

Decentralization and Preservation of the Environment and the Health of the Populations of the Precarious Neighbourhoods of the City of Bafoussam

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Abstract :- Bafoussam is a city in the West Cameroon region located in the highlands. This city is facing an unprecedented demographic growth with the consequence of urban sprawl and the development of precarious neighbourhoods in which the environment and the health of the populations are increasingly degraded. In the face of this situation, the Regional and Local Authorities are involved on a daily basis in improving the living environment of the city dwellers in the study area. This study therefore aims to draw up a typology of the local authorities in the city of Bafoussam and to decipher their intervention strategies in the precarious neighbourhoods. To this end, the study was based on preliminary documentary research, field observations, semi-structured interviews with officials of the local authorities and surveys by questionnaire of a sample of 551 households living in precarious neighbourhoods divided into three strata: Stratum A: 3 neighbourhoods for a total of 93 households surveyed, stratum B: 7 neighbourhoods for a total of 178 households surveyed and stratum C: 8 neighbourhoods for a total of 280 households surveyed. The use of a Global Positioning System (GPS) then made it possible to geolocate the various projects carried out by the CSOs in the city. The analysis of the various data shows that there are CTDs in the city of Bafoussam that actively participate in the preservation of the environment and the health of the populations of precarious neighbourhoods. These CTDs carry out several activities related to the sanitation of the living environment of the populations, access to drinking water, recycling of plastic waste etc.

Keywords:- Regional and Local Authorities, City, precarious neighbourhoods, Bafoussam.

I. INTRODUCTION

Third World cities, which are facing unprecedented demographic growth, are experiencing a proliferation of precarious neighbourhoods where city dwellers are confronted with the degradation of their living environment by solid and liquid waste of various origins. The latter have enormous difficulties in accessing basic social services such as water, electricity, sanitation, education, health, etc. Illnesses linked to insalubrity are rampant.

Cameroon's metropolises are not left out. Due to a galloping demography, the lack of financial and material resources of urban municipalities, the urban problems are

more and more perceptible and constitute urban challenges to be taken up by city dwellers. The precarious neighbourhoods of Cameroonian cities and the city of Bafoussam in particular are subject to the degradation of their living environment by wastewater, black water, excreta, household waste and smoke. Water and sanitation related diseases such as cholera, diarrhoea, typhoid fever and intestinal worms are spreading. Moreover, the environmental and health challenges faced by slum dwellers have also been exacerbated by the economic crisis of the 1990s. This resulted in a reduction in the financial resources of the States required for the implementation of urban projects such as the installation of refuse bins, the construction of gutters, access roads, the installation of water supply networks, etc. [2].

Faced with the degradation of the environment and health challenges, the populations of the precarious neighbourhoods of the city of Bafoussam, in synergy with local actors, are engaged in a perpetual struggle through various actions.

In the context of good governance, the Cameroonian state has initiated decentralisation, which strengthens the capacity of local authorities to manage their territory. Indeed, since 2004, responsibilities have been transferred to the councils in several areas, thus enabling them to manage local affairs. The major challenge of decentralisation is to promote development by involving the population in the management of local affairs. Article 2, paragraph 2 of law no 2004-17 of 22 July 2004 on the orientation of decentralisation, stipulates that: "decentralisation constitutes the fundamental axis of the promotion of development, democracy and good governance at the local level". Its implementation in the city of Bafoussam has boosted local development in general and the improvement of the living environment of the populations of the precarious neighbourhoods in particular. This study aims to evaluate the contribution of decentralisation to the preservation of the environment and the health of the populations of the precarious neighbourhoods of the city of Bafoussam.

II. MATERIALS AND METHODS

A. Physical and human framework of the precarious

The town of Bafoussam is located between longitudes 10°24'0"E and 10°26'30"E and latitudes 5°28'0"N and 5°30'0"N. It is bounded to the :

- North-West by the departments of Bamboutos and Menoua;
- South-West by the departments of Menoua, Hauts Plateaux and Koung-khi;
- North-East through the departments of Bamboutos and Noun;
- South-East through the departments of Koung-khi and Noun (Figure 1).

The town is located at an altitude of about 1450 m [3] and is characterised by three relief units: interfluvies, slopes and valleys. The lowest altitude (1,300 m) is located in the north-eastern part of the city and the highest (1,520 m) in the south. Depending on the steepness of the slope, the city is divided into: steep slopes (between 15 and 25%), medium slopes (between 10 and 15%) and gentle slopes (between 0 and 10%).

The city in general and the precarious districts in particular are built on a hilly site interspersed with talweg. The relief of the precarious neighbourhoods is quite marked, and presents a succession of plateaus separated by low-lying areas drained for the most part by intermittent watercourses. These watercourses are disappearing because of the many pressures to which they are subjected (dumping of household waste and exploitation for economic purposes).

Most of the watercourses that drain these precarious areas of the city of Bafoussam have their source inside the city. These rivers all have a regular flow, the result of high rainfall. Even at low water, these rivers always keep a trickle of water. Flooding is important in the wide lowlands where there are swampy areas. The landscape of the town of Bafoussam is essentially made up of a forest-savannah mosaic, which has become very degraded due to urban sprawl. The city's soils are mostly ferralitic, developed on basalts and blocks of granite-gneissic bedrock [4].

