MISSION 3 :

FEASIBILITY STUDY

CONTEXT

LIST OF ACRONYMS AND ABBREVIATIONS

AIMF	International Association of Francophone Mayors
AFD	French Development Agency
API :	Investment Promotion Agency
APS :	Preliminary Draft Summary
BAD	African development bank
BET	Technical consulting firm
BIT	International Labor Office
BM	World bank
BT	Low Tension
BTP :	Building and public works
CAC	Communal Additional taxes
C2D :	Debt relief and Development Contract
CCE :	Assessment and Evaluation Commission
CDE :	Camerounaise des Eaux
CES :	College of Secondary Education
CFA	Financial Community of Africa
CFC :	Land Property Loan of Cameroon
CMA :	District Medical Center
CNPS	National Social insurance Fund
CSI :	Integrated Health Center
CTD	Decentralized Territorial collectivity
CTP :	Technical steering committee
CU	City cuncil
CUB	Bamenda City cuncil
DAO :	Call for tender file
DGSN	General direction of the national security
DSCE :	Growth and employment strategy paper
DUP	Request for public utility
EIES	Environmental and social impact study
ENIEG :	National School of Teachers of General Education
FEICOM :	Special council support Funds for mutual assistance
EU	European Union
FFOM :	Strengths weaknesses opportunities and threats
FIMAC :	Investment financing of micro agricultural and Community production
FNE :	National Employment Fund
GIC :	Communal Initiative Group
GIE :	Economic Initiative Group
GIFU	Urban land grouping initiatives
HT :	High Tension
INS :	National Institute of Statistics
IST	Sexually transmissible diseases
MAETUR	Urban and Rural Land Development and Equipment Authority
MIHU	Ministry of Infrastructure, Housing and Urbanism
MINADER :	Ministry of Agriculture and Rural Development
MINESEC :	Ministry of secondary education
MINAS	Ministry of social affairs
MINDCAF :	Ministry of State Property, Survey and Land Tenure
MINDDEVEL :	Ministry of Decentralization and local Development
MINEE :	Ministry of water and energy

MINEFOP	Ministry of Employment and Vocational Training
MINPOSTEL :	Ministry of Posts and Telecommunication
MINEPAT :	Ministry of Economy, Planning and Regional Development
MINEPIA	Ministry of livestock, Fisheries and Animal Industry
MINHDU :	Ministry of Housing and Urban Development
MST	Sexually transmissible illnesses
MT :	Average Tension
NAEP :	National Agricultural Extension Program
NTIC :	New Technology of Information and Communication
ONG :	Non Gouvernmental Organisation
ONUC :	National order of cameroonian town planners
ONIGC	National order od cameroonian civil engineers
ONU :	United nations organisations
ONAC :	National order of camerronian architects
PGES	Envirenmental and social management plan
PGU	Urban governance program
PM :	For memory
PME :	Small and Medium Size Enterprises
PMI :	Small and Medium Size industries
PNUD	United Nations Development Program
POS	Land use plan
PPAB	Participatory slum upgrading program
PTF	Technical and financial partners
RAS :	Nothing to report
SIC	Cameroon real estate corporation
TF :	Land title
VIH	Immuno-deficient human virus
VRD :	Roads and Various Networks
ZAC :	Concerted Development Zone

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INTRODUCTION

A) CONTEXT OF THE MISSION

Sisia quarter is a set of four blocks, densely populated, which has deteriorated over time. It has the characteristics of a slum, including poor access to basic urban services and is situated in a risky site (rugged, steep), high density of housing and precariousness. The studies and diagnosis carried out in the area have highlighted the precarious living conditions of households. This precariousness is reflected on deficit in terms of accessibility to basic urban infrastructure and services, precarious land tenure and housing.

The State of Cameroon wishes to change the face of this area close to the city centre of Bamenda. In the master plan of Bamenda, this area is classified as a zone to be upgraded or renovated. As a result, under the PSUP, upgrading has been retained as a tool to improve on the slum nature of Sisia. This choice helps to keep people on the site while improving their living conditions in the neighbourhoods.

The main objective of this operation is to improve the standard of living of the people of the Sisia area through the increase in the rate of access to basic urban services and infrastructure. This project will also strengthen the capacity of local actors to manage and maintain the infrastructure and the services that will be put in place.

This upgrading operation is structured around four main activities: (1) The construction of infrastructures (roads, structures, drainage stormwater and flood-zone sanitation), (2) The extension of infrastructure access to basic urban services (drinking water supply, public lighting, solid waste collection service), (3) land regularization and the construction of social housing for the relocation of displaced households, (4) The realization of Socio-economic infrastructure (improvement of income-generating activities, playground etc).

The upgrading operation is in line with the Bamenda Master Plan, but also the 2035 government's vision, which makes the urban sector an engine of national economic development. The upgrading of this area located a few kilometers from the city centre of Bamenda and whose upgrading initiative challenges the crucial issues of urban mobility, densification of the housing, societal integration and environmental balance has a strategic position giving the opportunity to experience a sustainable process of upgrading; thus comforting the Government's commitment through its sustainable urban growth sector policy.

B) MISSION OBJECTIVE

The main objective of this mission, which deals with the feasibility study for upgrading operations in Sisia neighbourhood, is to determine intervention programs with technical, institutional, financial, Social and

environmental effects of their implementation, based on an analysis that will give an important part to the economic, financial, social and environmental impact. The main aim of this operation can be summed up in the following:

- The technical and financial feasibility study of all the operations carried out during the upgrading operations;
- The proposal of an institutional and regulatory framework for upgrading as a whole and for more precise operations;
- To Propose a documentary framework for environmental and social management plan
- Proposal for upgrading programs.

C) DEVELOPMENT STAKES IN SISIA NEIGHBOURHOOD

The previous diagnosis of Sisia Quarter highlights stakes of several orders; these are social, economic and environmental stakes.

C.1 Social Stakes

The inhabitants of the Sisia neighborhood are victims of social exclusion in the sense that they do not have easy access to urban services. Also, the lack of assistance of the municipality in development efforts in the neighborhood by the populations, contributes in isolate them the more. These populations are struggling with the burden of risk during which, in each rainy season causes enormous human and material losses. The dignity of the inhabitants of Sisia neighborhood is therefore challenged, the latter being frustrated by other inhabitants of the city who consider them negatively because of the "no man's land" image of the neighborhood. In a few meaning, let's say we are dealing with

- A frustrated population
- A population suffering because of flood and landslide risks
- A population excluded from urban life and deprived of all urban services

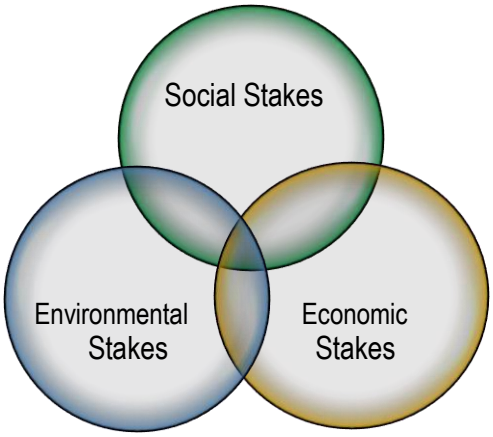
C.2 Environmental stakes

The slope sides which are now plagued by a rampant urbanization; this occupation contributes to the disappearance of the vegetation cover of the Bamenda Forest of Ngemba. Also, the pressures exerted on the slopes weaken the structure of the escarpment which in the long run can aggravate falling stones and jeopardize the entire lower town. In addition, the absence of a formal waste discharge contributes to pollute many waterways that litter the quarter with the pollution of streams which have become improvised waste discharge zones by the inhabitants. In summary, the green and bluebelt are hindered by the grey belt which suffers from an incompatibility.

C.3 The economic stakes

The escarpment falls represent the most beautiful gift from nature to the town of Bamenda; but this immense wealth remains unexploited and it represents a big loss to the community. The landscape potential presented in Sisia area could arouse the interest of many tourists especially since the city is already a privileged tourist destination on a nationwide scale.

Sketch 1: Stakes of sustainable development



C.4 Sketched summary of the stakes

Considering these stakes, it is urgent to formulate modus operandi strategies and proposals to overcome chaos in Sisia.

PART I:

FEASIBILITY STUDY FOR THE UPGRADING OPERATION

I. TECHNICAL AND FINANCIAL FEASIBILITY OF THE DIFFERENT DEVELOPMENT OPERATIONS

The choice of the development option depends closely on the results of the urban diagnosis carried out during mission 1 and the PSUP in the zone. The diagnostic phase helped us to characterize the study area and its population, focusing on the basic urban services that make up the area's primary facilities. At the end of this diagnosis, we drew up a hierarchical list of the needs of the neighborhood. This identification was based on the results of the present situation, but it was also necessary, in particular for prioritization to be taken into account on the opinions of the populations whose needs must be met.

Indeed, the participatory aspect of the definition of needs often makes it possible to carry out more relevant developments: they redefine the perception of needs and give an idea of the level and type of services expected by the populations. This conditioned the appropriation of the development made, since for example, a service with a high cost or not adapted to the current practices of the populations will not be used or it will be degraded.

Moreover, the development in Sisia area, which is spontaneous and dense, with poorly mastered land, necessarily requires the input of the population with regard to the localization of the latter. This is the case of roads and footpaths, whose first or main tracing is difficult to identify, but also whose layout to be carried out has been determined in consultation with the members of the committee resident in the area, especially since it can involve evictions. This is also the case for other developments through which, the population can easily propose the most useful sites for its implantation (streetlights, public taps...).

I.1 Technical feasibility: Urban upgrading

In the light of the constitutional provisions, the 2004 law governing town Planning and its implementing decrees, specify the prerequisites, the method of treatment, the modalities of execution of projects in operational planning. The treatment mode of precarious neighbourhoods is the upgrading and/or renovation carried out in the context of concerted planning or not. Article 53 of the 2004 Law states that: "urban upgrading is a set of development actions on spaces built in an anarchical manner, degraded or carried out in the old sector". And, "urban renovation is a set of measures and development operations which consists of the total or partial demolition of an unhealthy, delapidated or inadapted urban sector in order to establish new constructions".

One observes that in spite of the accelerated progression of precarious settlements and 8 years after the implementing decrees of the said Law, no upgrading/renovation operations were carried out till the end.

I.1.1 Development Orientation

We note here that decree N ° 2008/0738/PM of 23 April 2008 on the organisation of the procedures and modalities of land use planning, according to the definition which the said decree gives in its article 3 to urban upgrading and renovation, is not Applied in the provisions of article 6.10, 11, 45 and following.

The initiative of the upgrading /renovation process is the responsibility of the State and the Regional and Local Authorities (CTD) in general (article 55 (4): " upgrading and/or urban renovation operations are undertaken on the initiative of the State or a municipality or a group of municipalities and is carried out in accordance with a upgrading and/or renovation plan. Concerted planning includes upgrading. The number of actors responsible for initiating the upgrading process is broadened when it is done in concerted development. 'Concerted development operations are initiated by the state, Regional and Local Authorities, moral or legal persons, public or private or interested populations..." Stipulates in section, 69.-(1) of the said town planning law.

Article 46 of the above-mentioned decree states that "a concerted development operation shall be established on the initiative of the State; of the council; of a group of municipalities; A public and private developer; of an Urban Land Initiative group. ». It is therefore interesting to note that the law gives a wide possibility to initiate an operation of urban upgrading; unfortunately no action in this direction has been achieved so far. Even more interesting to note, in paragraph 2 of article 69 of the said implementing decree, that an upgrading operation may be undertaken on a part of the national domain by the populations concerned, provided that they constitute with a public or private planner, a legal person etc.

Thus, the population in neighborhoods within precarious housing, in order to improve their living conditions, can undertake such actions. According to the regulations in force, in particular, decree N° 2008/0738/PM of 23 April 2008 on the organisation of the procedures and modalities for land use; Article 10 of the decree stipulates that: "any upgrading or urban renovation operation shall be carried out in accordance with the following steps:

- A pre-feasibility study determines the technical, financial and operational details of the operation;
- The declaration of Public Utility of works and of the carrying out of upgrading or urban renovation operations planned in accordance with the regulations in force;
- The development of a upgrading or urban renovation plan in accordance with the provisions of article 27 of the law governing town planning in Cameroon "

As regards the planning operation of the Sisia quarter, the terms of reference of the study prescribe the urban upgrading as a mode of development. As a result, we will opt for different approaches to upgrading in order to retain the one that best suits the area of Sisia and its population.

I.1.2 Scenarios of the upgrading operations

The study conducted by consulting firm ERA-Cameroon on March 30, 2015 within the framework of the Participatory Slum Upgrading Program (PSUP) in Cameroon was aimed to defining what type of land development operation that is best suited to the renovation / upgrading project of the Sisia quarter in Bamenda. At the end of the five missions that were carried out as part of this study, it was adopted unanimously between the populations, the administrative and traditional authorities, the various local development committees under the umbrella of the consulting firm ERA-Cameroon, that urban upgrading was the ideal land development party for the Sisia neighborhood.

This choice resulting from the PSUP was verified by the consulting firm POLYGONE Sarl in charge of the land development operation of the Sisia neighborhood during the household survey carried out in the said neighborhood in April 2016, ie one year after the return of the work of ERA -Cameroon. From the household survey, it appears that the population is favorable to the upgrading operation of the Sisia neighborhood to more than 75%.

Upgrading, which is an urban planning intervention in an existing fabric, is generally intended to respond to a present failure in this environment. This intervention can start from a simple organization of the activities to a radical change of the habitat. However, the purpose is the same to improve the living conditions and conditions of resident populations in a given urban environment.

In order to successfully complete the Sisia Neighborhood Upgrading Operation as mandated during the investigation phase and through the PSUP, two planning approaches were examined. These are the following scenarios: a global Upgrading and a progressive Upgrading.

a) Global Upgrading

Global urban upgrading has long been implemented during the early 21st century to counter the destructive, destructive and radical effects of urban renewal. According to the principles of functionalism, urban renewal is more like brutal actions on the existing urban fabric. It consists more of demolition than a fine job on the city or neighborhood. These actions have had serious consequences as we have emphasized above. They are now assimilated to operations that breakup with the environment. In other words decontextualized in a given urban space of its environment. In effect, the proof is that today the task is to redevelop these spaces to reconnect them to the city through total urban upgrading operations.

The global upgrading which is an operation which consists in improving the quality of the habitat in an area by a radical change of it. Some consider it to be a renovation operation due to the fact that it is characterized by a set of measures and development operations which consists of the total or partial demolition of an unsanitary, defective or inappropriate urban sector, with a view to implement new constructions.

In addition, global upgrading involves interacting directly across an entire urban space. This is to embrace the entire planning process by addressing all the spheres taken into account.

This policy of global upgrading is more focused on the redevelopment of the built environment and the social development of large-scale neighborhoods than on interventions on the urban environment. Global urban upgrading operations require iterative approaches, that is, the project is revisited in its design.

Land and property control: This is necessary because the global upgrading operation must face a multiplicity of owners, social and economic and many different situations. All these must be done at the same time or in a short and well-defined period of time in the operationalization phase.

The transformation of strategic sectors often involves carrying out several operations at the same time:

- the resorption of degraded housing, housing populations often in great difficulty residential, economic and under the yoke of dubious land status,
- the revitalization of the commercial fabric, accompanied by a cost necessary to raise the quality of the commercial offer
- territorial marketing, in order to attract companies by valuing a profitable operation and its assets

b) Gradual upgrading

Contrary to some pragmatic thoughts, the notion of Progressive Urban upgrading is a kind of urban renewal, which is a new approach to the urban policy of our neighborhoods. It marks a turning point in the history of our cities. This implies a real reflection of work on the existing situation. It must be considered as a set of punctual actions to reconquer the entire urban territory. It refers to the action of rebuilding the city on the city in opposition to demolishing. Its goal is to recycle existing resources and the transformation takes place smoothly without the behavior of the inhabitants being upset.

It involves the implementation of development operations in a progressive manner with the aim of improving the living conditions of the populations living in the area to be upgraded. These operations are conducted in the short, medium and long term, and at the end of the process gives a new face lift to the neighborhood.

Thus, the progressive upgrading projects are part of short, medium and long-term prospects. The transformation of the neighborhood is over 10-15 years and development projects over 5-10 years.

The privilege lands where this reconstruction works are the large complexes. They are strategic areas with land potential for transformation and even urban intensification. Indeed, the potential for adaptation is such

that these neighborhoods often represent the most dense neighborhoods in urban areas. They are the place of all reflections as much by their difficulty as by their potentiality. These are mostly neighborhoods considered non-aedificandi, unfit for construction and are found in anarchically occupied by the corrupt people in search of a living environment at all costs.

This urban setting very often degraded and subject to a spontaneous occupation of the space is often in contradiction with the policies of preservation of the environment adopted within the framework of the sustainable development.

Progressive upgrading can be redefined as "rebuilding the city over the city". It must respond to major urban issues, namely:

- preservation (reclaiming tissues),
- equities (gives priority to disqualified spaces),
- social (fight against urban segregation),
- environmental (limitation of the sprawl of space) and
- economic (revitalize economic activity).

Progressive urban upgrading is therefore a form of urban development that seeks to promote comparative advantages. However, it is a development more qualitative than quantitative; one can oppose it to the urban growth. This qualitative development focuses on sectors where the land market is no longer attractive enough for spontaneous operations to rise. Urban projects must be produced to organize neighborhoods and attract new sources of funding. Without this action, the spaces will be segmented more and more or no mix would be present. By operating through urban intensification, the Progressive Urban upgrading opens up to the population a greater offer of decent housing, proximity services and thus avoids commuting.

With this model, the public authorities have more room for maneuver and opportunities for investment, seeking funding and mobilizing people to the resettlement site.

c) Choice of scenario to be adopted

Progressive upgrading is intended to be more sensitive, in an effect of modernization of the existing whereas global upgrading is more directed towards demolition-reconstruction.

A matrix of evaluation of the two scenarios is necessary to qualify the scope of each one and to favor the choice of the approach of upgrading best adapted to the Sisia district. The occurrence affected here is the impact that an action / activity may have on the progress of the project. This occurrence may be minimal, medium or total depending on its impact at the time of implementation.

Four areas are therefore highlighted: the engineering, the political management and project management, the operational project management and finally the technical and organizational management. Each project will have preferred trends towards one or more areas or all at once.

The new concept of social engineering complements those of the operational and the financial in urban upgrading and reflects both the need for engineering and that of integrating the social. The aim is to set up actions in relation with all actors (social workers, teachers, etc.), to assist the most disadvantaged inhabitants and those affected by relocation, to establish consultation procedures to associate the inhabitants and to obtain a membership in the project which will make it possible to avoid a certain number of conflicts.

Political management and project management is often under the yoke of political actors who are elected for a period of time. This has a major impact on their action plan and the initiatives they undertake. Indeed, a political actor would be more tempted to complete the project as quickly as possible, which is out of step with the initial duration of the project.

The operational project management highlights the fact that any project or development operation is an economy linking the sale of land charges and the costs of acquisition, equipment and land development. The client who is the guarantor of the financial equilibrium of an operation has developed numerous evaluation and monitoring tools allowing the establishment of "balance sheets", that is to say, the different types of existing reports during the life of a project:

- Feasibility assessments that enable the program to be progressively defined under optimum economic conditions of profitability.
- the commitment budget, which is established according to the urban project that has been defined (scope, projected program of public facilities, etc.). This balance sheet is the reference for implementation of the operation. It is on this basis that the decision of realization is taken
- the updated balance sheets: during the operation, in order to assess the conditions of evolution of the operation, a ARLC (Annual Report to the Local Community) is established: balance sheet evolution, cash flow plan, table of acquisitions and disposals of the previous financial year, business cycle note (physical and financial conditions for carrying out the transaction)
- the closing balance sheet: which record the achievements and the final results of the operation.

The technical and organizational management takes into account the operational phase of the upgrading operation of the Sisia district and bases itself on the points such as: Valuing the sites with strong collective value taking into account all the resident population strata and the different projects planned during the previous phases; Promote a qualitative development of the various projects that are stopped; Structuring the urban in equipment and road network and adequate infrastructure and finally Guarantee the respect of the great balances between the social and functional mix of the operation.

Table 1: Evaluative matrix of the various upgrading scenarios of Sisia

	Action / Activities	globale Upgrading (GU)	Progressive Upgrading (PU)	Evaluative comparison
the engineering area	Participatory approach	Average *	Total*	**PU** +
	Accompanying households	Minimal	Total	**PU** ++
	Project membership	Minimal	Average	**PU** +
political management and project management	Lessor Manager	Totale	Total	-
	Culture of social development	Average	Total	**PU** +
	Logic of the image for the elected	Average	Minimal	**GU** +
	Planning culture for the developer	Average	Total	**PU** +
	Technical-commercial logic for CTD	Average	Minimal	**GU** +
operational project management	feasibility assessments	Minimal	Average	**PU** +
	the engagement report	Average	Total	**PU** +
	the updated forecast balance sheets	Average	Total	**PU** +
	closing balance sheet	Average	Total	**PU** +
technical and organizational management.	Valuing sites with high collective value	Minimal	Average	**PU** +
	Promote a qualitative development	Average	Total	**PU** +
	Structuring the new urban space	Average	Total	**PU** +
	Guarantee the respect of the great balances	Minimal	Total	**PU** ++

*Miniml/average/total

The evaluative matrix of the two approaches initiated for the upgrading of the Sisia neighborhood, namely the global upgrading or scenario 1 and the progressive upgrading or scenario 2, makes it possible to differentiate the occurrence that each of these scenarios could have on the upgrading operation. In fact, out of the 16 actions / activities likely to be carried out during the upgrading operation of the Sisia neighborhood, 13 are in favor of a gradual upgrading of this neighborhood and only 02 are in favor of a total upgrading of the Sisia neighborhood.

From both scenarios, we can see that the function and status of housing in Sisia, the means available to local authorities and public authorities do not allow us to think of a global upgrading, but rather a progressive upgrading. Indeed, this will enable the funds to be mobilized as time goes by for the implementation of all the projects.

I.1.3 The relocation site

A successful upgrading operation is one that provides a relocation site for affected population. For this study, the population of Sisia has benefited from two resettlement sites made available by the city council of Bamenda. These sites are intended to accommodate the current population of sisia affected by the development operations, but also the future population of the city council who may be subject to of similar operations. In fact, according to the study on the identification of slums in the city of Bamenda, it appears that more than 10 quarters can take this identified and necessities of similar operations.

