-of-way large enough; -
- Availability of water and electricity;
- Existence of outlets

b) The socio-collective equipment

- Presence of all the administrative structures of the State
- Presence of all health agencies, schools (kindergarten to the university)

For the population and the economic activities

c) The Population

- cosmopolitanism ;
- Predominantly large youth population (more than 90% are less than 50 years old)
- Strong Elite;

d) The economic activities

- Existence of many future projects;
- Presence of several unstructured markets;
- Varying economy.

For the communal management and controlled urban development

- Human resource of the Council
- Young staff with a lot of energy and tenacity to perform their responsibility;
- A few old personnel with a lot of experience to transfer to the young ;
- mixture of young and old personnel, a harmonization of new ideas and experience;
- the wages paid regularly; -
- Housing available for some members of staff.
- Financial Resources of the Council
- financial autonomy; - support of FEICOM; -
- experience of finance and treasury personnel ; -
- local markets available; -
- tools and documents available on the management of finance; -
- taxation service available;
- well-kept records

• Relations with partners

- A strong leadership; -
- Good working relationship with MINATD, FEICOM, GIZ, PNDP.

II.3.2. Constraints for the elaboration of the Land Use Plan of Buea

The town of Buea does not only have strengths but also many constraints which could constitute some draw backs in the harmonious development of the town. These constraints will be presented in the different components of urban development.

For the natural site

• The Climate

- In the town of Buea the constraints related to climate are :
- -humidity is very high;
- -the rainy season is long and heavy;
- -the sky is almost always dull or dark.

- The relief

The presence of Mount Cameroon also constitutes a constraint for the development of the town of Buea by:

- -accidental relief;
- -weak capacity of site at the level of the sides of the mountain ;
- -strong steep water drainage causing wetness of soil and roadway or pavement
- Hydrography
- The constraints linked to hydrography in the town of Buea are:
- -The presence of vast marshy or swampy areas limiting constructions.
- The Vegetation

The constraints linked to vegetation in the town of Buea are:

- Destruction of the vegetable coverage by the destruction of forest;
- Deforestation because of the use of wood for cooking.
- The Fauna (Wildlife)

The constraints linked to the fauna are le poaching and the disappearance of certain rare species because of demand and high consumption.

- The Soil

The constraints related to the soil are:

A soil composed of rocks and complicated stones for constructions.

For the created site

The constraints are numerous

- Land tenure

The constraints related to land tenure are:

- -entanglement between the two laws on land tenure (civil and traditional);
- -low land market.
- Housing
- Concerning housing, the difficulties are based on the fact that:
- -fabrics are too densified in places (Molyko, Muea, Buea town Etc.);
- -anarchical constructions in vast spaces;
- Absence or insufficiency of preventive facilities.
- very low level of investment in real estate (total absence of real estate developer
- degradation of housing.
- Highways and various networks

Concerning the highways and various networks, the constraints are the following:

- highways insufficient;

- poor condition of the road system which ensures the connection between the city of Buea and the surrounding villages; •
- Irregular sanitation network on the tarred and untarred roads ;
- Insufficient; drinking water network
- Insufficient public lighting network
- The socio-collective equipment
- The constraints in this area are marked by:
 - -dilapidated and under exploitation of certain equipment (central market);
 - -inexistence of a true sports complex in the city;
 - inadequate localization of travel agencies;
 - -inadequacy of schools and classrooms in rural areas and peri urban;
 - absence of fencing, of proper latrines and drinking water-points in a good number of schools;
 - absence of structures for the effective management of farmers;
 - dilapidated facilities and shortage of equipment in schools;
 - - inadequacies of health structures in the periurban areas
 - medical corps falls far short of the needs
 - Tourism

The Buea Council faces an under exploitation of its touristic potential (Mount Cameroon).

- The urban environment

The urban environment of the city of Buea faces a crucial problem. This concerns the current position of the discharge of Hysacam waste.

For the population and the economic activities

- The Population
 - With regard to the population, we can cite as constraints
 - idleness of young people;
 - unemployment;
 - Exodus of students after the secondary.
- The economic activities

Concerning economic activities, the constraints are the following:

- weak economy;
- markets under used;
- Economic activities based on the primary and tertiary sector.

For communal management and mastery of urban development

The constraints are of different sorts:

- Human resource of the Council
- -existence of some ineffective members of the staff (gap /Assessment of training needs)

- -absence of policy for developing personnel, HR and their career plan;
- inadequate training for municipal councilors
- unhappy (discontented) councilors;
- indisciplined staff.
- Financial Resources of the Council
- a large part of the expenditure is going on disposable equipment and household goods;
- participation in numerous annual activities that require and consume a lot of money;the inadequacy of funds for projects
- absence of resource mobilization organ at the Council;
- the improper exploitation of the available sources of revenue;
- No update of lists of taxpayers.

Relations with the partners

- No official relations with the civil society;
- Lack of cooperation for local economic development;
- No formal relationship with the religious and traditional authorities;
- No functional cooperation - south-south and north-south ;
- Ambivalent relationship with technical services (even decentralized sectors).

II.4. PROSPECTS FOR DEMOGRAPHIC DEVELOPMENT

The prospects of development involves demographic projections of the population. According to the third general census of population and housing carried out in November 2005, the annual growth rate at the national level is 2.8 %. Therefore, our studies are based on population projections based on three assumptions:μ

Table 1: Estimate of the population in the study area according to the hypothesis of the study

Hypothesis \ Year	2014	2019	2024	2029
Low hypothesis (rate of 2, 8%)	168 378.	193 309	221 930	254 790
Medium hypothesis (rate of 4, 5%)	195 161	243 207	303 080	377 693
High hypothesis rate (rate 6%)	221 871	296 913	397 337	531 726

Source: RGP2005/estimation of COMPETING BET /BEFA, 2014

By applying this rate of growth of the estimated population of the study area in 2005 (131,325 inhabitants), we can deduce a population of 168,378 inhabitants in 2014, in the low hypothesis.

However, if the estimate of the total population based on the growth rate of 2.8 per cent is permitted normally, the systematic application of the same speed to estimate the populations of the study area in 2014, 2019, 2024, 2029 may not reflect the actual situation as regards the factors which caused the growth of yesterday which are not

necessarily those of today and certainly will not be for tomorrow which will probably go around the national average for cities in Cameroon, of 2.8 % to 6 %. That is why the estimates from 2014 to 2029, as a guide, are presented as follows: (see the table above)

II.5. THE PROSPECTS FOR ECONOMIC DEVELOPMENT

The attractive climate of this city, the presence of Mount Cameroon and the willingness of the public authorities to booster the economy will develop quickly enough the economy of the Buea Council. This economic development will happen by:

The development of tourism: With a potential virtually untapped, we can give life back to it with the implementation of outstanding touristic projects thanks to the exploitation of the capacities of Mount Cameroon which are enormous;

The organization and structuring of current activities: they are today very little structured, both in their location in the urban space and in their operation, in particular the informal activities (small trades, small businesses, food etc.);

The considerable increase in the rate of current activity: It is possible by a good structuring of the existing activities, an appropriate empowerment of the actors of this sector, a judicious choice of the spaces assigned (localization);

The creation of new employment and revenue-generating activities: It will happen by the development of the industrial sector;

Limit the displacement of the population especially the young people who constitute a strong force for the development of the municipality

III. THE DEVELOPMENT OBJECTIVES

The management objectives of the Land Use Plan of the Municipality of Buea stem from a balance sheet of a detailed diagnosis of the main elements which fall within the space of the Council (the natural site, the created site, the population, the urban economy and local governance). These objectives are the following:

1. Satisfactory state of urban networks and infrastructures:

Actions essentially consist in:

- providing an adequate network ;
- budgeting projects;
- maintaining the good condition of the infrastructure;
- Actually achieving the urban networks ;
- improving the networks;
- use the techniques and appropriate technologies;
- providing the staff with appropriate personnel;

2. Ensure adequate and decent housing

- reasonably reduce the costs of construction materials;
- provide an adequate housing;
- ensure a constant access to energy
- Put in place techniques, methods and appropriate building technologies;
- control the development of urban housing;
- enable reasonable prices of rents;
- develop access to development;

3. Satisfactory state of public facilities

- The beneficiaries are sufficiently associated;
- provide adequate installations;
- ensure the satisfactory placement of installations;
- Facilities sufficiently equipped;
- ensure the satisfactory quality of the workforce; •
- Availability and installation of adequate resources;
- facilitate access to reach the facilities;
- provide the capacity adequate use;
- provide adequate space;
- properly manage the facilities
- Provide transparent decision making procedures;
- use adequate technology;
- ensure adequate consolidation.

4. Ensure the equitable access to urban facilities and to basic social services

- Education
- medical care
- welfare
- sport and recreation
- decent employment
- Urban basic services
- drinking water supply;
- Provision of energy ;
- drainage;
- waste management
- reduce the cost of basic services;
- satisfactory level of services
- ensure proper satisfactory service.

5. Ensure a strong and reliable urban economy

- ensure the organization of the urban economy;
- encourage enough private investment initiatives;
- Facilitate access to investment funds
- availability of adequate investment;
- availability of adequate information on the urban economy;
- provide adequate collateral for investment credit
- Ensure stable and reliable local finance
- ensure a thorough knowledge of taxes;
- ensure the satisfactory management of available funds
- provide cadastral and tax plans;
- reasonably reduce the taxes ;
- combat corruption
- thorough and adequate knowledge of the taxpayers
- limit the leakage of taxes;
- Ensure a satisfactory local governance
- assure a satisfactory collaboration of actors
- appropriate forum for collaboration
- ensure adherence to the procedures of making decisions; •
- provide the adequate skills; •
- reasonably reduce the conflicts of interest;
- sufficiently allowed by the citizens
- reasonably reduce administrative bottlenecks
- restrict the traffic of influence;
- ensure good governance.

IV. PROGRAMMES TO BE REALISED

IV.1. RECALL OF DEVELOPMENT VARIANTS

After the thorough analysis of the natural site, the created site with a summary of the diagnosis by sector, of the elaboration of the problem trees identified with their causes and consequences, of the definition of strategic objectives linearized and spread out in the course of time. We can now offer two or three development scenarios for the city of Buea following three hypothesis:

- 1) Low hypothesis (variant 1)
- 2) Medium hypothesis (variant 2)
- 3) High hypothesis (variant 3)

For each of the three hypothesis specified below is a corresponding variant of precise development. Each variant has a location of the center of secondary service.

Variant I corresponds to a population of 254, 790 inhabitants in 2029,

The service center is located in the current administrative district which combines the services of the Senior and Divisional officers. This service center is located at the edge of two main roads, which link the city of Buea with the Governor's service in Mile 17 and Bova. This variant corresponds more or less to the actual situation in the town of Buea.

Variant II corresponds to a population of 377.693 habitants in 2029

The principles of the second variant are characterized by a different option of the role of the service centre. This variant is interested in the development of Mile 16 and its population. This will cause the transfer to Mile 16 of the administrative services of the the division i.e. the services of the the Senior Divisional officer.

VARIANT III corresponds to a population of 531, 726 inhabitants in 2029,

The principle of the third variant is similar to the second. It consists of the relocation of services from the Divisional Office to the liberated area by the C. D. C in Muea. In this perspective, Muea will become a real secondary center, by organizing the different services of a divisional head quarter. In each spatial unit will be built appropriate collective public facilities and in accordance with the grid of equipment to be proposed.

IV.1.1. Comparing the variants

The evaluation focuses on the locations of the secondary service centers, the other components of the diagrams of structures being the same.

Assessment Grid

The evaluation grid is made following an assessment in terms of: unsatisfactory, average, good, very good or very favorable, which may be more or less subtle.

Variants evaluation

The secondary center:

Accessibility: It must be assessed in relation to the whole of the relevant perimeter and in relation to the city or the center playing an attractive role, the accessibility of the secondary center being fully assured...

VARIANTS	APPRECIATION
Variant I The service center is located in the present administrative quarter which involves the two services (Divisional and Sub Divisional Offices). The accessibility to this area is difficult for the population of Mile 16 and its environs.	Unsatisfactory
Variant II Creation of a secondary center, the transfer to Mile 16 of the administrative services of the Divisional Office i.e. the services of the Sub Divisional Office	Medium
Variant III It consists of the relocation of services from the Divisional Office to the liberated area by the C. D. C in Muea.	Very Good

Source: Le BET COMPETING/BEFA, 2014

Population Served: In relation to the population expected in 2029 of the LUP, are these centers located in a manner acceptable to all?

VARIANTS	APPRECIATIONS
Variant I The service is only good for the population's resident in the Buea city centre and the administrative center.	Medium
Variant II This displacement of the population is only good for those who live at Mile 16, Mile 17 and Molyko	Very Good
Variant III Virtually every person can access it after opening of the ring roads to and from town. These secondary centers are located almost in the center of the town of Buea and surrounded by all the areas of urban extension.	Very Good

Source: Le BET COMPETING/BEFA, 2014

Implementation: The locations chosen, taking into account the land situation and of the likely evolution of the perimeter allow-it easy implementation of the centers?

VARIANTS	APPRECIATIONS
Variant I The city center is saturated, it will not be easy to implement this variant	Unsatisfactory
Variant II	Medium
Variant III It is located on a virgin field, there is no major difficulty but it will be necessary to create all the roads and various networks. It will necessitate the displacement of the attributions of the village communities.	Very Good

The traffic: Distribution of traffic and nuisance: The traffic generated by the locations, taking into account the long-term population is it divided on the main network or does it provoke nuisance in the habitat areas?

VARIANTS	APPRECIATIONS
Variant I Proximity with the protected green area (Mount Cameroon) and the fiftieth anniversary monument	Very Good
Variant II Similar to variant I	Very Good
Variant III Similar to variant I.	Good

Implementation: Taking into account the capacity of various stakeholders, are the proposed locations probable?