Climatically, Bafoussam belongs to the Cameroonian sub-equatorial climate, characterised by two seasons of unequal duration, namely a short dry season of four months

and a rainy season which lasts eight months. The rains are abundant. The average annual rainfall is 1,800 mm/year. The rains are spread out from the end of March to the beginning of October and the heavy rains are recorded in July, August and September, which are also the coolest months of the year. The average annual temperature is 21°C [5].

The town of Bafoussam is made up of a number of precarious neighbourhoods such as Tougang village I, Tougang village II, Tougang village III, Tougang-ville A, Tougang-ville B, Famla II, Famla III and Bamendzi I, etc. Some of these neighbourhoods have been created by the government and the private sector. Some of these districts were created in the 1980s [8]. These are Tchitchap I and II, Banengo village I, Banengo village II, Kouougou-ville B 1, Tyo-ville, etc. (Figure 1). The strong demographic growth that Bafoussam has experienced in recent decades has given rise to new precarious neighbourhoods such as Kamkop (1, 2, 3, 7), Ngouache, Kouptchou, etc [6].

At the time of the 1976 census, Bafoussam's informal settlements covered 65.8% of the urban area. In 2008, these neighbourhoods occupied about 75% of the total surface area of the urban perimeter and concentrated about 80% of the total population [7].

The population of these neighbourhoods has continued to grow. This strong growth has its origins in the rural exodus and the natural demographic increase... Most of this population is concentrated in the precarious neighbourhoods (approximately 159,784 inhabitants, i.e. 66.77% of the urban population). It is made up of a community made up of a minority of non-natives and the vast majority of natives [8].

Today, the demographic growth in precarious neighbourhoods amplifies the urban challenges, including the degradation of the living environment and the insufficiency of basic urban services.