Table 2: name of ten slums in the city of Bamenda without Sisia

N°	Name of Quarter	Level of structuring of the quarter	Equipment level of the quarter					Environmental degradation			State of Housing (Score on 10)
		Accessibility & Practicability (Score on 20)	Potable Water (Score on 10)	Electricity (Score on 10)	Public Lighting (Score on 5)	Nursery and primary school (Score on 15)	Health Centre (Score on 15)	Collection of solid waste (Score on 5)	Treatment of waste (Score on 5)	Absence of risky zones (Score on 5)	
1	Atuazire	8	5	3	4	10	8	3	0	5	8
2	Nitob I	6	4	4	1	11	7	2	0	4	6
3	Nitob II	5	5	3	1	12	6	2	0	4	5
4	Nitob IV	5	5	4	1	8	8	1	0	4	4
5	Ntamulung	4	3	2	1	10	5	1	0	3	3
6	Mbelem	12	6	6	1	10	6	2	0	4	6
7	Mbeffi	10	5	7	1	8	8	2	0	4	7
8	Mbessi	12	6	5	1	7	7	2	0	4	8
9	Abangoh	6	5	3	1	8	6	1	0	2	4
10	Ntenefor	9	5	7	1	10	8	3	0	3	6

Source : study on the identification of slums in the city of Bamenda, MINHDU 2016

a) Relocation of displaced populations

In order to provide good conditions for real estate operations in the city of Bamenda, the authorities have begun to find areas that will accommodate displaced populations during urban planning operations. We have the MBUNG and MUBANG area. The State authoritiesas as well as local authorities of the city of Bamenda have the firm intention of improving the living environment in the city. For this, development strategies are needed. In view of the magnitude of unplanned neighbourhoods currently identified in the city of Bamenda, it is necessary, in order to decongest these areas, to free up spaces for urban facilities and new sections for roads. There is also the need for sufficient land reserve to accommodate the entire population that will be moved from public right-of-way and also from swampy areas.

It is true that city planning and construction operations will not be done at one time or at the same moment. It is thus necessary to provide places where the displaced populations from the liberated areas will be re-established. The choice of these areas must take into account their connection to the various networks and to roads that currently link the city.

This choice also takes into account the ability to reconcile this area with the activities of the displaced. In the current upgrading project, the mass population to be moved will occupy at most one of the two sites which are the sites of MUBANG and MBUNG. In these sites, the capacity to accommodate displaced people will be assessed, taking into account the location of the collective facilities that will ease their urban insertion and also the remoteness of these two sites of the Sisia neighborhood.

Sketch 2: Location Maps of resettlement in relation to the quarter of Sisia

I.2 Possibilities for Resettlement

The project to upgrade the Sisia neighbourhood in Bamenda will result to some people moving to new sites. The resettlement in situ cannot be possible in its entirety, due to the non-availability of land (very hilly site and unbuildable); considering that the city council of Bamenda has already identified several relocation sites for populations to Move during these landscaping operations. For this stydy, two sites were defined. The site of MBUNG and MUBANG.

I.2.1 The Mbung site

This site located north of the city at the exit to Bambili offers many advantages in terms of population relocation. Currently, this site is linked by a well tarred road. This route crosses the area indicated below and continues to link other parts of the region. The site in question has hills as a whole and thus, delimited in a natural way by swamps and streams. The topography of the area is gently sloping, stretching from the base near the streams at the top of the hill. This low gradient makes it easy to trace roads and thus to carry out good land subdivision operations.

There is already a public primary school here which hosts the children of the surrounding population. The rest of the site is empty in a greater part. We noticed that there are houses under construction on the strip located below the hill that is near to the river. This is the unfortunate side of this site which is already being occupied anarchically by some city-dwellers. We already have nearly five construction units that are housing a small number of this population. The fact that the area is surrounded by streams suggests that water sources could be easily taken and treated as a local distribution network. In the absence of this opportunity, the urban network can be connected there.

The electricity network is already near this relocation area although the current network is of medium voltage. All around the site, it's still greenery and the soil seems very fertile. The settled population will be able to make a wasteland for local urban agriculture. From this site, a good part of the urban landscape of the city of Bamenda is visible. This site stretches out on more than 27 hectares.

Sketch 3: Location map of the Mbung site

I.2.2 The Mubang site

Mubang's relocation site is located in the northeast of the city, accessible from the NTASEN quarter. Following this already populated area, a good tarred route crosses a large bridge with traditional architecture and very aesthetic to link this resettlement area. The area is bounded by a serviced lane and extends to the left flank of this lane. Upon arrival on the site, there is a crossroad where a branch line bypasses the site to serve the plantations for cultivation. Along the main road, there is another intersection and the extension of the left branch line that delimits the site. The left side is deployed from this path to the top of a hill. There is a path created to reach this summit. From there, we can see the other side of the hill that goes to the edge of the stream and this stream is the natural edge of the site.

The topography of this resettlement area is strong and gentle slope on both slides of the site and other slope are very sleep, but a little bit steep in some places. The strips of land in the vicinity of the waterways are relatively flat, enough to install sport facilities of all kinds. Here, the land subdivision operations will be carried out with difficulties because; does not have a uniform landscape requires in some places operations of large technical works (cuttings / embankments) in order to make the site of Moban exploitable in its entirety.

Sketch 4: Location map of Mubang's resettlement site

Also, in this relocation site, the identified perimeter is already occupied by three dwelling units. These houses are located near the first intersection that gives access to the area. It should be noted that, this area, unlike the former, already has a group of inhabitants all around the site. It is urgent for the city council to take strong actions to stop this phenomenon of illegal and irregular occupation of these future zones to be planned. The first actions will be to mark the boundaries of this area in a clear and visible way, in order to determine potential clandestine occupants.

From both sites, the choice of populations was focused on **Mbung** site on more than **75%.** Indeed this site, which offers facilities for its development and which is a national land belonging to the state. It should also be noted that during the surveys, the majority of the population preferred to be relocated to this area which has similar characteristics like the site of Sisia, but at a more favorable pace.

I.2.3 Estimated Population to be displaced

In Sisia quarter, approximately 850 household are identified for displacement; the projected network in the upgrading will affect approximately 135 parcels or a percentage of 16% of the parcels identified. In summary, it shows that:

- 135 buildings will be affected by the projected network and the widening of the roads, which is about 810 people;
- 715 buildings will be affected by the evacuation up of risky areas, river banks and areas of construction project, which about 4300 people.

The total population estimated to be displaced is about **5000 people** considering that the average per household is about **six peoples.**

Sketch 5: Map of the buildings affected in Sisia by the gradual upgrading operation of the quarter

I.2.4 Terms of Resettlement

The development of the relocation site is the first priority of the upgrading operation of the precarious quarter of Sisia. In fact, in the practical phase of the project, the operations will begin with the relocation site, by a reprofiling of the existing roads and the construction of new ones. Compliance with the development requirements for the resettlement of affected populations is necessary.

The relocation of the affected populations will be done by priority. This priority is particularly relevant for the households affected by the road projection and those on the marshy areas (riverbeds). The chosen site at Mbung, future layout for the resettlement of delocalized populations during the gradual upgrading operation of Sisia, and where apartment buildings of type T3 and T4 will be built right up to three or four storeys, to facilitate urban densification, will be developed in lots and plots.

People with financial means will be accompanied in the process of plot acquisition. The construction of their houses, of which the plans will be designed for them in advance, will be carried out in accordance with the planning standardsand norms. This process is part of a managed housing approach to control land tenure and spatial evolution. In addition, this relocation site is also intended to accommodate the present and future populations of the same eviction process by the Bamenda city council.

Speaking of the terms of Resettlement proper, the allocation of parcels and lodgings will be done by households, even if an individual has more than one plot affected by the upgrading operations, he will be compensated for a parcel or an accommodation, depending on whether we are dealing with a one-storey house or with high rise buildings.

I.3 Financial feasibility: Local financial possibilities

The analysis of the financial feasibility of the upgrading operation of Sisia helps to evaluate the local financial possibilities of the communities present in Bamenda which contribute to the success of the project.

I.3.1 Brief reminder of the general legal context of the Cameroonian municipalities

The legal context of Cameroon's municipal landscape in general is quite colorful. The relevant texts can be cited in several categories: The Constitution, laws, ordinances, decrees, the orders, decisions, circular letters and instructions.

It should also be noted that ´the implementation texts of the Law of 1996, revising the Constitution (for aspects related to decentralisation), those of the decentralisation laws of 2004, as well as those of the Law on ´town planning of 2004 with its decrees of application of 2008, were all signed with the aim of reinforcing the role of the councils. Then, between April 2007 and June 2010, many other laws were established to strengthen this legal aspect and to consolidate the process of decentralization.

I.3.2 Raison d´être of Councils

Analyzing the councils and their internal dynamics is to raise their strengths and weaknesses through the elements that make them up and in relation to their raison d'etre. The councils's raison d'être is understood as "**what the council exists for**".

Article 3 of Law N°. 2004/18 of 22 July 2004 on decentralization assigns to the councils a general mission of local development and improvement of the standards and living conditions of its inhabitants. According to this law, the council has very broad powers, and is now an essential driver of local economic and social development growth. Indeed, Law N°. 2004/018 of 24 July 2004 laying down the rules applicable to councils in accordance with the provisions of the Decentralization Guidance Law carried out an inventory of the competencies transferred to the councils concomitantly with a transfer of resources. These skills include:

- Economic development,
- The environment and natural resource management,
- Planning,
- Regional development,
- Urban planning and housing,
- Population's health and social Action,
- Education, literacy and vocational training.

Regional and Local Authorities have as mission the management of regional and local interests. The usual unfortunate improvisations will no longer allow them to be up to the missions assigned to them by the law of 22 July 2004. Therefore, in the absence of an urban planning document of the LUP type, the difficulty is foreseeable.

I.3.3 Relations with administrative and financial guardianship (supervision)

a) The burden of administrative guardianship

Administrative guardianship is ensured by the Senior-divisional officer who exercises it prio to by visa and approval of acts (bylaws, decisions, work contracts, deliberations, etc.) and documents (budgets, administrative accounts, state of the staff, etc.). The municipality may be required to support the administrative authority materially and financially (fuel, organisation of official festivals, reception, visitors) and this within the provision of communal finances. The ´exercise of supervisory authoritiy may appear to the executive´ and the Municipal Council as a blocking factor and a source of delays in the ´implementation of the budget, sometimes for example, due to delays in the processing of the files.

b) Limited financial supervision

Financial supervision is provided by the services of the General accountant and those of the divisional inspector of Finance. These services are involved in the control of the financial documents of the municipality. The collaboration between the tax services which ensure the control of the taxes base and those of the municipality is not always as narrow as one could imagine. This situation is not in favour of the increase yield and the improvement of communal revenues.

I.3.4 The financial strategy

The Bamenda city council and more precisely the Bamenda 3 council must increase their revenue and financial capacities through:

- Increased tax revenue by a better functioning of its taxation and collection services;
- Local and national intercommunal cooperation in the framework of certain projects;
- The support of the State through the transfer of competences to decentralized structures and special actions, particularly those related to land, through the assistance of the Ministry of Land (MINCAF) for the demarcation and registration of plots, but also by the PIB of MINHDU and MINEPAT.

The financial strategy must be a document developed as a result of the various programming studies and will include a simulation of each project and the whole upgrading Plan. The implementation of this financial strategy in Sisia will make the best possible use of all the facilities recommended by the plan, but above all to render the latter sustainable.

I.3.5 The Land strategy

The main actions will have as consequence an increased demand for land. The proposed land strategy is presented by the base map of the study area. It is a tool to help with land security and urban management.
It is necessary for the Bamenda city council and more precisely the municipality of Bamenda 3 to implement an effective land policy, for the realization of the identified projects. The following projects should be given particular attention as it concerns land management:

- The creation of an concerted zone for development (ZAC);
- The creation of an ecological urban park
- The creation of new facilities in general;
- The application of the planning rules (easement and alignment of buildings).

Land demands for the materialization of the identified projects were taken into account and projected into land reserves especially at the level of the relocation site. The land management Strategy map presents the various status of the land and the actions to be carried out for the implementation of the upgrading Plan of Sisia and the development of the resettlement area by Bamenda III subdivision. The management of the land heritage of the city council must be substantially improved. To do this, it is imperative that the Bamenda city council and more precisely the municipality of Bamenda 3 should do the following:

- proceed to the Identification, demarcation and registration of all of its lands;
- Constitutes land reserves by using the tools provided by law in the Master Plan and the Land Use Plans of the city of Bamenda;
- Delimit land reserves within neighbourhoods for planned proximity facility;
- Proceed to the development of housing and activity areas
- Submit all projects to the authorization of planning acts (building permits, implantation permits, layout permits, etc.);
- Encourage the densification of existing urban tissue by constructing storey buildings in the Sisia area where slope permits and especially in the relocation site of Mbung;
- Make sure that unauthorized development within the upgraded area and the new Mbung layout are prohibited;
- Protects natural areas, slope areas, river banks, agricultural areas and areas to be protected from the city.

I.3.6 The Local Governance Improvement Program

The specific objective of promoting good governance in Bamenda aims in general to improve the living conditions of the population through the search for efficiency in the public actions of Bamenda city council. This strategic axis comprises three programs:

- Citizen participation;
- Strengthening of the municipal institution;
- The promotion of civic responsibility among people.

a) Citizens participation

This program aims to actively involve the population in the decisions and development of the Sisia neighbourhood and the resettlement site, through the creation of neighbourhood associations. The latter will be the direct and representative link between the population and the local authorities. They will

strengthen the participatory management of the municipality. It is also important to promote social dialogue through support to the local newspaper and other means of communication.

b) Reinforcement of the communal institutions (BCC and the Bamenda 3 municipality)

The reinforcement of the communal institution will be possible through various measures:

- the Increase of human resources through the upgrading and recruitment of qualified and sufficient personnel;
- Improving tax returns and revenues through revenues and royalties generated by the new proposed market facilities and improving the current management;
- The development of partnerships for the implementation of the upgrading Plan for the Sisia neighbourhood and the management of the relocation zone;
- The establishment of a monitoring and evaluation unit for the implementation of the plan.

c) Increasing the civic knowledge of the population

This program will be materialized by:

- The civic education Project of the population: it is a project for awareness and citizenship education of the young population in schools, Youth Training Centre, and in neighbourhood associations. It is vital that the population reconnects with the sacred values of the Republic.
- The environmental Education Project: It will be implemented within the same target structures as the citizenship Education Project. It will be about educating the public about the benefits of natural resources and the sustainable means of value and protecting these resources for their well-being and that of the city, and even the planet

I.3.7 Local finances

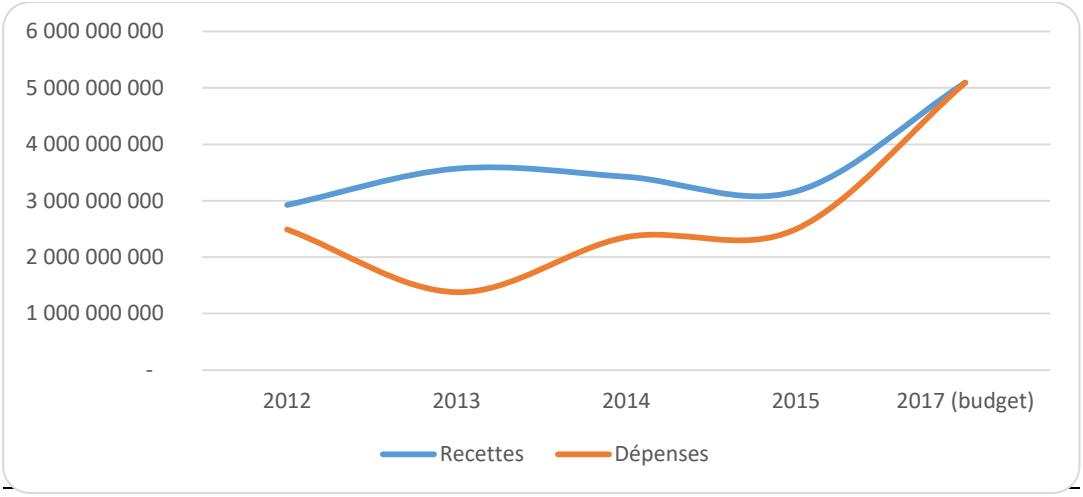
The following table globally presents the resources of the municipality of Bamenda 3 and their use.

Table 3: Overall Evolution of resources and their use on a few exercises

Elements of analysis		2012	2013	2014	2015
Revenues	**Fonctioning**	476 413 804	397 704 192	463 918 651	515 247 106
	Investistment	2 179 335 044	1 387 083 323	2 960 662 577	2 650 586 117
	Total	**2 925 748 848**	**3 569 575 030**	**3 424 581 228**	**3 165 833 223**
Spendings	**Fonctionning**	475 636 274	403 311 709	408 952 433	395 980 001
	Investistment	2 015 705 259	976 650 180	1 946 362 380	2 099 237 062
	Total	**2 491 341 533**	**1 379 961 889**	**2 355 314 813**	**2 495 217 063**

Source: Municipality of Bamenda 3 and calculations of the Consultant

Sketch 6: Overall revenue evolution in the Bamenda 3 Municipality



Source: Municipality of Bamenda 3 and calculations of the Consultant

In general, we can say that the revenue and expenditure of the municipality of Bamenda 3 between the years 2012 and 2015 are constant: they have slightly increased from 2.491 billion CFA francs to 2.495 billion for the year 2015. However, while revenues since 2012 have been slowly evolving, expenditures have been incresing since the same year. This is due to the commitment of the municipality in the realisation of various projects.

I.3.8 Financial performance

In order to assess the financial performance of the community, we will analyze the revenue implementation rate and expenditure over several years. These ratios are calculated on the basis of the achievements in relation to the local forecasts. The following tables give us an overview of these performances.

Table 4: Evolution of the revenue recovery rate

Designation	2012	2013	2014	2015
Functioning revenue			84,53	89,36
Investment Revenue			84,01	46,00
Total revenue	78,20	46,09	109,62	43,70

Source : Calculation of the Consultant from the data of the administrative accounts of the municipality

With regard to the evolution of the implementation of expenditure, the following table give an overview of local performances.

Table 5: Evolution of the execution rate of expenditure

désignation	2012	2013	2014	2015
Functioning spendings			75,90	75,19
Investment spendings			55,09	37,81
Total spendings	73,36	35,60	75,40	34,61

Source: Calculations of the Consultant from the data of the administrative accounts of the municipality

IN TERMS OF THE TYPE OF RESOURCES AND USE

The Bamenda 3 municipality has several types of revenues, including local revenues and transferred funds.

Local revenues in the council include:

- Revenues derived from land operations and the communal services on one hand;
- On the other hand, tax revenues, direct communal taxes, and indirect municipal taxes.

The transferred revenues are made up of:

- CAC
- Received Transfers ;
- Received Operating grants,
- Received Endowment Funds
- And received equipment grants

In terms of the financial capacity and services rendered to the population

The following four ratios were analyzed to calculate the economic performance of the municipality:

- **Ratio 1: Tax revenue/population.**This ratio enables to assess the tax pressure exerted by the community in order to estimate the financial capacity of the community.
- **Ratio 2: Total revenue/population.** This ratio helps to assess the wealth of the community on the basis of the contribution of each inhabitant.
- **Ratio 3: Functioning expenditure/population.** It measures the operating rate of the community, that is, the share of the income of the community per capita absorbed by the operation of the institution.
- **Ratio 4: Investment and equipment expenses/population.** It measures the investment rate, i.e. the share of the income of the community per capita absorbed by the municipal investment. It should be remembered, however that, while ratio 1 estimates the financial capacity of the community, the others measure the level of service rendered to the population.

I.3.9 Possibilities of applicability

The Bamenda city council and especially the municipality of Bamenda 3 do not have huge financial resources that can lead to the successful operation of such a project. In addition, the material means, the car parks and the human means are not left out. This is evident in the small number of works currently carried out by the latter in Sisia quarter

To overcome this shortcoming, a distribution of the planning operations from the State to the beneficiary population is recommended. Thus, the major work will be carried out by the State of Cameroon and its departments (MINHDU, MINCAF, and FEICOM etc.), medium-scale work by local authorities (BCC, Bamenda 3 council etc.), and finally the work of lesser scope by the actors and the beneficiary population in form of association.

Case study: the landscaping. It is recommended at the level of the road works that:

- The State and its departments deal with primary roads, boulevards, bypasses, bridges and other major works;
- The Bamenda city council deals with secondary roads;
- The municipality of Bamenda 3 will tackle the tertiary lanes and,
- Finally, the local actors, other development associations and the populations will be in charge of pedestrian tracks.

The feasibility of this work can only be achieved if all stakeholders work in synergy and the contribution of foreign financial donors would be an additional asset.

II. REGULATORY AND INSTITUTIONAL UPGRADING FRAMEWORK

II.1 Institutional feasibility: Analysis of the institutional framework of the UPGRADING of the quarter of sisia

The institutional and regulatory framework helps to identify elements that could facilitate/justify the implementation of the development operation in the Sisia neighbourhood. The upgrading of this quarter requires a surplus of institutional actors. Some need to intervene in a specific and others in a transversal way, on an ad hoc or a long-term basis.

The institutional analysis proposed below will at least try to list these institutional actors before proposing a reflection on their actual and/or potential roles and interventions.

II.2 Institutional actors within the framework of the improvement of Sisia Quarter

The notation adopted in the table below, by the sign "+" in the last column, reflects the degree of involvement of the institution concerned.

Nota Bene: + weak, ++ average, +++ strong, ++++ very strong.