VARIANTS	APPRECIATIONS
Variant I Localization confirms what has already been done during colonization and what is actually happening on the field	Medium
Variant II This localization is possible for a center but can pose difficulties for proper functioning of the entire city of Buea..	A bit satisfying
Variant III This center is highly recommended, more and more services of the public, MAETUR, SIC and the private operators can respond together.	Very Good

IV.1.2. Citations and outcome of the evaluation of development variants

Following the previous objective assessments, the following results can be deduced:

Variants	Nombre of Very Good	Number of Good	Number of Medium	Number of unsatisfactory
Variant I	1/6 possible	2/6 possible	1/6 possible	2/6 possible
Variant II	4/6 possible	1/6 possible	1/6 possible	0/6 possible
Variant III	5/6 possible	1/6 possible	0/6 possible	0/6 possible

If:

- a very good= 17 points.
- A good = 15 points
- A Medium= 12 points
- An unsatisfactory = 10 points

We then have the following result:

Variant I: $1*17+2*15+1*12+2*10 = 79$ points

Variant II: $4*17+1*15+1*12 = 95$ points

Variant III: $5*17+1*15 = 100$ points

The variant adopted after the holding of the validation workshop which took place on December 10, 2014 in the Buea Council, the validation committee opted for variant 1. This variant recommends leaving the town as it is currently that is to say, with the same mode of operation.

IV.2. THE PROGRAMMING OF EQUIPMENT

After having presented the existing equipment in the town of Buea, we find an imbalance in the distribution of these urban facilities in the whole of the city. But also through the absence, the inadequacy and obsolescence of some equipment. It involves the importance of programming of these facilities so that they can be implanted coherently and efficiently to ensure the harmonious development of the city. In the framework of our study, we propose in this part a programming of equipment by 2029 based on our knowledge in terms of programming of equipment, on the internationally recognized standards but also on the knowledge of the environment of the town of Buea. In effect the gap to be filled being very important in terms of urban facilities, it is not for us to based on standards and propose a programming which cannot be achieved, because of the importance of the equipment to be put in place but rather to better adapt these standards to significantly reduce the gap and improve the standard of living of the populations,

while remaining realistic about the capacity of the Buea Council to put in place the projected equipment.

Based on these, we are proposing to establish a programme for the realization of collective facilities, for the Buea Council by specifying:

Their number: a number of equipment allowing a certain improvement in the lives of the populations according to chosen deadline.

Their dimension: it is standardized dimensions for the equipment considered. They may be modified by the urban actors on the basis of the realities that offers the implantation site, availability of finances and land;

Their localization: here it is all about the proposal (indication) of a site (of an implantation area for the equipment provided as a function of the availability of the space of the proximity with the other equipment of the same type and number of the population served (in case of large amount of equipment to be put in place, only the priority sites will be presented);

The deadline for implementation: the deadline in this study is the year 2029 which is the year of the end of the LUP. Therefore as a function of the number of equipment to be put in place, the urban actors will have to do every thing in their power to ensure they are all put in place before 2029 ;

The cost: the evaluation of the cost of the equipment to be put in place

IV.3. HOUSING PROGRAMME

Housing is closely linked to the population and urban development. To programme housing by 2029 requires taking into account the evolution of the population. Hence the importance of recalling in the tables below the projection of the population in 2029 in all neighborhoods which constitute the Buea Council with a low hypothesis which corresponds to a 2.8% growth rate.

Table 2: Reminder of the demographic projections by quarter according to the low hypothesis by 2029

Administrative Unit	Population 2005	Population 2014	Population 2019	Population 2024	Population 2029
BUEA	131 325	168 378	193 309	221 930	254 790
BUEA TOWN	90 090	115 509	132 611	152 246	174 788
BOKOKO	2 151	2 758	3 166	3 635	4 173
BOKWAONGO	7 653	9 812	11 265	12 933	14 848
BULU	855	1 096	1 259	1 445	1 659
CLERK'S QUARTER	2 629	3 371	3 870	4 443	5 101
FEDERAL QUARTERS	2 313	2 966	3 405	3 909	4 488
GOVERNMENT RESIDENTIAL AREA	779	999	1 147	1 316	1 511
GREAT SOPPO	19 401	24 875	28 558	32 786	37 641
MOKUNDA	773	991	1 138	1 306	1 500
MOLYKO	13 864	17 776	20 408	23 429	26 898
OLD GOVERNMENT STATION	4 078	5 229	6 003	6 892	7 912
SMALL SOPPO-WONGANGA	3 745	4 802	5 513	6 329	7 266
BONDUMA	6 382	8 183	9 394	10 785	12 382
STRANGERS EAST	869	1 114	1 279	1 469	1 686
STRANGERS WEST I (BABUTI)	946	1 213	1 392	1 599	1 835
STRANGERS WEST II (BONABERI)	1 999	2 563	2 942	3 378	3 878
VASINGI	1 315	1 686	1 936	2 222	2 551
WOKOKO	6 723	8 620	9 896	11 361	13 044
WOLIKAWO	901	1 155	1 326	1 523	1 748
WONDONGO-WANYAMOLIO	1 483	1 901	2 183	2 506	2 877
WONYAEMONGO	3 090	3 962	4 548	5 222	5 995
WOTOLO	638	818	939	1 078	1 238
SMALL SOPPO-WOTEKE	818	1 049	1 204	1 382	1 587
SMALL SOPPO-WOVILA	2 232	2 862	3 285	3 772	4 330
WONYALYONGA	4 453	5 709	6 555	7 525	8 639
BONAKANDA	1 090	1 398	1 604	1 842	2 115
BOVA I	1 395	1 789	2 053	2 357	2 707
LOWER BOLIFAMBA	809	1 037	1 191	1 367	1 570
BOKWAI	1 026	1 315	1 510	1 734	1 991
BOMAKA	145	186	213	245	281
DIBANDA	1 677	2 150	2 469	2 834	3 254
LIONGO	633	812	932	1 070	1 228
LOWER MUEA	12 580	16 129	18 518	21 259	24 407
LOWER BOKOVA	597	765	879	1 009	1 158
LOWER BOLIFAMBA	2 689	3 448	3 958	4 544	5 217
UPPER MUEA	1 512	1 939	2 226	2 555	2 934
TOTAL POPULATION OF THE STUDY AREA	114 243	146 476	168 164	193 063	221 648

Source: COMPETING BET /BEFA, 2014

Table 3: Estimate of the population of the study area according to the low hypothesis

Hypothesis \ Year	2014	2019	2024	2029
Low hypothesis (growth at 2, 8%)	168 378.	193 309	221 930	254 790

IV.3.1. Estimation of land needs in the Buea Council by 2029

According to the last General Census of the Population and the Housing (GCPH) in 2005, the Land Use Plan (LUP) has estimated the population of Buea in 2014 to be 168378 inhabitants and has projected for 2029 a population of 254790 souls according to the low hypothesis where the growth rate of the population is 2.8 %. This population cohabits on a total land area of the municipality estimated at 8700 ha and on an urban perimeter of 7934 ha. It shows that the density of the population on the whole of the territory of the Buea Council in 2014 is 19 per/ha and by 2029 it will be 33 per/ha. Concerning the density of the population on the urban perimeter of the Buea Council it is 21 per/ ha, and by 2029 it will be 32 per/ha.

In view of the fact that the average number of inhabitants of each household is estimated at 5 people and the average size of a piece of land in the Buea Council is estimated at 300 m on an urban perimeter of 7934 ha, the need for land by 2029 is estimated at 2965 ha. In addition, if we estimate the average distribution of the occupation of the land in all the neighborhoods at:

- 65 % for housing;
- 10% for equipment;
- 25% for highways.

The needs in residential land can be estimated in the following manner

Table 4 Estimate of needs in residential land

Year	2014	2019	2024	2029
Needs in residential land (ha)	1273.	1461	1678	1927

Source: Le BET COMPETING/BEFA, 2014

IV.3.2. Estimation of housing needs

The obvious growth of the population by 2029 in the town of Buea requires a taking into account of the aspect related to housing. Because this population will have a clear need in housing. The number of houses can be obtained only by taking into account the number of persons per slot which in Buea is estimated at 5 persons per dwelling. If based on this estimate, in 2014 with a population of 168,378 souls, the number of houses

is approximately 33675 dwellings. By 2029 with an estimated population of 254,790 souls, the number of houses will be approximately 50958 dwellings. Because of this, the housing needs in the Buea Council between 2014 and 2029 amount to approximately 17283 housing units, or approximately 1152 housing units/ year.

DIAGNOSED REALITY

- Poor habitat quality for the segment of the population with lower incomes and means;
- Habitat generally inadequate for the poor.

HABITAT IMPROVEMENT PROGRAMME

Elements of the habitat improvement programme

A) Areas of existing habitat

- Restructuring areas of degraded habitat (Bolifamba, Muea, Bueatown, Molyko);
- Densification and consolidation of areas of under occupied habitat (Wotolo, Bomaka, Liongo, Small soppo, Woteke Lower bokova)
- Rehabilitation of dilapidated houses.

B) Habitat areas to create

- Social habitat for the poor;
- Communal subdivision (lay outs);
- Programme of subdivision (lay outs) of resettlement areas;
- Programme of private subdivisions (lay outs), high standard

C) Development programme of degraded habitat areas

- Operational Procedures
- Operational procedures for restructuring of areas of the habitat include:
 - Identify areas to development;
 - Examine and justify the needs of development;
 - Negotiate the financing;
 - Prepare development programmes;
 - Mobilize local resources and the participation of local stakeholders;
 - Implement the restructuring programs by:
 - Improving the networks of roads and drainage;
 - Extension of public utilities such as drinking water and electricity;
 - Improve the facilities of sewage water;
 - Improve public and community facilities
 - Rehabilitate the dilapidated houses;
 - Relocate displaced persons;
 - Establish the land titles;
 - Manage and maintain the sites.

D) Program of densification and consolidation of under occupied habitat areas

Several empty plots or partially arranged plots are located on the inner and intermediate areas of the city. These plots must be identified and arranged for an optimal use of the land and the existing infrastructure and equipment.

- Operational procedures
- Identify the plots and sites which must be occupied;
- Extend and improve the roads, drainage and public facilities of sites;
- Facilitate access to financing of habitat and technical assistance;
- Impose taxes on the plots that are less arranged and not built.

E) Social habitat programme

- Operational Procedures:
- select and acquire sites for social housing;
- negotiate the funds;
- measure the sites for social;habitat
- develop plans of subdivision (lay outs);
- partially develop the road networks and drainage;
- provide the basic utilities such as water and electricity;
- allocate the plots to the poor ;
- assist financially and technically the poor;
- control the development and construction on the sites;
- Improve gradually the sites for social housing.

F) Communal subdivisions (lay outs) programme

The Council holds the sole responsibility of insuring that well arranged and affordable land is available for all categories of Social housing. In view of this, she must encourage and facilitate the provision of urban land by all potential compensation. However, the Council must preview enough land to make up for the deficit between needs for housing and the land actually provided by the actors involved in land management or development.

The communal subdivisions have to be made within the reserves of the Council land

G) -Operational Procedures:

The operational procedures for the communal subdivisions are as follows:

- Estimate the annual request for land for habitat; -
- Facilitate the supply of land by the promoters of habitat; -
- Acquire land for the local communal subdivisions on appropriate and suitable sites;
- Estimate the deficits of supply in land for habitat;

- Demarcate the local communal subdivisions;
- Prepare preliminary plans for the subdivisions;
- Assign the plots to the interested parties; -
- Check the construction process on the subdivisions ;
- Check the land transactions on the subdivisions.

IV.4. COLLECTIVE EQUIPMENT PROGRAMME

The communal facilities are composed of:

- Education; equipment
- Health facilities;
- Welfare equipment; -
- Civic and cultural equipment
- Cultural facilities
- Markets; -
- Urban parking facilities; -
- Facilities for sports and recreation; -
- Public and community halls

IV.4.1 Educational Facilities

Education in Cameroon is divided into 4 major groups. Also, from the base to the tip of the educational pyramid, we include:

- Basic education (kindergarten, nursery school, primary school) ;
- secondary education (SECONDARY SCHOOL, TECHNICAL, INDUSTRIAL AND COMMERCIAL COLLEGE, TECHNICAL INDUSTRIAL AND FINANCE COLLEGE, general or technical college/high school, NATIONAL TECHNICAL TEACHER TRAINING COLLEGE, NATIONAL GENERAL TEACHER TRAINING COLLEGE) ;
- Vocational education and learning (vocational training center);
- Higher education (university, schools/higher institute of vocational training).

The programming of the equipment according to this partitioning is of particular interest in the city of Buea, which is more important at the basic level and closes gradually toward higher education. The equipment for the teaching of basic and secondary education receives an outline of standards considered realistic like those contained in the draft of the "PRACTICAL GUIDE OF PDL" of 1987.

PRESENT SITUATION

IV.4.1.1 Basic Education

The Buea Council counts within her jurisdiction 31 nursery schools and 42 primary schools. The table below shows the ratio between the size of the population and the strength of the equipment of basic education.

Table 5: Ratio of the equipment of basic education in the Buea Council on a low hypothesis with a population growth rate of 2.8.

Type of school	Number	2014		2029	
		Population	Ratio	Population	Ratio
Nursery	31	168 378.	1/ 5432	254 790	1/ 8219
Primary school	42		1/ 4009		1/6066

Source: Le BET COMPETING/BEFA, 2014

IV.4.1.2 Secondary Education

The Buea Council counts within her jurisdiction 05 high schools, 01 technical high school, 01 Technical, Industrial and Commercial College (CETIC), 23 private secondary schools.

Table 6 *Ratio of equipment of secondary education in the Buea Council, low hypothesis with a population growth rate of 2.8*

Type of school	Number	2014		2029	
		Population	Ratio	Population	Ratio
CETIC	01	168 378	1/168 378	254 790	1/254 790
High School	05		1/33675		1/50958
Private secondary school establishments	23		1/7320		1/11078
Technical High School	01		1/168 378		1/254 790

IV.4.1.3 Higher Education

There are about 45 institutions of higher education in the town of Buea. These include the University of Buea, the "Pan African Institute for West African Development (PAID-WA), the CEFAM etc.