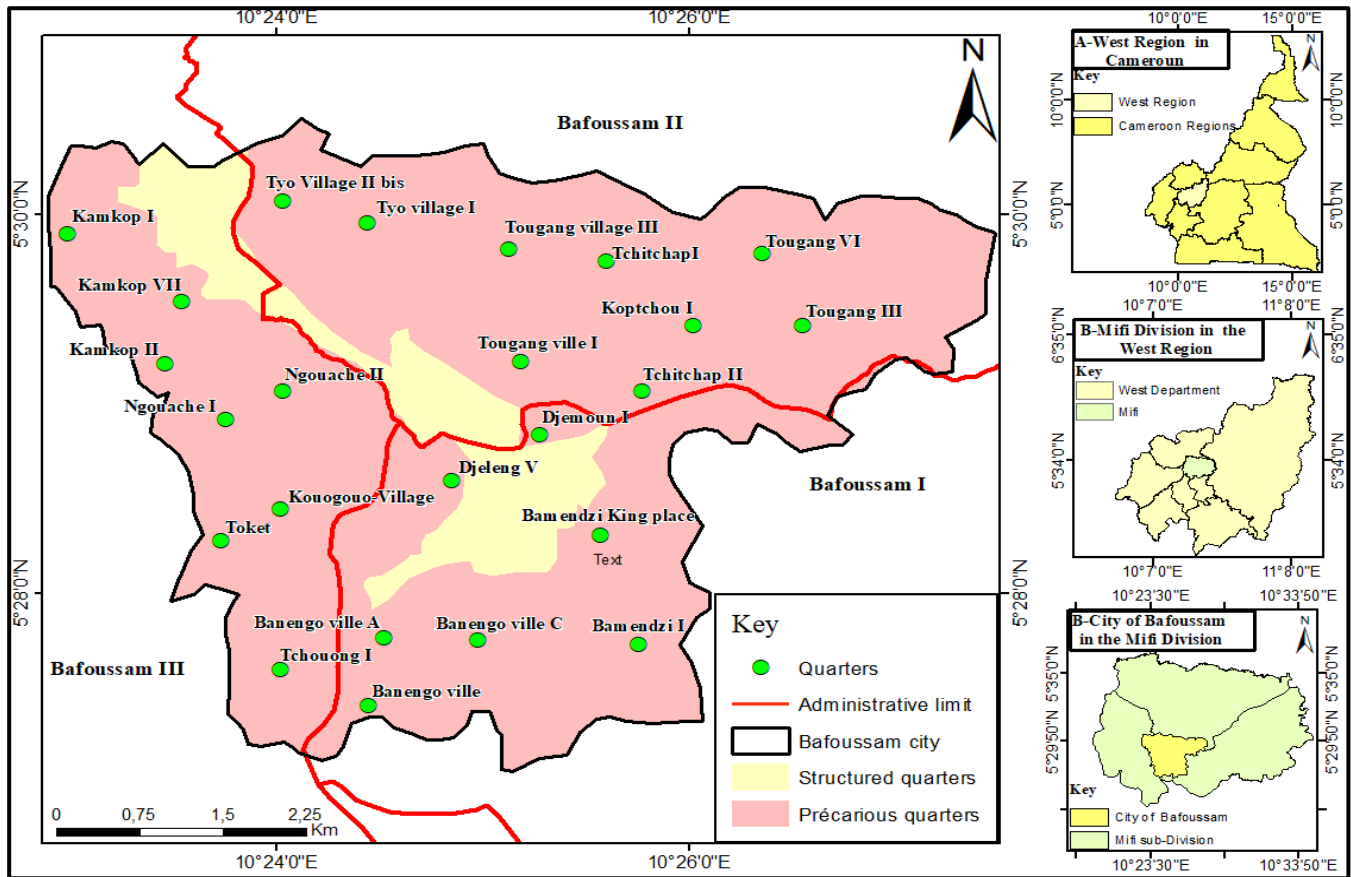


Fig. 1: Location of precarious neighbourhoods in the city of Bafoussam

Source: PCD and PDU of the city of Bafoussam 2013 plus shapefile 2016

B. Methodology

The method adopted for this study was based on a documentary search that enabled us to consult the available works relating to this work: general works, theses, dissertations, articles, statistical data banks, specialised dictionaries, etc. Subsequently, a systematic search was conducted on the Internet where information was collected on the actions of the Regional and Local authorities. Then, field investigations and observations were carried out. Questionnaire surveys were conducted among households in the precarious neighbourhoods of the city of Bafoussam. They were conducted in 18 precarious neighbourhoods with different urban fabrics divided into three strata and housing 32,790 households. Stratum A: 3 neighbourhoods for a total of 93 households surveyed, stratum B: 7 neighbourhoods for a total of 178 households surveyed and stratum C: 8 neighbourhoods for a total of 280 households surveyed. Stratum A includes the precarious neighbourhoods located in the centre of the city of Bafoussam. Stratum B groups together the precarious pericentralneighbourhoods, which were created after saturation of the town centre and lack of space in the old precarious neighbourhoods. Stratum C groups together the peripheral precarious neighbourhoods. The questionnaire, which was divided into three sections for households, dealt with:

- participation in the activities of the local authorities, b-
- the impact of the Regional and Local Authorities' actions in the precarious neighbourhoods.

In the same vein, interviews and surveys by questionnaires were conducted with the Regional and Local Authorities operating in the city of Bafoussam. These include the District Councils of Bafoussam I, II, III and the Town Hall. The questionnaire intended for the CTDs concerned the projects carried out by them and was subdivided into several headings (a- excreta sanitation, b- household waste management, c- wastewater disposal and d- access to water and hygiene f- difficulties encountered). The aim was to gain a better understanding of their rationale and action strategies in the management of the environment and the health of the populations of the precarious neighbourhoods of the city of Bafoussam.

The field observation phase allowed us to get a good feel for the environmental and health problems in the study area.

III. RESULTS

A. The Regional and Local Authorities and their actions relating to the preservation of the environment and the health of the populations of the precarious districts of the city of Bafoussam

a) Regional and Local Authorities

The Regional and Local Authorities in the City of Bafoussam represented by the District Councils of Bafoussam I, II, III and the City Hall represent the main body for the operationalisation of decentralisation. They are responsible for promoting economic, social, health, educational, cultural and sports development in their respective territorial constituencies, according to a distribution of competences fixed by law and in strict compliance with republican legality. The CTDs work together with the population.

In order to make decentralisation effective, the state is gradually transferring powers to them. However, given their current configuration, no municipality can, whatever its will and means, take full responsibility for the preservation of the environment and the health of the population. Therefore, to ensure their new responsibilities, the CTDs are supported on a daily basis by institutions supporting decentralisation and other categories of social actors [9].

B. Actions of Regional and Local Authorities to preserve the environment and the health of the population

Essentially, the communes have the imperative duty to ensure the well-being of their populations in several forms.

To this end, council authorities levy taxes in their territories to finance their annual action plans. They must manage local resources rationally for the benefit of their constituents. Cameroon's councils, including those of Bafoussam, also benefit from FEICOM funding, PNDP support, PADDL/GIZ, etc. Thanks to these revenues and funding, the councils in the study area contribute to the preservation of the living environment of the population [10].

a) Actions of the Bafoussam District Council

The achievements of the Bafoussam district councils in preserving the environment and the health of the populations of the precarious neighbourhoods include the construction of ventilated pit latrines, boreholes, road development, etc. These projects, financed by the town halls, reinforce the initiatives of the populations to improve their living environment.

- Construction of double ventilated dry pit latrines

In contrast to the traditional bottomless latrine, where the excavation of the hole generally reaches the water table, the ecological latrine consists of two dry pits no more than 3m deep.

Council	Ecological latrines	Neighbourhoods	Costs	Years
Bafoussam 1st council	One block of 3-compartment public latrines	Banengotown B	6 188 700	2013
	Two blocks of 6-compartment school latrines	Djemoun 1 and Bamendzi	12 524 00	2012
	One block of 3-compartment school latrines	Banengotown C	6 188 700	2013
	Two blocks of one-compartment school latrines	Djeleng V	12 110 00	2013
	One block of one compartment public latrine	Djeleng V	6 141 000	2015
Bafoussam 2nd council	Three blocks of 4-compartment school latrines	Tougang II	16 700 000	2012
	Two blocks of 3-compartment school latrines	Tougangtown B	13 108 600	2015
	Two blocks of public latrines	Tchichap I	12 920 000	2016
	One public latrine block	Toungangtown A	5 902 800	2014
	One block of public latrine	Toungang VI	6 902 800	2014
	One school latrine block with one compartment	Tyo city	6 141 000	2015
Bafoussam 3rd council	One 6-compartment school latrine block	Tchouong I	-	2015
	One 3-compartment school latrine block	Ngouache II	6 188 700	2012
	One 6-compartment school latrine block A	Banengotown	6 000 700	2012
	One compartment public latrine block	Kamkop II	-	2014

Table 1: Ecological latrines financed by the Communes in the precarious neighbourhoods of the city of Bafoussam

Source: Bafoussam district councils, plus field survey, 2016

Ecological latrines have definite advantages for the city dwellers who adopt them. It does not pollute the groundwater, does not emit odours, and does not attract cockroaches, rats or flies. It limits the transfer of pollutants (faecal coliforms and faecal streptococci), is easy to empty, and saves the owner from having to spend his or her life digging new pits for defecation.