Table 6: Institutional actors and potential contributions

Institutional Actors		Institutional Roles and Potential contributions	implication
The Presidency of the Republic		The upgrading of the under-structured quarter of Sisia is a national priority (promulgation of the Finance law and or special budget allocation, guarantor of external debts, etc.). Quarter being one of the three selected for the upgrading /renovation operation of the PSUP.	++++
Prime Ministry		Decree for the creation of primary and nursery establishments in areas within precarious housing…… Decree implementing legislation in the context of the improvement of areas of precarious settlement; Monitoring and follow-up of projects/programs;	++
Ministerial departments	MINHDU	contracting authority and/or technical partner of the operators responsible for the implementation of the upgrading projects; Monitoring and follow-up of project execution, either as part of the BIP or external or internal financing in co-financing with funders; Pre-negotiation on technical, institutional and financial arrangements for projects/programs on areas with precarious housing;	++++
	MINDCAF	Land security, registration and guarantee of land rights in areas with precarious housing, identification, delimitation and location of resettlement areas, valuation of property at stake, compensation and evicting...	++++
	MINATD	Administrative guardianship of CTD (mentoring of CTD staff recruitment, approval of budgets,...); Presidents of the allotment commissions, public plots in the new quarters open to urbanization or those upgraded...	++++
	MINEPAT	Investment agreements with potential investors, monitoring/evaluation of the execution of BIP projects or external financing, negotiation of the said financing on behalf of the State; Support for CTD development through various programs: PNDP, PIAASI..	++
	MINEPDED	Ensures the consideration of environmental aspects (existing environmental and social impact studies and ex-post projects), protection of nature (areas with fragile ecology/environmental risk zones) in the process of intervention in Areas of precarious habitat. Monitoring and follow up of the application of the existing regulations in environmental matters;	+++

		If necessary, participate in the negotiations and implementation of environmental projects.	
	MINEFOP	Vocational training of local working force, in order to be better integrated in the framework of the treatment operations of these areas of precarious housing (approach works HIMO).	+
	MINSANTE	Monitoring, follow up and resolution of public health problems and the construction of local health units; Assessment of the health risks associated with the degradation of the urban environment of these areas	++
	MINFI	Ensures the financial contribution of the State and controls the financial flows, signing of the financing agreements with the local and external financial partners; Exercises financial guardianship over the proper execution of urban projects; ... ….	+++
	MINAS	Supervises and accompanies the inhabitants concerned in the treatment of these zones organized in associations or not;	+++
	MINEDUB	contributes to the training and education of children of school age, training and assigning of teachers, and construction of nursery and primary schools in areas of precarious housing, if necessary	++
	MINPOSTEL	Ensures the installation and monitoring of the telecommunications network in a given environment. He also deals with the subscription of users to the local telecommunication network	
	MINDEVEL	Administrative supervision of the CTD (supervision of the recruitment of the CTD staff, approval of the budgets, ...)	
	MINTSS	Protects workers in the setting of the implementation of the road networks infrastructure and urban services of these neighborhoods, much more local workers.	+
	DGSN	The existing police stations or to be built, or implanted in the vicinities of precarious housing ensure the safety of men and property in the broad sense of the term.	+
Operational-oriented parapublic institutions	MAETUR	Ensures the realization (project owner) of the development operations (subdivisions) of upgrading/renovation of the areas of precarious settlement; It can also play the supervisory role of certain projects; Resettle evicted populations in collaboration with MINDCAF, MINHDU, CTD	+++

	SIC	**Ensures the construction of social housing: relocation, hire-purchase or rental accessible to low-income households**;	+++
	CFC	Ensures the mobilization of financial resources and housing savings at low interest rates accessible to all social strata including those in areas of precarious housing;	+++
Local descentralised collectivities (LDC)	Municipalities and cities councils	Project manager or managing director of projects of upgrading /renovation of the precarious neighbourhoods: initiation, financial assembly and guarantor of the implementation...	++++
	FEICOM	Financial contribution to LDC as part of an investment transaction such as upgrading /renovation	+++
local private institutions	**IDF**	Monitoring of project execution and social engineering	+++
	ERA-Cameroon	Monitoring of project execution and social engineering	+++
	BET	Studies on upgrading /renovation of precarious housing areas: technical and social engineering	+++
Foreign public institutions	UN-HABITAT	Definition of policy and technical support to the Cameroonian government (MINHDU), **LDC** and specialized organizations (CFC, MAETUR, SIC) in the treatment of areas with precarious housing.	++
	FDA	Technical and financial support and policy definition;	++
	EU	Funding and technical support ;	++
	World Bank	Funding, policy definition and advice.	++
	ADP	Funding and technical support, policy advice	++

	German cooperation GIZ C2D	Technical support and funding; Monitoring of project development and social monitoring of affected populations...	++
Non Governemental Organsation	ONG	Implementation of projects to improve precarious neighbourhoods, control of social work; Social Assistance and support of actors and populations affected during the development operations (upgrading /renovation).	++
Beneficiaries	Local Population Local civil society	Support to other bodies and institutions in the implementation of planning policy, construction assistance	

Source: Analysis of the Consultant

The table above is far from being exhaustive. However, it is clear that a large-scale operation that can significantly transform a precarious housing area and should mobilize a great number of actors, the main ones being:

- MINHDU, MINDCAF, MINATD and CTD on the one hand,
- MAETUR, CFC, SIC, Real estate developers and civil society organizations on the other hand.

In practice, institutional actors, each at its level of intervention, which have so far participated actively in various and multiform interventions in areas of precarious housing or under-structured spaces are:

- MINHDU, MINDCAF, MINATD,
- Regional and Local Authorities (of Yaounde, Douala, Bamenda …),
- UN-HABITAT, European Union, World Bank, etc.,
- Non GovernmentalOrganisations ;
- Technical Consulting Firms specialized in Urban planning, Architecture, civil engineering, etc.

It is therefore noted, in the various attempts to treat these neighbourhoods, the absence or low involvement of the major national and international real estate developers. The CFC, FEICOM, MINAS, MINEPDED which according to our research should be involved in the process until the end. The occasional and specific interventions of the other actors (MINEPAT, MINEDUB, MINJEC...) which could give a boost to the upgrading/renovation process have so far been mixed, and should be encouraged. In this context, the mobilization of many actors will pose the problem of good governance, programming and coordination of interventions with regard to the significant number of institutions involved. In addition, MINAS and MINEPDED and national and international real estate promoters should henceforth be associated from the outset in the preparation of projects/programs for the partial or total upgrading /renovation of precarious Housing areas

II.3 The institutional actors involved: specific analysis

MINHDU

The divisional delegation of MINHDU in Mezam-Bamenda is a decentralized service of the State on the frontline of issues related to the prevention and improvement of slums. It thus provides technical support to the various institutions involved in the planning of the city and housing in particular to the Bamenda city council. As part of its strategic role, it should be noted that it is currently piloting a platform for the control of building permits and materials used for construction. As regards the key interventions for the improvement of the slum of Sisia, it is therefore able to ensure the control of the process of elaboration and implementation of the urban planning regulations applicable to the upgrading zone of Sisia which specifies the types of construction and the types of authorized materials by sectors.

MINHDU, as initiator of the project and contracting authority, has the necessary political means. Its main role will be to redesign the existing infrastructures for their development. The divisional delegation will have to be much more involved in the operations, especially in the resolution of land disputes in association with State Property.

MINDCAF

The divisional delegation of MINDCAF is responsible for supervising the procedures for acquiring parcels of land and the registration of landowners. It is also responsible for land management and expropriation. It plays a major role in accompanying the population in the process of land regularization, but also in the identification of land reserves.

MINEE

The divisional delegation so far plays a minimal role in the development process of the city of Bamenda. With the upgrading of the quarter of Sisia, MINEE is called upon to accompany the populations and the State in the process of preserving the very abundant water resources in the quarter and the city; and exploit any potential for the implementation of electrical energy through these different streams.

MINAT

As MINAT is the administrative guardianship of local CTD, it is called upon to act as a regulatory body for allotment activities, public parcels, and limitation of land disputes, supervision of acquisitions and legal supervision of the populations benefiting from lots in the new upgraded quarter of Sisia.

MINEDPED

MINEDPED is responsible for the environmental aspects (existing environmental and social impact study and ex-post projects), protection of nature (areas with fragile ecology/area of environmental risk) in the intervention process in the Sisia quarter. In addition, the Sisia neighborhood, through its hilly character, its numerous waterways and the abundance of risk zone (slope) within it, requires special attention during the upgrading in order to protect its natural environment and anticipate any climate resilience effect of the area after the project. Thus, the monitoring and follow up of the application of the existing regulations in environmental matters in Cameroon is in force. Where appropriate, MINEDPED must participate in the negotiations and implementation of environmental projects in Sisia, before or after the upgrading operation.

The BCC

The task of city councils is to manage, under the guardianship of the State, local affairs for the economic, social and cultural development of its people. The law of 22 July 2004 provides for the pre-eminent role of the regional authorities in the management of the land issue, but the fields of competence are not defined.

The implementing decrees should specify them. In Bamenda, the city council is recent (created by Decree No. 2008/021 of 17 January 2008 with its headquarter in Mankon.) and has not yet engaged in slum actions in the city of Bamenda, even if the city's Master Plan foresees a large upgrading operation of Neighbourhoods characterized by unhealthy housing.

However, it is distinguished by the setting up of large-scale sanitation actions. The strategic role of city councils in slum upgrading is defined by the town planning law, which enshrines them as authorities of accreditation of urban planning and construction in the city, but also attributes to them the responsibility for the management of the living environment and the operation of the collective facilities. It is in this sense that the Association of the residents of Sisia (sisia supervisory committee) seeks support from the Bamenda city council in search for financing from funders.

The role of the Bamenda city council in the upgrading operation of the slum of Sisia should be central. It extends from the development, to the rehabilitation of the collective facilities such as the public school, markets and the health centre, to the mastery of the infrastructures (primary and secondary roads), the establishment and the accompanying of the company HYSACAM for the establishment of the garbage bins and the waste collection circuit throughout the city, the development of structured sanitized parcels in slums areas, the sale of plots from land speculation and the participation in land securisation. But the officials say that the BCC does not have the financial resources for that, nor does it have a plan of action for the Sisia neighborhood. They later added that anything related to the development operations are up to MINHDU

The Bamenda III Council

The current balance sheet of urban governance highlights a small contribution from local authorities to the support of the social component of Sisia. Since the creation of the Municipality of Bamenda III in 2008, it is noted that no project has been carried out at its initiative in the quarter. The municipality, however, represents the first participant in the prevention of slums. The area of Sisia covers an area worth **170 ha**, with a sub-structuring rate exceeding 65%. The total length of the road line in the neighbourhood is 29 282.50 lm; with an average track hold of 6-metres in the neighbourhood, this linear represents only 10.34% of the area of occupancy of the Sisia quarter.

In general, the role of the municipality of Bamenda III could be defined in the delegated project management of the construction of the tertiary and pedestrian roads, as well as the realization of the collective facilities such as the Cultural Centre, commercial areas, games, relaxation and leisure... Similarly, the upgrading of Sisia's sub-structured neighbourhood is part of its priority projects for the coming years, and it is the responsibility of the Bamenda III council to involve local population associations like Sisia Supervisory Committee (SSC) in the development process, for the support of affected populations.

II.4 Modalities for the intervention of these actors

The modalities for the intervention of the actors in the process of implementing an urban upgrading operation are gradual. The implementing partners are political, technical and financial. The technical and financial Partners (TFP) are both internal and external. The external ones are often grouped under financial funders; these are the first to influence on the implementation of the upgrading operations. As for the more national political actors, it appears that their adherence to the implementation of the upgrading operation depends on the degree of political collusion with the elected official in place at the time of its elaboration, but above all on the political character that locality plays in the development of the area.

The modality of intervention will therefore not only aim to understand and document their logic, but also to highlight their degree of implication in the upgrading process.

They are thus targeted by these modalities:

- The main internal TFP: decentralized institutions of the State in particular
- The main external PTF : FDA, WB, EU, ADB in particular ;
- Political elites: deputies, mayors of all parties
- Mayors and government delegates in post
- Local Development associations

II.5 Regulatory framework for upgrading

II.5.1 The town planning law in force

Urban upgrading, according to Law N° 2004/003 of 21 April 2004 in its article 53, is a set of development actions on builtup spaces in an anarchical, degraded or done in an old sector, intended for the integration of specified facilities or for improving the urban tissue of the agglomerations. As part of this project, upgrading is proposed and will involve the insertion of some basic urban infrastructure and equipment. To this effect, new buildings will be built. Since this operation incorporates the entire Sisia quarter, it will require a concerted development by GIFU.

The provisions relating to this type of land association are given by Act No. 2004/003 of 21 April 2004 governing Town Planning in Cameroon, in its section III. First of all, it should be noted that a GIFU has never been created in Cameroon and therefore the first difficulty. In the absence of a tangible case of GIFU, it is difficult to rely solely on the law, especially since the actors incharged with urban planning themselves do not have a perfect knowledge of this type of innovative association. As for the law, it offers little detailed paragraphs of this type of grouping, rendering its understanding complex.

The area has only one mother land title. As for the other owners, they do not feel affected by the resolution of land disputes because they already possess their land titles. Nevertheless, they are thinking of bringing ideas into the context of the reflections on the Securing of occupants ' property. For all the actors, the main objective is to protect their interests and not those of the population. It is therefore impossible to approach the setting up of GIFU in the Sisia neighbourhood.

II.5.2 Case of concerted planning:

- Creation of a concerted planning zone by prefectural Order or MINHDU;
- Establishment of the GIFU by prefectural ORDER or MINHDU ;
- DUP MINCAF ;
- Infrastructures and facilitys to be brought by MINHDU;
- Approval by Prefectural Order.

The Urban Land Initiative Group (ULIG) will be formed between the owners of the integrated land in the Sisia quarter, interested in the execution of land-use and work operations.

In fact, can justify the creation of an Urban Land Initiative Group:

- Land Pooling operations, the consequential modification of property rights, and the realisation of the necessary facilities and development work;
- The grouping of parcels for the purpose of conferring its use to a third party, in particular construction by lease, or by making a contribution or selling it to a public establishment or construction or development company;
- maintenance and management of works of collective interest such as roads, parking areas, recreation green or spaces;
- Conservation, upgrading and development of the safeguarded sectors ;
- The upgrading/renovation urban operations like in the concrete cases. Upgrading /urban renovation operations as in this case.

The administrative authority authorizes the creation of an Urban Land Initiative group at the request of the interested owners. Prior to the establishment of the group, it collects the opinion of the Mayor (Government Delegate) on the intented operation.

Its decree of creation shall fix, as necessary, the modalities for the organisation and operation of the GIFU and the conditions under which the technical assistance of the State, Regional and Local Authorities, public establishments or Private persons, may be given to it, as well as the formalities of publicity to which the acts concerning these groups are subject to.

In general, when the procedure is initiated by individuals, a GIFU (urban land Initiative Group) must first be put in place. It is then:

- The GIFU develops the project, which it sends in writing to the mayor of the concerned municipality (the proposal must contain a program, a timetable and a financing plan for the proposed operation);
- The mayor (Government Delegate to the BCC) has 30 days to review the project and then transmits it, with reasoned opinion, to the Minister responsible for town planning who, if necessary, gives an order.

The difficulty with the GIFU is that there is a need for consultation to take into account the following:

- the development on site at Sisia quarter of urban programming considering the concerns of landowners with those of the tenants with a new offer of housing, programming with economic vocation essentially tertiary and commercial, new quality public spaces and public facilities useful to the neighbourhood;
- The integration of the quarter in an environment revisited by the urban upcoming device to the city of Bamenda in general and the Bamenda III council in particular, by creating and promoting links and convergences with its surroundings;
- The design of the quarter within the logic logic of sustainable development affirmed by the approaches of social, economic and ecological/environmental management of urban development.

Ultimately, the DUP or GIFU approach is only a matter of action strategy.

II.5.3 The Master Plan (MP) of Bamenda and the Land Use Plan (LUP) of Bamenda III

According to the LUP of Bamenda III, the area of Sisia is administered by the municipality of Bamenda III which integrates into the Bamenda city council. These actors in the urban administration must necessarily find ways to curb the difficulties of the study area, given the special aspect of this space. It is an area partly classified as "risk zone" where development projects and integration of urban infrastructures are non-existent. It is only through a study like the one we are carrying out that we can achieve a clear vision of the future of this area and give a viable and liveable aspect to this space. This would contribute to an appropriate urban integration for this population.

From the regulatory point of view, the MP and the LUP highlighted the upgrading and or renovation of the Sisia area. We have a spontaneous housing area which is part of the geographical continuity of the unplanned areas of the city of Bamenda. These areas, which lie below the mountain range or which are ancient nuclei of the city, present a common landscape, which is that of disorganization.

II.5.4 The PSUP

The participatory slum Upgrading Programme (PSUP) in Cameroon, through this initiative, is developing an upgrading policy of certain sub-structured neighbourhoods in three city councils in Cameroon. The area of Sisia has been chosen from among and is the subject of this study. The PSUP by this initiative accompanies and finances the study for the improvement of these neighbourhoods and sets up a plan to monitor the affected populations and to take over the latter.

II.6 Regulations

The favorable regulatory provisions, which can help the successful completion of the project, are:

Constitution of January 18, 1996

The Constitution of the Republic of Cameroon establishes the fundamental principles of protection of individual rights, including the right of ownership: "Individual ownership is the right to use, enjoy and dispose of property guaranteed to anybody by law." No one shall be deprived of it unless it is a matter of public utility, and under the condition of compensation, the terms of which are laid down by law.''

Ordinance N° 74-1 and N° 74-2 of July 6, 1974 fixing the land and domanial system

These texts make the state the sole legal owner and custodian of the land. It confers to the State the prerogative to intervene and ensure the rational use of land, depending on the country's development priorities. According to these texts, the lands of Cameroon are classified into three main categories: private property, the public domain, and the national domain.

- **The Private Property**; a private property is any property acquired by the state or by individuals: registered land, "freehold lands", land acquired under the transcription regime, land recorded in the Grundbuch. Only land with this status may, under Cameroonian law, be compensated for unintentional displacement;
- **The Public Property:** This is the status of any movable or immovable property set apart for the direct use of the public or private services. This property may be natural public (such as coasts, waterways, subsoil, airspace), or artificial, made of any terrain assigned to various uses such as roads, runways, railways, telegraph lines and telephone, alluvial deposits deposited upstream and downstream of sites built for public use, public monuments and buildings installed and maintained by the state, concessions to traditional tribal chiefs. Property in the public domain is inalienable, imprescriptible, and elusive;
- **The national domain:** It is made up of lands which are neither classified in the private domain of the State or other persons nor in the public domain. They are administered by the State, for

development and rational use. They may be allocated in concession by the State to third parties, rented, or assigned. They can also be occupied by dwellings, plantations, and pasture areas. They can still be free from any occupation.

Law N°85/009 of 04 July 1985 on expropriation for public unity and on the methods of compensation and Decree N°87/1872/of 16 December implementing Law N° 85/009 of 04 July 1985

The above text defines the expropriation procedures for the public utility of the land and determines the compensation to be accorded to the victims in relation to the Constitution and land law. As a reminder, expropriation affects only private property as recognized by the laws and regulations. The expropriation gives right to monetary or compensation in-kind. The indemnity due to the evicted persons is fixed by the decree of expropriation. The decree of expropriation entails the transfer of ownership and allows mutation the existing securities in the name of the State or any other beneficiary person of public law of this measure.

In principle, the expropriation entitles to prior compensation. However, in certain cases, the beneficiary of the expropriation may, before the actual payment of the indemnity, occupy the places of publication of the decree of expropriation. A Notification of six (06) months from the date of publication of the expropriation order is given to the victims to liberate the premises. This period is three (03) months in case of an emergency.

The Declaration of Public utility is suspensive of any transaction and of any development on the land concerned. No building permit can be issued on the premises under penalty of a void public order.

Order N° 0832/Y. 15.1/MINUH/D000 of 20 November 1987 laying down the basis for calculating the market value

This text, and for the purpose of compensation, classifies constructions into 6 categories or standings, depending on the nature of the materials used. Each category benefits from the compensation of a particular rate which also takes account of the state of old investment. Existing compensation rates run between 1960 and 1990. During this period they will be revalued annually on the basis of a rate of 7%, to certainly take into account of inflation

Expropriation (due to public utility)

Several official texts are related to expropriation

- Ordinance N° 74-3 of 6 July 1974 is related to the expropriation procedure and presents the elements for calculating the expropriation indemnity

- Law 85/009 of 4 July 1985 is wider, it regulates the conditions of expropriation for reasons of public utility, it also specifies the various kinds of compensation and resettlement and also speaks of litigation in case the expropriated person is not satisfied with compensation or resettlement
- Decree N° 87/1872 of 16 December 1987 lays down detailed rules for the application of Act N° 85/009. It mainly develops the expropriation procedures

II.6.1 Expropriation procedure

Only the state is entitled to order expropriation. The expropriation procedure inforce in Cameroon consists successively of the following steps (articles 3 to 6, Chapter 1 of Ordinance No. 74-3 of 6 July 1974 and articles 2 to 16 of Decree No. 87/1872 of 16 December 1987):

- A request for expropriation, emanating from the Ministry, a public institution or a city council that wishes to undertake the expropriation, is transmitted to the Minister responsible for domain (MINDCAF)
- The next step is to appoint, on a decision of the Minister, an observation commission which will carry out an administrative, public and real estate investigation whose objective is the identification of rights and interested parties. This committee, chaired by the Divisional Officer, the Governor or MINATD and composed of the traditional sector and authorities, has the role of:
    - Select and limit land at the expense of the beneficiary of the operation,
    - Ascertain the rights and assess the implicated property
    - Identify their holders and owners
- At the same time, a property expropriation plan is deposited in the relevant city council and is subject to a public inquiry for 30 days.
- If there is no objection during these 30 days and on the basis of the public enquiry and the real Estate survey, a declaration of public utility (DUP) is made, by decree of the Council of Ministers on the proposal of the Minister of LANDS and the expropriation is enforced; The expropriating authority then has 24 months to execute it

The initial consists of the appointment of MINDCAF (Lands Directorate, expropriation and Compensation Sub-Directorate) with a file comprising:

- An application accompanied by an explanatory note indicating the purpose of the operation;
- A form identifying the main characteristics of the facility to be carried out and specifying in particular: the approximate area of the land requested duly justified, a summary plan of the investment validated by MINDCAF, the approximate date of Start-up of the work, the availability of

compensation appropriations with indication of the budgetary allocation or any other means of compensation.

When, in the light of these elements, the Minister of Lands judges the record admissible and the project of public utility, he issues a decree declaring public utility of the work proposed and defines the level of competence of the Commission responsible for the investigation. This order suspends on the said land all transactions, development and issuance of the building permit. These lands with this order are now part of the State's property; at the end they assign by decree to the beneficiary department, in this case MINDUH or the Bamenda 3 coucil.

The same order stipulates that for public legal entities seeking expropriation for public purposes and before resorting to them, they must pre-negotiate with the owners or beneficiaries concerned. In the event of the conclusion of their negotiations, they must comply with the common law acquisition rules.

Eligibility

Chapter 2 of Ordinance No. 74-3 of 6 July 1974 and Chapter 2 of Act No. 85/009 indicate the provisions on eligibility for compensation:

- Compensation relates to direct, immediate and certain material damage caused by eviction (Section 8 of order 74-3 and section 7 of Act 85/009).
- The indemnity can be pecuniary or in the form of compensation in kind (article 8 of Law 85/009).
- The price of land compensation is different depending on whether the land is the result of a normal common law transaction or the result of a customary detention resulting in land titles. In the first case, the compensation is equal to the purchase price, and secondly it is equal to the rate of the State Land (article 9 of Ordinance 74-3 and article 9 of Law 85/009).
- The value of constructions is determined by the Observation Commission and evaluation of; on the contrary the old houses or those carried out on the public right-of-way will not be compensated (article 10 of Law 85/009).
- The modalities for determining the value of destroyed crops and plantations are laid down by decree (paragraph 1, article 10 of Law 85/009).
- The articles relating to expropriations do not deal with untitled occupants who are in fact the majority. Nevertheless, article 17 of Ordinance 74 recognizes them as successful beneficiaries when they have occupied the land in a personal, real, obvious and permanent manner, resulting in a development. These occupants have in fact been taken into account in a number of previous cases of expropriation (Chad,-Cameroon pipeline, Nylon Quarter in Douala...)