DIAGNOSED REALITY

After a detailed analysis of the state of the place of the educational facilities in the Buea Council, it is found that these facilities are facing several problems which are summed up in:

- Insufficiency of equipment;
- High gap between the manpower of the institutions of basic education and those of secondary education.

PROPOSED PROGRAMME

This programming takes into account the standards laid down by UNESCO or by the objectives of the 6th plan. These standards are the following:

Regarding the maternal, the standards provide for:

- 25 students per class;

- 01 class for 1700 inhabitants;
- 04 classes per establishment;
- 0.5 ha of land per establishment.
- Concerning the primary, the standards provide for:
 - 01 class for 50 students;
 - 01 class for 300 inhabitants ;5 to 6 classes per establishment;
 - 1ha per establishment including the playgrounds and the administration.
- Concerning the general secondary education, the standards provide for:
 - 45 students per class; -
 - 01 class for 1,000 inhabitants; -
 - 1ha per establishment;
 - 12 classes by college.
- Concerning technical education, the standards provide for:
 - 45 students per class;
 - 12 classes by college;
 - 1 ha by college;
 - 1 class for 2,200 inhabitants.

Table 7: Programming of educational equipment in Buea, low hypothesis

Type of equipment	Existing Equipment	Equipment to be created	Programming threshold					Observations
			Population	Ratio	Localisation	Surface area	Type of Construction	
Nursery	31	7	254 790	1/ 6800	BOKWAONGO GREAT SOPPO BONDUMA WOKOKO	0,5ha	RDC	The existing equipment must be renovated The sites listed are the priority. Some surface areas are revised with an increase in order to take care of possible enlargements.
Primary School	42	100		1/1800	VASINGI WONDONGO- WANYAMOLIO BONAKANDA LOWER BOLIFAMBA BOVA I UPPER MUEA	1,5	R+2	
Private secondary school establishments	23	/		1/12000		1,5ha	R+3	
CETIC	01	8		1/26400	GREAT SOPPO MOLYKO LOWER MUEA	1,5ha	R+3	
General Education High School	05	16		1/12000	BOKWAONGO MOLYKO GREAT SOPPO WOKOKO LOWER MUEA	2ha	R+3	
Technical High School	01	8		1/26400	GREAT SOPPO MOLYKO LOWER MUEA	2ha	R+3	

IV.4.2. The socio - educative Equipment DIAGNOSED REALITY

Retained as socio-educational facilities in the framework of our study, the equipment or where they meet to discuss, play, debate, organize other activities, commemorate and celebrate, listen, watch, and many other reasons. They are responsible to provide the people of the town of Buea, current or specialized social services

PROPOSED PROGRAMME

The following table gives us the equipment selected in this category, their function, and their programming. The criterion of evolution of the population is not taken into account here in view of the function played by these equipment and also in view of the number that the population of Buea can take by 2029, this programming remains valid.

Table 8: Programming of the socio-educational facilities in the Buea Council

Type of equipment	Function	Number	Programming threshold	
			Localization	Surface area
Public Institutions of early childhood (Youth House)	Whose role is to allow an extra life to the family and at school, they must be programmed in the unit of the neighborhood "quarter"	Given that there are quarters in the town Having more than 10 000 inhabitants	In the vicinity of sports facilities of the quarters or schools (Bokwaongo, Wokoko, Molyko, Muea)	0,25 ha
Handicapped centres	Allows you to gain awareness and to teach the disabled persons to live with their disability, and to mingle with their peers.	One in the town to serve the whole Council	The site must be located in a quiet area, away from the heavy traffic of the city center, that is to say preferably in the peri-urban zone. The equipment will be accessible through private vehicles, taxi, and motorcycle and by pedestrian road	1,5ha
Home of Retired persons	The homes of pensioners are administrative centers in which the pensioners go to submit their problems of economic and social nature		It must be served by primary and secondary road and it may be situated in a place like Tole	0,3 ha
Institute for re-education and re-habilitation	The Institutions for re-education and rehabilitation are the urban facilities in support of the rehabilitation of the wounded and their reinsertion into the social environment		Ditto(same) for the center for handicapped, Bokwaongo	0,25 ha

Source: Le BET COMPETING/BEFA, 2014

IV.4.3. Sanitary Equipment

DIAGNOSED REALITY

The health facilities in the city of Buea are represented by approximately 27 health facilities including 16 public and 11 private centers among which we can count three hospitals (military, Regional, St Veronica), a few integrated centers, private clinics, and care services. In the light of all this, the tables below show the ratio in terms of population served by a health equipment of the current situation to that projected in 2029 if one takes into account a population growth rate of 2.8 per cent and in considering the current equipment for the whole of the Council

Table 9: Ratio of sanitary facilities in the Buea Council, low hypothesis

Type of health establishment	Number	2014		2029	
		Population	Ratio	Population	Ratio
Hospital	03	168 378.	1/56126	254 790	1/84930
Integrated Health Centre	20		1/8419		1/12740
Health Posts/Clinics	04		1/42095		1/63698

Source: Le BET COMPETING/BEFA, 2014

PROPOSED PROGRAMME

In order to strengthen the capacity of health facilities in the city of Buea, the State has undertaken the construction of a regional hospital on an area of 5 hectares.

In complying with this administrative boundaries and in view of the difficulties encountered in the health sector in Buea. We offer this programming for the Buea Council in the case of a population growth rate of 2.8 per cent i.e. for a population of 254,790 by 2029

Type of Facility	Existing facility	Facility to be created	Programming threshold		Characteristics		Observations
			Population	Ratio	Localization	Surface area	
Hospital	3	3	254 790	1/ 84930	Molyko ; Buéa town ; Bokwango	/	The current ratio is insufficient, however an enlargement of the staff premises and the technical plateau is essential
Divisional Medical Centre	1	1		1/254790	Great soppo	3 ha,Optimal capacity 200 beds, that is 150 m ² per bed	Will permit the taking in of the surplus of the sick of other health institutions
Integrated Health Centre	20	19		1/12740	bokwango Great soppo Molyko Bonduma Wokoko Lower Muea	1ha, Optimal capacity 70 beds, that is 150 m ² per bed	
Health Posts/Clinics/ Itinerant(Mobile) Health Centres	3	3		1/84930	Muea ; Bolifamba ;	0.5ha Optimal capacity 30 beds, that is 150 m ² per bed	The created facilities are ambulatory care centres. Those existing must be enlarged

Source: Le BET COMPETING/BEFA, 2014

IV.4.4. Market Facilities

PRESENT SITUATION

In the town of Buea, a number of markets can be counted amongst which are:

- Buea Main Market
- Fruits Market
- Bokwango Market
- Buea Town Market
- Great soppo New Market
- Tole Market
- MUEA Market
- Mile 17 Market
- Mile 16 Market
- Great Soppo Old Market
- Small SoppoMarket

DIAGNOSED REALITY

Market facilities in the town of Buea suffer many problems related to:

- some markets encroaching on the road ;
- markets poorly constructed;
- markets poorly located;
- inadequate space;
- bad site;
- inaccessibility ;
- Under use ;
- Over use.

PROPOSED PROGRAMME

To provide a solution to the difficulties of the market facilities, several actions have already been undertaken. For example in the framework of the implementation of the emergency plan prescribed by the President of the Republic of Cameroon, a site with an area of 05 hectares has been identified for the construction of a supply market of in the Buea Council. This market might have an influence on the whole of the city. The site chosen to establish this market is the Molyko quarter which is a site strategic enough in the sense that all the population of the Council regardless of their place of habitation will be able to access it. The Land Use Plan also prescribes the displacement of some markets which encroach on the road such as the Mile 16 market (Bolifamba), Muea market etc ... However, the implementation of these approaches to solutions will not completely solve

the problems of availability of market facilities, thus the need for planning for the next 10 to 15 years.

In the document entitled "The Yaounde agglomeration markets facilities, technical element of the technical and financial programming, general planning, mastery of the construction project and management" developed in 2004, we have a few programming standards of markets facilities in Cameroon including:

Principal markets

The programming elements are contained in the following table:

Table 10 *Indicative programme of principal markets*

Population served	Total number of sales points	About food products	Total prepared surface area in m2	Spread of under cover	Prepared box undercover: Slaughter house and cool store	Shop or kiosk on the exposed part	Sales points on the exposed part
30 000	1 050	525	5 250	263	53	53	683
40 000	1 400	700	7 000	350	70	70	910
50 000	1 750	875	8 750	438	88	88	1 138
70 000	2 450	490	12 250	613	123	123	1 593
150 000	5 250	1 575	26 250	1 313	263	263	3 413
300 000	10 500	5 250	52 500	2 625	525	525	825

Secondary Markets

The programming elements are contained in the following table::

Table 11: *Indicative programme of secondary markets*

Population served	Total number of sales points	Food products	Total prepared surface area in m2	Spread of under cover	Prepared box undercover: Slaughter house and cool store	Shop or kiosk on the exposed part	Sales points on the exposed part
5 000	175	175	875	44	9	9	114
10 000	350	350	1 750	88	18	18	228
15 000	525	420	2 625	131	26	26	341
20 000	700	560	3 500	175	35	35	455
25 000	875	700	4 375	219	44	44	569

Table 12: Ratio of market facilities of the Buea Council, low hypothesis by 2029.

Type of Facility	Existing Facility	Facility to be created	Programming threshold				Observations
			Population	Ratio	Localization	Surface area	
Principal Markets	7	7	254 790	1/36399		0,2ha	The indicated sites are the priority
Secondary Markets	4	4		1/63698		0,2ha	

Source: Le BET COMPETING/BEFA, 2014

IV.4.5. Sporting facilities

PRESENT SITUATION

In the area of sports, the Buea Council has:

- Four (04) football stadiums;
- A tennis court;
- The Molyko omnisports stadium

"We summarize in the table below the ratio between the facility and the number of people they serve for the years 2014 and 2029, considering the current facilities.

Low Hypothesis: The annual growth rate of the population is 2, 8%

Table 13 Ratio of the sporting facilities for the town of Buea according to low hypothesis

Sporting facilities	Number	2014		2029	
		Population	Ratio	Population	Ratio
Football Stadium	03	168 378	1/56126	254 790	1/84930
Tennis Court	01		1/168 378		1/254 790
Omnisport(Multipurpose) Stadium	01		1/168 378		1/254 790

Source: Le BET COMPETING/BEFA, 2014

In view of the foregoing, it is important to realize that the ratio between the size of the population in 2014 and expected in 2029, is substantially higher than the sport facilities available in the city of Buea

DIAGNOSED REALITY

Sporting facilities in the town of Buea are exposed to a number of difficulties among which we can cite:

- Bad state of facilities;
- Under developed facilities ;
- Unregulated facilities ;
- The delapidating of facilities.

PROPOSED PROGRAMME

In the current context and in the light of everything that prevails, improving the demand in sporting facilities in the city of Buea becomes urgent. It will be a matter of rehabilitating the omnisport stadium of Molyko and the stadium of Buea Town which are the most representative sports equipment in the town of Buea in order to prepare for the receipt of the ACN (African Cup of Nations), women in 2016 in Cameroon. However given that the ratio between the size of the population being largely superior to the sporting equipment available in the city, there is an urgent need to schedule other facilities for the next 10 to 15 years to come.

Table 14 *Programming of sporting facilities for the town of Buea at the low hypothesis*

Type of facility	Existing facility	Facility to be created	Programming threshold				Observations
			Population	Ratio	Localization	Surface area	
Football field	03	3	254 790	1/84930	GREAT SOPPO BONDUMA LOWER MUEA	2ha	The sites listed are for prepared grounds with bleachers (terraces) for the meetings of local clubs. The other land will be simple platforms located in the popular neighborhoods (at least 8,000 inhabitants)
Tennis Court	1	1		1/ 254 790	Molyko	1.5ha	The sites listed are for prepared grounds with bleachers (terraces) for the meetings of local clubs. The other constructions will be without bleachers (terraces) just for the amusement of the population in the popular neighborhoods (at least 8,000 inhabitants)
Omnisport Stadium	1	1		1/254 790	BOKWAONGO	15ha	

Source: Le BET COMPETING/BEFA, 2014

IV.4.6. Cultural Facilities

PRESENT SITUATION

The town of Buea has within her jurisdiction a cultural facility of renown which is namely: the monument of the fiftieth anniversary.

DIAGNOSED REALITY

The town of Buea is a real melting-pot of culture, this notwithstanding, it suffers a glaring lack of facilities to enhance this culture. The only facility worth its while of real cultural value is the monument of the fiftieth anniversary. This facility alone does not represent the entire cultural wealth of Buea.

PROPOSED PROGRAMME

To provide an element of solution to this situation the LUP 2029 proposes:

- The Construction of an open air Amphitheatre in Bongo Square;
- The opening of a museum in the city where the cultural wealth of the people of Buea will be exposed
- Opening of a cinema hall;
- Opening of public libraries in the city.

The table below shows the summary of the programming of the cultural facilities

Table 15: Programming of cultural facilities; Buea Council; low hypothesis

Type of facility	Existing facility	Facility to be created	Programming threshold				Observations
			Population	Ratio	Localization	Surface area	
National Museum	/	1	254 790	1/254 790	Clerk's quater	0,011ha	/
Cinema Hall	/	1		1/254 790	Molyko	0,094ha	In view of the context in which it is programmed it could also be used for theatrical performances
Municipal Library/ Media library	/	1		1/254 790		0,05ha	/

Source: Le BET COMPETING/BEFA, 2014

IV.4.7. Security Facilities

Security facilities are the facilities necessary and indispensable for the security of populations. Because of this, these facilities are programmed for the populations of all social strata. The thresholds of the population needed for the introduction of security facilities are for most part included in the decree No.2002/003 of January 04, 2002 on the organization of the General Directorate of National Security. In this decree, the programming standards are the following:

Article 170. : (1) The Police station of Public Security is located in each urban agglomeration with at least 10,000 inhabitants. Above 50,000 inhabitants, it can be created a Central Police Station and Divisional Police Stations.