In the precarious neighbourhoods of the city of Bafoussam, several sanitation access projects have been carried out under the own funds of the town halls of Bafoussam I, II and III and the public investment budgets (see Table 1). The achievements of access to excreta sanitation in the study area concern latrine blocks within primary schools and public latrines between 2012 and 2016. These facilities are unevenly distributed (see Figure 2).

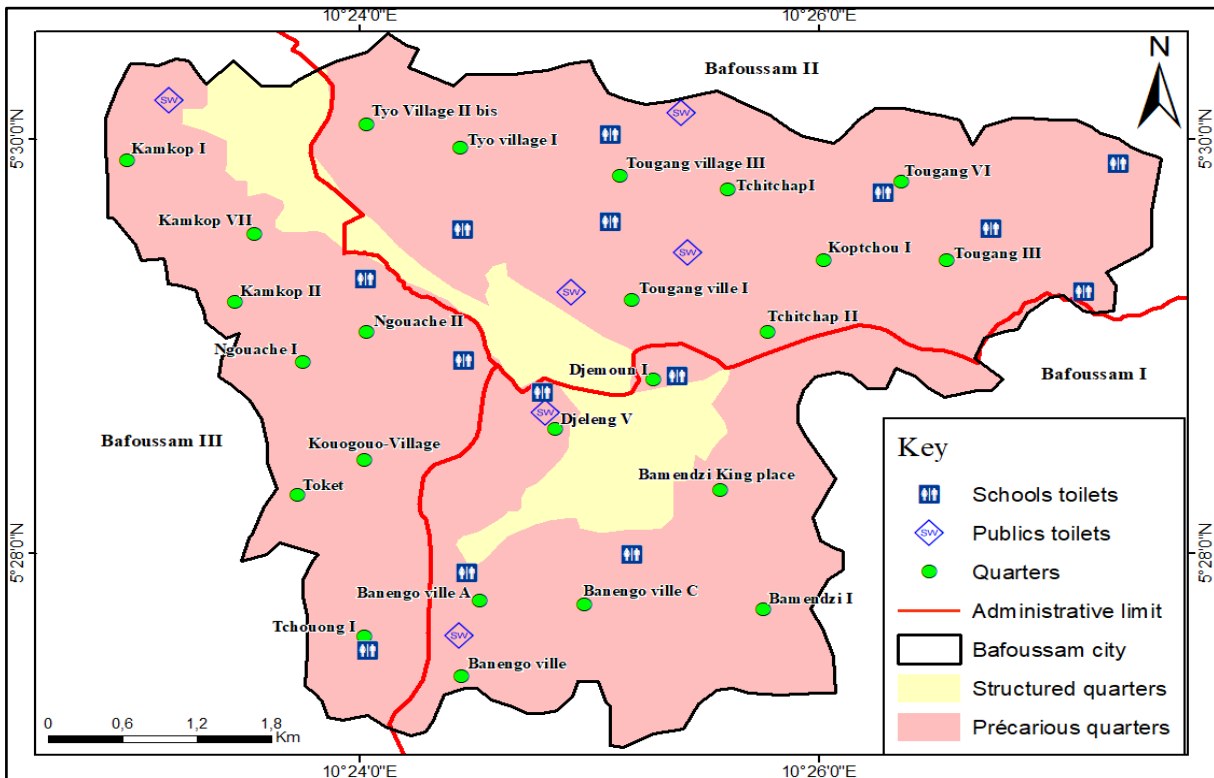


Fig. 2: Public and school latrines built by the Councils in precarious neighbourhoods of the city of Bafoussam

Source: Field investigation, plus GPS surveys 2016

The construction of ventilated pit latrines is not the only action undertaken by the council of the city of Bafoussam to improve the living conditions of the populations of the precarious neighbourhoods. In terms of excreta management, the hygiene and sanitation services of the various town halls regularly visit the precarious neighbourhoods to analyse the sanitation conditions in which the populations live.

- Construction of drinking water facilities

With a view to facilitating access to drinking water for the populations of precarious neighbourhoods and reducing water-borne diseases, several water points (wells,

springs and boreholes) have been financed and built by the council of Bafoussam (see Plate 1). These water access projects, unevenly distributed in the study area (see Figure 3), are in addition to those financed by national financial partners such as the National Participatory Development Programme, FEICOM, PADDL/GIZ, etc. Despite the synergy of action in providing access to drinking water for the inhabitants in order to reduce the spread of water-borne diseases in the precarious neighbourhoods of the city of Bafoussam, the problem of access to water is still very acute.

Plate 1: Water points built by the Bafoussam District Council



Photo 1 and 2: Borehole and spring in Nkouache I

Source: Photos Kengmoé Emmanuel, 2016

The three councils of Bafoussam have benefited from springs and boreholes equipped with human-powered pumps, most of which are no longer functional (see Table 2). Faced with the malfunctioning of the boreholes, PADDL/GIZ and PNDP have trained the agents of the town halls on how to repair the water points.