Determination and payment of compensation

The allowances are determined as follows:

- For upgrading (crops, buildings, etc.), and on land, there are tariffs. These are bases on calculations which can guide the commission of expropriation. The tariff for Crops is recent (2003) and realistic. The one relative to the buildings is older (1990), but nevertheless takes into account the categories and standing of houses (it would be necessary to update it). The one relative to the value of the land is old (1994) and above all corresponds to the price of State land, which is very small compared to the market price (e.g. in Douala 3 000F/m2 instead of 50 000F).
- In reality, for registered land, the value is determined on the basis of the market, whereas for unregistered land, the price of State land is (eventually) followed. We can therefore note that the reality is a little bit different from what is provided by law. If an amicable agreement is reached between the expropriation Commission and the expropriated party, the minutes of this Agreement shall be drawn up. The indemnity must then be paid to the expropriated before evicting.

Legal remedies

If it is not possible to obtain an amicable agreement on the amount of the indemnities, the expropriated Party shall send its claim to the Ministry of Lands. If he does not obtain satisfaction within one month he shall write to the competent court for the expropriated property. After listening to the parties, the Tribunal decides on the amount of compensation (article 10 of Law 85/009).

II.6.2 the pre-emptive right

Its application is governed by Chapter 4 of Title 2 of Act No. 2004/003 of 21 April 2004 governing town planning in Cameroon. All landowners located in the area of intervention of the quarter of Sisia are subject to the pre-emptive right. The state becomes the priority purchaser of any property that an owner wishes to sell; the terms of sale conform to the regulations in force. In the case of Sisia, since the number of owners is limited, the pre-emptive right cannot be an effective tool for securing land and relocating of populations.

3 Coownership

It is governed by Act No. 2010/022 of 21 December. 2010 on the co-ownership of immovable property and its implementing decree is N ° 2011/1131/PM of 11 May 2011 laying down detailed rules for the application of law N ° 2010/022 of 21 December 2010 on the co-ownership of immovable property. All these legal and regulatory issues aims to harmonise life between co-owners, whether it is the maintenance of stairs and stairwells, the lighting of the corridors, the use of the main facades or the rehabilitation of the Piping.

Moreover, these texts aim to better ensure the protection of the individual rights of the co-owners as well as the protection of the condominium itself.

Beyond the general rules of coownership defined in the regulation, this law brings a major innovation in the social and solidarity economy in that it allows several people to pool their efforts in order to obtain a building in the principle of joint ownership. This law is to end the very expression of wanting to live together, as it addresses rules (modalities of use of common areas, concertation of neighbours) indispensable to the preservation of good neighbourship in a society where individualism often stands as a life model.

This newly implemented law is a windfall for resettling the populations of Sisia after intervention in that it would save the land and guarantee the relocation of a large number of people in the same area. The occupants will become owners of their dwellings as they are given the title of co-ownership. These titles will protect their rights. However, in order to ensure the proper functioning and administration of the condominium, a condominium regulation will have to be drafted and bodies such as the Coownership union, Coownership Union Council, must be created. A co-ownership status specifying the roles and the various charges for the maintenance of the common areas will be developed.

The fundamental element is the pre-emptive right which will be guaranteed by the right of pre-emption; but still considerations related to the standard of living, to the standing of the former dwelling, to the area of the land and the number of houses situated on the cleared Land.

II.7. Acts governing town planning in Cameroon

In the light of the constitutional provisions, the law of 2004 governing town Planning and its implementing decrees, specify the prerequisites, the method of treatment, the modalities for implementing urban upgrading projects.

- **The treatment** of precarious neighborhoods is the **upgrading** and/or renovation carried out in the context of concerted planning or not. Article 53 states that: "Urban upgrading is a set of development actions on **spaces built in an anarchic manner, degraded or carried out in the old sector**..."

And, "Urban renovation is a set of measures and development operations which consists in the total or partial demolition of an **unhealthy, defective or inadequate urban sector** in order to establish new constructions".

One observes the constant progression of precarious settlements notwithstanding the decrees implementing the said Law; no upgrading /renovation operations have been carried out till date.

- **An upgrading renovation or development operation in a precarious housing area,**

We note, here, that decree N ° 2008/0738/PM of 23 April 2008 on the organisation of the procedures and modalities of land use, within the meaning of the definition, that the said decree gives, in its article 3, to urban upgrading and renovation is not Applied in the provisions of article 6.10, 11, 45 and following.

The initiative of the upgrading / renovation process is the responsibility of the State and the CTD in general (article 55 (4)): " Upgrading and/or urban renovation operations are undertaken on the initiative of the State or a municipality or a Group of municipalities and are carried out in accordance with an upgrading and/or renovation plan. Concerted planning includes upgrading.

‘‘Concerted development operations are initiated by the State, regional and local authorities, natural or legal persons, public or private, or interested populations... "Stipulates section. 69. (1) of the said planning law.

Article 46 of the above-mentioned decree states that "a concerted development operation shall be established on the initiative of the State; of the council; of a group of municipalities; a public and private developer; of an Urban Land Initiative group **». *It is therefore interesting to note that the law gives a wide possibility to initiate an operation of urban restructuring; unfortunately no action in this direction has been achieved so far.***

Even more interesting, with paragraph 2 of article 69 of the said implementing decree, that an upgrading operation may be undertaken on a part of the national domain by the population concerned, provided that they constitute with a public or private planne or a legal person. Thus, the populations of neighbourhoods with precarious housing, in order to improve their common living conditions, can undertake such actions. According to the regulations in force, in particular, Decree N ° 2008/0738/PM of 23 April 2008 on the organisation of the procedures and modalities for land use.

Article 10 of the Decree stipulates that:

"Any upgrading or urban renovation operation shall be carried out in accordance with the following steps:

- A preliminary feasibility study determines the technical, financial and details of the operation;
- the Declaration of Public Utility of studies and carrying out of upgrading or urban renovation operations planned in accordance with the regulations in force;
- the elaboration of an upgrading plan for urban renovation in accordance with the provisions of article 27 of the law governing town planning in Cameroon

Article 11 states that, the upgrading or urban renovation plan must bring out:

- the diagnosis of the existing situation with particular emphasis on the landscape and socio-economic survey;
- Development proposals;
- The town planning regulation of the upgrading or renovation zone and;
- The modalities for the implementation of the renovation or renovation project.
    - The modalities for carrying out the project concerned, in strict accordance with the approved plan, the measures relating to:
- land regularization;
- The relocation of displaced populations;
- a pecuniary compensation of landowners.

These two articles clearly specify the stages of an upgrading/renovation operation;

Long before a upgrading operation, a specific text of the minister in charge of urban planning specifies:

- The implementing rules ;
- Sources of funding;
- the actors involved in the operation and their role;
- The final destination of the operation;
- The modalities for the recognition and compensation of owners with or without land titles;;
- The modalities for the establishment of the area of relocation and allocation of plots in the said zone;
- The cost recovery modalities;
- Modalities of consultation of the populations.

The following other acts in the field of town planning remain very little applied in their rigorousl provisions:

- Decree N° 2008/0736 of 23 April 2008 laying down the modalities for the elaboration and revision of urban planning documents: the upgrading/renovation plan must be consistent with the urban planning document in force;
- Decree N° 2008/0737 of 23 April 2008 laying down the rules on safety, hygiene and sanitation in the field of construction: the carrying out of the upgrading operation must enable the sanitation of the zone;
- Decree N° 2008/0740/PM of 23 April 2008 laying down the system of penalties applicable to offences against urban planning rules: This text is necessary to enforce the regulation of the restructuring plan;

- Decree n° 2009/1726/PM of 04 September 2009 laying down detailed rules for the application of Law n° 2009/009 of 10 July 2009 on the sale of buildings to be constructed. It is important for real estate development at the heart of the process of relocation/resettlement of populations in the context of a upgrading/renovation operation.
- Decree N° 2008/2009/PM of 23 April 2008 laying down the rules for the use of land and construction: it gives the tools (administrative acts) to urban managers to control and regulate land uses and constructions etc.

In the light of the above, the texts are sufficiently clear, coherent and enlarged, but they are not simply applied systematically in the strictness of the law and it's implementing decrees.

Table 7: Summary of Regulatory provisions

Cameroon legislation	Regulatory provisions facilitating intervention in Sisia	Element of Appreciation	Deficiency or probable constraint	Recommendations for the project
Constitution of January 18, 1996	Any deprivation of individual property is the result of a public utility which inevitably induces compensation	There is compensation in case of involuntary relocation. Only if the owner has a land title		Extension and rigorous enforcement of laws
Ordinance No. 74-1 and No. 74-2 of July 6, 1974 fixing the land and federal system	Registration is the only mode of access and proof to land ownership, it is the ultimate means of securing land in areas with precarious housing It suggests the transformation of the existing titles and acts into land titles for people who do not yet have a land title It defines the three main categories of land in Cameroon			Extension and rigorous enforcement of laws
Law No. 85/009 of 04 July 1985 on expropriation for public benefit and on the compensation provisions **Decree No. 87/1872/of 16 December implementing Law No. 85/009 of 04 July 1985**	They define expropriation procedures for the public utility of land and determine the compensation to be granted to victims in relation to the Constitution and land legislation		Against old houses or those built on public right-of-ways will not receive compensation (article 10 of Law 85/009). Knowing that at sisia most of the constructions are in planks (50.7%); it is known that wood is not a definite construction material according to Cameroonian legislation. Articles related to expropriations do not deal with occupants without title	Nevertheless, article 17 of Ordinance 74 recognises untitled populations as successful recipients when they have occupied the land in a personal, real, obvious and permanent manner, resulting in a development. These occupants should be taken into account as has been the case in a number of previous cases of expropriation (Chad-Cameroon pipeline, Nylon Quarter in Douala...). Provide compensation for limited persons in access to property and resources (rental house, natural resource

Order No. 00832/Y. 15.1/UNMIH/D00 of 20 November 1987 laying down the basis for calculating the market value of buildings affected by expropriation for public purposes	It identifies 6 categories of buildings that facilitate the basis of calculation. The compensation rate is equal to the current net value of the property taking into account the state of depreciation: **Land-**the compensation is equal to the transfer price of the Service land (usually social prices) **Crops**-according to the types of crops official scales (frozen rates) **Constructions**-Official scales in M2, based on: i) Classification (six categories), ii) AGE (Rate of aging), iii) dimensions and area Rate revalued at 7.5%/yr until 1990	The tariff for Crops is recent (2003) and realistic No compensation for old or almost ruined buildings, or built by breaking the rules	The price for buildings is old (1990) and needs to be updated. The land value tariff is old (1994) and above all corresponds to the price of State land which is very low compared to the market price (e.g. in Douala 3 000F/m2 instead of 80 000F). It needs to be updated	Compensation on the basis of the depreciated property would not allow the populations affected by the project to replace it, cosidering inflation. To focus on the dialogue for the amicably management of complaints and in proximity Affected persons must be informed in advance about options offered to them, and then be associated with their implementation

Source: Analysis of the Consultant

III/ ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK DOCUMENT

As part of the preparation of the Sisia upgrading project, the Cameroonian Government has undertaken, with the PSUP (Participatory Slum Upgrading Programme), a program aimed at improving the living conditions of populations in underprivileged urban areas, in Phase 3 of the project, to analyse the technical and financial feasibility of the operation.

On cartographic maps, new activities are proposed, namely: (i) Civil engineering for the development and rehabilitation of four quarters constituting sisia in order to improve the living environment, to increase the carrying capacity in respect for sustainable development standards and (ii) support for local self-development initiatives. To do this, the study is to identify the risks associated with the different project interventions and to define the procedures and mitigation and management measures that will have to be implemented in the course of implementing the project.

The environmental and social management Plan is designed as a management activity framework for effective and efficient implementation of the various proposed measures. It describes the measures required to prevent, minimize, mitigate or compensate for negative environmental and social impacts or to increase positive impacts. It is to enforce the environmental commitments of the project. It helps to effectively strengthen the contribution of the project in the sustainable socio-economic development of the target areas.

In accordance with the terms of reference, the ESMP defines the follow up and monitoring framework as well as the institutional arrangements to be made during the implementation of the project and the implementation of activities to mitigate environmental and social disadvantageous impacts, limit them or reduce them to acceptable levels. This work was carried out in accordance with the environmental and social directives in force in Cameroon as well as those of the World Bank.

III.1 description of the program and applicable legal, institutional and regulatory framework

III.1.1 Description of the programs

The intervention in the Sisia quarter is summed up as a set of development operations for the upgrading/renovation of the quarter. This upgrading will take place in situ, because the eviction of the existing one cannot be envisaged, in order to avoid the problem of finding a relocation site outside the study area. The population will remain on the site even if localised evictions cannot be avoided for cases of construction on risk areas, harmonisation of the site or on the necessary rights-of-way for planned development (roads, networks and Public facilities).

The operation envisaged here is insitu rehabilitation without eviction of the entire population. It consists of a gradual urban integration of the neighbourhood through the development of access to networks,

essential services and facilities. It will be accompanied by measures of land security, measures to facilitate access to employment and social support in the neighbourhood. The intervention program will be done as follows:

- Ensure that environmental and social issues are explicitly addressed and taken into account in the implementation of the project;
- Identify, characterize and evaluate the positive and negative impacts of the project
- Inform people and nearby communities about the activities of the project and gathering their views, fears and concerns about the project;
- Propose measures to avoid mitigation compensate potential negative impacts or optimise potential positive impacts of this project.

It will also produce at the end of the study an environmental and social management Plan (ESMP) whose implementation will ensure a harmonious insertion of the project into its environment.

III.1.2 Legal international, national, institutional and regulatory framework

Several legal texts present the study as well as the institutions concerned. These texts adopted both at international and national level are to be respected during all phases of the implementation of the upgrading project of Sisia.

Legal international framework

At the international level, Cameroon is a signatory to several conventions, agreements and treaties relating to environmental management and according to article 14 (2) of law No. 96/12 of 05 August 1996 establishing the Framework Law on environmental management. The environmental authority must ensure that Cameroon's international environmental commitments are introduced into national legislation, regulations and policy.

Among these international instruments, those applicable to this project are:

- The UNESCO Convention for the Protection of the World Cultural and Natural Heritage (1972);
- The Convention on Biological Diversity (1992);
- The Algiers Convention on the Conservation of Natural Resources (1968);;
- The United Nations Framework Convention on Climate Change (1992) and the Kyoto Protocol (1997) ;
- The RAMSAR Convention on Wetlands (1992) ;
- The Bamako and Basel conventions on toxic and hazardous wastes.

National legal framework

In the area of environmental management and sustainable development, Cameroon has an important legal arsenal.

Article 17 of the Act provides that "the proponent or contracting authority of any development, equipment or installation project which is liable, by reason of its size, nature or the impact of the activities carried out therein on the Natural environment, to damage the environment is under the obligation, according to the requirements of the specifications, to carry out an impact assessment in order to evaluate the direct or indirect impact of the project on the ecological balance of the area of implementation or of any other region, the framework and quality of life of the populations and the impact on the environment in general.Article 19 (2) sets out the indications required by an environmental and social impact assessment.

The realization of the EIES of the said project, finds its legal basis in **law No. 96/12 of 05 August 1996 establishing the Framework Law on environmental management** sets out the principles that inspire the management of the environment and natural resources, within the framework of the laws and regulations in force, namely:

- The principle of caution, according to which the lack of certainty, taking into account the scientific and technical knowledge of the moment, must not delay the adoption of effective and proportionate measures to prevent a risk of serious and irreversible damage to the environment at an economically acceptable cost;
- The principle of preventive action and correction, by priority at source, of environmental damage, using the best available techniques at an economically acceptable cost;
- The polluter payer principle; According to which the costs resulting from the measures of prevention, pollution reduction and control and the reclamation of the polluted sites must be borne by the polluter;
- The principle of responsibility, according to which any person who, through his or her action, creates conditions that would jeopardise human health and the environment, is under the obligation to ensure or make sure that it is eliminated under conditions specific to avoiding such effects;
- The principle of participation, according to which:
  - Each citizen must have access to information relating to the environment, including those relating to dangerous substances and activities;
  - Every citizen has a duty to ensure and contribute to the protection of the environment;
  - Public and private persons must comply with the same requirements in all their activities;

- Decisions concerning the environment must be taken after consultation with the sectors of activity or groups concerned, or after public debate when they have a general scope;
- The principle of subsidiarity, according to which, in the absence of a rule of written law, general or special in the field of environmental protection, the identified customary norm of a given territory proven to be more effective for the protection of the environment.

- **Law No. 98/005 of 14 April 1998 on the water regime**

This law lays down the legal framework for the water regime and the general provisions on the safeguarding of the principles of environmental management and protection of public health. It defines the general policy on the management and protection of water by the State as a property of the national heritage. Article 4 prohibits acts which could alter the quality of the groundwater or the sea, or affect public health as well as aquatic or under water flora and fauna. Moreover, this law in article 6:

- Obliges any person who owns an installation capable of causing water pollution to take all necessary measures to limit or reduce the effects;
- Obliges any person who produces or holds waste to self-dispose or recycle, or have it eliminated or recycle in the facilities approved by the administration responsible for the classified establishments;
- Prohibits the cleaning and maintenance of motor vehicles, internal combustion machines and other similar equipment in the vicinity of water.

The implementing decree N ° 2001/165/PM specifies the modalities for the protection of surface waters and ground waters from pollution. Article 3 (1) of the decree provides that: 'are prohibited, spills, flows, discharges, seepage, burials, spreading, direct or indirect deposits in the water, of any solid, liquid or gaseous materials and in particular any Industrial, agricultural or atomic waste liable:

- to alter the quality of surface water, ground water or sea;
- to jeopardise public health and aquatic or under water fauna and flora;
- to endanger the economic and tourist development of the regions;
- To harm the quality of life and the comfort of the residents.

It stipulates in article 6 that "any natural or legal person, owner of facilities capable of causing pollution of the waters, shall take all necessary measures to limit or suppress the effects".

- **Law n ° 2004/003 of 21 April 2004 governing town planning in Cameroon**

This law governs urban planning, and construction throughout Cameroonian territory. In this respect, it lays down the general rules of land use, defines the forecasts, rules and acts of urban planning, organises the land management operations and the relations between the different urban actors.

- **Law No. 85/009 of 04 July 1985 on expropriation for public benefit and on the compensation methods;**

This procedure is initiated either directly, when it is intended to carry out operations of public interest, or indirectly at the request of local authorities, public institutions, public service concessions or state-owned companies. Section 4 (2) states that: "In principle, expropriation is entitled to precompensation" and section 7 (1) of it provides that "the indemnity relates to immediate and certain direct material damage caused by eviction."

It covers

- Bare land; ;
- Crops;
- Constructions;
- Any other exploitation, irrespective of its nature, duly ascertained by a commission of observation and evaluation. »

- Law No. 94/01 of 20 January 1994 on the Regime of forests, fauna and fishing;
- Law No. 19 of November 29, 1983 amending the provisions of article 5 of Ordinance No. 74/1 of July 6, 1974 fixing land tenure;
- Law No. 98/015 of 14 July 1998 concerning establishments classified as dangerous, unsanitary or inconvenient
- Law No. 64/LF/23 of 13 November 1964 on the Protection of public health;
- Act No. 77/11 of 13 July 1977 on the repair and presentation of work-related to injury and occupational diseases;
- Law No. 86/016 of December 6, 1986 concerning the reorganization of civil protection;
- Law No. 92/007 of 14 August 1992, establishing the Labour Code;;
- Act No. 89/027 of 27 December 1989 on toxic waste in Cameroon
- Decree No. 99/818/PM of 09 November 1999 – laying down the arrangements for the implantation and operation of establishments classified as dangerous, unsanitary or inconvenient

Article 2 of the Decree stipulates that "any person wishing to establish and operate an establishment subject to authorisation shall send an application to the minister in charge of the classified establishments".

Article 10 states that "the order for authorisation to operate an establishment classified as dangerous, unsanitary or inconvenient specifies the conditions of establishment and operation, as well as the technical requirements for the presentation either of Dangers to health, safety, public safety, agriculture, nature and the environment in general, or problems to the convenience of the neighbourhood.

- **Decree N ° 2012/2809/PM of 26 September 2012 laying down the conditions for sorting, collecting, storing, transporting, recovering, recycling, processing and final disposal of waste.**

This decree defines the general conditions for the management of solid waste in Cameroon. Article 8 (1) provides that "industrial wastes (toxic and/or dangerous) can only be collected, transported or stored for final disposal by any natural or legal person approved by the administration in charge of the environment ". Article 10 stipulates that "the transport of industrial waste (toxic and/or hazardous) shall be accompanied by a waste traceability manifest issued by the administration in charge of the environment".

- **Decree No. 2013/0171/PM of 14 February 2013 laying down the modalities for carrying out environmental and Social Impact studies.**

It also prescribes in its article 27, the administrative and technical monitoring of any project having been the subject of an EIAS. This new decree, which repealed certain provisions of Decree No. 2005/0577/PM of 23 February 2005, in addition to instituting the environmental impact Statement and Strategic environmental assessment, gives the content of the different types of studies, sets the implementation procedure and the administrative costs to be paid. Article 20 of the Decree stipulates that "the implementation of the environmental and social impact study or strategic environmental assessment must be carried out with the participation of the populations concerned through consultations and Public hearings ". It also prescribes in article 27 the administrative and technical supervision of any project which has been subject of an EIAS.

- **Decree No. 2003/418/PM of 25 February 2003 fixing the compensation rates to be allocated to the owner victim of destruction for public utility, crops and trees;**
- **Decree No. 2011/2583/PM of 23 August 2011 regulating noise and olfactory nuisances;**

This decree prohibits, among other things, the carrying out of noisy activities or works, hindering the neighbourhood beyond the values of noise level and periods planned by the body responsible for standardization and quality.

- **Order No. 039/MLHW/LMT of 26 November 1984 laying down general hygiene and safety measures in the workplace.**

Article 4 stipulates that the employer is obliged to make available to workers and to maintain appropriate premises, facilities and tools for the work to be carried out in such a way as to ensure that workers are adequately protected against accidents at work and any damage to health. Article 8 states that (1) a Health and safety committee shall be constituted in any establishment using at least 50 workers, if the activity is classified in groups A and B of risks and irrespective of the number of workers if the activity is classified In group C. (2) The committee shall consist of the staffs of the delegation, the employer or its representative. If they exist: the assistant, the training officer; the security guard must be a member of this committee. (3) It meets as much as necessary and at least once a quarter under the chairmanship of the employer.

Article 13 stipulates that workers who are required to engage in activities requiring special aptitudes for their performance and who are likely to put their health and that of any other person at stake shall undergo appropriate periodic medical examinations and additional exams. Article 41 provides that in noisy establishments, measures are taken to protect workers against the effect of noise and vibration. As far as possible, the sound intensity in the vicinity of a workstation shall not exceed 85 decibels. The characteristics of the machines must be taken into account for this purpose at the time when they are put into circulation and installed. Workers who are exposed to a sound atmosphere above 85 decibels must undergo a periodic audiometric examination at least twice a year.