Article 186: (1) Placed under the authority of a Head of Post having the rank of head of office of the Central Administration, the Public Security post ensures the security of proximity:

In an urban area or semi-urban area not requiring the establishment of a Police Station of Public Security;

In a neighborhood or group of neighborhoods within the territorial jurisdiction of a Police Station of Public Security

IV.4.8. Tourism facilities

PRESENT SITUATION

Tourism facilities in the town of Buea can be presently summed up in 27 hotels and palaces.

DIAGNOSED REALITY

The town of Buea suffers from a lack of development of touristic sites.

PROPOSED PROGRAMME

The Land Use Plan of Buea 2029 provides:

- The development of touristic sites on the flanks of Mont Cameroon;
- The Construction of tracks accessible to vehicles up to a certain height of the Mountain ;
- The construction of a pedestrian walkway up to the summit of the Mountain ;
- planting ornamental trees on spaces declared non aesthetic in this case on the flanks of the mountain. Space that could be turned into a park.

IV.5. HIGHWAYS PROGRAMME AND DIVERS NETWORKS

DIAGNOSED REALITY

The highways and the various networks are facing many difficulties in the town of Buea. It is for example:

- The inadequacy of highways,
- The poor condition of the existing road system;
- The network and the quality of drinking water are unsatisfactory
- Sanitation is defective and insufficient
- Public lighting very insufficient and frequent low tensions
- Absence of the optical fiber.

PROPOSED PROGRAMME

IV.5.1. Road Network

In order to prevent the eruption of Mount Cameroon, reduce traffic congestion and ensure a smooth flow to the interior of the city, reduce the cost and time of travel, increase the comfort and convenience of travel, facilitation of movement on the axis, minimization of accidents on the different axis and access to the different neighborhoods , we are advocating for the development of the land use plan of the city of Buea, the rehabilitation, expansion and development of tracks of road traffic below:

- Ekande Axis – Mile 17 (penetrating West) in 2x2 lanes with earth-full central: length 1.5 km ;
- Muea Axis – Mile 17 (penetrating is) in 2x2 lanes with earth-full central: length 1.8 km ;
- Tole Axis - Bwiyuku (penetrating Northwest) in 2x1-track: length 6 km ;
- Buea Town Axis - Moliko Camp - RN5 in 2x1-track: length 9 km ;
- Carrefour BOKOM Axis - native Molyko in 1X2 tracks: length 1.3 km ;
- RN5Axis - Bowanda-Bomaka Layout - Dubai Center in 1X2 tracks: length 6km ;
- Small Soppo Native Axis - Great Soppo in 1x2 tracks: length 2.2 km ;
- RN5Axis - Schestreet in 1X2 tracks: length 1.5 Km ;
- Rehabilitation of 7.5 km of road in the Bomaka quarter in 1X2 lanes;
- Rehabilitation of 2.5 km of road in the Bolifamba quarter in 1X2 lanes ;
- Rehabilitation of 3.2 km of road in the Muea quarter in 1X2 lanes.

Transportation and travel

- Creation and construction of two bus stations (one hectare each) : at Liongo and another at Ekande ;
- Elimination of the bus station of Mile 17.

Enlargement and development of junctions

- BOCOM junction on the RN5 ;
- Bolifamba junction ;
- Arangement of the stadium junction (place of the market) ;

- Arrangement of the Kahwa Medical Clinic junction;
- Malingo (pharmacy AMAZING) junction
- Molyko Camp junction;
- Great Soppo junction ;
- Dubai Center on the RN5 junction in the form of roundabout.

Installation of traffic lights

- Mile 17 junction ;
- BOCOM junction ;
- Muea junction;
- Malingo junction;
- Molyko stadium junction ;
- Great Soppo junction ;
- Moliko Camp junction ;
- Maintenance and strengthening of the horizontal and vertical signs on the major roads of the city.

Crossing Works

- Construction of a collapsed double culvert 2X2X1, 5 cm on the river Monica (entrance of American International University Institute) Liondo quarter;
- Construction of five (05) double culverts 2X2X1, 5 cm in the neighborhood of Bolifamba;
- Construction of three simple culverts 2X1, 5 cm in the neighborhood of Bomaka;
- Rehabilitation and expansion of the bridge (6m range) serving the neighborhood of Small Soppo Native.

Drinking Water

- Maintenance of equipment and existing drinking water infrastructure;
- Construction of 60 drilled wells in the various neighborhoods and surrounding areas;
- Creation of a new drinking water abstraction factory of 10 000 m³/day;
- Expansion of the network of drinking water in all neighborhoods and surrounding areas.

Electricity;

- Maintenance of equipment and existing electricity infrastructure
- Extension of the electricity network in all the new neighborhoods.

Public Lighting

- Maintenance and strengthening of the existing network of public lighting in the entire city;
- Extension of 15 km of public lighting in the city center, neighborhoods and peripheries.

Sanitation

- Ditch cleaning of gutters, nozzles, and existing culverts
- Construction of 10,000 linear meter (ml) of drains of trapezoidal cross-section going from BueaTown up to Bowanda (outlet potential);

- Construction of 37, 2 km of ditches of brickwork, variable section;
- Creation and construction of a station for the treatment of sewage drain.

Telecommunication and NICT

- Maintenance and strengthening of the network of existing telecommunications;
- Connection to the optical fiber and extension in the town of Buea;
- Construction of three community tv centers;
- Pitching the various neighborhoods of the city with the network.

IV.6. PROGRAMMING FOR OTHER PROJECTS

IV.6.1. On the environmental plan

On the environmental plan, the Land Use Plan of Buea 2029 advocates:

- Implementation of a draft regulation of the urban discharge (HYSACAM) which does not respect the environmental standards;
- Moving of the discharge of HYSACAM (Muea) to two potential sites in the town of Buea (Lower Muea and Tole) or outside of the city;
- Provide for a system of treatment associated with a basin of sewage treatment of drain.
- Beautification project and the decoration of the city.

IV.6.2. The agricultural plan

On the agricultural plan, the Land Use Plan 2029 calls for the construction of six agricultural posts in:

- Biyoko ;
- Mile 16 (Bolifamba),
- Muea,
- Bonakanda,
- Bojongo,
- Bissoka on an area of approximately 5000m² each.

V. PROIRITY INVESTMENT PROGRAMME (PIP)

V.1. THE OBJECTIVES OF THIS PROGRAMME

- The rehabilitation of socio collective facilities (schools, health, etc.), »
- The improvement and expansion of the network of highways to obtain a better urban mobility,»
- Improving the security of populations by the expansion of the network of public lighting,
- Improvement of the environment by proper sanitation, »
- The creation of new socio collective facilities,»
- The rigorous programming of expenditure in respect of public facilities

It presents the projects by sector, the costs, the period of creation, the characteristics of the project, the location in the communal space.

V.2. MAIN REALIZATION PHASES, INVESTMENT PRIORITY PLAN AND COST

The priority investment programme is composed of projects related to new works or to the rehabilitation of existing infrastructure but in poor condition, because of the antiquated or inadequate maintenance. To do so, the objectives of the PIP are divided into New and Rehabilitation projects.

Nursery Schools:

The construction of a nursery school including the administrative and health block as well as the playground was estimated at \$30 million CFA francs in 1987. Today, 27 years after, we can estimate the inflation rate at 20 %. In applying this rate, a nursery school would cost 36,000,000 FCFA.

In January 1998, an estimate of the MINEDUC was evaluated at 4.5 million the cost of a Nursery, classroom not including the playground. Today with inflation estimated at 20 %, this cost can be reasonably estimated at 6,000,000 FCFA.

Public Primary Schools:

The BIP funding varies from year to year. The classrooms are twinned
In 2014, the cost of financing of two rooms is 18 000 000FCFA
Public institutions of secondary technical education:

The cost of a classroom is 9 000 000FCFA

Public establishments for general secondary education

The cost of a classroom is 9 000 000FCFA

Health Facilities

The BIP previewed in 2004-2005 approximately 30,000,000 FCFA for the construction of a health center. A decade after, with an inflation rate estimated at 20 %,

this cost would be approximately 36,000,000 FCFA, not including the equipment and the land

Community Home in R+1 plus external arrangements

For a community home, we have:

- Surface = $15m \times 12m \times 2 = 360m^2$
- External Facilities (parking, garden courts, mouvement) $300m^2$
- The cost of m^2 built is 150 000 FRS. Thus we have $200\ 000F \times 360 = 72,000\ 000$ FRS
- The external facilities: 20000 FRS for square meter and we have: $20000F \times 300 = 6000\ 000$ FRS
- A home therefore will cost 80 000 000 FRS
- A handicapped center: It can occupy half a hectare and several buildings (offices, halls of hospitalization, care,).
- Built Surface area approximately:
 - 100 m^2 for the administration
 - Hospitalization 200 m^2
 - Care and Rehabilitation (Reeducation): 500 m^2
 - Total built area: 800 m^2

Cost of constructions: We are evaluating the m^2 at 125 000 FRS. The cost of the buildings is therefore at $125000 \times 800 = 100,000,000$ FRS

External Facilities: $5000 \times 4200 = 21,000,000$

Cultural center and museum, area $800m^2$ each at 125,000F for $m^2 = 100,000,000F$

Table 16: Summary of the priority investment projects

Title	Carrier	Qty/surf.	Locality	Cost FCFA	Deadline	Remark
Education Facility						
Creation of Nurseries	State, Funders	7	CB	420000000	2014-2029 and beyond	
Primary Schools	State, Funders	100	CB	900000000	2014-2029 and beyond	
General secondary	State, Funders	16	CB	144000000	2014-2029 and beyond	
Technical secondary	State, Funders	16	CB	144000000		
Socio- educative						
Community home/Youth houses(Centres)	CTD, State, FEICOM, Funders	1	CB	80000000	2019-2024	
Handicapped Centres	CTD, State, FEICOM, Funders	1	CB	120 000 000	2014-2019	
Health Facilities						
CSI	State, Funders	10	CB	36 000 000		
Creation of a Regional Hospital	State, Funders		CB	1000 000 0000	2014-2024	
District Hospital	State, Funders	1	CB	500 000 000	2024-2029	
CMA	State, Funders	2	CB	25 000	2014-2019	
Sporting Equipment						
Omnisport Stadium	State	1	CB			
Multipurpose Fields	CTD, FEICOM	1	CB	100 000 000	2019-2024	
Football fields	CTD	3	CB	5 000 000	2014-2019	
Socio-Cultural Facilities						
Construction of a Cultural Centre	CTD, State, FEICOM	1	CB	100 000 000	2024-2029	

Title	Carrier	Qty/surf.	Locality	Cost FCFA	Deadline	Remark
Construction of a Museum	CTD, State	1	CB	100 000 000	2024-2029	
Construction of a municipal library	CTD, Feicom	1	CB	5 000 000	2014-2019	
Industrial Activities						
Site for polluting industry	CTD, Hysacam	10ha	CB	10 000 000	2014-2019	Compensation package
Tourism						
Development	CTD, Feicom	1	CB	50 000 000	2024-2029	
Development of the feet of the mountain	CTD, State	3	CB	1 000 000 000		Touristic centre
Development of walkways to access the summit of the Mountain	CTD, Feicom, Funders,	5	CB	50 000 000	2014-2024	Arrange progressively
Environment						
Creation and protection of land reserves	CTD, State	1000 ha	CB	50 000 000	2014-2019	Extension zone
Creation and protection of land reserves in the very long term after 2029	CTD, State	1000ha	CB	50 000 000	2024-2029	
Demarcation and protection of areas that are non-aesthetic	CTD, Feicom		CB	15 000 000	2014-2019	Plant, supervision and regular control
Creation of parks	CTD	11	CB	50 000 000	2019-2024	
Habitat						
Create a supply market at Molyko	State	5ha			2019	
Create social housing in Molyko	CTD, Etat	5ha	CB	500 000 000	2019-2024	Create the habitat social style SIC on the rest.
Restructuring or renovation of some neighborhoods - Bolifamba, MUEA, Bokwaongo, MOLYKO	CTD, Feicom, State, Funders		CB.	3 000 000 000	2019-2029	Feasibility Study, prior planning areas of resettlement areas

Source: Le BET COMPETING/BEFA, 2014

Priority Investment Program of Roads others networks

N°	PROJECT	Linear	Unit price	Total price HT	Date
1	Axis Ekande-Mile 17 (West penetrating) in 2*2 lanes with a central reservation	1,5 km	890 536 346	1 335 804 519	2020-2022
2	Axis Muea-Mile 17 (East penetrating) in 2*2 lanes with a central reservation	1,8 km	890 536 346	1 602 965 423	2020-2022
3	Axis Tole-Bwiyuku (North West penetrating) in 1*2 lanes	6 km	550 455 450	3 302 732 700	2018-2020
4	Axis Buéa Town –Molyko Camp-RN in 1*2 lanes	9 km	550 455 450	4 954 099 050	2020-2021
5	Axis Bocom-Molyko Natives junction in 1*2 lanes	1,3 km	550 455 450	715 592 058	2021-2023
6	Axis NR5- Bowanda-Bomaka layout- Dubai Center in 1*2 lanes	6 km	550 455 450	3 302 732 700	2020-2021
7	Axis Soppo Small natives-Great Soppo in 1*2 lanes	3,2 km	550 455 450	1 761 457 440	2018-2020
8	Axis NR5- Schestreet in 1*2 lanes	1,5 km	550 455 450	825 683 175	2020-2021
9	Réhabilitation de 7,5 km de route dans le quartier Bomaka en 1*2 voies	7,5 km	380 356 250	2 852 671 875	2018
11	Rehabilitation of 2.5km of road in the Bolifamba quarter in 2*1 lanes	2,5 km	380 356 250	950 890 625	2018
12	Rehabilitation of 3.2km of road in the Muea quarter in 2*1 lanes.	3,2 km	380 356 250	1 217 140 000	2019
	SUB TOTAL 1			22 821 769 592	
	DISPLACEMENT AND TRANSPORT				
13	Creation and construction of two passenger stations. One hectare each.	2 U	1 000 000 000	2 000 000 000	2022-2024
14	Construction of two truck fleets (10,000 m ² each)	2 U	300 000 000	600 000 000	2020- 2022
	SUB TOTAL 2			2 600 000 000	
	ENLARGEMENT AND DEVELOPMENT OF JUNCTIONS				
15	Bocom junction on RN5	U	90 534 657	90 534 657	2018
16	Bolifamba Junction	U	90 534 657	90 534 657	2018
17	Development of the stadium junction	U	90 534 657	90 534 657	2018