District Councils	Waterworks	Neighbourhood	Current State	Cost	Year
Bafoussam I st	DrinkingFountain	Bamendzi-ville A	Non-functional	-	2011
	DrikingFountain	Bamendzi-king place	Not functional	-	2011
	DrinkingFountain	Bamendzi I	Non-functional	-	2009
	DrinkingFountain	Banengo-village I	Non-functional	-	2009
	DrinkingFountain	Banengo-ville C	Non-functional	-	2012
	DevelopedSpring	Banengo ville A	Functional	2 814 210	2015
	Pumpborehole	Famla II	Functional	6 354 200	2013
	Pumpborehole	Bamendzi 1	Functional	5 874 355	2016
Bafoussam II nd	DrinkingFountain	Tougang II	Non-functional	-	2009
	DrikingFountain	Tougang-ville I	Not functional	-	2009
	DrinkingFountain	Tyo-village III A	Non-functional	-	2009
	DrinkingFountain	Tyo-village IV	Non-functional	-	2009
	Pumpborehole	Tyo-ville	Functional	6 478 325	2013
	Pumpborehole	Tougang ville B	Functional	6 478 325	2013
	Pumpborehole	Tyo-village 1	Functional	6 523 200	2014
	Pumpborehole	Kouptchou	Functional	6 523 200	2015
Bafoussam III rd	DrinkingFountain	Kouougou-ville A1	Non-functional	-	2009
	DrinkingFountain	Kamkop III	Non-functional	-	2009
	Pumpborehole	Gouache I	Functional	6 624 738	2014
	Pumpborehole	Tocket	Functional	6 624 738	2014
	Pumpborehole	Kamkop I	Functional	6 234 600	2013

Table 2: Water points built with own funds in the councils of the city of Bafoussam in precarious neighbourhoods

Source: Field research, 2016

The creation of water points makes people in slum areas less vulnerable to waterborne diseases.

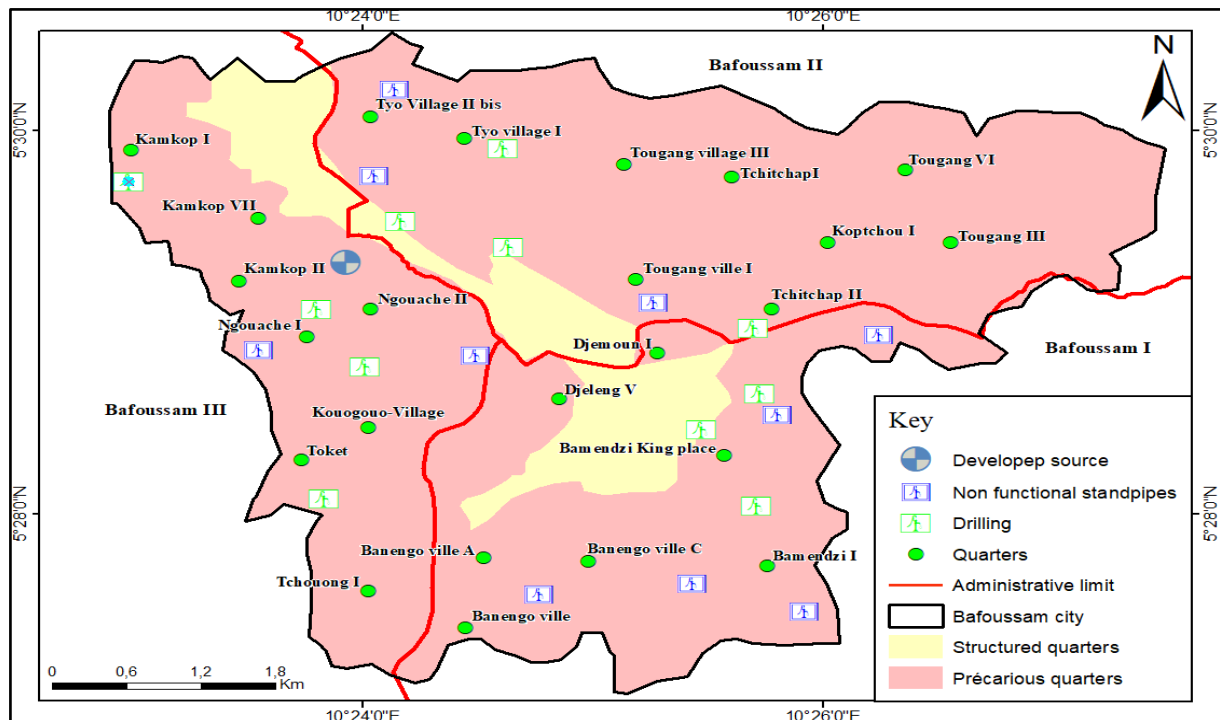


Fig. 3: Water points constructed by the councils of the city of Bafoussam

Source: Field investigation, plus GPS survey 2016

- Sanitation and rainwater drainage works

Each arrondissement commune in the city of Bafoussam participates in the management of rubbish and the drainage of rainwater and wastewater. The communes support the sanitation campaigns organised by Hysacam, and thus participate in raising the awareness of the inhabitants when diseases occur (cholera, typhoid, amoebic dysentery, etc.). The communes inform Hysacam's services in the event of the presence of piles of rubbish in certain neighbourhood.