- Order No. 0070/MINEP of 22 April 2005 laying down the different categories of transactions to be carried out under an EIAS;
- Order No. 02/MINMEE/DMG/SDAMIC of 4 January 1999 concerning the Nomenclature of dangerous, unsanitary or inconvenient establishments;
- Order No. 00004/MINEP of 03 July 2007 laying down the conditions for the approval of the design offices for the carrying out of environmental impact studies and audits;
- Order No. 0832/Y. 15.1/UNMIH/D000 of 20 November 1987 laying down the basis for calculating the market value of buildings affected by expropriation for public purposes.
- Order No. 00001/MINEP of 03 February 2007 defining the general content of the terms of Reference (TOR) of environmental impact studies.

Institutional framework

Are concerned with the project for the upgrading of Sisia, the following institutional actors:

- **Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED)**

It is the main institution responsible for the management of the environment in Cameroon. It is responsible for the development, implementation and monitoring of the national environmental policy. MINEPDED was established in December 2004 following the breakup of the former Ministry of Environment and Forestry (MINEF) under the name of the Ministry of Environment and Nature Protection (MINEP); it has become MINEPDED since the reorganisation of government on December 09, 2011.

MINEPDED through the sub-directorates of environmental assessments and environmental management plans is responsible for monitoring the implementation and approval of environmental impact studies, as well as for monitoring the implementation of Environmental management stemming from environmental Impact and audit studies.

- **Ministry of Housing and Urban Development (MINHDU)**

It is responsible for the implementation of the National Housing and Urban Development policy. As such, it is responsible for:

  - The definition of standards for hygiene and sanitation, the removal and/or treatment of household waste, and the monitoring of compliance with these standards;
  - The beautification of urban centres in liaison with the ministerial departments and the Regional and local authorities concerned;
  - The development and implementation of urban infrastructure management strategies;
  - etc.

- **Ministry of State Property, Survey and Land Tenure (MINDCAF)**

It is responsible for the preparation, implementation and evaluation of the country's state, land and cadastral policy. It is more specifically in charge of:

  - the protection of public and private areas of the State against any infringement, in cooperation with the administrations concerned;
  - The acquisition and expropriation of immovable property at the benefit of the State and public administrative institutions and public-capital companies, in collaboration with the authorities and institutions concerned.

- **Ministry of Territorial Administration and Decentralization (MINATD)**

MINATD is responsible for the development, implementation and evaluation of the Government's policy on land administration, civil protection and decentralization. This department coordinates land

expropriation operations for public purposes; Plays an important role in indemnification/compensation and the management of social conflicts.

- **Ministry of Social Affairs (MINAS)**

The Ministry of Social Affairs (MINAS) is the guardian of the national social sector. It is responsible for the development and implementation of the Government's policy on the prevention, assistance and protection of socially vulnerable persons. In the context of this study, it will be involved in the monitoring and implementation of social measures.

- **Ministryof Public Works (MINTP)**

The Ministry of Public Works (MINTP) is responsible for the supervision and technical control of the construction of public infrastructures and buildings as well as the maintenance and protection of the national road heritage. It will ensure the compliance of the access routes with the established standards.

- **Ministry of Public Health (MINSANTE)**

MINSANTE through the decentralized services is involved in this study because of the risks of work accidents and diseases related to the development plan. Similarly, due to the presence of many workers in this project, the National Committee to fight against AIDS through its departments will participate in education and awareness raising programmes of the people on STIs/HIV/AIDS.

- **Interministerial Committee on the Environment (ICE)**

The ICE was created by the Framework Act N° 96/12 of 05 August 1996 on environmental management; Decree No. 2001/718/PM of 3 September 2001 establishes its organisation and operation. Under the terms of this decree, the company's mission is to assist the Government in the development, coordination, implementation and control of national environmental and sustainable development policies (art. 2 (1)). This decree was amended and supplemented by decree N° 2006/1577/PM of 11 September 2006. The ICE is responsible for examining the terms of reference and reports of environmental impact assessments and audits and giving opinions on their admissibility

III.2 The biophysical condition of the initial state

The physiognomy of the area suggests open spaces that are used for gardening and food crops. Also, on the side of the mountains, we have well-structured areas where an organized agriculture is developing, providing food to the farmers on these parcels of land. Given the topography of the area, vegetable growing is not developed as in other areas of the city.

III.3 Identification, assessment and analysis of impacts

III.3.1 Impact Identification Method

The method used here to identify impacts is first to identify all the components of the environment that are likely to be impacted by the project. Then to do an inventory of the main activities associated with the construction and exploitation of Sisia: construction works from the base to the end of the building, the preparation of the land, etc... And finally, a matrix of interaction (Leopold's Matrix) has been put in place to cross the elements of the environment and the activities sources of impacts. Which helped to clear the inter relationships.

The identification of these impacts has taken into account public consultation meetings, interviews with resource persons (populations, local authorities...), visual observations made on the ground and the experience of consultants in Environmental management of projects.

- **Activities sources of impact**

Within the framework of the upgrading project in Sisia, the impact-source activities are grouped according to the phases of preparation, construction and operation. The project activities with an impact on the different components of the environment are contained in table 3 below:

Table 8: Activities sources of impacts

PROJECT PHASE	ACTIVITIES SOURCES OF IMPACT
preparation Phase	Recruitment of the workforce
	Eviction
	Demolition of buildings
	Earth-movement
	Site Stripping
	Transportation of waste
	Installation of the site fence in temporary materials (planks or sheets)
	Building the Life base
	Installation of the construction site (supply and withdrawal of the equipment);
Construction Phase	Recruitment of the labourforce;
	Various excavations (debris/embankments); ;
	Setting up of foundations, poles and beams;
	Setting up the reinforced concrete slab;
	Installation of the framing, roofing and sealing;
	Drinking water supply;
	Sanitation system;
	Internal carpentry;

	Public Electrification (installation of solar panels);
	Installation of communication networks
	Planting of streets
	Works of exterior fittings including those of the green space, coatings and paint.
Exploitation Phase	Various Waste Management
	House keeping
	Use of solar energy
	Maintenance activities (cleaning, paints, green spaces)

Source: Analysis of the Consultant

- **Valued elements of the environment**

The receiving environment was subdivided into three groups:

- The physical environment (4 elements);;
- Biological Environment (2 elements);;
- The socio-economic or human environment (7 elements).

The following table 4 presents the different valued elements of the environment..

Table 9: Different valued elements of the environment

Physical environment	**1. Soil**
	2. Air
	3. water
	4. Acoustic environment
Biological environment	5. Fauna
	6. Flora
Human environment	7. Health
	8. Security
	9. Employment
	10. Economic activities and income
	11. STI / HIV / AIDS
	12. Conflicts
	13. Living Environment

Source: Analysis of the Consultant

- **Matrix of interrelationships between impact-related activities and valued elements of the environment**

Impact-source activities and valued environmental elements (VEE) were crossed to determine the interactions between project activities and the VEE from which the project impacts result.

Table 10 on the next page presents the impact identification matrix

Table 10: Matrix of interrelations between impact-related activities and valued elements of the environment

Eléments of the environment / Project activities		Physical environment				Biological environment		socio-economic environment						
		Air	Soil	water	Acoustic Environnement	Fauna	Flora	Health	Security	Employment	Economic activities and income	Conflicts	STI / HIV / AIDS	Living environment
Preparation phase	Recruitment of the workforce								X	X	X	X	X	
	Evicting							X	X			X		X
	Demolition of buildings	X			X			X	X	X		X		X
	Earth-moving		X			X	X	X	X	X				
	Transportation of waste		X	X						X				
	Installation of the site fence in temporary materials (board or sheet		X						X	X				
	Building the Life base		X		X				X	X				
	Installation of the construction site (supply and withdrawal of the equipment);;				X				X	X				
Construction phase	Recruitment of the workforce;								X	X	X	X	X	
	Various excavations (debris/embankments);	X	X		X				X	X				
	Setting up of foundations, poles and beams;;		X					X						

Source: Analysis of the Consultant

Table 11: Matrix of interrelations between impact-related activities and valued elements of the environment

Elements of the environment / Project activities		Physical environment				Biological environment		socio-economic environment						
		Air	Soil	water	acousticEnvironnement	Fauna	Flora	Health	Security	Employment	Economic activities and income	Conflicts	STI / HIV / AIDS	Living environment
construction Phase (part 2)	Setting up the reinforced concrete slab;							X	X	X				
	Installation of the framing, roofing and Ceiling;				X				X	X				
	Drinking water supply;		X					X	X	X				
	sanitation system;		X	X					X	X				
	Carpentry ;	X		X				X	X	X				
	Electrification (Installation of solar panels);									X				X
	Installation of communication networks		X					X	X	X				

Source: Analysis of the Consultant

Table 12: Matrix of the interrelations between the activities of the impact sources and the valued elements of the environment

Eléments of the environment / Project activities		Physical environment				Biological environment		socio-economic environment						
		Air	Soil	water	acousticEnvironnement	Fauna	Flora	Health	Security	Employment	Economic activities and income	Conflicts	STI / HIV / AIDS	Living environment
Exploitation phase	Various Waste Management							X		X	X			X
	House keeping							X		X				X
	Use of solar energy									X				X
	Maintenance activities (cleaning, paints, green spaces)									X				X

Source: Analysis of the Consultant

III.3.2 Impact Characterization Method

In order to characterize the different impacts of the project on the environment, the following criteria were used:

- **The nature of the impact**: it refers to its "negative" or "positive" character;
- ***The intensity or magnitude of the impact****: it* defines the degree of disturbance in the environment that depends on the degree of sensitivity or vulnerability of the component studied. This parameter is divided into three classes:
    - **High/strong:** The activity heavily affects the integrity of the component or its use and compromises its durability;
    - **Medium:** The activity significantly affects the integrity of the component or its use without compromising its durability;
    - **Low/weak**: The activity slightly affects the integrity of the component or its use.

- ***The extent or scope of the impact***: it gives an idea of the spatial dimension of the impact. The factor considered is the proportion of the project's impact area; the scope can be regional, local or punctual.
    - The extent is **regional** if the disturbance affects one or more regions;
    - The extent is **local** when the disturbance affects a territory or communities at the scale of a city or department, for example;
    - Extent is **punctual** when disturbance affects a relatively small area or very few individuals.

- ***The interaction****:* It characterizes the relationship between the project and the impact identified. The impact may be direct or indirect;
    - It is **direct** when it is directly caused by the work;
    - It is **indirect** when caused indirectly by the work

- **The occurrence**: It expresses the likelihood that an impact will be realized. The impact can be certain or probable.
- The Duration: It indicates the manifestation of the impact over time. Three classes will be distinguished:
    - **Short term**: When the disturbance is well circumscribed in time and stops with the end of the activity source of impact;

- **Medium Term:** When the impactlasts a few months to two years after the execution of the work;
- **Long-term**: when the impact is evident throughout the lifetime of the project or more.

- **The Value**: This is the importance given to the affected environmental component. It can be legal, scientific, economic or sociocultural;
- ***Reversibility***: It is the possibility for an element of the affected environment to return to its initial state even in time. Two classes were selected:
  - **Reversible**: To indicate that the impact has more than 50% chance of being reversible or that the proposed measure is effective at more than 50%;
  - **Less reversible**: to indicate that the impact at less than 50% chance of being reversible and that the proposed measures are effective at less than 50%.

Table 8 below shows the parameters and symbols that will be used for the impact analysis.

Table 13: Parameters and symbols used for the analysis of the impacts

Parameters	Qualification and symbols
Nature	**Positive (+) ; Negative (-)**
Interaction	**Direct (D) ; Indirect (I)**
Duration	**short term (Ct) ; Medium term (Mt) ; Long term (Lt)**
Magnitude/Intensity	**High (H) ; Medium (M) ; low (B)**
Occurrence	**Certain (Cer) ; Probable (Pro)**
Scope	**Regionale (R) ; Local (L) ; Ponctual (P)**
Reversibility	**Reversible (Rev) ; Irréversible (Irr)**

Source: Analysis of the Consultant

III.3.3 Method of evaluating the importance of impacts

The purpose of evaluating an impact is the determination of its importance, which reflects the degree of concern about the impact, the idea being to tackle the most serious impacts in priority. The importance of an impact can be major, medium or minor. In order to assess the importance of an impact in relation to which mitigation or enhancement measures will be recommended, the Martin FECTEAU method combining the following three parameters intensity, duration and extent has been used.

Table 14 : Scale of impact assessment

Intensity	Scope	Duration	Absolute Importance
High	Regional	Long	Major
		Medium	Major
		short	Major
	Local	Long	Major
		Medium	Medium
		short	Medium
	Ponctual	Long	Major
		Medium	Medium
		short	Minor
Medium	Regional	Long	Major
		Medium	Medium
		short	Medium
	Local	Long	Medium
		Medium	Medium
		short	Medium
	Ponctual	Long	Medium
		Medium	Medium
		short	Minor
Low	Regional	Long	Major
		Medium	Medium
		short	Minor
	Local	Long	Medium
		Medium	Medium
		short	Minor
	Ponctual	Long	Minor
		Medium	Minor
		short	Minor

Source: Analysis of the Consultant

III.4 Measures to mitigate negative impacts and to enhance positive effects

The restructuring work in the Sisia neighbourhood can have a detrimental impact on the lives of local people and on the project site. Thus, various mitigation measures of negative impacts can be identified. The study carried out with the participation of the various stakeholders in the project highlighted both negative and positive impacts. The main impacts of the project include:

- **Significant negative Impacts:**
  - Air pollution;
  - Soil pollution;;
  - Pollution of water resources;
  - Loss of vegetation cover;
  - Destruction of wildlife habitat;
  - The risk of spread of STD/AIDS;
  - The risk of destruction of homes and equipment;
  - Noise pollution; ;
  - The risk of conflict and increased crime
  - The risk of accidents at work, incident, and occupational disease.
- **Positive significant Impacts:**
  - The development of income-generating activities and increased tax revenues;;
  - Job creation;
  - Improving the quality of life of the people.

In order to mitigate the negative impacts and optimise the positive environmental impacts of the project, the following key measures were recommended:

- **Measures in relation to air pollution**
  - Provide workers with personal protective equipment (goggles and nose covers) to protect themselves from the dust that will be emitted;
  - Limit traffic speed to 20 km/h in particular on the access runways;
  - Regularly maintain vehicles and equipment at the work site (replacement of oil, gas and air filters at specified times);
  - Water the access trails in dry weather during the development of these runways.

- **Measures relating to soil pollution**
  - Avoid spilling concrete on the floor;

- Rigorously manage left over paint and empty pots, avoiding leaving them lying around, and taking them into account in waste management;
- Provide suitable septic tanks and sumps
- Set up garbage bins at the life base for waste collection;
- Set up a system of selective waste sorting at the base ;
- Develop the oil and gas storage areas and the maintenance of vehicles and equipment.

- **Measures relating to the pollution of water resources**
  - Provide suitable septic tanks and sumps for proper management of valve waters;
  - Construct a drain pit at the garage level for the collection of waste oils;
  - Build a decanter/oil separator at the fuel storage site use approved pesticides;
  - Treating waste water before being released into nature;
  - Recover clean water and have them treated in an eco friendly manner;
  - Rigorously manage leftover paint or varnish as well as empty pots, avoiding leaving them lying around, and taking them into account in the management of hazardous waste.
- **Measures related to the spread of STD/AIDS**
  - Develop and implement a voluntary personnel screening program
  - To raise awareness of the project to the staff and people in the host communities on the need to protect themselves in case of suspicious sex;
  - Recruitment of local workforce.
- **Measures relating to the demolition of houses and equipment**
  - Populations must be compensated in accordance with the regulations in force prior to commencement of work. Compensation must also be paid directly to the victims to avoid misappropriation;
  - Resettle populations in a pleasant setting, on site for the most part and offsite for the rest.
- **Measures relating to noise pollution**
  - Avoid night work;;
  - Equip staff working in noisy posts with ear plugs or noise-canceling helmets and ensure their effective port.
- **Measures relating to the risk of conflict and increased crime**
  - Set up a platform for discussion and problem-solving with traditional authorities;
  - In addition, assets that may be destroyed must be compensated before commencement of work;

- Recruiting the local workforce and applying the same salary scale;
- Inform people about any job opportunities through posters on public squares.

- **Measures relating to the risk of accidents at work, incidents and occupational diseases**
  - Equip project personnel in all phases with adequate personal protective equipment (PPE) according to workstations (helmets, safety footwear, earplugs, nose caps, etc.);
  - Carry out a hazard study with an emergency plan; This contingency plan should be communicated to employees, neighbourhoods, authorities and visitors;
  - Develop and implement an emergency medical evacuation plan for the various types of incidents;
  - Educate workers to remind them of the risks and dangers they are exposed to daily;
  - Set up fire fighting equipment: operational fire extinguishers in sufficient numbers and maintain them regularly
- **Extra measures for the development of income-generating activities and increased tax revenue**
  - Raise awareness of the opportunities offered by the project;
  - To frame the restoration activities around the site, in terms of quality;
  - Sensitize workers, cooks, etc. of good hygiene and the management of the waste generated from the activities.
- **Extra measures related to job creation**
  - With equal skills, residents must be privileged when recruiting;
  - Inform people about job opportunities by posting notices of recruitment in public places;
  - To affiliate permanent employees to Social Security (CNPS);;
  - Make the recruitment policy transparent

- **Extra measures for improving the life quality of the population**
  - Ensure regular maintenance of sisia;
  - Educating people about their rights and duties and about the opportunities offered by the project;
  - Educating people about hygiene conditions;
  - Promote safety in Sisia neighbourhood.

With the effective implementation of this set of measures as prescribed in the Environmental and social management plan, the construction of collective dwellings will have no significant impact which could impede its implementation. In addition, the study recommended accompanying measures, namely: the recruitment of an environmental safety Officer (HSE) responsible for supporting the implementation of

environmental measures both in the construction and in the Development phase, the elaboration of a site environmental regulation.

III.4.1 Measures to limit air pollution by dust emissions and toxic gases

- ***Objective***

The objective is to reduce air pollution in an acceptable manner in order to minimise the risk of spreading lung diseases (pneumonia, bronchitis, flu...).

- ***Content of the measure***

This includes implementing the activities needed in ordre to reduce dust and gas emissions.
The limitation of these emissions will consist of

- To provide workers with personal protective equipment (goggles and nose covers) to help them to protect themselves from the dust that will be emitted;
- Limit traffic speed to 20 km/h in particular on the access runways;
- regularly assure the maintainance of vehicles and equipment working at the site (replacement of oil, gas and air filters at the indicated periods)
- Water the access trails in dry weather during the development of these runways.

- ***Activities***

- Elaboration of a driving code for the equipment and vehicles of the project, including the above measures;
- watering the circulation tracks in dry weather;
- Awareness and control of drivers
- Regular maintenance of vehicles and gears.

- ***Implementing actors***

Sisia through its environmental manager is the actor in the implementation of this measure.

- ***Follow-up actor***

The Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED), the Monitoring Mission (MDC).

- ***Monitoring indicators/sources of verification***

- The prevalence rate of lung disease in the project area;
- The maintenance report of vehicles and equipment and the quality of gaseous emissions of construction vehicles and engines;
- Watering equipment and program;
- Field surveys of the populations and activity report of the HSE manager.

- ***Implementation planning***

It must be done from the beginning of the work and throughout the time that the project lasts.

- ***Cost of implementation***

The cost of this measure includes renting a tanker truck and carrying out other activities. It must be included in the cost of the project.

III.4.2 Measures to limit soil pollution

- ***Objective***

To prevent pollution of the soil by hydrocarbons and other hazardous chemicals.

- ***Content of the measure***

This measure includes all the precautions and actions to be taken to prevent the chemical pollution of the environment. This is to:

  - Avoid the spilling of concrete on the ground ;
  - rigorously manage the leftover paint as well as the empty pots, avoiding leaving them lying around, and taking them into account in the waste management;
  - Provide suitable septic tanks and sumps;
  - Set up at the life base garbage bins for waste collection
  - Set up a system of selective waste sorting at the base;
  - To develop the oil storage areas and the maintenance of vehicles and gears.

- ***Activities***

- integration of the above measures in the design of the project;
- Development and implementation of a plan for the management of liquid and solid waste.

- ***Implementing actors***

The implementing actor is the environment manager of the company.

- ***Follow-up actor***

The follow-up actors are the Ministry of Environment, Nature Protection and sustainable development (MINEPDED) and the monitoring Mission.

- ***Monitoring indicators/sources of verification***

- The Environmental activity report of the company in which the quantities of waste oil recovered with the discharge sheets of the latter validated by both parties will be mentioned;
- Actual presence of the prescribed facilities;
- Waste management Plan and implementation documents (contract with the approved structure, removal manifest, etc.);

- Observations on the site,

- ***Implementation planning***

This measure will have to be implemented before startingthe work.

- ***Cost of implementation***

The cost of this measure is included in the site installation fee

III.4.3 Measures aiming at limiting the pollution of water resources

- ***Objective***

Avoid or limit water pollution

- ***Content of the measure***

This measure includes all the precautions and actions to be taken in order to prevent water pollution. This is:

- concrete the washing area of vehicles and gear and set up an appropriate pipe and then equip this area with a decanter/oil separator;
- rigorously manage leftover paint or varnish as well as empty pots, avoiding leaving them lying around, and taking them into account in the management of hazardous wastes;
- Provide suitable septic tanks and sumps for proper management of the valve waters.
- Use approved pesticides;
- Recover the cleaning water and have it treated in an ecological way.

- ***Implementing Actors***

The implementing actor is the company's environment manager

- ***Follow-up Actor***

MINEPDED and the control Mission.

- ***Monitoring indicators/sources of verification***
- Effective presence on the site of contaminated water treatment devices: The decanter/oil separator for washing water of machinery and vehicles and septic tanks for the treatment of water valves;
- Observations on sites.

- ***Implementation planning***

Planning must be done at the beginning of the work.

- ***Cost of implementation***

The concretisation of the washing areas of gear having been taken into account in the measure on the prevention of the pollution of the soil, the implementation of this measure does not require additional expenditure; the cost is therefore marked for record.

III.4.4 measures to limit the spread of STD/AIDS

- ***Objective***

This measure aims to prevent STIs/HIV/AIDS and unwanted pregnancies

- ***Contentof the measure***
  - Develop and implement a voluntary personnel screening program;
  - Recruitment of the local workforce
  - to raise awareness of the project's staff and people in the host communities on the need to protect themselves in case of doubtful sexual relations

- ***Implementing actors***

The implementing actor is the company's environment manager

- ***Follow-up actor***

MINEPDED and the Control mission.