N°	PROJECT	Linear	Unit price	Total price HT	Date
18	Development of Kahwa Médical Clinic junction	U	90 534 657	90 534 657	2018
19	Development of Malingo Junction	U	90 534 657	90 534 657	2018
20	Development of Molyko Junction	U	90 534 657	90 534 657	2018
21	Development of Great Soppo Junction	U	90 534 657	90 534 657	2018
22	Development of Doubai Center junction of NR5 with roudabout	U	120 236 345	120 236 345	2018
	SUB TOTAL 3			753 978 944	
	INSTALLATION OF TRICOLOR LIGHTS				
23	Mile 17 Junction	U	26 345 678	26 345 678	2019
24	Malingo Junction	U	26 345 678	26 345 678	2018
25	Molyko stadium junction	U	26 345 678	26 345 678	2018
26	Muea Junciton	U	26 345 678	26 345 678	2019
27	Great Soppo Junction	U	26 345 678	26 345 678	2019
28	Bocom Junction	U	26 345 678	26 345 678	2019
29	Maintenance and reinforcement of horizontal signaling in the town.	Ft	1 00 000 000	100 000 000	2018-2019
	SUB TOTAL 4			284 419 746	-
	CROSSING WORKS				
30	Construction of double openings 2*2*1,5 cm	35 ml	1 750 000	61 250 000	2018-2020
31	Construction simple openings 2*1,5 cm	21 ml	1 300 000	27 300 000	2018-2020
32	Rehabilitation and enlargement of the bridge serving the Soppo Small Natives quarter.	6 ml	1 900 000	11 400 000	2019
	SUB TOTAL 5			99 950 000	
	POTABLE WATER				
33	Maintainance and equiping of existing potable water infrastructures.	Ft	600 000 000	600 000 000	2016-2018
34	Construciton of 60 drilling in the quarter and its surroundings	60 U	8 556 450	51 387 000	2017-2020
35	Construction of a new drinking water collection plant with a capacity of 10,000 m ³ / day	Ft	1 500 000 000	1 500 000 000	2020
36	Extension of the drinking water network in the quarters	ft	4 500 000 000	4 500 000 000	2017-2019

N°	PROJECT	Linear	Unit price	Total price HT	Date
	and its surroundings (40 km)				
	SUB TOTAL 6			7 113 387 000	
	ELECTRICITY				
37	Maintainance of existing electricity facilities and infrastructures	Ft	1 000 000 000	1 000 000 000	2016-2018
38	Extension of electricity network in all new quarters	ft	1 500 000 000	2 500 000 000	2018-2020
	SUB TOTAL 7			3 500 000 000	
	PUBLIC LIGHTNING				
39	Maintainance and reinforcement of all existing public lightning network in the town.	Ft	150 000 000	150 000 000	2017-2019
40	Extension de 25 km d'éclairage public dans le centre ville les quartiers et les périphéries. Extension of 25km of public lightning in the central town, quarters and its peripheries.	25 km	15 000 000	375 000 000	2019-2022
	SUB TOTAL 8			525 000 000	
	SANITATION				
41	Cleaning of gutters, scuppers, nozzles	Ft	30 000 000	30 000 000	2016-2018
42	Construction of 10 000 ml of drains of trapezoidal section in masonry	10 000 ml	96 000	960 000 000	2020-2025
43	Creation and construction of a sludge treatment plant	ft	450 000 000	450 000 000	2028-2021
	SUB TOTAL 9			1 144 000 000	
	TELECOMMUNICATION AND NTIC				
44	Maintainance and reinforcement of existing communication network.	ft	100 000 000	100 000 000	2017-2019
45	Connexion to the optical fibres and extension in the municipality of Buea.	ft	1 000 000 000	1 000 000 000	2020-2022
46	Construction and equipping of three community telecentres	3	800 000 000	240 000 000	2018-2020
47	Addressing of the different streets of the town of Buea	ft	600 000 000	600 000 000	
	SUB TOTAL 10			1 400 000 000	
	TOTAL GENARAL			40 538 505 282	

Summary of the Priority Investment Projects in short and medium term

Priority investment in short term (2014-2019)

- Handicapped Centres ;
- CMA ;
- Football fields ;
- Construction of a municipal library ;
- Site for polluting industry ;
- Creation and protection of land reserves ;
- Demarcation and protection of areas that are non-aesthetic ;
- Create a supply market at Molyko ;
- Axis Tole-Bwiyuku (North west penetrating) in 1*2 lanes
- Axis Soppo Small natives-Great Soppo in 1*2 lanes ;
- Rehabilitation of 7.5km of road in the Bomaka quarter in 1*2 lanes;
- Rehabilitation of 2.5km of road in the Bolifamba quarter in 2*1 lanes;
- Rehabilitation of 3.2km of road in the Muea quarter in 2*1 lanes;
- Development of Bocom junction on NR5;
- Bolifamba junction ;
- Development of the stadium junction;
- Development of the Kahwa Medical Clinic junction;
- Development of the Malingo Junction ;
- Development of the Molyko junction;
- Development of the Great Soppo junction;
- Development of the Doubai Center junction on NR5 with a roundabout;
- Installation of tricolor lights at Mile 17 junction;
- Installation des feux tricolores au Carrefour Malingo ;
- Installation of tricolor lights at Malingo junction;
- Installation des feux tricolores au Carrefour stade Molyko ;
- Installation of tricolor lights at the Molyko stadium junction;
- Installation of tricolor lights at Muea junction;
- Installation of tricolor lights at the Great Soppo junction;
- Installation of tricolor lights at the Bocom junction;
- Construction of double openings 2*2*1,5 cm ;
- Construction of simple openings 2*1,5 cm ;
- Rehabilitation and enlargement of the bridge serving the Soppo Small Natives quarter;
- Maintenance and equipping of existing potable water infrastructures;
- Extension of water network in all the quarters and its surroundings(40 km) ;
- Maintenance of existing electricity facilities and infrastructures;
- Extension of electricity network in all the new quarters;

- Maintenance and reinforcement of all the existing public lightning network in the town;
- Extension de 25 km d'éclairage public dans le centre ville les quartiers et les périphéries ;
- Extension of 25km of public lightning in the central town, quarters and its peripheries;
- Cleaning of gutters, scuppers, nozzles
- Construction de 10 000 ml de drains de section trapezoidale en maçonnerie ;
- Construction of 10 000 ml of drains of trapezoidal section in masonry ;
- Maintenance and reinforcement of the existing communication network.

Priority investment in medium term (2019-2029)

- Creation of Nurseries ;
- Primary Schools ;
- General secondary ;
- Technical secondary ;
- Creation of a Regional Hospital ;
- District Hospital ;
- Multipurpose Fields ;
- Construction of a Cultural Centre ;
- Construction of a Museum ;
- Development of the feet of the mountain ;
- Creation and protection of land reserves in the very long term after 2029 ;
- Axis Ekande-Mile 17 (West penetrating) in 2*2 lanes with central reserves ;
- Axis Muea-Mile 17 (West penetrating) in 2*2 lanes with central reserves ;
- Axis Buea Town –Molyko Camp-NR in 1*2 lanes ;
- Axis NR5- Bowanda-Bomaka layout- Dubai Center in 1*2 lanes ;
- Axis NR5- Schestreet in 1*2 lanes ;
- Creation and construction of two passenger stations. One hectare each;
- Construction of two truck fleets (10,000 m² each);
- Construction of 60 drillings in the quarters and surroundings;
- Construction of a new drinking water collection plant with a capacity of 10,000 m³ / day;
- Extension of the electricity network in all new neighborhoods;
- Extension of 25 km of public lighting in the city center to the quarters and peripheries;
- Construction of 10 000 ml of drains of trapezoidal section in masonry;
- Connection to fiber optics and extension in the municipality of Buea;
- Construction and equipment of three community telecentres.

VI. ENVIRONMENTAL RATING

VI.1. OBJECTIVE OF THE ENVIRONMENTAL RATING

The environmental rating is carried out with the objective of doing an inventory and describing the potential impact of the project of the LUP on the environment and the local populations concerned, and then proposing measures for mitigation of negative impact which will need to be applied to all of the interventions required for the realization of the project and the measures advocated to ensure and/or amplify the positive effects of the project on the various sites. These measures are of 3 different types:

Preventive: intended to prevent or reduce in advance the negative impact; they are involved in the design of the project or as a result of the participatory approach;

Compensatory: if they are intended for unavoidable impact; the pre-existing conditions will be either restored, or replaced by resources or similar habitats, either compensated;

Corrective: if actions are undertaken with a view of reducing the adverse or unfavourable effects and reducing them to an acceptable level.

These measures will ensure that the concerns related to the protection of the environment biological, physical and socio-economic will be taken into account during the development, the protection and management of the urban space of the city of Buea.

VI.2. WORK METHODOLOGY

The methodological approach is simple. It is backed by the preparation of materials for data collection and field work in the town of Buea

VI.2.1. Preparation of data collection materials (forms)

The materials (forms) for data collection were designed according to the needs and the type of information researched. It was a question of:

- The map of the whole Buea Council to the scale of 1/75000, for the needs of materialization of important information identified on the field, for the purposes of highlighting on the map the at risk areas, the touristic sites, water points, distribution of natural resources ;
- An guide for interviewing administrative authorities during field work

The guide and the map are presented in annex1 of this document.

VI.2.2. Field work and data collection from traditional authorities

The field work in the Buea Council was carried out by the members of the team. This took place from the 12th to the 17th of May, 2014. During this field work, the

meeting of a few administrative authorities was necessary for the proper conduct of the study.

VI.2.3. The material used

The following equipment was necessary for the proper execution of the missions carried out:

- a camera for shooting,
- a topometre for the measurement of elements on the field.

VI.3. TREATMENT AND ANALYSIS OF DATA

The different data collected were compiled, which enabled them to better understand the interactions between project activities and the various components of the environment.

The data collected during the meetings and interviews were analyzed and the results obtained have allowed us to better understand the concerns of local populations, their expectations and their proposals for the draft of the LUP of Buea and to better highlight the impact of this project on these populations concerned.

VI.3.1. Identification and characterization of the potential impact of the project

This section analyzes the environmental impact and socio-economic potential of the town of Buea.

The principle of the method

The question here is to identify and describe any significant changes of the initial state of the environment in line with the fact of the impact of the project.

The main activities of the project have been identified and for each of them, the impact on the main components of the physical environment (water, soil and air), biological (flora and fauna terrestrial and aquatic) and human (transport and communication, framework and conditions of life, economic activities, health, security, basic infrastructure, jobs and income, community organizations) have been identified. A special emphasis has been placed on the potential impact of the project on the local populations.

The observations, interviews, and investigations of the field have led to complete the identification of the impact and then to describe in order to propose the adequate moderation measures.

Presentation of tools and the identification criteria and evaluation of impact

VI.3.2. The matrix of interaction and the grid of characterization and evaluation of impact

The matrix of interaction and the grid of characterization and evaluation of impact have been used to identify and evaluate the impact of the project on the various components of the environment.

VI.3.2.1 Definition of tools

Using the matrix of interaction, the combinations between the components of the environment and the activities of the project have led to prepare all the potential impact of the latter. Although not identifying an exhaustive list of impact, the matrix of interaction allows you to recognize the activities, sources of impact and the components of the environment that can feel the effects.

VI.3.2.2 Interaction matrix, of characterization and evaluation of impact of project

Each impact of the project of the LUP of Buea has been identified from the cause-and-effect relationships determined by the interaction between the components of the environment and the activities planned. The characterisation and evaluation on its part has been made using the criteria presented previously. The matrix of interaction, characterization and evaluation below present a synoptic view of the impact.