During the holidays (June, July and August), the actions of the various communes in terms of hygiene and sanitation are much more noticeable. Young people are recruited as trainees for a period of one month, in exchange for a payment of 20,000 FCFA. They are divided into several groups and work in the precarious neighbourhoods of the city of Bafoussam in particular, which are faced with environmental degradation.

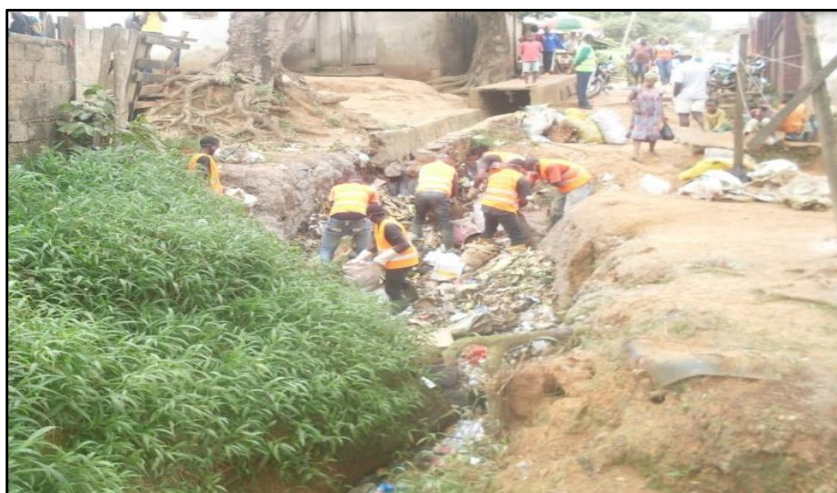


Photo 3: Young recruits for the holiday course in action

Source : Photo Marie de Bafoussam II

Young recruits from the Bafoussam II district remove rubbish from a natural drain.

The objective of this campaign is the preservation of the living environment of city dwellers. The activities carried out by these young people within the framework of environmental protection and the health of the inhabitants are among others

- the collection and removal of household waste in the neighbourhoods and in the markets and their evacuation to the collection points of the Hysacam trucks. The populations of the precarious neighbourhoods praise these efforts, because during these periods, the piles of rubbish are almost absent;
- Cleaning of gutters and gullies: the trainees clear the rubbish, earth and weeds that prevent the proper flow of rainwater;
- Weeding the edges of roads;

- Cleaning the surroundings of community water points (boreholes and springs, etc.).

District Council	Number of young people recruited
Bafoussam I st	1400
Bafoussam II nd	1000
Bafoussam III rd	800
Total	3200

Table 3: Young people recruited in the communes of Bafoussam between 2014 and 2017

Source : Bafoussam district councils, 2017

In total, more than 3,000 young people (see Table 55) are recruited in all three district councils of Bafoussam in the space of four years to ensure the sanitation of the districts in our study area. The number of trainees varies according to the funds available in the town halls.

Plate 2: Gutter construction work in precarious neighbourhoods



Photo 4 and 5: Gutter construction in Bamendzi-ville A

Source : Photos Commune Bafoussam III^{ème}, 2017

In order to facilitate the drainage of rainwater, the communes of the city of Bafoussam are building gutters.

The town councils in the study area are working hard to drain rainwater in order to limit soil erosion. They build natural gullies and channels (see Plate 2) along the edges of roads to accelerate or facilitate the evacuation of wastewater and rainwater.

With regard to projects concerning the preservation of the environment and the health of the populations of the precarious neighbourhoods of the city of Bafoussam, 46.5% of the projects concern waste management, 26.2% the sanitation of wastewater and rainwater, 24% the construction of water points and 3.3% the construction of latrines.

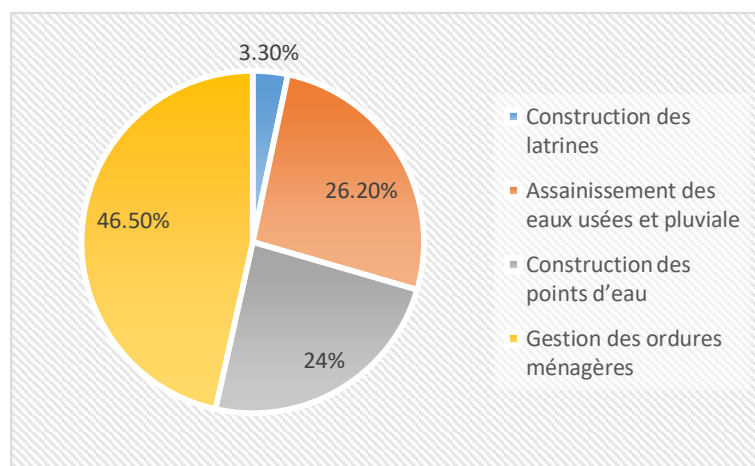


Fig. 4: Projects carried out by the CTDs in the precarious neighbourhoods of the city of Bafoussam

Source : Field surveys, 2016

The proximity actions of the Bafoussam District Councils are complemented by those of the town hall.

b) Actions of the Bafoussam City Council

The Bafoussam City Council is, admittedly, less present than the district councils in the field, but it is the local project manager for most of the projects initiated by development partners and ministries. This is the case for the drinking water supply project in Banengoville C, Famla II,

Tougang II, Tchitchap I, etc. by the CAON/FED. Local works (the internal opening up of precarious neighbourhoods, the construction of water kiosks in Kamkop III, Tocket, Kouogouoville B2, etc., and public toilets, carried out within the framework of the Debt Reduction and Development Contract (C2D), are carried out directly by the town council.