- ***Monitoring indicators/sources of verification***
  - Program and sensitization material;
  - Number of awareness campaigns organized
  - Number of condoms distributed free of charge,
  - Number of sticked posters,
  - field surveys ;
  - Activity Report of the HSE manager of Sisia.
- ***Implementation planning***

Planning must be done at the beginning of the work.

- ***Implementation cost***

This aspect has been taken into account under awareness; the implementation of this measure does not require additional expenditure, so the cost is marked for record.

III.4.5 Measures to compensate destroyed houses and to limit social conflicts

- ***Objective***

This measure is aimed at resettling or compensating people whose cultures and homes have been destroyed in their right in order to avoid social tensions

- ***Contentof the measure***

This measure includes all the operations to be used to compensate crops, fruit trees and houses destroyed during the work. This compensation must be made on the basis of the degree of injury suffered. The compensation rate used is the one provided by the current regulation.

For the successful implementation of these objectives, the following activities may be carried out:

- dentification of the property to be destroyed as well as their owners;
- Definition of the procedure and the modalities of compensation;
- Compensation of the property to be destroyed.

- ***Implementing actors***

The project proponent is the main player in the implementation of this measure. It should be supported by the administrative and local authorities concerned

- ***Follow-up actor***

Those concerned with the follow-up of this measure, are the following public administrations: MINEPDED, chief of district.

- ***Monitoring indicators/sources of verification***
  - Number of complaints recorded;
  - Minutes of compensation signed by the stakeholders;
- ***Implementation planning***

This measure must be implemented before starting the work.

III.4.6 Measures to prevent the risk of work accidents, incident, and occupational disease

- ***Objective***

This measure is designed to protect workers from threats to their health.

- ***Content of the measure***

This measure includes the equipment of the workers and the precautions to be taken for their safety. It is also a question of preventing occupational diseases among employees

In order to achieve the objectives of this measure, the following precautions and tasks must be carried out:

- Purchase and equipment of workers with (helmets, ear caps, nose covers, safety footwear, gloves, etc.);
- ensure the obligatory wearing of these equipment by the workers;;
- Avoid the nocturnal movement of the gears;

- Comply with international Occupational safety standards and comply with the provisions of Order No. 039/MLHW/MT laying down general hygiene and safety measures in the workplace;
- Develop and implement an emergency medical evacuation plan for the various types of incidents;
- carry out the hazard study accompanied by the emergency Plan
- Regularly water the work areas in dry season to limit dust;
- Signalling and securing of danger zones with prescription of safety precautions where necessary;
- Staff awareness of security measures

- ***Activities***

- Effective implementation of the measures prescribed above;
- Develop and implement an awareness program to prevent workplace accidents
- Set up the contingency plan and ensure its operation

- ***Implementing actors***

This measure will be implemented by Sisia.

- ***Follow-up Actors***

Are concerned with monitoring this measure the MINEPDED, and the monitoring Mission

- ***Monitoring indicators/sources of verification***

- Internal regulations incorporating security measures;
- discharge sheet by workers;;
- Contingency Plan available and functional;
- Verification during field missions of the port of equipment by workers assigned to delicate posts;
- The number of patients received and treated.

- ***Implementation planning***

This measure must be implemented at the beginning of the work and will continue for the duration of the project.

- ***Cost of implementation***

The implementation of this measure requires financial means for the carrying out of the hazard study accompanied by the contingency Plan, for the regular acquisition and maintenance of fire fighting equipment and for the acquisition of EPI. Some of these expenses are to be included in the operating budget of the project but we believe that a provision of 5 000 000 FCFA is required.

III.4.7 Measures to limit noise pollution

- ***Objective***

Avoid damaging the health of workers, harming the tranquility of people and damaging the sound environment in the vicinity of the project area.

- ***Content of the measure***

This measure essentially includes precautions to be taken and staffequipment with protective facilities against various sources of nuisance. The activities to be implemented include:

- the acquisition of personal protective equipment (noise-cancelling helmets);
- Avoid night work.

- ***Implementing actors***

This measure will be implemented by the municipality of Bamenda III.

- ***Follow-up actors***

Are concerned with the follow-up of this measure the MINEPDED, and the control Mission, the following;

- ***Indicators/sources of verification***
  - The order form for personal protective equipment and equipment discharge sheet by the workers;
  - Technical inspection certificates for vehicles and gear;
  - visual verification of the wearing of noise-canceling helmets by workers;
  - Surveys of people and workers.
- ***Implementation planning***

Planning must be done from the beginning of the work and throughout the duration of the project.

- ***Cost of implementation***

Since the acquisition of personal protective equipment has been taken into account in the measure relating to the prevention of accident risks, the implementation of this measure does not require any additional expenditure, so the cost is marked for record.

III.4.8 extra measures for the development of income-generating activities and increase in tax revenue

- ***Objective***

This measure aims to increase the benefits of the project for the people and for the public authorities of Cameroon.

- ***Content of the measure***
  - Raise awareness of the opportunities offered by the project
  - To supervise the restoration activities around the site, in terms of quality;

- Sensitize workers, cooks, etc. to good hygiene and the management of the waste generated from activities;
- Affiliate all permanent employees with the CNPS.

- ***Implementing actors***

The implementing actor is the company's environment manager

- ***Follow-up actor***

MINEPDED and MDC.

- ***Monitoring indicators/sources of verification***
  - Number of people (employees and riparian populations) sensitized on the above aspects;
  - Amount of taxes paid to the Cameroonian State;
  - awareness-raising Programme including the above-mentioned aspects
  - Financial Documents of the company.
- ***Implementation planning***

Planning must be done at the beginning of the work.

- ***Cost of implementation***

The implementation of this measure does not require any additional expenditure the cost is therefore marked for record.

III.4.9 Extra measures for job creation

- ***Objective***

This measure aims at combating unemployment in the project area and providing permanent employees with a decent job for self fulfillment.

- ***Content of the measure***
  - With equal skills, residents must be privileged during recruitment;
  - Inform people about job opportunities by posting notices of recruitment in public places;
  - to affiliate permanent employees to Social Security (CNPS); ;
  - Make the recruitment policy transparent.
- ***Implementing actors***

The implementing actor is the environment manager of the company

- ***Follow-up actors***

The MINEPDED and MDC.

- ***Monitoring indicators/sources of verification***
  - Number of employees from the project area in relation to the total number of employees;

- Number of employees affiliated to the CNPS;
- Activity reports of the administrative and financial HSE managers;
- Register of payment of the company's social contributions;

- ***Implementation planning***

Planning must be done at the beginning of the work.

- ***Cost of implementation***

The implementation of this measure does not require any additional expenditure the cost is therefore marked for record.

III.4.10 Measures to improve the quality of life of the population

- ***Objective***

This measure aims to improve the living conditions of the people in their environment and to ensure their self fulfillment.

- ***Content of the measure***
- Ensure the regular maintenance of sisia
- Educating people about their rights and duties and about the opportunities offered by the project;
- Educating people on hygiene conditions
- Promote security in the city.

- ***Implementing actors***

The implementing actor is the environment manager of the company

- ***Follow-up actor***

MINEPDED and MDC.

- ***Monitoring indicators/sources of verification***
- implementation of the planned measures;
- Observation on the site ;
- Reports of the environmental activity of Sisia from the plan.

- ***Implementation planning***

Planning must be done at the end of the work.

- ***Cost of implementation***

The implementation of this measure does not require any additional expenditure the cost is therefore marked for record

III.4.11 Measures relating to awareness-raising

- ***Objective***

The objective of this measure is to create an environmental awareness of the population and site staff, with a view to mitigating negative impacts and optimizing positive impacts.

- ***Content of the measure and impacts involved***

Awareness will concern the protection of the environment in general. It will focus on the following aspects:

- STI/HIV/AIDS;;
- Employees safety;
- Job Opportunities
- income-generating activities;;
- Waste Management ;
- Conflicts ;
- the implementation of this measure requires the following tasks:
- Development of a target-based awareness program
- Design of the content of awareness activities adapted to the targets;
- Making and/or acquiring awareness material (leaflets, posters, condoms, etc.);
- Distribution of condoms and leaflets
- holding meetings with the population and staff

- ***Implementing actors***

Awareness should be held at the beginning of the construction site and every three months carry out workers ' screening. The support of an NGO or an awareness expert may be necessary to organize it.

- ***Follow-up actors***

The MDC environment Manager and the administrations (MINEPDED and MINSANTE).

- ***Monitoring indicators/sources of verification***

- Presence of awareness program and awareness material
- presence of posters around the site
- Report of the awareness meeting and the number of condoms given out to staff;
- Surveys of populations.

- ***Implementation planning***

The implementation of this measure consists in two phases:

- a first phase ensured by the consultant who must start a month before work resumes,
- A second phase ensured by the project environment manager that will take place throughout the duration of the project.

- ***Cost of implementation***

This cost will be reviewed in a timely manner.

III.5 The population consultation plan and the analysis of the social acceptability of the urban upgrading operation

III.5.1 Population Consultation Plan

Stakeholder analysis is a methodology for identifying and analyzing key stakeholders in a project and planning for their participation. This is, therefore, the starting point for most participatory processes and is the basis for the development of subsequent stakeholder activities throughout the project cycle. An in-depth stakeholder analysis should be conducted at the earliest stages of planning for all projects supported by the Sisia upgrading process, revised and refined from time to time, as the details of the progress of the Project are made clear.

Stakeholder analysis seeks to answer the following fundamental questions:

- Who are the key stakeholders (main/secondary) of the upgrading project?
- What are the interests of these stakeholders during the development of Sisia?
- How will they be affected (positively/negatively) by the project?
- Which stakeholders are the most important for the success of the upgrading project?
- How will the various stakeholder groups participate throughout the project?
- What groups need to be strengthened to enable them to participate?

III.5.2 Proposed methodology

Participatory stakeholder analysis may initially be based on secondary data (study at Headquarters), but in order to accurately identify interests and plan for future participation, it requires direct collaboration with groups of stakeholders. Methods based on the organization of workshops and field visits can be used to gather primary data, exchange ideas with people on their interests and expectations, and jointly plan the Participation with them throughout the project cycle. In several countries, experienced National institutes, research centres, government authorities, urban planners, sociologists, academics or NGOs can be recruited to help carry out an operation in support of the Beneficiary population.

Step 1: Identification of stakeholders

The first step in a stakeholder analysis is to identify the stakeholder groups involved. The key questions to ask are:

- Who are the beneficiaries of the project?
- Who could be negatively affected?
- Will the project have an impact (positive or negative) on all vulnerable groups?

- Who are the main supporters and opponents of the projects?
- Who is responsible for carrying out the planned activities?
- Who can provide financial and technical resources?
- Who should change behaviour for the success of the intervention?

An initial list of stakeholders can be drawn up on the basis of a review of the secondary data (publications and documents) and of the knowledge that the existing staff has of the project, the sector and the country. This preliminary list must therefore be verified, amended and disseminated at the country level through: Interviews with key informants (governmental authorities, donor representatives, sectoral experts, NGO staff, and traditional leaders); Consultations with already identified stakeholders and site visits (during which participatory research/data collection methods may be used. Particular attention must be given at this stage to ensure that the information exercise has been broadly woven and that no marginal groups have been inadvertently excluded.

Step 2: Stakeholder analysis and project impacts

Once the relevant stakeholder groups have been identified, the next step is to analyze their interests. The key questions to answer are:

- How does each stakeholder group perceive the actual problem and the solutions proposed? What are their concerns and interests in relation to the project?
- What do stakeholders expect from the project?
- What is each stakeholder group willing to win/lose at the end of the project?
- What conflicts could a group of stakeholders have with a particular project strategy?
- How do the different stakeholder groups come into contact?
- Are there any points of convergence/divergence between their interests and expectations?

The stakeholders themselves respond better to these issues as part of a stakeholder workshop. Such a workshop requires careful preparation and may require a full day (depending on the complexity of the project and stakeholder interests).

Step 3: Giving priority to stakeholders

The analysis of stakeholder interests and project impacts should allow the project team to classify the different stakeholder groups and determine the relative priority that the project should give to the interest of each group of Stakeholders. The key questions are:

- Who are the main target beneficiaries of the project?

- What is the important role that each stakeholder group plays in the success of the project?
- What is the degree of influence of each stakeholder group on the project?
- Are special measures necessary to protect the interests of weak or vulnerable stakeholder groups?

The results of the first three stages of stakeholder analysis are to provide a clear and complete picture of the interests, importance and influence of stakeholders. Ideally the first three columns should be completed at the first stakeholder workshop. An assessment and a comparison of their importance and influence can be made during the workshop or be completed later by the project team.

Step 4: Action planning for stakeholders

The purpose of stakeholder analysis is the definition and development of an action plan that outlines the specific activities to be carried out by each stakeholder group (including deadlines, inputs and resources, Indicators of progress, etc.). Some stakeholder groups will have active roles to play, while others will only need to be kept informed of progress or be involved at some key time of planning/implementation. A stakeholder action plan is better when it is developed in direct collaboration with those involved. Once again, a participatory workshop (or series of workshops) is often the best way to proceed.

III.5.3 Social acceptability of the upgrading operation

Social acceptability conveys a collective judgement about a policy or a project, so it is about understanding the foundations and factors of influence. If individual preferences can play a role in the formation of this collective judgement, social acceptability is more a matter of shared values and beliefs. Social acceptability refers to a collective assessment rather than to individual positioning, in the sense that the acceptability judgement is part of the social dynamics that can forge and transform it. Moreover, this judgement implies an element of comparison between the proposed project and its alternatives, hence the following definition of social acceptability: "Assent of the population to a project or decision resulting from the collective judgement that this Project or decision is greater than the known alternatives, including the status quo.

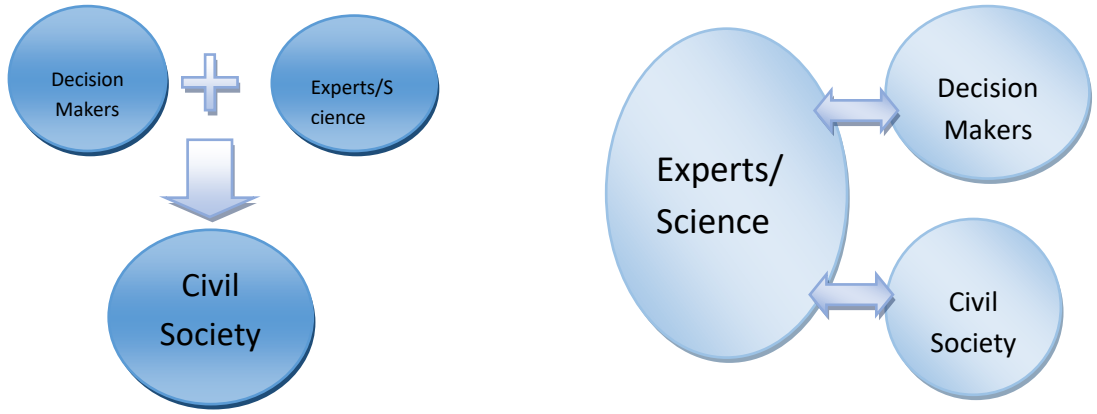
The representative population of the Sisia neighbourhood is rather favourable to the planning operation orchestrated in all the neighbourhoods. To do this, various meeting should be held with the quarterheads, blocks, elites and the chairman of the Local Development Committee under the cover of the technical officers of the council of Bamenda III and those of the BCC. A model for the evolution of relations between different stakeholders has allowed us to better apprehend the restructuring operation of the area.

The social acceptability of the restructuring of the Sisia neighbourhood is the acceptance of the project by the majority of citizens, whether directly or indirectly affected by the impact and impacts of the project.

The notion of social acceptability is directly linked to the perception of a possible threat that the project may be for the life or quality of life of a milieu, thus on the use of the human goods and activities of this environment. It consisted of "early acceptance of a short-and long-term risk that accompanies either the restructuring project or a given situation which impacts indirectly ". For them, a cost-benefit analysis is generally a prerequisite for the assessment of consent to pay. It helps to find a balance between the fears of one and the benefits of others. There are many indicators of social acceptability. The definition of acceptability by citizens implies:

- The citizen at the heart of development
- Broad consensus
- Access to Information
- A revision of the project development model.

Sketch 7: The acceptability model



Traditional model **Contemporary model**

This model stemming from the social anchoring of scientific theories (van der Sluijs et al. 2008, P. 265-273), has help to adopt the upgrading plan of the Sisia quarter.

III.6 The costs of implementing the environmental and social management framework

The writing cost of the ESMP was covered by the teams already allocated to the project and it was estimated at 200 hours (20 hours of on-site visits, 25 hours of discussion with the local population, 50 hours of research and response, 25 hours of revision of the initial versions, 20 hours for public

consultation, 60 hours to finalize the document). The cost of publishing and sharing the document for which internal project resources were used was estimated at 180 000FCFA.

During implementation, construction companies are to separate the costs of implementing safeguards in their proforma, such as: installation of temporary latrines, protective equipment, signalling, Water supply, covers for materials and measurements of deposits, and waste management. The total cost will be assessed on the basis of the costs of the upgrading operation.

Slight additional costs will be applied to ensure erosion prevention, protection of areas at risk, such as the installation of structures to reduce the spread of sediments in liquid effluents. They will be directly taken care of by the project owner. These costs, as well as the costs of installing runoff collection boxes for water quality monitoring, are estimated at less than 3 million FCFA. The sum ultimately spent will be calculated and reported.

The costs associated with backups will also be associated with the time needed for human resources to ensure control. The project will benefit from the support of qualified staff already supported by the project, thus not representing any additional cost to the project. The consultant evaluates this at about 5 hours per week for the environmental focal point, including a three-hour site visit (with project staff accompaniment) and two hours of follow-up/report. Site supervisors will also be trained in environmental control and will follow-up on site on a daily basis-approximately 5 hours per week for each. The final time spent on backup activities and its value will be calculated and reported.

The costs of the proposed activities will be included in the project costs. These activities will concern:

I. Provisions for ESI studies
II. The training of the actors and the awareness of the population;
III. The design of good practice manuals;
IV. The rehabilitation of quarrying of building materials after operation;
V. Support for monitoring implementation by local technical services
VI. Table 10 below shows the detailed costs per activity programmed in the environmental and social management plan.

Table 15: Detailed costs by programmed activities

MEASURES	NEGATIVE IMPACTS TO BE ATTENUATED	RESPONSABILITY	COSTIN FCFA
Technical Measure	- Trees felling - Dust and exhaust gas - Soil and landscape degradation - pollution and nuisance related to the transport of materials and their handling - Poor maintenance of buildings	Environmental Focal Point	**5 500 000**
		Regional control offices/technical services	**20 000 000**
		Design Offices/focal point/Consultants/Experts	**30 000 000**
		Entrepreneurs	**8 000 000**
		Local Entreprises	**4 000 000**
Training of actors involved in the control at the local level	- use of occupied or private sites for sandpit or stone quarry opening - Accident risks (students, workers...) - Non-observance of standards/poor quality of works - Non-compliance with the procedural manuals	Consultants / Experts	**11 000 000**
Information and Sensitization of the populations, management Committees	- Pollution in FTP establishments (odors, unsanitary...) - Pollution of soil and water/waterborne diseases	Environmental Focal Point	**15 000 000**
		Amounting to 93.500.000 FCFA	

Source: Analysis of the Consultant

PART II:

PROPOSAL FOR UPGRADING PROGRAMS

I. RELOCATION PROGRAM FOR THE DISPLACED POPULATION

In fact, the RP (Resettlement plan) is a component of the ESMP (Environmental and Social Management Plan). But its importance and delicacy are such that it is always the subject of a separate report.

I.1 THE OBJECTIVES OF THE RESETTLEMENT PLAN

As reflected in the project documents, "the main purpose of the resettlement Plan is to ensure that people who have to leave their living environment and lose part of their property, because of the implementation of the Sisia development project, are treated in an equitable manner and entitled to their share of the project's impact. To achieve this goal, a number of objectives have been assigned to the resettlement Plan:

- Minimise, as much as possible, unintentional resettlement and expropriation of land, by studying viable alternatives in the design of the project;
- Ensure that affected persons are consulted and have the opportunity to participate in all the pivotal stages of the process of developing and implementing involuntary resettlement and compensation activities ;
- Determine the compensation based on the impacts suffered, to ensure that no person affected by the project is disproportionately penalized;
- Establish a fair, transparent, effective and reassuring compensation process
- Assist those affected in their efforts to improve their livelihoods and standard of living, or at least to restore them, in real terms, as they were before their displacement or before the project implementation, whichever is the most advantageous to them;
- Design and carry out unintentional resettlement and compensation activities as sustainable development programmes, providing sufficient investment resources to ensure that those affected by the project have the opportunity to Share the benefits
- Pay special attention to the needs of the most vulnerable among displaced people

For the success of the relocation plan, the authors of the report, based on the experience of multilateral donors and citing the AfDB document on involuntary displacement of populations, propose a participatory and inclusive approach consisting in involving the affected populations in the different phases of the project with a view to identifying all their concerns both with regard to the different impacts and with regard to the envisaged solutions. Indeed, the report of the PR notes three major differences between the Cameroonian legislation and the policies of the World Bank.

The main difference lies in the definition of eligibility criteria and the categories of impact that qualify for compensation. The Cameroonian legislation considers that only people with legal rights in the occupied

lands are eligible for compensation even if in practice, customary rights are taken into account. The World Bank's criteria include all persons affected by a project, whether or not they are displaced, to be eligible for compensation for the loss of their housing, property or Sources of income.

I.1 Displaced Populations because of the widening of existing roads

In the ESIA report, three groups of people were considered as potentially affected by the project:

- Affected individual: An individual, male or female, is affected when he or she suffers the loss of property, land or property and/or access to natural and/or economic resources as a result of the project.
- AffectedHousehold: a household is affected if one or more of its members is affected by the activities of the project.
- Affected community: A community is affected if all persons forming the community are affected by the activities of the project, whether it is the loss of land or resources managed by the community, or a reduction of access to Infrastructure and services used by the community.

Thus, in the area of Sisia, the populations that will be displaced are those located near existing routes that need to be widened to decongest the neighbourhood. Field surveys have revealed that the population displaced because of the widening of existing channels is divided as follows:

Table 16: The number of displaced populations in the context of roads widening

Zones	Number
Sisia 1	46
Sisia 2	69
Sisia 3	23
Sisia 4	31
Total	169

Source: Analysis of the Consultant

In sum approximately 169 households will be displaced in connection with the widening of pathways in the upgrading process of Sisia. Nevertheless, this population is not considered in the process of eviction and resettlement on the Mbung site. Indeed, the population affected in the course of the widening of the tracks during the upgrading operation of the Sisia neighborhood will be relocated in-situ, either on the same site occupied by the household given the degree of damage, or on a site. built in the neighborhood and serviced for the occasion.

I.2 Displaced populations within the context of the configuration of new roads.