Table 17 Interaction matrix of impact

Activities, source of impact	Items recovered from the environment													
	Physical Milieu				Biological Milieu		Human Milieu							
	Air Air	Water u	Soil	Flore	Fauneland and aquatic street	Transport and communication	Framework and living	Economic Activities	Health/STD/AID S	Security	Jobs /Revenues x	Community organizations x	Landed Property	
Development of tracks	-	-	-	-	-	+	+	+	+/-	+	+			
Protection (prohibition of the sale of land, regulation of constructions, of agriculture, fishing, hunting, etc.)			+	+	+		+	+			-		-	
Promotion of certain activities (crafts, tourism, ecotourism, fishing and sustainable hunting, sustainable agriculture and catering, etc.)			+		+		+	+		+	+			
Training and organization (Tourists' Guides, etc.)							+	+		+	+	+		
Establishment and management of touristic circuits							+	+			+			
Putting in place of some infrastructure (accommodation, nutrition, training, health, etc.)	-	-	-	-	-		+	+	+/-		+			
Creating some green spaces in the city	+		+/-	+							+			
Sanitation (sewerage network, combating pollution of the city etc.)		+			+			+	+					
Delimitation, securing and incorporation in the private domain of the state										+	-		-	

Table 18 Matrix of Characterization and evaluation of impact

Valorised environmental element		Activities, source of impact	Impact	N°	Charaterization Parametres							Evaluation											
					Nature	Interaction	Duration	Range	size	Occurrence	Reversibility	Absolute Importance	Classification										
Physical Milieu	Air	Development of tracks	Degradation of the quality of air	1	-	D	Ct	L	Fa	Cer	Re	Mi	Sig										
		Establishment of some infrastructure																					
		Creation of green spaces in the city	Contribution to the purification of air											2	+	D	Lt	R	Mo	Cer	Re	Ma	Sig
	Water	Development of tracks	Perturbation of the system and accumulation of sediments in the water course	3	-	D	Ct	L	Fa	Cer	Re	Mi	Sig										
		Establishment of a few infrastructure																					
		Sanitation	Protection of the town against pollution											4	+	D	Lt	L	Mo	Cer	Re	Mo	Sig
		Registration in the public domain artificial																					
	Soil	Development of tracks	Perturbation of the structure of the soil	5	-	D	Ct	L	Fa	Cer	Ir	Mi	Sig										
		Establishment of some infrastructure																					
		Creation of green spaces in the city																					
Protection		Protection of the soil against erosion	6											+	I	Lt	L	Fa	Cer	Re	Mo	Sig	
Promotion of certain activites																							
Creation of green spaces in the city																							
Biological Milieu	Flore	Development of tracks		Destruction of vegetation by clearing	7	-	D	Ct	L	Fa	Cer	Ir	Mi										NSig
		Establishment of a few infrastructure																					
		Protection	Maintenance of the floristic diversity	8										+	D	Lt	L	Mo	Cer	Re	Mo	Sig	
		Creation of green spaces in the city																					
	Fauna/Land/Aquatic Street	Development of tracks	Destruction and /or perturbation of the faunic habitat		9	-	I	Ct	L	Fa	Pro	Re	Mi										NSig
		Establishment of some infrastructure																					
		Protection	Sustainable management of aquatic fauna	10										+	D	Lt	L	Mo	Cer	Re	Mo	Sig	
Promotion of certain activites																							
Sanitation																							
Human Milieu	Transport and Communication	Development of tracks	Amelioration of movement conditions, the transport of persons and goods		11	+	D	Lt	R	Fo	Cer	Re	Ma										Sig
		Registration in the public domain artificial.																					

Valorised environmental element	Activities, source of impact	Impact	N°	Charaterization Parametres							Evaluation	
				Nature	Interaction	Duration	Range	size	Occurrence	Reversibility	Absolute Importance	Classification
Human Milieu (Continued)	Framework and Condition of life	Development of tracks	12	+	D	Lt	L	Fo	Cer	Ir	Ma	Sig
		Protection										
		Promotion of certain activities										
		Training and organisation										
		Establishment and management of touristic circuits										
		Establishment of some infrastructure										
		Registration in the public domain artificial										
	Economic Activity	Development of tracks	13	+	D	Lt	L	Mo	Cer	Ir	Mo	Sig
		Protection										
		Promotion of certain activites										
		Training and organisation										
		Establishment and management of touristic circuits										
		Establishment of some infrastructure										
		Sanitation										
Registration in the public domain artificial												
Health and STD/AIDS	Development of tracks	14	-	D	Lt	L	Mo	Pro	Re	Mo	Sig	
	Establishment of some infrastructure											
	Registration in the public domain artificial											
	Development of tracks	15	+	D	Lt	L	Mo	Cer	Re	Mo	Sig	
	Establishment of some infrastructure											
	Sanitation											
Registration in the public domain artificial												
Security	Development of tracks	16	+	I	Lt	L	Mo	Cer	Re	Mo	Sig	
	Promotion of certain activities											
	Training and organisation											
	Delimitation, securing and incorporation in the private domain of the State											

Valorised environmental element	Activities, source of impact	Impact	N°	Charaterization Parametres							Evaluation	
				Nature	Interaction	Duration	Range	size	Occurrence	Reversibility	Absolute Importance	Classification
Human Milieu (Cont.)	Registration in the public domain artificial											
	Protection	Diminution of reevenu from the sale of land	17	-	D	Lt	L	Fa	Cer	Ir	Mo	NSig
	Delimitation, securing and incorporation in the private domain of the state											
	Development of tracks	Job creation and increase of revenu	18	+	D	Lt	L	Mo	Cer	Re	Mo	Sig
	Promotion of certrain activities											
	Training and organisation											
	Establishment of some infrastructure											
	Creation of green spaces in the city											
	Establishment and management of touristic circuits											
	Registration in the public domain artificial											
Community organisation	Training and organisation	Amelioration of organisation of the concerned populations into common initiative groups	19	+	I	Lt	L	Mo	Cer	Re	Mo	Sig
	Registration in the public domain artificial											
Landed property	Protection	Loss of landed property	20	-	D	Lt	L	Fo	Cer	Ir	Ma	Sig
	Delimitation, securing and incorporation in the private domain of the state											

Source: Le BET COMPETING/BEFA, 2014

The table below presents the qualification and the symbols which have been used for each parameter.

Table 19 **Qualification and symbols of the characterization parameters of impact**

Parameters	Qualification and symbols	Parameters	Qualification and symbols
Nature	- Positive (+)	Extend/Range	- Punctual (P)
	- Negative (-)		- Local (L)
Interaction	- Direct (D)	Reversibility	- Regional (R)
	- Indirect (I)		- Reversible (Rev)
Duration	- Short term(Ct)	Apparition phase	- Irreversible (Ir)
	- Medium term (Mt) < 1 year		- Work (Tr)
	- Long term(Lt) > 1 year		- Fonctioning(Fonct)
Intensity	- Strong (F)	Classification	- Significant (Sig)
	- Medium (M)		- Not Significant (NSig)
	- Weak (f)		
Occurrence	- Certain (Cer)	Absolute Importance	- Major (Ma)
	- Probable (Pro)		- Medium(Mo)
			- Minor (Mi)

Source: Le BET COMPETING/BEFA, 2014

The method of determination of the mitigation measures consisted in the detailed characterization of each adverse effect and the proposal of measures takes account of the importance of the impact and is based on the experience gained in the study and the realization of similar projects.

VI.4. ANALYSIS OF THE MAIN IMPACT OF THE PROJECT

The interaction between the different elements valued and the activities that will be carried out permit to identify on all the components of the environment, 8 impacts of a negative nature and 12 of a positive nature.

VI.4.1. Impact on the physical milieu

(1) Degradation of the quality of air

The air will be affected by the dust and the release of exhaust gases during the development work for the tracks and of the establishment of certain infrastructures. In fact, the engines and equipment used for the constructions consume fuels and emit exhaust gases (greenhouse gases) in the atmosphere, which contributes to the degradation of the quality of the air just as the dust, which are often very abundant during the work, particularly in the dry season.

In the light of the effect that could have the dust on the health of populations and the degradation of their framework of life, this impact which is yet of short duration (during work) is deemed significant.

(2)Contribution in the purification of the air

The creation of new green spaces in the city will contribute to increase the plant tissue which is reputed for purifying the air by the phenomenon of photosynthesis which allows plants to absorb under the effect of the sun carbon dioxide gas and to release oxygen which is vital for man.

This positive impact is deemed significant in the light of the current question of climate variations.

(3)Perturbation of the system and accumulation of sediments in the water courses

The realization of the development work of the city and of the establishment of certain infrastructures will require in certain places the deviation or temporary obstruction of some rivers. These activities will lead to the disturbance of the system and the water courses. The effect of the erosion, accentuated by the bare surfaces once covered with vegetation, would increase the load of water runoff. This phenomenon is exemplified by the increase in turbidity of the waters and a strong sedimentation in the low-stages and the water-courses characterized by laminar flow (streamline flow)

In view of the usefulness of water courses for the local populations and the sensitivity of these environments, this impact of minor importance is deemed significant.

(4)Protection of the town against pollution

Sanitation by the fight against pollution of the city (dumping of waste and other unidentified products in the street) by the populations will help to protect the health of the local surrounding populations.

Taking into account the effect that pollution may have on the health of populations and visitors, this positive impact is deemed significant.

(5) Perturbations of the structure of the soil

The development work for the tracks, the establishment of some infrastructure and reforestation are likely to disrupt the structure of the soil. A number of precautions should be taken during the implementation of these activities to minimize this disturbance which may cause the important erosion and affect the surface and groundwater reserves.

Considering the effect that the erosion could have on the surface waters and the sensitivity of this community in the area considered, this impact yet of minor importance is deemed significant.

(6)Protection of the soil against erosion

The protection by the proposal of best farming practices, the promotion of sustainable agriculture and reforestation around the mountain will contribute to the reduction of soil erosion and conservation with the least possible disturbance.

Considering the risks associated with soil erosion in a place to be conserved, this positive impact is deemed significant.

VI.4.2. Impact on the Biological milieu

(1)Destruction of vegetation by clearing

The destruction of flora concerns the vegetation cover that will be removed due to the cleanup of the grip of the road and the operations of earth digging for the construction of new infrastructure. This will be observed during the realization of the work of rehabilitation of tracks and of the establishment of certain infrastructures. In view of the fact that the road already exists and will only require a development, this activity will bring only losses to a low scale of timber and non-timber products vis a vis its commercial value, protected, or even taken by the populations for their pharmacological food virtues

In light of the foregoing, this impact is considered non-significant.

(2)Maintenance of the floristic diversity

The promotion of sustainable agriculture and the creation of new green spaces will allow the rehabilitation of spaces that are today stripped and to maintain the floristic diversity of the cultural heritage. The reforestation by planting the species formerly existing in the degraded areas will also rehabilitate its natural beauty which gradually disappears because of human actions.

This positive impact is deemed significant.

(3)Destruction and/or perturbation of the faunic habitat

The cleaning of the outskirts of tracks during the rehabilitation and the earthworks of land for the construction of new infrastructure will lead to the destruction of habitats of animals which could be located in the grip of the road. As for aquatic fauna, the sedimentation of the products of erosion in the course of water may affect the lives of fish and shrimps, which are important resources for the local populations concerned.

In view of the strong colonization of the area by human beings, the affected surfaces very limited and the short duration of this impact, it is deemed significant.

(4) Sustainable management of the fauna

The protection, the fight against pollution, the promotion of fisheries and sustainable hunting will improve the current management made of wildlife, whether it be terrestrial wildlife or aquatic fauna.

Given the importance of these resources to the local populations concerned and of the reputation of certain species of wildlife in the area, such as snails, this impact is considered significant.

VI.4.3. Impact on the human milieu (socio-economic and cultural)

(1)Amelioration of moving conditions, of transportation of persons and goods

The development of tracks will improve road equipment of the area and promote the development of transport on certain sections which are currently in an advanced state of decay and served mainly by the motorcycles. This would have a great impact on the transport costs which logically should decrease. This may lead to a revitalization of the microeconomy and an increase in the income of the people of the zone.

Taking into account the importance of the microeconomy for the populations, this positive impact of major importance is significant.

(2)Amelioration of the environment and the conditions of life of the local population

Some projects of the Land Use Plan (LUP) such as the management of tracks, the promotion of agriculture and sustainable fisheries, training in the field of tourism, the establishment of touristic circuits and their management will result in a significant flow of tourists in the study area. The local populations concerned will therefore benefit from the good market of their activities to improve their environment and living conditions.

This positive impact is deemed significant.

(3)Creation of income genetion activities

Just as in the case of the improvement of the living conditions, the prestige of the development will result in a large influx of tourists. This will entail the creation of a large number of income-generating activities for the local populations concerned. The main activities will involve restoration, accommodation, tourist guide, crafts, agriculture, fishing, etc. depending on their dynamism, these populations concerned could make a very large profit.

This positive impact is deemed significant.

(4) Risk of respiratory infections and the outbreak of STD/AIDS

The rising of dust during the rehabilitation work in the tracks and the construction of certain infrastructures could create conditions favorable for the development of respiratory infections among employees and residents, in particular during the dry season, but this will only be felt during the period of the work.

The spread of sexually transmitted diseases and HIV/AIDS will be related to the presence of the staff of the constructions in the area during the work and the significant increase in the number of tourists who will come to visit the town of Buea.

This impact directly related to the health of the population which is an important factor of development is deemed significant.

(5) Limitation of pollution and amelioration of patient care

The fight against the pollution of the city and the establishment of infrastructures including health would reduce the cases of diseases and to improve the care of the latter. The improvement of access will facilitate the evacuation of patients to health centers more appropriate for their treatment.

In considering the sensitivity of the issue, the impact concerning the improvement of the care of patients is deemed significant.

(6) Amelioration of the security of persons and goods

The various activities which contribute to the increase of income-generating activities and employment of young people will occupy the young people without-jobs of the area concerned who will become responsible. This will minimize the number of delinquents, and will participate in the improvement of the security of persons and property or goods.

This positive impact is deemed significant because one of the key activities of the zone is tourism which cannot develop if insecurity reigns.

(7) Diminution of revenue derived from the sale of land

To be incorporated in the private domain of the State, the sale of land is prohibited. Nevertheless, the local populations concerned will continue to enjoy the rights of usage with just recommendations to follow to keep the integrity. Learning from the lessons of the development of several cities in Cameroon, it is admitted that in the majority of cases, the sellers of land benefit for a time and after this period they become most often poorer than before and in addition no longer have their spaces already sold.

In view of the fact that the sale of land does not always allow a lasting enrichment of the former owners, this impact is considered non-significant.

(8) Job creation and increase of revenue

The implementation of this project will offer enormous opportunities for employment for local people. This will allow for the reduction of youth unemployment and increase in their income. To better take advantage of these opportunities, the local populations must organize themselves and organize their activities.

This positive impact and of long duration is deemed significant.

(9) Amelioration of the organisation of the populations concerned into common interest groups

As stated above, the local populations concerned would benefit to organize themselves in groups of common interest to better respond to the demand for services which will be great. To do this, training and initiation of the organized groups will allow them to better take advantage of the opportunities offered.

This positive impact of long duration is deemed significant.

(10) Loss of landed property

The incorporation of certain lands to the private domain of the State or of the Council will result in the loss of property rights by the local populations concerned whose villages are entirely or in part within the perimeter of study. Nevertheless, these populations concerned will continue to enjoy the rights of usage as in the past.

Given the importance of land ownership for man, this impact is considered significant.