The presence of the City Council is still perceptible during projects to open up neighbourhoods that require the

release of rights of way. It has the financial means to pay for damage or affected property. Above all, it has the power of coercion to force those who refuse to comply to do so.

The City Council is also involved in the maintenance of the primary and secondary roads that cross the territory of the arrondissement communes. Some precarious neighbourhoods in the city of Bafoussam have already benefited from the work of the City Council. For example, the maintenance of the Tougang II-Djemoun 2 unpaved road, the Mayor-Evêché crossroads, etc. with the aim of reducing water erosion.

The Bafoussam City Council is involved in the daily management of solid and liquid waste in most of the city's precarious neighbourhoods. It has assigned this task to the Hysacam company through a contract. It has trucks to ensure the emptying of sludge from latrines and septic tanks. The excreta are pumped out and transported by 6 m³ tanker trucks to landfills where they are dumped without treatment. The current coverage rate of emptying in the entire urban area is very low, as these actions are not extended to all parts of the city, especially the precarious neighbourhoods. Through these series of actions, the Regional and local authorities appear to be front-line actors in the preservation

of the living environment of the populations and the improvement of their living conditions.

With regard to the management of household waste, in 2006, the city council, within the framework of the Public Private Partnership (PPP), entrusted the management of household waste to the company Hysacam. This transfer was materialised by a written agreement between the two parties which marked the transition from direct management to delegated management.

The private operator Hysacam is responsible for the collection, transport and treatment of waste produced in the city. Since then, the city has undergone some notable changes in terms of hygiene and sanitation. The precarious neighbourhoods also benefit from Hysacam's services. To this end, Hysacam collects in two ways: collection by 'voluntary delivery' and collection from homes, also known as 'door-to-door'. In the first case, the inhabitant himself carries the waste to a dump or a rubbish bin placed on the public highway. These places are the first point of concentration of the waste. In the second case, Hysacam trucks drive through the neighbourhoods, honking their horns, so that households come and dump their waste in the skips (see Photo 6).



Photo 6: Garbage collection in Famla II

Source : Photo Kengmoé Emmanuel, 2017

Hysacam garbage collectors use a Paris skip to collect household waste. A 360 litre bin is seen full of waste.

Rubbish bins of various variants (see Table 4) are distributed throughout the urban area of Bafoussam, depending on the level of waste production by city dwellers. In some precarious neighbourhoods of the city of Bafoussam, refuse bins are almost non-existent due to the lack of access roads.

Type of bins	Capacity	Number
Metalbins	6 m³, 9 m³, 12 m³ et 16 m³	36
Large plastic bins		777 L
Medium plastic bins		360 L
Small plastic bins		120 L
Total		Motrethan 226

Table 4: Typology of refuse bins in the city of Bafoussam

Source:Hysacam Urban Service Office 2017, Tutchamo F., 2012

From the analysis of the above table, it can be seen that there are four types of rubbish bins in the city of Bafoussam.

The metal bins, which are stored in the markets, crossroads and along the roads. There are also a few metal bins in the

precarious neighbourhoods of the city (Bamendzi I, Kouougou IV, Famla II, etc.) served by the roads. Some deprived neighbourhoods, although isolated, are provided with metal and plastic bins (see Photo 7 and 8).

Large and medium-sized plastic bins predominate in our study area. These fill up quickly, forcing some households to dump their waste on the ground. Small bins are used by refuse collectors to clean roads.

Plate 3: Examples of rubbishbins



Photo 7 and 8: Metal and plastic waste bins in Kouougou town B2

Source : Photo Kengmoé Emmanuel, 2017

The images above show the metal and plastic refuse bins in the study area, filled with waste.

The collection of refuse by trucks in the city is divided into three sectors corresponding to the three districts that make up the territory of the Urban Community. They are organised into circuits following specific routes. Only certain areas of the precarious neighbourhoods served by the roads are part of this circuit. There are a total of 14 circuits, spread over the three sectors (see Table 5).

Sectors	Number
Bafoussam I district	5
Bafoussam II District	5
Bafoussam III District	4
Total	14

Table 5: Waste collection routes in the city of Bafoussam

Source: Hysacam urban service in Bafoussam, 2017

The company uses around 15 collection trucks (see Table 58), several of which are out of order. Tipper trucks and 'ville de Paris' tippers (see Photo 6) are commonly used.

Types	Description
Tipper-Amplirolls	These are vehicles that operate by exchanging containers. These containers are deposited, transported and collected by means of a hydraulically operated lifting arm system mounted on the truck.
Tippingtrailers	
Compaction or clamshell buckets	These vehicles are equipped with an automatic collection system adapted to the container. They are equipped with a hermetically sealed bin and a mechanical compressing device that packs the waste.
Crane skips	These vehicles are equipped with a bucket system that allows them to be loaded. They are intended for the collection of waste on the ground.
City of Paris skips	They allow the removal of piles from the ground on pavements. They have a lid that allows them to be closed during transport.
Small skips	Allows for the collection of waste in areas that are difficult to access by large skips.

Table 6: Type of skips in Bafoussam

Source: Hysacam Bafoussam Urban Service Office 2016, plus field survey 2016

These garbage trucks go around the city and the precarious neighbourhoods in particular on a daily basis to empty the loaded bins and clear the illegal deposits that litter the streets following the precise routes in the circuits designed for this purpose.