Three groups of people in the ESIA report were considered to be affected by the project, namely the affected individual, the affected household, and the affected community. In view of the foregoing, the displaced populations in the context of the configuration of the new road are divided as follows:

Table 17: Number of displaced populations within the context of the configuration of new roads

Zones	Effectif
Sisia 1	39
Sisia 2	11
Sisia 3	20
Sisia 4	65
Total	**135**

Source: Analysis of the Consultant

Thus, as part of the restructuring of the new roads, 135 households will be moved inSisia

I.3 Displaced Populations from risk areas, river banks and areas of construction projects

By definition, a risk zone or a non-building zone is a defined and delimited space in which subjects and/or products are particularly vulnerable to viable or inert particles, but also vulnerable to Natural or anthropogenic risks. It is a prohibited area for any construction because it is likely to affect the safety of the population.

Slopes, rivers banks are also risky for the population with the rising in the water level, the water currents and other threats affecting the life of the population. The areas of construction are likely to cause various forms of pollution on the life of the resident population.

The ESIA report identifies three groups of people who were considered to be affected by the project, namely: the affected individual, the affected household, and the affected community.

Table 18: Number of displaced populations from risk areas, river banks and construction project areas.

Zones	Number	
	Displaced Population on risky areas, and areas of construction projects	Evicted population from the rivers' banks
Sisia 1	240	25
Sisia 2	87	99
Sisia 3	59	45
Sisia 4	105	55
Total	**491**	**204**

TOTAL	**715**

Source: Analysis of the Consultant

In the upgrading process of the Sisia quarter, 715 households will be moved from the risk areas, river banks and areas of construction projects.

II/ PROGRAM FOR THE EXPANSION AND STANDARDIZATION OF EXISTING ROADS

The objective of the extension of the network is to open the area of Sisia in relation to the rest of the city of Bamenda by improving the movement of goods and the development of accessibility to plots. The desire expressed by the people here is to facilitate access to their homes. This need has been severely felt in recent years, especially in the case of disasters (fire, landslide) or emergency (evacuation). The roads to be implemented will also serve as support for the development of infrastructure such as drinking water systems, electricity and rainwater drainage channels. Three types of roadways on which the improvement of the network should be based: Main roads with sidewalks, parking and gutters (12m right-of-way, with a bearing layer of 10m); Primary lanes (12 m right-of-way, with a 10m bearing layer); The secondary lanes (10m right-of-way, with a 7m bearing layer) and the tertiary channels (7 m of grip, with a bearing layer of 5m).

II.1 Urban road connecting the study area

The urban connecting road of the Sisia zone takes into account all primary, secondary and tertiary routes. This will be specifically a release of the rights-of-way and various networks. This in order to allow traffic between blocks and parcels and especially ease access for the inhabitants of Sisia Who can now go from up station to Sisia 4 without necessarily going through Nkwen.

II.1.1 Description of the Interventions

The option chosen for the realization of the network is that of the opening of blocks, the tertiary lanes and pedestrian tracks. It totals approximately 4,6 km of road and the access time to the farthest parcel is 30 minutes. Besides, 850 households will be affected or displaced in the course of the work. People prefer this option. In fact, they consider it preferable to lose a small number of households despite the size of the network to be set up, given the constraint of resettled displaced households in the quarter. They also opted for a total release of the selected track right-of-way (approximately 135), which will result in the immediate transformation of the global image of the neighbourhood and the instantaneous improvement of accessibility.

- The main track (current average of 12m) is the national N°4 which comes from Mile 2 to up-station and the new lane leaving from the PMI to the station. These infrastructures must be supported in

the Public Investment Budgets (BIP) of MINHDU or MINTP, insofar as their expansion will allow a flow of traffic at the entrance of the city;

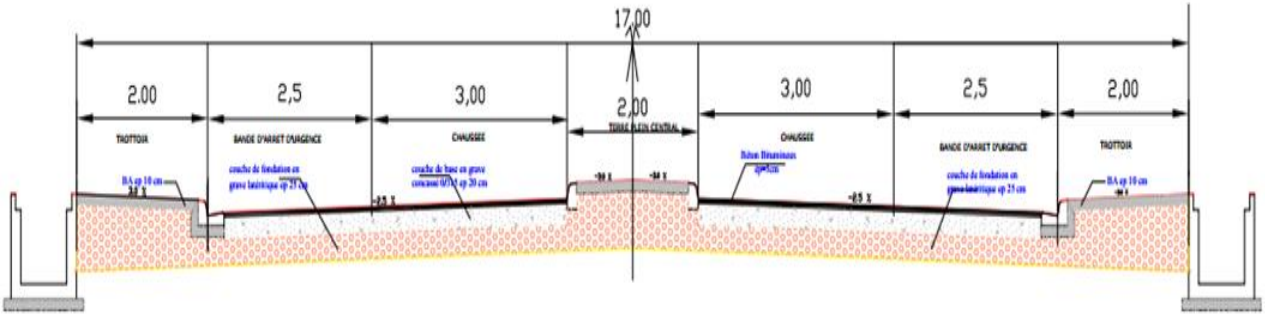
- Primary roads include the lanes (current average right-of-way 12m) of inter- quarter liaison. These infrastructures must be supported in the Public investment Budgets (BIP) of MINHDU or MINTP, insofar as they are the extension in the city. A link can thus be created with the national at the level of up-station.
- The secondary roads (current average right-of-way 10m) will therefore be those on which the interventions will dwell. They will be gradually carried out from negociations among the riparians of the same block.
- Currently tertiary channels are non-existent. The release of tertiary channels will be left to the initiative of the users of these channels during the procedure of division of the land parcels to be registered, under the supervision of the Quarter Development Committee. It will be specifically for the secondary roadway a release of the rights-of-way and various networks of 7m and 5m depending on the route defined by the populations during the projection on the field.

II.2 Roads Categorization

II.2.1 The categories of channels taken into account here are:

THE MAIN ROAD

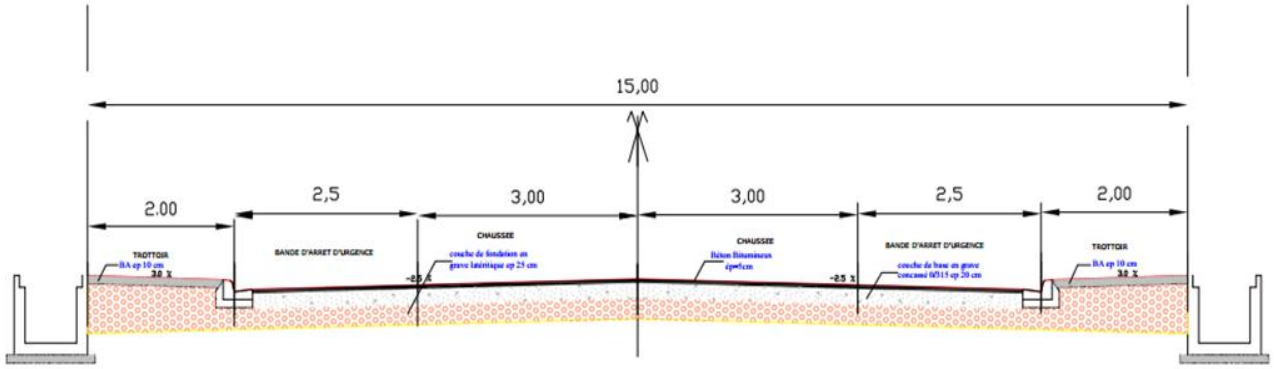
Sketch 8 : The main road track



CROSS SECTION PROFILE OF 'U' ROAD

THE PRIMARY TRACK

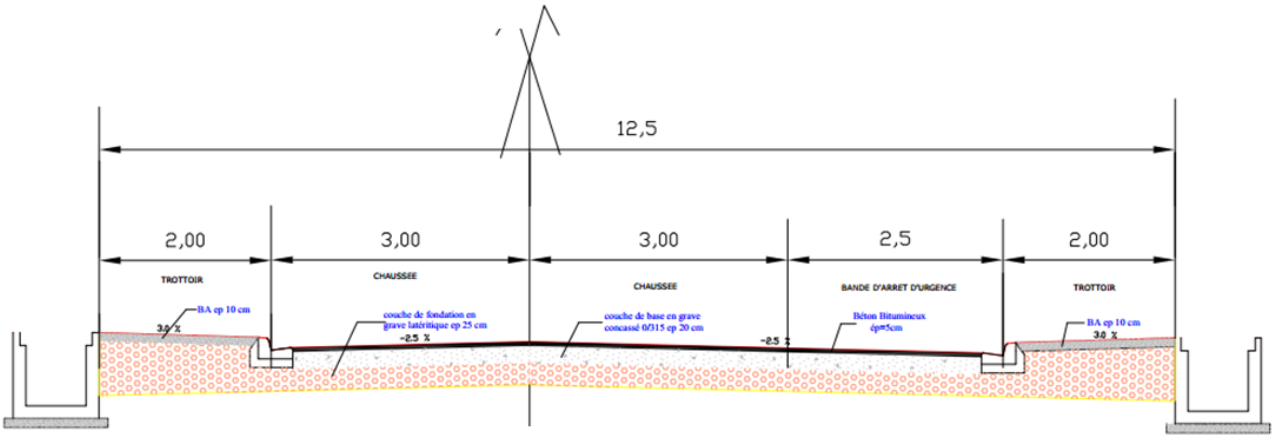
Sketch 9: The primary track



CROSS SECTION PROFILE OF A BYPASS ROAD AND 'V' ROAD

THE SECONDARY TRACK

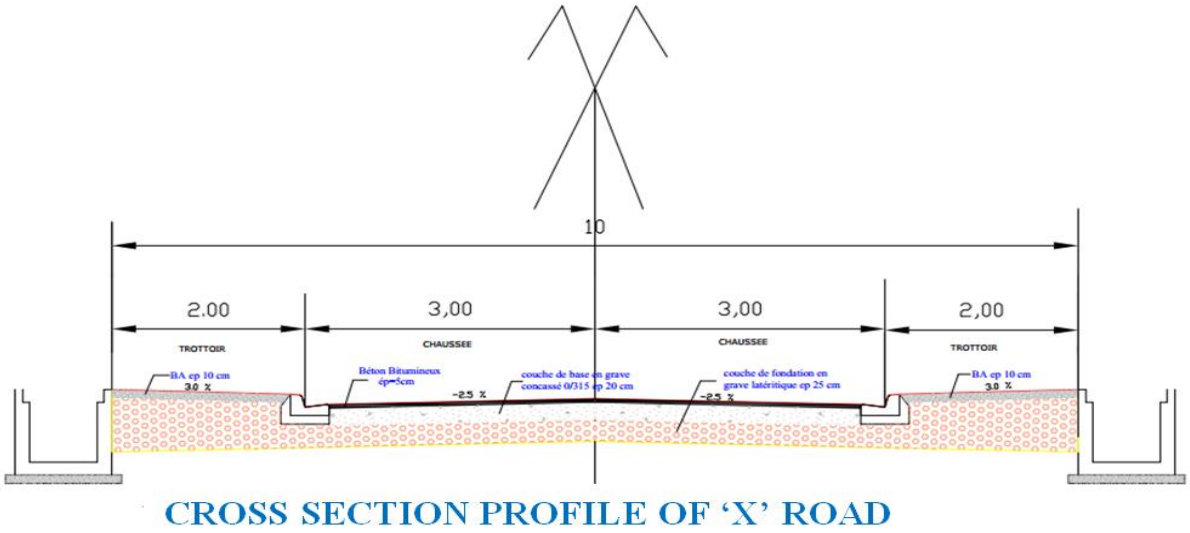
Sketch 10: The secondary track



CROSS SECTION PROFILE OF 'W' ROAD

THE TERTIARY TRACK

Sketch 11: The tertiairy track



CROSS SECTION PROFILE OF 'X' ROAD

NB: The sketches of the different profiles are shown in the appendix whether they are the cross profiles above, or the long profiles currently not represented. In addition, the long profiles by their large number will be provided in another document because of their large number and the size of their dimension.

II.3 Surface water Drainage

The construction of the V-shaped masoned gutters will be arranged along the various tracks and the enforcer will be downstream of natural waters or managed sumps. Pavement blocks will be located in the vicinity of swampy areas to facilitate infiltration and resurgence of water.

Opportunities

The extension of the road network will allow the service of facilities in the quarter. It is the support of the various services (water, electricity). The tiered road network is an effective way to connect the area to the rest of the city.

Risks

The main risk is linked to the actual taking into account of the households affected during the opening-up operations. For this, implementation must be participatory and measures to facilitate the relocation of populations must be prior to initiation of the work.

Costs

Costs are related to roads because sanitation works such as gutters are related to road costs.

III/ PROGRAM FOR THE CREATION NEW ROAD

The new road program takes into account primary peripheral roadways to the study area, secondary liaison roads, tertiary distribution roads, feeding walkways and the drainage system of the study area.

III.1 Peripheral roads

The peripheral or primary roadways concern the set of new lanes that leave the national N°4 or a main artery and serve the area of Sisia. This is the entire primary structuring mesh of the study area to which the bypass routes are added. The peripheral roads created here concern the North and south ways of the upgrading site. Indeed, these new routes cross the entire study area on both sides, meaning, all four districts that form Sisia. This primary road is 12m in its right-of-way. Its approximate total linear is 3 km.

III.2 Secondary roads

The secondary roadway to be developed will consist of the set of tracks leaving the main road and turning into service route to the major arteries of the study area. This is the set of structuring and feeding lanes of the Sisia district. It is 10m of right-of-way in its entirety, and covers an approximate linear 5,2 Kml. side paths will be created on the sidelines of the secondary roadway. The side path right of way helps to facilitate load failure and creates an indirect link between a major axis (main) and a low (secondary) axis.

III.3 The Tertiary Road

Tertiary roadways are all types of roads that leave the secondary roadway to serve the various blocks that make up Sisia's neighbourhoods. These new axes constitute the set of internal links to the study area, with the exception of pedestrian paths. These lanes have 7 m of right of way.

III.4 Pedestrian walkways

The pedestrian tracks represent the set of connecting internal track to a given area or space. In the Sisia area on its entirety, pedestrian tracks will be created on both sides in order to facilitate the urban connection. These runways have 2m of right of way.

III.5 Surface water Drainage

For the drainage system, gutters will be built along all the lanes. The roadways will be arranged in such a way that water will drain easily. On primary and secondary roads, the gutters will be in final materials and covered on the main arteries, but open on the secondary arteries. These gutters will be in the form of U or V according to the estimation of the flow of liquid residue to the slope. For cross roads, reinforced concrete scuppers or nozzles of sufficient diameter will be required

IV/ ELECTRIFICATION PROGRAM OF THE STUDY AREA

IV-1 Objective

The state of access to basic urban services has shown that the Sisia quarter is served with electricity, but public lighting is still traditional with lamps in front of the dwelling houses. This operation will focus in facilitating the access of the inhabitants to electricity infrastuctures as well as their connection to the networks. It will also reinforce public lighting in the neighbourhood through the installation of streetlights along existing or projected secondary lanes and fixed lighting points inside the neighbourhood.

Map of the electric network (see annex)

IV-2 Description of interventions

The current demand for electrical energy in the Sisia quarter is important. Many clandestine electrical connections have been recorded in the neighbourhood. The extension of ENEO lines to areas still uncovered and the promotion of individual connections have also been identified as priority actions, with the aim of improving the quality of the electrical supply and fighting against Proliferation of illegal connections. With a view to a sustainable partnership with the electricity company, people will have to commit themselves to the identification and denunciation of electricity pirates.

IV.3 Public lighting in the survey area

Public lighting is almost non-existent in Sisia. The populations request the installation of street lights along the roads to be arranged. These measures aim to increase not only security, but also to allow the continuation of commercial and social activities at nightfall, in a neighbourhood located in the heart of the city of Bamenda and with significant economic potential. The installation of public lighting will also allow the opening up of certain areas of the neighbourhood which currently do not enjoy access to electricity.

The populations identified points that they thought were substancial in the neighbourhood and after examination some points were flunked. Given the power cut and the problem of low voltage that the city of Bamenda like the major part of the Cameroonian cities face, the choice here is on solar streetlights, because in the neighbourhood there are already some, which according to the Population, are beneficial to their safety. The picture below gives us example of a lamp post snapped in the neighborhood.

Sketch 12: Streetlight in the neighborhood

Source: Photo MINYEMECK, POLYGONE SARL

For the proposed models we have chosen the best on the market because of their volume, their storage capacity, as well as the lifespan and characteristics are listed below:

- 1 photovoltaic module of 140WP
- 1 20w LED luminaire
- 1 or 2 100 mAh batteries with a 10a charger
- 1 protection box and fuse
- 1 mast of 7 to 8 metres.

It is noted that here the current number of lamppost is about 100 in all the area of Sisia.

Opportunities

i. Electricity and public lighting

This type of lighting does not require any operating constraints, other than the need of having a carrycot to change the battery when it starts to show signs of fatigue. Due to their height and inclination, the panels do not require any intervention as they are even cleaned during rainwater. Public lighting will allow commercial activities to go on by night, as well as ensuring the safety of the surrounding populations.

Risks

ii. Public lighting

The management of renewable energies is a very new science, solar energy being part of it, often suffers from a lack of qualified people for installation as well as for the maintenance; it may be the main risk. Another risk may be act of vandalism perpetrated on the equipment and its stealing, because they are very sensitive materials.

Costs

Table 19: Financial assessment of electricity distribution and installation of public lighting

Designation	Estimated Cost (excluding taxes)
Solar street lights with LED lamps	1 000 000
Plead with the dealer for the extension of individual lines and connections	500 000
Total	**1 500 000**

Source: Analysis of the Consultant

Solar streetlights are powerful equipments with a reduced maintenance, which need battery to be changed every 5 to 8 years depending on the rate of use. LED lamps have a life span of more than 50 000 hours (more than 10 years of use). A staff trained in the urban community for the management of streetlights will ensure the remote monitoring of the device. This work should take a maximum of 1 hour a day in real time. There should be about 5% of the investment cost per year for battery renewal.

V - WATER SUPPLY PROGRAM IN THE STUDY AREA

V-1 Objective

This operation consists of bringing closer drinking water infrastructure to the inhabitants and to facilitate their connection to the networks.

V- 2 Description of Interventions

Access to quality drinking water in sufficient quantity is a factor of socio-economic development and the reduction of waterborne diseases. It should be recalled here that the Sisia quarter is not covered by the CDE network in its entirety and that the populations are organized by the Development Committee and have set up mini drinking water supply networks

Here we will be extending the existing network of the CDE and the connection of the populations to the CDE network. However, there will also be the creation of 7 additive fountains to those that the populations have already created, as well as those proposed by ERA within the framework of the PSUP. The objective here is to offer a better water supply to the people of Sisia. The water system's collecting points will be improved and thus increase the flow of the public tap. It is noted that the flow will be by gravity thanks to the topography of Sisia which offers this type of slope.

Maps of the proposed and existing fountain terminals as well as the collection points (confer annex)

Model of a technical device chosen for the public tap.

Sketch 13: operation principle of tap point

Source: POLYGONE SARL

V-3 Opportunities

Securing the supply by setting up a buffer tank for the storage of water.

V-4 Risks

In order to succeed, hydrants require a good social organization for the management of the work, but also the securing of the water sales revenue.

V- 5 Costs

Table 20: Financial assessment of the improvement of drinking water distribution

Designation	Estimated unit costs (without taxes)	Number	Costs estimated total (excluding taxes)
Expenditure investments public tap	250 000	7	1 750 000
Connection fee	_	_	30 000 000
Modernization fees of Collection Point	800 000	6	42 000 000
Realization of network extensions and individual connections (by the dealer	-	-	50 000 000
Total			**123 750 000**

Source: Analysis of the Consultant

The maintenance of public tap which is a very important thing for the sustainability of the project will be on the responsibilityof the people of Sisia. It is remarkable considering the good social organization of the quarter of Sisia by a development committee of the bloc leaders, as well as quarterheads. This organization will mobilize resources as it already does for the construction of infrastructure in the neighbourhood.

Sketch 14: Working session of the quarter development commitee

Source: Photo MINYEMECK, POLYGONE SARL

VI/ PROGRAM FOR THE CONSTRUCTION OF SUPERSTRUCTURE EQUIPMENTS

VI- 1 Objective

Collective facilities are usually places of exchange, of marriage sharing of the brewing culture within an urban space. These facilities often allow people to feel at home. In addition, these facilities are among other things schools, health centres, green spaces etc. There will be an addition of facilities in the neighbourhood to guarantee that social cohesion is ensured and that the populations of sisia do not feel marginalized.

VI- 2 Description of Interventions

A number of actions have been identified in this sense

EDUCATION

- The building of a nursery and primary school;
- The building of a high school of general and Technical education

HEALTH

- Creation and equipping of a medical centre;

OTHER FACILITIES

- Development of a small scale playground;
- construction of a police station;
- Expansion of the current market;
- Development of the waterfalls site in order to enhance the tourism aspect of the area
- Another opportunity to improve income-generating activities will be implemented through support for small economic activities. In this context, synergy will be sought with the programmes and structures that share the same objectives, like the National Employment Fund, which has an agency in Bamenda and other programmes to promote young jobs.

These different actions are all the more significant as they aim not only at improving the immediate environment of slum dwellers, but also on the positive benefits for the entire city of Bamenda.

VI – 3 Risks

The release of the rights-of-take is a risk for the spatialization of investments. Private and public actors must be involved in the realization of the equipment.

VI- 4 Costs

Table 21: Cost of implementing facilities and activities

Désignation	Estimated cost (excluding taxes)
Building a nursery and primary school	**50 000 000**
Building of a high school of technical education	**200 000 000**
Creation and equiping of a medical centre	**25 000 000**
Development of a small scale playground	**25 000 000**
Building of a police station	**15 000 000**
Extension of the current market;	**10 000 000**
Development of the waterfalls site in order to enhance the tourism aspect of the area	**10 000 000**
Support for small activities	**10 000 000**
Total	**345 000 000**

Source: Analysis of the Consultant

VII/ SANITATION AND BEAUTIFICATION PROGRAM FOR THE AREA

The sanitation system in the city of Bamenda is still traditional, individual and old. Indeed, HYSACAM is not yet represented at the level of the city council. As a result, the sanitation system is rather provided by the city council (BCC) and local organizations, but they are struggling to be more effective because of their limited material, human, technical and financial resources. For this reason, a whole program must be set up in the Sisia neighbourhood, in order to overcome this inconvenience.

VII.1 The solid waste collection and disposal system

Sisia quarter presents certain topography; waste management here will be done by voluntary contribution. The installation of several garbage bins in the neighbourhood along the main axes will allow the population to throw away their household garbage and the Bamenda city council will come to carry as usual. These garbage bins will be placed on platforms probably arranged to accommodate them.