VI.5. MITIGATION MEASURES, COMPENSATION AND OPTIMIZATION

In this section, it is a question of describing the main steps to be taken to mitigate, compensate for and maximize the impact of development on the various components of the environment. These measures are proposed to the promoters and actors of the project in order to integrate them in the job description of those who will be responsible for executing the development work.

VI.5.1. Mitigation measures of negative impact

Preservation of the quality of air

In an effort to mitigate the effects of the management of the cultural landscape on the quality of air, a number of measures have to be implemented by the companies responsible for the implementation of the work relating to the rehabilitation of tracks and the putting in place of other infrastructure. It will be:

- To stop systematically machinery engines and vehicles when they are not in service;

- To respect the periods for oil change and replacement of air and diesel filters of machines to allow an optimal operation of their engines;
- The use engines still in good condition to avoid excess emission of greenhouse gases, which is produced by aging engines;
- To put in place a system for limiting speed of machines at the level of residential areas during work ;
- To regularly wet the paths during the works to reduce the rising of dust.
- Reduction of soil erosion and sedimentation in the streams

The following measurements shall be implemented during the implementation of the work relating to the rehabilitation of tracks and the putting in place of other infrastructure, to limit soil erosion and sedimentation in the rivers:

- The establishment of longitudinal and transversal works for draining of running-water;
- The efficient calculation of the slopes of embankment soil excavated to avoid their rapid erosion;
- The coverage of slope of embankment of topsoil from the superficial pickling (removal) to allow colonisation by vegetation and prevent erosion;
- The establishment of simple groins at the exit of the works of sanitation to avoid the erosion which can cause scouring of the foundations of these works;

The Preservation of the flora and fauna

Despite the fact that the impact on the fauna and the flora are non-significant, we express all of same the mitigation measures with the aim of limiting the damage of the work related to the rehabilitation of tracks and to the establishment of other infrastructure on these elements of the environment. The companies to perform such work must:

Proceed in the recovery of the timber felled during the removal of stuff and grass clearing for the construction of the workers camp and the scaffolds during the construction of works of art ;

Precautions concerning the risks of the spread of respiratory diseases and STDs/AIDS

The execution of work on touristic sites will serve as sources of risk of the spread of STDs/AIDS. The measures below must therefore be observed by the companies responsible for the completion of the work (in the rehabilitation of tracks and other infrastructure), and by the promoters of the registration project in order to limit the risk of spread of STDs/HIV/AIDS and respiratory diseases:

To implement the measures recommended above for the preservation of the quality of the air:

- Initiate and lead awareness and information campaigns of staff, local populations and tourists on STDs/AIDS;

- Distribute condoms (or make them widely available locally) and motivate the staff, the local population and tourists through awareness to use them;
- Paste posters in the town to sensitize all on HIV/SIDA ;
- Organize educative talks on STDs/SIDA.
- Security of workers and the population

Generally speaking, the realisation of work exposes workers and the local population to risks of accidents and incidents on the work site. The respect of security measures and the good manipulation of equipment, engines and inflammable products by workers ought to logically minimize work accidents and incidents. Also the respect of the Highway Code by the populations should also limit the risk of traffic accidents before and after the works. In order to secure workers and the concerned local populations against eventual work or traffic accidents, the following precautions ought to be taken into account:

- The staff of the companies must be trained on the use of equipment and appliances and the risks associated with each workstation;
- It must have the appropriate safety procedures and the company must ensure that its personnel scrupulously respect these instructions;
- Employees must be equipped with equipment for personal security (appropriate uniform, helmets, safety shoes, gloves, scarf, ear plugs, etc.) and the company must ensure the actual putting on of these facilities;
- The fire-fighting equipment (fire extinguishers and sand bags) must be available where the sensitive facilities are (maintenance workshop, storage tanks of fuel, generators and kitchen) to take care of eventualities;
- Sensitize the coastal persons and transporters and in particular Motorbike riders on the increased risk of accidents linked to the existence of the construction sites;
- Install sign boards to mark the presence of the construction sites and limit the speed of movement at the level of crossings in areas with high concentrations of humans (villages)
- Have on site medical equipment for first aid.
- Appeasement of the local populations concerned

In relation to the loss of property rights, the local populations concerned have shown their discontent and some villages have written queries for the withdrawal of their territory from the cultural landscape. To respond to these concerns and allow for a better understanding and adhesion of the affected local populations, the following actions must be undertaken by the promoters of the project:

Repeat of awareness campaigns in all the villages concerned, during which all the challenges of the project must be frankly explained to the local populations concerned by insisting on the benefits and disadvantages (ensure that the populations of all the villages concerned are well informed and on time of dates and places where these awareness campaigns will be held).

Optimization Measures of the positive impact:

Of the identified impact, characterised and evaluated, twelve are positive. It is a question of:

- The contribution to the purification of air;
- The protection of the city against pollution;
- Protection of soils against erosion;
- Maintenance of the floristic diversity;
- Sustainable management of aquatic wildlife; -
- Improvement of the conditions of traffic, transport of persons and goods; -
- Improvement of the framework (environment) and conditions of life of the local populations;
- Creation of income-generating activities;
- Limitation of pollution and improvement of the care of the sick (patients); -
- Improvement of the security of persons and property;
- Creation of jobs and increased income;
- Improvement in the organization of the populations concerned into common interest groups.

To improve the benefits of these positive impacts for the local populations, a number of measures must be taken both by the populations, the promoters of the projects and the companies responsible for the execution of the development works.

The promoters of the projects must:

- Ensure that this project is being conducted in a participatory manner taking into account the apprehensions, comments and concerns of the local populations concerned;
- Educate the local population on the new economic opportunities;
- Accompany the local populations concerned in their organizational efforts to benefit from the results relating to the completion of the projects concerned.
- The companies responsible for the realization of the development works should: With equal competence, give priority to the recruitment of the local workforce;
- Make transparent the policy of recruitment, by relying on the local authorities such as the heads of villages;
- Inform the people about the jobs opportunities offered and the conditions to benefit;
- Use the technique of High Labor-Intensive (HLI) for operations on the field.
- As for the local populations, it must be resolute to work and to organize themselves in groups of common interest to be in a position to provide skilled labour during the development work, but especially to accommodate, house, feed, entertain, in brief meet the significant flow of tourists who will come.

VI.5.2. Compensation measures

It is important to note here that the local populations concerned will not be evicted from the cultural landscape. Therefore, goods and other valuables identified by the departmental committee of observation and evaluation of property in question will not be compensated.

The compensation in question here concerns therefore any property or valuables that will be damaged during the work or social measures that will be taken to alleviate the conditions of the populations concerned for the loss of property rights.

These measures are the following:

Any owner of property or valuable to be damaged by the development work should be identified and compensated at its fair value before the actual work;

The promoters of the project for the classification of the cultural landscape to the PM of UNESCO must propose to the local populations concerned appropriate training and coaching in the implementation of a number of alternative activities. We can cite for example the crafts, sustainable agriculture, sustainable fishing, the tourist guide, ecotourism, etc. , or the valuation of some local cultural riches whose implementation on their land would better exploit them to their advantage and in a sustainable manner rather than to sell them for a temporary gain.

VI.6. ENVIRONMENTAL MANAGEMENT PLAN (EMP)

The present Environmental Management Plan presents the program of implementation of mitigation measures, compensation, and optimization of negative and positive impact of the LUP. It sets out for each of the measures, those responsible for the implementation and monitoring and the period during which it must be implemented.

VI.6.1. Programming of the EMP

The following table presents the programme of implementation of the main measures proposed. This programme includes: -

- The potential impact of the project on the environment; -
- -The importance of the impact considered;
- - The mitigation measures, of subsidy or proposed compensation; -
- -The different officials responsible for implementation; -
- -The performance indicator of the implementation of the proposed measure; -
- -The implementation period; -
- -Those responsible for monitoring the implementation of the various measures proposed.

Table 20 *Programming of EMP*

Impact	Importance	Proposed measures	Person responsible for implementation	Implementation period	Performance indicator	Those responsible for monitoring-evaluation
Degradation of the quality of air	Minor	<ul style="list-style-type: none"> - Stop systematically machinery engines and vehicles when they are not in service; - Respect the periods for oil change and replacement of diesel air filters of machines to allow an optimal operation of their engines; - Use of engines still in good condition to avoid the emission of greenhouse gases, which is produced by the aging engines; - Put in place a system for limiting speed of machines at the level of the residential areas and villages during the work; - Wet regularly the paths during the works to reduce the rising of dust. 	Enterprises in charge of the development works	During the development works	Road worthiness forms for cars	Execution Master
Perturbation of the system and accumulation of sediments in the water courses	Minor	<ul style="list-style-type: none"> - Establishment of transverse and longitudinal works for the drainage of running water; - The efficient calculation of the slopes of embankment soil excavated to avoid their rapid erosion; - Coverage of slope of embankment of topsoil from the superficial pickling, to allow colonization of vegetation and avoid erosion; - Establishment of simple groins to get out of the sanitation works to avoid erosion which may cause the washout of the foundations of these works; - Recovery of areas of laterite borrowing of topsoil at the end of the work on the tracks to allow a recolonization of the soil by the vegetation and limit erosion. 	Enterprises in charge of the development works	During the development works	Report established following direct observation	Execution Master of work
Perturbations of the soil structure	Mineure	<ul style="list-style-type: none"> - Establishment of transverse and longitudinal works for the drainage of running water; - The efficient calculation of the slopes of embankment soil excavated to avoid their rapid erosion; - Coverage of slope of embankment of topsoil from the superficial pickling, to allow colonization of vegetation and avoid erosion; - Establishment of simple groins to get out of the sanitation works to avoid erosion which may cause the washout of the foundations of these works; - Recovery of areas of laterite borrowing of topsoil at the end of the work on the tracks to allow a recolonization of the soil by the vegetation and limit erosion. 	Enterprises in charge of the development works	During the development works	Report established following direct observation	Execution Master of work

Impact	Importance	Proposed measures	Person responsible for implementation	Implementation period	Performance indicator	Those responsible for monitoring-evaluation
Destruction of the vegetation by clearing	Mineure	<ul style="list-style-type: none"> - Make sure that the encroachments to be cleared are reduced as most as possible; - Proceed to the recovery of the timber felled during the movements and clearing for the construction of the camp of workers and the scaffolds during the construction of the works of art; - Participate in anti poaching by prohibiting the consumption of bushmeat in the camps of workers, the practice of hunting by the workers and the transport of game by the vehicles and equipment of the project. 	Enterprises in charge of the development works	During the development works	Report established following observation; No game is bought, transported or consumed by the workers	Execution Master
Destruction et/ou perturbation de l'habitat faunique	Mineure					
Création des activités génératrices de revenus	Moyenne	<ul style="list-style-type: none"> - Educate the local population on the new economic opportunities - Accompany the local populations concerned in their organizational efforts to benefit from the results relating to classification and the World Heritage. 	Promoters of the registration project of World Heritage (WH)	Classification of WH	Minutes of sensitization meetings, Number of associations created	Execution Master
	Moyenne	<ul style="list-style-type: none"> - By equal competence, prioritize the recruitment of local work force; - Make transparent the recruitment policy, with the aid of the local authorities such as the heads of villages; - - Inform the people about job opportunities that are offered and the conditions required for them to benefit from them- - Use the HLI technic for operations on the field 	Enterprises in charge of the development works	During the development works	Percentage of locals employed	Execution Master/Heads of Enterprises
Risk of respiratory infection and outbreak of STDs/AIDS	Moyenne	<ul style="list-style-type: none"> - Implement the measures advocated for the preservation of the quality of the air; - Initiate and lead awareness and information campaigns of the staff, local populations and tourists on STDs/AIDS; - - Distribute condoms (or make them widely 	Enterprises in charge of the development works / Promoters of the registration project	During the development works From the classification of the WH	Minutes of the sensitization campaigns Number of posters placed	Execution Master and Hospitals

Impact	Importance	Proposed measures	Person responsible for implementation	Implementation period	Performance indicator	Those responsible for monitoring-evaluation
		available locally) and motivate the staff, the local population and tourists by the awareness to the use them; - Install posters in the city for the sensitization of all on HIV/AIDS; - Organize educational talks on the issue of STD s/AIDS.	of WH			
Risks associated to work and movement	-	- The staff of enterprises must be trained on the use of machinery and equipment and the risks associated with each workstation; - It must have the appropriate safety procedures and the company must ensure that its personnel scrupulously respect these instructions. - Employees must be equipped with equipment for personal security (appropriate uniform, helmets, safety shoes, gloves, scarf, ear plugs, etc.) and the company must ensure the actual wearing of these facilities; - The fire-fighting equipment (fire extinguishers and sand bags) must be available at the level of the sensitive facilities (maintenance workshop, storage tanks of fuel, generators and kitchen) to prevent fires; - Raise awareness among the coastals and transporters and especially the Bike riders on the increased risk of accident linked to the existence of the site; - Install sign boards to mark the presence of the construction site and limit the speed of movement at the level of crossing of the areas with high concentrations of humans (Villages); - Have medical equipment for first aid. - Restricted to authorised persons and increase	Enterprises in charge of the development works	During the development works	Training report Security instructions available Signboards and extinguishers in place No work related accidents	Execution Masters and Work Master

Impact	Importance	Proposed measures	Person responsible for implementation	Implementation period	Performance indicator	Those responsible for monitoring-evaluation
		awareness among the population and the other employees in the respect of this security perimeter; - Establish an emergency plan in case of an accident (explosion, fire) with evacuation of personnel; - Do regular medical check up of workers.				
Diminution of income related to the sale of land	Medium	- Repeat of awareness campaigns in all the villages concerned, during which all the challenges of the project must be frankly explained to the local populations concerned by insisting on the benefits and the disadvantages of (ensure that the populations of all the villages concerned are well informed and on time of the dates and places where these awareness campaigns will be held).	Promoters of the registration project of World Heritage	From the classification in the WH	Minutes of sensitization campaigns Report of compensations made Training programmes	Execution Master and Work Master or Supervisor
Loss of landed property	Major	- Any owner of property or valuable to be damaged by the development work should be identified and compensated at its fair value before the actual work; - Propose to the local populations concerned, appropriate training and the accompaniment in the implementation of a number of alternative activities or the valuation of some cultural local riches, whose implementation on their land would allow for better exploitation to their advantage and in a sustainable manner rather than sell them for a temporary gain.				