The actions of Hysacam contribute to the preservation of the environment and the health of the populations of the precarious neighbourhoods of the city of Bafoussam in the most isolated areas of our investigation area. The deterioration of the living environment of the populations

persists because the Regional and Local Authorities are faced with a series of difficulties.

With regard to priority projects to improve the living conditions of the population, out of a sample of 551

households surveyed, 51% of households opted for water supply, 11% for the construction of boreholes and 36.2% for the construction of gutters (see Figure 5). However, the population must contribute financially to the implementation of the projects.

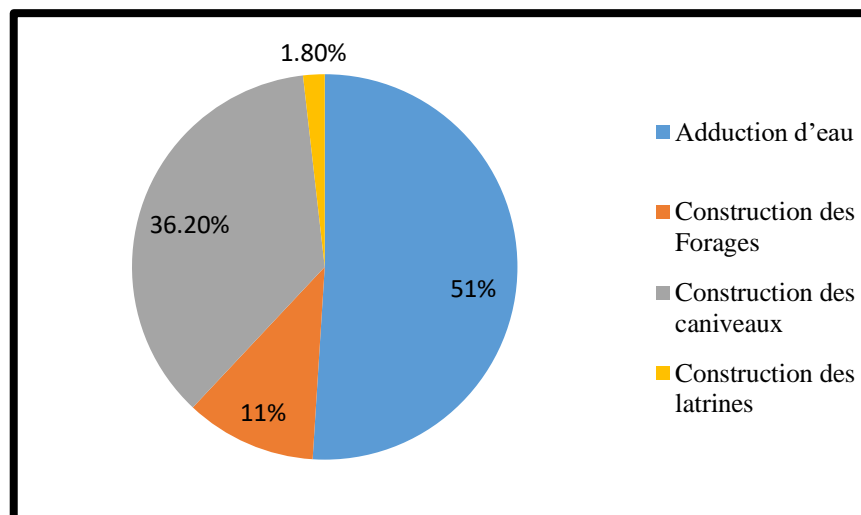


Fig. 5: Priority projects of people in precarious neighbourhoods in the framework of the CTD projects

Source : Field investigations, 2016

The projects developed by the Regional and local authorities support the actions of the populations (construction of wells, springs, development of gullies and cleaning of gutters) to improve living conditions. These include the construction of boreholes, gutters, ventilated pit latrines in primary schools and public latrines, water supply for Camwater, etc.

IV. DISCUSSION

From this study on decentralisation and the preservation of the environment and the health of the populations of the precarious neighbourhoods of the city of Bafoussam, one can see that the three district councils and the city council of Bafoussam, like everywhere else in the country, are carrying out various actions to preserve the environment and the health of the populations. These CTDs participate on a daily basis in the preservation of the environment and health in the various precarious neighbourhoods, in response to the failure of the public authorities to fulfil their responsibilities to guarantee a healthy environment for the population. We found that 46.50% of their actions relate to household waste management, 26.20% to wastewater disposal, 24% to access to drinking water and 3.30% to the construction of latrines. The same observation is made in the work of Mabou P.B. [11], who notes that in the Nkoldongoneighbourhood of Yaoundé, faced with the inability of local populations to preserve their living environment, the competent municipal and ministerial services are trying to manage their living environment through various actions such as the construction of water points and the sanitation of districts. The Maries contribute materially and financially to the protection of their living environment. This is in line with

the findings of Abega S.C et al [12] who indicate that Regional and Local authorities are at the centre of the preservation of the environment and the health of the populations in precarious neighbourhoods. Because of the economic, health and social difficulties experienced by the populations, the DTCs support the city dwellers through various projects. Mougoue B and NgnikamE stated [13] that Regional and Local authorities are a force for the sanitation of precarious neighbourhoods in Douala I. Through their multiple actions, they contribute to the removal of household waste and the cleaning of gutters. Kengmoé T.E [14], following the same line of thought as Mougoué B and Ngnikam E, stated in his work that in 2013, Regional and Local authorities were at the centre of household waste collection and gutter cleaning in the upstream catchment area of the Abiergué in Yaoundé. Despite the financial difficulties encountered, they also sometimes participate in urban development in synergy with the public authorities. This also follows from the Cameroon report for HABITAT-III in 2015 [15], which emphasises that several urban development projects (Participatory Slum Upgrading Programme, Urban C2D Programme, Yaoundé City Sanitation Project, Urban Sectors and Water Supply Development Project) have adopted the participation of the beneficiary populations as an essential element of their implementation. This participation is exercised through resident committees and other neighbourhood associations. Over the years, Regional and Local authorities have thus positioned themselves as key players in improving the living environment of urban populations. The 2007 UN-HABITAT report on Cameroon's national urban profile listed as one of the project activities 'strengthening the capacity of civil

society organisations and setting up a framework for dialogue between citizens and councils'.

V. CONCLUSION

This study aims at presenting the contribution of Regional and Local authorities in the preservation of the environment and the health of the populations of the precarious neighbourhoods of the city of Bafoussam. It should be noted that in the precarious neighbourhoods studied, the latter deploy different strategies to set up projects, including the collection of household waste, the cleaning of gutters, the development of water points, the organisation of Human Investment sessions, etc. These CTD actors face financial, technical and material difficulties.

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