Table 22: Cost of building platforms

Designation	Estimated costs (excluding taxes)T
Building platforms	20 000 000
Trash bin Costs	15 000 000
Total	**35 000 000**

Source: Analysis of the Consultant

VII.2 The Housing sanitation system (housing, shops,)

Sanitation is a pillar to have a healthy environment. With regards to the houses and shops, we propose here models of VIP toilets which have already been experienced by ERA Cameroon in the framework of the PSUP in the Nkolbikok neighborhood in Yaounde. These toilet models are ecological toilets which occupy less space because an area of about 2 to 3 m²is enough for the installation of these toilets that will enable the populations to have an independent sanitation. As far as trades are concerned as it is already done on the field, we will provide public toilets like those already existing in the city in some neighborhoods like in Mile 4.

Sketch 15: VIP model of dry sceptic tank

Source: POLYGONE SARL

Table 23: Construction Costs of dry toilets

Designation	Cost estimates (excluding taxes)
Installing dry latrines for households	150 000 000
Community sensitization of good hygiene practices	15 000 000
Install dry latrines for the market and others	10 000 000
Total	**175 000 000**

Source: Analysis of the Consultant

VII.3 The development of river banks and waterfalls

The development of river banks is structured in several phases. One has among other things cleansing of these streams which will increase the flow rate of waters as water will no longer encounter any obstacle on its route, clearing the banks of the streams to release sediments that have been accumulated there for years. At the end we will have the recalibration of the waterways because after the liberation of the rights-of-way, it will permit us, to give a constant section using definitive materials.

The construction of culverts will also be carried out for a better movement of populations from one area to another, planting trees throughout the waterways to give a new image to the neighbourhood, thus creating areas of micro-climates and spaces for relaxation.

As for waterfalls it will be a question of arranging the falls by making them more attractive thus offering a resting place for tourism for the populations of Sisia in particular and those of Bamenda in general. Activities will take place there and thus create income for the people and especially the young people in need of jobs.

Sketch 16: Different waterfalls and streams in the area of Sisia

Source: POLYGONE SARL

Table 24: Costs of river and waterfall management operations

Designation	Coûts estimés (excluding taxes)
Landscaping of green space along streams	80 000 000
Development of spaces along the waterfalls	50 000 000
Total	**130 000 000**

Source: Analysis of the Consultant

VII.5 The development of slopes

It consists of the reforestation of these areas by eucalyptus and to make retaining walls which will thus prevent landslides as well as the fall of the rocks on houses lying on the slopes of the mountain. It presents as strengths, the embellishment of the neighbourhood landscape as well as green landscaping on the embankment. Before reforestation there will be reprofile operations of these slopes.

Table 25: Cost of slope development operations

Designation	Coûts estimés (excluding taxes)
Reprofiling operations	20 000 000
Constructions of retaining walls	15 000 000
Landscaping	5 000 000
Total	**65 000 000**

Source: Analysis of the Consultant

VII.6 The development of car parks and parking areas

Considering the topography of the Sisia area which makes the opening of certain roads in neighbourhoods particularly difficult, the creation of car parks in the quarter was the proposed solution. These car parks and parking areas will be developed where the access road will generally end at the steep slopes, or the end of roads. These car parks, which will be of three types (03) in the neighbourhood, will also encourage people to walk from the parking spaces of their vehicles to their homes as well as to soft mobility, thus entering into the objectives of sustainable development (ODD).

Table 26: Costs of construction of parking areas and car parks

Designation	Estimated cost (excluding taxes)
Constructions of car parks and parking areas	20 000 000
Total	**20 000 000**

Source: Analysis of the Consultant

VII.7 Surface water Drainage

The drainage of surface waters will be done through the gutters built along the tracks which will allow the evacuation of the waters to the outfall of the area which is located further south of the area as indicated in the map of the watershed of Sisia.

VIII. OVERALL COSTS OF UPGRADING OPERATIONS

Table 27: SUMMARY OF COST

Designation	cost
Electricity and public lighting	15 000 000
Water supply program in the study area	129 000 000
implementing costs of facilities and activities	345 000 000
solid waste collection and disposal system	35 000 000
Costs for construction of dry toilets	175 000 000
Costs of river and waterfall management operations	130 000 000
Cost of slope development operations	65 000 000
Costs of the construction of parking areas and car parks	20 000 000
TOTAL	**489 000 000**

Source: Analysis of the Consultant

BIBLIOGRAPHY

- **PUBLICATION**

- « Étalement urbain et changements climatiques », Réseau Action Climat-France, juillet 2011
- Belaadi Brahim, Le Bidonville: Histoire d'un concept pg 6.
- Chaline Claude, (1987), La Havane : urbanisme de rupture ou de rattrapage ? In: Annales de Géographie. 1987, t. 96, n°534. pp. 171-185.

- **REPORTS**

- Approches suivies au Burkina, Djibouti et Haïti « de Guillaume Josse et Pierre-Alain Pacaud «Améliorer les quartiers précaires »:
- BATISU SARL (2012) : PLAN DIRECTEUR D'URBANISME (PDU) de la ville de Kumba. 200 p.
- Document de stratégie de développement du secteur urbain au Cameroun, annexe 1, BREIT Consulting, 2005
- ECAM, Conditions de vie des populations et profil de pauvreté au Cameroun en 2007
- Elaboration d'une grille nationale des équipements urbains au Cameroun (TOME 1)
- INS (2007). Troisième Enquête Camerounaise auprès des Ménages (ECAM3). Rapport d'études sur le profil et les déterminants de la pauvreté au Cameroun entre 2001 et 2007
- L'étude d'identification des quartiers sous-structurés de la ville de Yaoundé, 2013
- Le Programme National des Nations unies pour les Etablissements Humains, (2007), Le profil urbain National du Cameroun, Nairobi, ONU-HABITAT, 41p.
- Elaboration de la stratégie d'amélioration des bidonvilles au Cameroun, Phase 1 : Identification du stock des bidonvilles dans les 14 Communautés urbaines du Cameroun, Diagnostic. IEA/KAS, 2015 ;
- NATIONS UNIES (2010), Rapport, Objectifs du millénaire pour le développement : rapport 80p.
- Rapport de présentation du 3ème recensement de la population, 2010.
- RAPPORTS CAVIE. (2002). Enquête sur le Cadre de VIE des populations de Yaoundé et Douala
- SORTIR DES BIDONVILLES - "Un enjeu mondial à l'horizon 2020" - Rapport de la conférence-Conférence Internationale Rabat - Maroc, 26-29 Novembre 2012, pp 2 & 3
- The challenge of slums, 2003 UN-Habitat;
- Participatory slum upgrading programme Bamenda city: Sisia quarter-nkwen Bamenda III subdivision, ERA-Cameroon, Tom 1, 2, 3, 4 and 5. 2014;
- A new strategy of sustainable neighborhood planning : Five principles, UN-Habitat, Discussion note 3, Urban planning, 2017;
- UN-HABITAT, The Challenge of Slums, Global Report on Human Settlements 2003, United Nations Human Settlements Programme, Earthscan Publications, Londres, 2003 (ISBN 1-84407-036-0) ou

(ISBN 1-84407-036-0), partie I « Sharpening the global development agenda », pp. 1-16. Yamoussoukro - Ingénieur des techniques en bâtiment et urbanisme 2010)

- **DOCUMENTS EXPLOITED IN CITY COUNCILS**

- MINHDU, Elaboration du Plan Directeur d'Urbanisme (PDU) de la ville de Bamenda et des Plans d'Occupation des Sols (POS) des communes d'arrondissement de Bamenda 1, 2 et 3 Janvier 2015.

ANNEX

Annex 1: Mission Terms of Reference

This part of the study, which concerns only targeted neighbourhoods, aims to determine intervention programmes with the technical, institutional, financial, social and environmental modalities of their implementation, based on an analysis which will give an important part to the economic, financial, social and environmental impact

a) Technical and financial feasibility

The Consultant will study the technical and financial feasibility of the development of parcels intended for the contribution of one or more equipment (s) in order to initiate the endogenous process of development of the neighbourhood, the development of real estate operations for the use of offices, shops or housing of social standing:

- with total resettlement of the populations on the same site notably through, the development ofparts unsuitable and unfitfor the habitat, the intensification by the height and the promotion of co-ownership
- Where appropriate, for the relocation of those which may not be preserved on these sites?

It will start from the average costs of the relevant operations (to be justified) to define programs (nature and costs). On the basis of the market data, it will carry out, for each quarter, a financial analysis enabling it to establish profitability (gross margin, internal profitability, etc.).

The Consultant will consider as much as possible the possibility of promoting the development of social housing to promote social mixing with facilities that the state could grant to the developers, and whose details are to be presented by the Consultant, drawn from the information available at the Investment Promotion Agency and the legislative and regulatory framework in force.

The proposals of the priority intervention Programme will take into account the (documented) facilities related to the establishment on the same site of temporary relocation plots and the release of rights-of-way for the implementation of the work.

b) Institutional and regulatory framework

The Consultant will propose the institutional and regulatory arrangements for carrying out these operations: the regulations to be complied with (DUP, GIFU, condominium, preemption right, etc.), nature of the potential operators, elements of the specifications, roles and/or contributions of government (BCC, MINHDU, MINDCAF, MINEE, MINEPDED, MINATD,), etc. The opportunities offered by the -Public-Private partnership will also be explored through the support of banks and the technical framework of the Support Council for the implementation of partnership contracts (CARPA).

c) Environmental and social Aspects

The Consultant will define a framework document for environmental and social management to be respected during the implementation of the project, according to the directives in force. The outline to be followed will take into account: (i) the description of the project and the sub-projects, the institutional and regulatory framework applicable to environmental management, (ii) the biophysical conditions of the initial state, (iii) identification, Impact assessment and analysis, (iv) mitigation measures for negative impacts and positive impact enhancement, (v) a public consultation plan with an analysis of the social acceptability of urban restructuring/renewal and (VI) Costs of implementing the environmental and social management framework

This part, the estimates of which will be presented, will be the subject of public consultations within the said districts, in premises negotiated by the Consultant and made available by the neighbourhood sheads or otherwise in the premises of the district municipality Concerned. The Consultant will be introduced by the project manager's representative, who will read the work order to start the services. The Consultant will then carry out the necessary interviews to inform, educate and communicate with the populations concerned on the stakes of the development of the city and the implementation of the urban planning documents, but also by taking into consideration the populations'Concerns particularly on new element of the project such as the co-ownership within the limits of the regulations in force and lobbying for the vulnerable strata.

The populations will also be informed on their role, including the possibility of being grouped into land initiative groups, promoting co-ownership to facilitate on-site relocation, the need to accommodate by yielding Parts of their property to aspire to a well-being in a regulated living environment, the possibilities offered by the sale of the serviced land, etc., according to the constraints of the specifications which will be validated.

For this purpose, social workers will be mobilized at the expense of the consultant, as well as the social services of the municipalities concerned (BCC and municipalities) and MINHDU will be associated for their capacity building (Learning by doing). These activities will be carried out in parallel with the technical studies and will have to be rigorously planned to avoid slippages at the timetable level.

The Consultant will propose criteria for compensation, relocation on site or in the periphery (at Bafoussam) or in neighboring municipalities, in kind and/or species in accordance with the regulations in force and the proposals for social management of this Project.

The study will propose measures which can enable land security by regularization, resettlement of displaced populations, pecuniary or in-kind compensation of landowners in relation to the laws and regulations in force in Cameroon.

As an option, in order to enable decision-makers to have the necessary elements to integrate the social component, a particular attention will be given to two key points:

- The taking into account of all the affected people, irrespective of their status of occupation;
- The concern for prevention, in the sense that the evicted populations should not be in a situation where they would be obliged to reproduce elsewhere the same pattern of precariousness

The possibility of relocation on site (primarily) or resettlement on the periphery of the city or in neighboring municipalities will be studied, and the compensation/accompanying measures presented.

d) Program proposal

Following the above elements, the Consultant will propose intervention programs (nature, implementation modalities, timetable, etc.). The criteria for analysis and selection of operations will be proposed and validated by the Administration. They will be able to rely on the following points of interest:

- The financial profitability of the operations;
- Economic profitability for the city ;
- Social profitability ;
- The proximity of other planned operations or in progress in the framework of various projects (see the opening of neighbourhoods or other areas under rehabilitation, sanitation Project etc.);
- The density and occupation status on the land;
- The standard of living (poverty level)/accessibility to basic urban services.
- The assessment of the economic interest of the planned operations will focus on:
- The cost/benefit analysis of investments in relation to a non-project reference situation;
- The estimation of the relevant economic indicators (internal rate of return, the comparison of the costs of servicing, expropriation and resettlement with revenue related to the sale of the land, the contribution of the beneficiaries, etc.) And will also hold, the existence of clearly identified and projected operations in the said neighborhoods.

Annex 2: Mission report for the public consultation

In the setting of the project related to the study of the upgrading/renovation of the sub-structured neighbourhoods in the urban community of Bamenda in general and in the Sisia area in particular, we had a field trip of 3 days. This meeting is part of Mission 3 on the financial, institutional, environmental and social feasibility study of the Sisia quarter. In advance a contact was arranged with the various actors involved in the project namely the different focal points of the Municipality of Bamenda 3 (Bda 3 council); Urban community of Bamenda the regional delegate of the MINHDU, the Association of residents and the traditional authorities.

The objective of this meeting was to inform the various actors about the content of the meeting and about the expectations of the project vis-a-vis everyone.

This report sets out this contact as follows:

I. PRESENTATION OF THE CONTACT PHASE WITH THE DIFFERENT ACTORS

The contact was initially made by a presentation of the project team responsible for the realization of the study and in a second time by a presentation of the work plan during our stay in Bamenda. This plan will focus specifically on a review of the development operations and the assessment of the feasibility of these operations, while highlighting the difficulties associated with their implementation but also the avenues for solutions. In addition, the team requested certain documents such as the administrative accounts of the Municipality of Bamenda 3 and the city council which would enable them to know their capacity to finance certain projects.

Image 1: Working session with the populations

Image 2: Working seesion with people (part 2)

Source: Picture of MINYEMECK, POLYGONE SARL

II. EXCHANGES

Although all the actors promised to honor with their presence, they expressed some fears that could constitute blockages to the evolution of the project. The traditional authorities first pointed the lack of coordination of the project's priorities. As a result, the population feels that their needs are not taken into account to the municipality and MINHDU initiator of the project. This situation creates scepticism about the project that could lead to general paralysis and potential popular uprisings as evoked by the quarterhead.

It would therefore be important, according to the quarterhead, that the project initiators should be more involved through an intervention in order to reassure the people, but also to facilitate the progress of the project.

The exchanges made with the focal point of the Bda 3 council also the head of technical services. He also requested that the schedule of activities should be forwarded to them at least on a monthly basis to facilitate their mobilization.

With him we found a consensus which helped us to know that he will be favorable for any other workshop or task at any time.

The Mayor, while emphasizing on his will for the success of the project, promised to make available to the team some administrative accounts of the municipality and the project to be carried out in Sisia. The people who have made recommendations are those who want to the realization of the projects and who want to see us on the field to present the project to them on an ongoing basisas soon as possible. Hence the need for a field tripwith the purpose of presenting the developmentmodels proposed for the entire neighborhood, as well as the priority projects.

III. DIFFICULTIES ENCOUNTERED

The main difficulty encountered was the very short time to meet some actors and the tensions that are in the city at present. This climate of tension began at the beginning of the work session but by the grace of the leader of the Development Committee and some participant everybody relaxed. Other difficulties were encountered. These include the unavailability of some member of the Development Committee because they have lost interest and motivation for the project, Given the more than six months that passed between the last field trip and today.

Moreover, all the actors think that they should be motivated financially for a potential participation in the project. On the other hand; the weather could hinder the evolution of the activities to be carried out. As for the objectives of the trip they have been reached.

IV. OBJECTIVES ACHIEVED

1. Day 0

- Journey to Bamenda

2. Day 1

- Meeting with the Chairman of the Development Committee of Sisia for the organization of the Mission;
- Meeting with the Mayor (presentation of report 1, collection of data relating to Mission 3, request of the presence of the technicians of the council of Bamenda 3 on the site);
- Prior studies of the site by the experts.

3. Day 2

- Meeting with the population of Sisia;
- Meeting with the Regional Delegate of MINHDU and presentation of report No1
- Selection of the team to locate additional water points.

4. Day 3

- Field trip to the identified site;
- Return trip to Yaounde

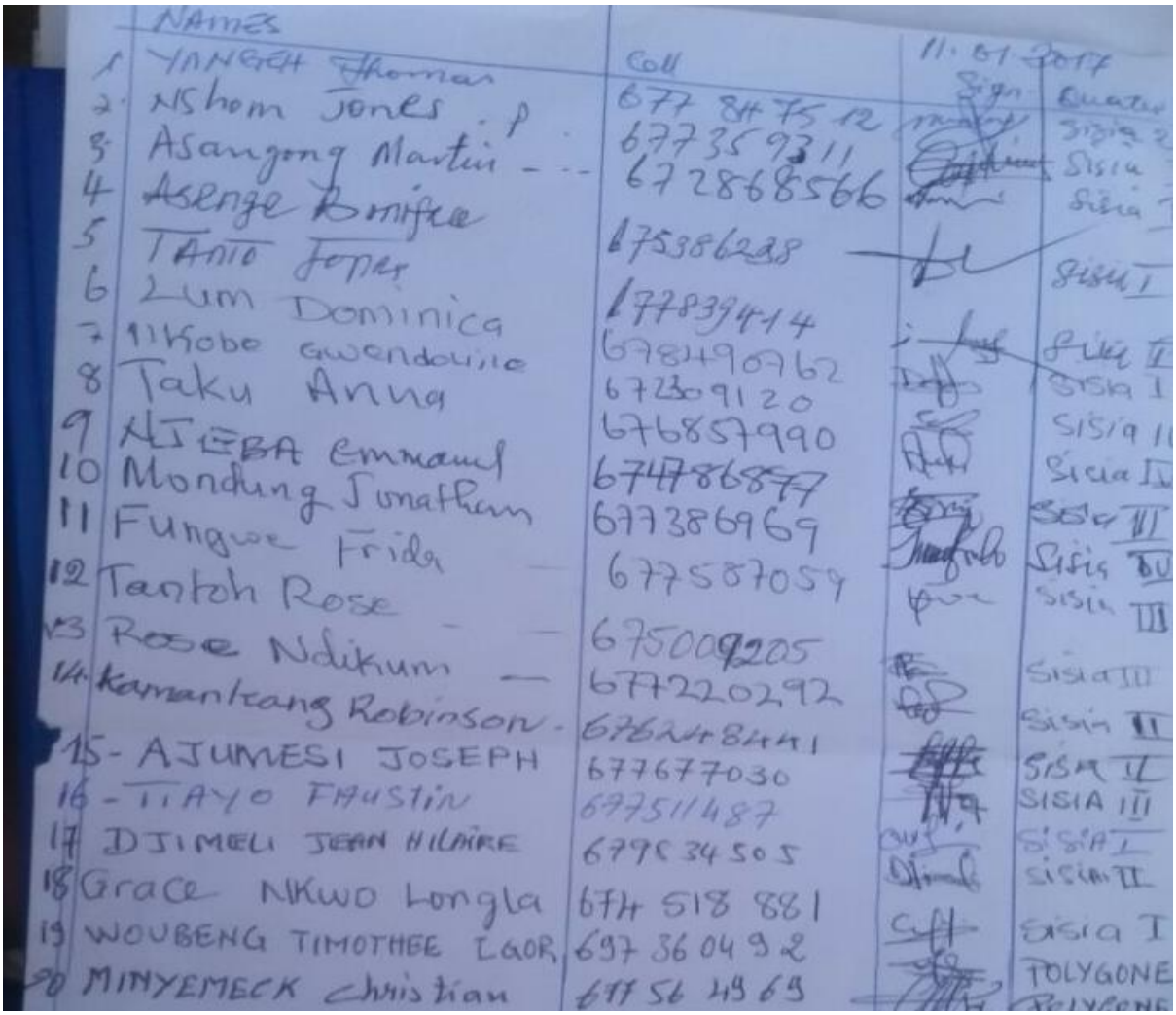


Image 3 : Attendance sheet of participants

Source : Picture of MINYEMECK, POLYGONE SARL

Annex 3: Surface area and number of households to be expropriated from sisia

Table 1: Number of households affected by sector in Sisia quarter

Number of households affected	Division/Sector/ households			
	Sisia 1	Sisia 2	Sisia 3	Sisia 4
200	95	27	20	58
400	100	100	50	150
250	100	30	08	112
850	**295**	**157**	**78**	**320**

Source : Polygone Sarl, 2017

NB: The table above summarizes the various owners affected by the expropriation and eviction of the progressive upgrading project of the Sisia quarter in Bamenda. A detailed analysis of the properties impacted will be made before the start of the works by a multidisciplinary team consisting of a land expert, a town planner and two social engineers. This mission will aim to confirm the information gathered during the household and land survey carried out in 2015.

Table 2: Surface area of buildings expropriated in Sisia I, II III & IV

Surface Area of Sisia 1 (m^2)	Surface Area of Sisia 2 (m^2)	Surface Area of Sisia 3 (m^2)	Surface Area of Sisia 4 (m^2)
104	137	30	57
32	135	34	41
182	234	295	303
38	232	35	639
47	62	43	85
97	68	91	175
648	73	57	91
70	55	205	57
76	22	221	15
75	66	174	319
185	111	10	119
133	62	47	1705
409	54	181	99
38	259	145	139
757	478	105	55
146	62	62	155
517	10	398	56

62	240	44	93
166	91	108	114
16	33	130	33
28	69	145	81
126	33	136	217
299	91	96	242
94	72	22	163
20	53		81
75	331		188
60	36		243
23	80		52
16	89		174
172	76		92
52	243		42
305	66		72
35	82		28
258	35		143
41	28		118
247	49		148
60	61		160
141	69		92
123			107
50			135
32			137
41			52
55			66
96			42
304			50
169			69
70			104
20			87
643			51
94			157
141			67
50			116
7738	4047	2814	7926
10059.4	5261.1	3658.2	10303.8

Source : Polygone Sarl, 2017

SUMMARISED INFORMATION

Number of Households to be expropriated from Sisia:

Sisia 1=295 households

Sisia 2=157 households

Sisia 3=78 households

Sisia 4=320 households

Total= 850 households

Total surface Area of Buildings to be expropriated from Sisia:

Sisia 1= 10059.4 m2

Sisia 2= 5261.1 m2

Sisia 3= 3658.2 m2

Sisia 4= 10303.8 m2

Total= 29282.2 m²

Annex 4 : Cartographics map

- **Projected road network map**

- **Map showing water drainage**

- **Map showing affected buildings due to the progressive upgrading project of Sisia**

- **Map showing the electicity network and waste management**

- **Map showing the projected facilities**

- **Map showing water rationing in the Zone**

- **Map showing risk zone**

- **Map showing building**