Source: Le BET COMPETING/BEFA, 2014

VI.7. ENVIRONMENTAL RATING

The objective of the environmental monitoring is to ensure that the activities to be undertaken within the framework of the implementation of the projects of the LUP shall comply with the standards in force and that they are compatible with the commitments of Cameroon in environmental matters and that their realization respects the interests of local populations concerned. It aims for the continuous improvement of environmental performance and allows you to check the accuracy of forecasts and assessments of impact as well as the effectiveness of certain proposed mitigation measures.

This environmental monitoring will be provided by the public authorities (State and the Buea Council) who must ensure the implementation of the measures recommended in the present EMP and verify their effectiveness for a continued improvement.

Main elements of the urban environment:

- Protected areas;
- Urban green space;
- Hygiene and public health;
- Solid waste management;
- Sanitation;
- Pollution of the environment;
- Landscape and architecture;
- Public dressing and beauty

In the current context, the urban environment is generally:

- Unhealthy;
- Not pleasant;
- Uncomfortable;
- Inconvenient;
- Lacks harmony.

VI.7.1. Management of protected areas

Elements of protected areas

Protected areas in the city include the vulnerable sites, the areas at risk and the scenic areas which must not be occupied, constructed or built. They include:

- All water courses;
- Flood plains;
- Steep slopes;
- Water catchment points;
- Natural Reserves; -
- scenic tourism sites;
- Declared protected areas;
- All the public roads: -

- Main roads; -
- Primary roads;
- Secondary roads;
- High and low voltage (tension);
- Water pipes;
- Pipes of liquid waste;
- Telecommunication lines.

Problems

- Illegal and non-regulated occupation and development
- - Destruction of the natural environment;
- - Activities favourable to landslides, flooding and accidents;
- - Lack of comfort and convenience;
- - Loss of historical and cultural heritage.

Objectives •

- Reduce the destruction of the natural environment;
- Reduce the conditions that favor the possibilities of landslide, flood and accidents;
- Increase the beauty, comfort and convenience of the city.

Plan of protected areas

The plan of the current situation shows the elements of the protected areas (areas situated from other parts on the flanks of Mount Cameroon).

Political Orientations

Protect, maintain, retrieve and develop the vulnerable sites in order to reduce risks and natural disasters;
Acquire, develop and manage the formal green spaces

Strategic directions

- Regulate- the protected sites (areas situated from others on the flanks of the mountain);
- Check the protected sites;
- Develop and enhance in a progressive manner the protected sites;
- Resettle displaced persons.

Rules and regulations

- All existing properties with land title and building permits in the interior of the protected areas approved must be maintained until further notice;
- All existing properties without land title or building permits must be destroyed after a notification, to the loss of the offenders;
- All properties and buildings newly acquired must respect the rules and regulations stipulated.

Management Procedures

- Designate and declare all protected sites;
- Promulgate the regulation of management of protected sites; •
- Digitize all protected sites;
- Reject all land transactions on the protected sites;
- Reject all certificates of urban planning on the protected sites;
- Reject all the building permits on the protected sites;
- Assess the development on the protected sites; •Resettle displaced persons;
- Develop and restore the sites.

Actors

The executive and legislative bodies of the Council have the responsibility for the implementation of the projects of the LUP. However, they must work with local representatives of the:

- Ministry in charge of state property;
- Ministry in charge of urban development and habitat;
- Ministry in charge of the environment;
- Guardianship authorities (Senior Divisional Officer and Sub Divisional Officer) ;
- Civil society;
- -Local NGOS.

VI.7.2. Green space system

Elements of the green space

- Protected Areas: •
- Water courses and flood plains;
- Steep slopes;
- Natural resources.
- Encroachments of public roads (Highways);
- Parks and gardens of the city;
- Parks and gardens of the secondary centers;
- District parks
- Sporting Infrastructures:
- City stadia;
- Playgrounds of sectors;
- Playgrounds of schools.

Problems

- Green spaces informal and non-protected;
- Roles and responsibilities of planning, development and management of green spaces, confused;
- Difficulties related to the acquisition and conservation of land for urban green spaces.

Objectives

Roles, responsibilities and procedures for planning, development and management of green spaces are clearly defined;

- Access to the land for urban green spaces facilitated;
- Appropriate measures for the protection of urban green spaces provided
- Adequate resources for urban green spaces provided.

Plan of urban green spaces

Green spaces are distributed equitably in the perimeter of planning.

Political orientations

All green spaces existing - formal and informal are public property and maintained as such.

Strategic Directions

- Identify and document the existing green spaces - formal and informal;
- Declare as public utility all existing green spaces - formal and informal;
- Plan, develop, and manage existing green spaces;
- Continue to plan, acquire and manage green spaces.

Rules and regulations

Specific rules and regulations should be provided for:

- Standards of provision of green spaces; •
- Property (possession) of green spaces;
- Recovery of costs of green spaces.

Management Procedures

- Designate all green spaces;
- Delimit the green spaces;
- Acquire the green spaces;
- Design each green space;
- Mobilize funds for the development of the green spaces; •
- Develop each green space;
- Occupy and use the green spaces;
- Manage and maintain each green space.

Expected Results

- Enhance the conditions of the urban environment;
- Improvement in comfort and public amenities
- Conservation of spaces in the process of disappearing.

Partners and actors

- The Council and the population are responsible for the protection and management of protected areas in collaboration with the local representatives of the:
- Ministry of urban development and habitat; •
- Ministry responsible for state property and land registry;
- Department of the environment for the protection of nature and sustainable development;
- Ministry of sports and physical education;
- Administrative Authorities;
- Benefiting concerned populations;
- Local NGOS.

VI.7.3. Urban Hygiene and Sanitation plan

The unsanitary conditions in the town of Buea is caused by:

- The poor management of solid waste;
- Waste water are evacuated into nature without any treatment and not far from homes.

Solid waste management

In the city the management of household waste is ensured by the HYSACAM Company without any form of pre collection (separation of organic products, plastics and industrial). Despite the government policy aimed at the use of biodegradable envelopes, the production of plastic waste remains effective given the delay in the implementation of the alternative products. On the other hand the indiscipline of populations has led to the establishment of the wild landfills in certain areas of the city such as Tole and the Hausa quarter (see photo 5) (on the public places, in the drains and in the gutters). It must also be noted that garbage collection in the city is not regular. In effect, we have observed in some locations (Bokwango) waste bins full of waste pre-collected by the populations (see photo 6) and which are waiting to be collected by the staff of HYSACAM (see photo 7).

However the populations on their part do not fully assure the pre-collection. In effect despite the facilities put in place (waste bins) we can sometimes observe garbage that litter the ground at the edge of the bins, thus illustrating a lack of education in relation to hygiene and sanitation (see photo 8).

In some neighborhoods on the contrary, the landfill of junk are simply burnt when they supercede a certain limit

In general these solid wastes are made of plastics (bottles and bags of plastic packaging), glasses, metal wastes, and organic debris (vegetable materials, debris of dead animals). The combustion of these latter generates a considerable rate of Co2 and many toxic gases harmful to the environment and the ozone layer.

With regard to the management of hospital waste, within the central hospital is observed waste bins and given the cleanliness of this hospital we can believe that the pre-collection is well done at the base (see photo 9).

As for the treatment of these wastes an incinerator is planned for its processing (see photo 10), but for now, without any soul restraint, these wastes are dumped into nature only to be burnt later (see photo 11).

The discharge of HYSACAM is located at two meters from the road less than a kilometer and half of first homes and two km exactly from the urban area (see photo 12). It is in fact just a relief discharge because as at now there exists no appropriate areas for creating a discharge respecting environmental standards or norms.

VI.8. PHOTOGRAPHIC ILLUSTRATION



Photo 1 : Household waste dumped in an anarchical manner



Photo 2 : Here on this map, we find the consequence of the insufficiency in the collection of waste by HYSACAM



Photo 3 : Pre-collected waste by the populations awaiting the collect of HYSACAM



Photo 4 : Dumping of waste out of waste bin



Photo 5 : Waste bin for pre-collecting of hospital waste



Photo 6 : Hospital waste is collected and burnt into nature



Photo 7 : Incinerator of the Buea Hospital unused and abandoned



Photo 8 : HYSACAM discharge situated at less than 2 Km of the urban area

Management of liquid waste

Liquid waste is comprised essentially of waste (used water) (domestic, rain water). This is a major problem in the sense that they are released by a number of households into nature without treatment. Several technics are used to channel and limit the negative effect on these housholds. We are thinking primarily of septic tanks, easement tanks or latrines.

Generally in our homes, used water (laundry water, dish washing, and all other dirty substances), are poured into gutters and channels, and these create and follow their course (see Photos 13). This unhealthy practice favours the development of agents of sickness exposing as such the coastals to divers illnesses (malaria, skin diseases...).



**Photo 9 : Waste water is drained into nature-
Muea quarter**



**Photo 10 : The slaughterhouse of Hausa
quarter**



Photo 11 Deposit of cow horns



Photo 12 We have in the itinery liquid waste from the slaughter house before being found in nature



The management of waste from slaughterhouses constitutes one of the greatest problems facing the town of Buea. In effect the slaughterhouse located in the Hausa quarter (see (photo14) constitutes a very large source of pollution and nuisance. Because, located in full urban area, solid waste (see photo15) and liquids of animals are dumped into nature thus causing pollution and various nuisances. The liquid wastes from these slaughterhouses are dumped into nature just near homes (see photo 16). These waste release a very strong odour

VI.8.1. Sanitation

Sanitation relates to the collection, transport, treatment and the secure disposal of liquid, domestic, public and industrial waste.

Sanitation elements

- Toilet and household latrines;
- Public toilets;
- Plants for the treatment of industrial waste.

Sanitation problems

Sanitation in Buea is generally unsatisfactory and characterised by: -

- Inadequate provision of public easement facilities (toilets and urinaries) in public and commercial places;
- Irregular evacuation of public and household toilets; -
- Absence of sewage treatment recipient;
- Uncontrolled release of untreated wastewater into the natural environment.

Sanitation Guide

In order to Improve the management of liquid waste in the short term, the following guide is recommended: -

- Continuously raise public wareness on the appropriate management of domestic and public liquid waste; -
- Ensure a design and adequate capacity of the sanitation facilities in the approval process of building permits;
- Inspect and regularly check the public and domestic sanitation facilities;
- Organize the evacuation, transport, treatment and a secure disposal of liquid waste.

Rules and responsibilities

The Council and the populations concerned must take direct responsibility for the management of sanitation. However this must be done in collaboration with: -

- - The local service of the public health and safety; -
- - The technical services of the Council;

- - Heads of neighborhoods and traditional authorities; -
- - NGOS active in the field; -
- - The Senoir Divisional Officer
- - The Buea Council

VI.8.2. Pollution of the urban environment

Elements of urban pollution

- The elements of urban pollution include: -
- Water courses;
- Air; -
- Physical environment and landscape; -
- Audiovisual environment;
- Noise.

Definition of the problem

- -The rivers are polluted with solid and chemical waste from slaughterhouses and households; -
- -The air is polluted by dust and smoke from exhausts and fuels; -
- -The Visual environment is due to the non-collection of solid waste, unbuilt plots, bad architecture and urban landscape; -
- Noise from incompatible occupation of the soil.

Pollution management guides

To gradually reduce the levels of urban environmental pollution, the following guide is recommended: -

- Continuous sensitization of the public on ways of reducing pollution; -
- Execute appropriate hygiene and public health programmes; -
- Ensure systematic programming and development of land;
- Ensure appropriate management of solid and liquid wastes.

Roles and Responsibilities

The control of pollution of the urban environment is the direct responsibility of the decentralized environmental services. However they work in collaboration with:

- The department of hygiene and public health (HYSACAM);
- The technical services of the Council;
- Quarter heads and traditional authorities; -
- Owners and promoters;
- Inhabitants;
- The S.D.O;
- The Buea Council;
- NGOS.

VI.8.3. Urban landscape and architecture

Elements of urban landscape and architecture

The main elements of the urban landscape and architecture include: -

- Natural topography, vegetation and scenic sites; -
- Fabric of urban planning and construction; -
- The provision of sites and the design of built buildings;
- Urban furniture and landscape; -
- Treatment of the urban landscape.

Definition of the problem

The main problems of the urban landscape and architectural features include:

- Destruction of the topography and vegetation; -
- Irregular Occupation of scenic sites; -
- Spontaneous division, chaotic and haphazard land, planning and construction; -
- Urban design and landscape management unsatisfactory;
- Urban furniture not controlled;
- Urban agriculture not controlled.

Urban landscape and architectural guide

To improve the landscape and the architecture of the city, the following guide is recommended:

- Ensure an appropriate design and urban planning; -
- Ensure a systematic subdivision, development and construction of urban land; -
- Ensure effective control and monitoring of land development;
- Prepare and implement plans and regulations of occupation of the land

Roles and Responsibilities

The Council and the populations concerned have the direct responsibility to ensure a satisfactory urban landscape and architecture. However, they must work with: -

- The decentralized services of urban development and habitat; -
- The decentralized services of state property and land registry; -
- Professional bodies of the town planning, architecture, engineering, state property and land registry;
- Owners and land developers (promoters);
- Entrepreneurs; -
- NGOS.

VII. ANNEXES

- A.1-Actual situation synthesis ;
- A.2- Map of equipments proposals for 2025;
- A.3- Map of equipments proposals for 2029;
- A.4- Synthesis of equipments proposals;
- A.5- Memory of responses to the comments.

A.1-Actual situation synthesis

A.2- Map of equipments proposals for 2025

A.3- Map of equipments proposals for 2029

A.4- Synthesis of equipments proposals

A.5- Memory of responses to the comments