

# Assessment of Degradations/Defects and Maintenance of Administrative Primary and Secondary School Buildings of the City of Bafoussam, Cameroon

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## Abstract

This paper reports the findings of a survey on assessment of degradations/defects and maintenance of administrative primary and secondary school buildings of the city of Bafoussam, Cameroon. Data were collected with the use of structured questionnaires as shown in appendix II administered on various managers of public primary and secondary schools in the three districts of Bafoussam namely, Bafoussam I, Bafoussam II and Bafoussam III. Data were analysed with basic descriptive tools such as percentage. The results showed that the primary schools buildings in the city of Bafoussam are more degraded than those of secondary schools as an example 98% of primary school buildings in the city of Bafoussam show an aging of the paint on the walls, i.e. 127 buildings, while those of secondary school buildings show 86% i.e. 157 buildings. 85% of primary school buildings in the city of Bafoussam have a ceiling in poor condition i.e. 111 buildings, while those of secondary schools buildings have 76% i.e. 132 buildings. The secondary school buildings in the city of Bafoussam have undergone more maintenance works than those of primary schools.

**Keywords:** Degradations/defects, Maintenance, Primary school buildings, Secondary school buildings, Bafoussam

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## 1. Introduction

Since ancient times, housing has always been at the center of human concerns. Administrative buildings represent an important part of the heritage of a state, they are the workplace of its personnel performing administrative tasks. School buildings are the most numerous in this category. A building in good condition provides a framework for excellence in transmission of knowledge to learners and a conducive and safe environment for proper service delivery for supervisory staff on the other hand. Well planned maintenance will first protect long-term assets whilst save revenue because the costs of emergency repair of a failure exceed those of well planned maintenance. In the cases of our school buildings in particular those of the city of Bafoussam suffer from a real maintenance problem. This is how we can observe facades covered with mold, cracked walls, torn sheets, poor condition of the coating on the walls, poor condition of the paint, cracking with peeling of the concrete on the elements of structures such as columns, beams, slabs etc. poor condition of the foundation and erosion, defective ceiling, etc. it undoubtedly and indisputably turns out that without maintenance their operation would be ineffective and the rapid and early deterioration would cause serious hazard and discomfort which could lead to the collapse of the various structural elements or even to the total collapse of the building. According to Perret (1999), building maintenance work requires skills in the use of technical equipment and adequate maintenance make buildings last longer (Olubi and Adewolu, 2018).

Buildings are structures constructed to serve as shelter for man, his properties and activities ((Bikoko et al. 2019; Tchamba & Bikoko, 2016; Tah Onana et al., 2020; Amadi et al. 2012; Ayuba et al. 2012; Oseghale et al. 2015; Tauheed, 2007). They are expected to be properly designed, planned, constructed, managed and maintained to offer desired satisfaction to the occupant (Tah Onana et al., 2020 ; Olubi and Adewolu, 2018 ; Babalola, 2015).

Some studies have been conducted around the world on maintenance of school buildings as example, Tayeh et al. (2016) studied the effects of faulty design phase on school buildings maintenance in Gaza Strip. They reported that the important factors that leading to defects in the design stage were: lack of workshops to discuss construction problems between project parts, inadequate QA/QC programs during design stage, lack of auditing and archiving of approved as-built drawing documents electronically. In a study on maintenance of government buildings in Ghana, Twumasi-Ampofo et al. (2017) stated that absence of planned maintenance policy and improper maintenance, pressure on facilities vis-à-vis age of the buildings cause elements of building such as doors, windows, ceilings, cables etc. in deplorable state. Tayeh et al. (2017) studied the effects of construction phase errors on school buildings maintenance in Gaza Strip. The authors recommended that a strict quality assurance and quality control (QA/QC) program should be implemented by the parties to construction to insure that project execution complies with the latest economical and practical specifications. Wuni et al. (2018) reported that the empirical causes of poor facility management were: lack of professional managers, attitude of deferred maintenance, budgetary limit on maintenance expenditure, sidelined in the financial planning and capital budgeting of institutions, amongst others. Eghan (2014) developed a framework for maintenance management for senior high schools in Ghana.

So far, no information or data is available from this study area on assessment of degradations/defects and maintenance of administrative primary and secondary school buildings.

This paper was aimed at assessing the degradations/defects and maintenance of administrative primary and secondary school buildings of the city of Bafoussam, Cameroon.

## 2. Description of the study area

### 2.1. Relief and soil

The city of Bafoussam is built in the lower hills of Banengo and Baleng, which are covered with savannah vegetation, the city is located at 1450 m above sea level and is built in steps on the perimeters of the Tamdja (1st floor) districts, commercial centre Djemoun (2nd floor), Djeleng (3rd floor), lower the corners called rural municipalities and Tougan on the 4th floor.

### 2.2. Hydrology

The city of Bafoussam is not very rich in hydraulic resources; the main river is the Mifi which runs along the city in the southern part, accompanied by other small streams including the Megang, Nlom and Vava. as an attraction, the fall of Metche and Lake Baleng.

Other informations on the city of Bafoussam such as the population and density, temperature, precipitation etc... can be found in Tahi Onana et al. (2020).

The map showing the three districts of Bafoussam, namely Bafoussam I, Bafoussam II and Bafoussam III can be seen in Figure 1.



**Figure 2** : Carte de la ville de Bafoussam (Source : Wikipédia)

Figure 1. Map of the city of Bafoussam (Tahi Onana et al., 2020)

### 3. Research methodology

This work consisted in making an inventory of the administrative school buildings of the city of Bafoussam, in identifying and quantifying all the degradations or defects present in each building, and in all the buildings, to bring out the problems related to their operation or their physical aspect and to assess the maintenance work undertaken on these buildings. To achieve this goal, the diagnostic aid sheets informing us of the faults or damage encountered in all of the buildings have been designed. These files allowed us to identify and examine by summary and detailed visual inspections of all the buildings by public school establishment then to examine the potential defects or degradations encountered on these buildings, we also took photos of the main degradations. The calculations are represented in the tables respectively covering the buildings of the primary and secondary schools and the total, the figures and the histograms are also plotted. This work was carried out during the period of March-April 2017. The data collected were analyzed using descriptive and analytical statistics.

#### 3.1. Questionnaire design

The survey sheets were administered to the various managers of the 46 public primary and secondary schools in the three districts of Bafoussam, namely Bafoussam I, Bafoussam II and Bafoussam III. The names of these schools, the total number of buildings contained in each establishment school, the number of classrooms and others, the number of offices and the number of toilets or latrine blocks of these schools are given in appendix I of this article. The survey sheets designed ask the following questions: How many buildings does the establishment have? How do the buildings look at first sight? Does the establishment have a daycare service? Does the establishment have a building maintenance service? Is there a preliminary assessment study of the repair work? Who takes care of cleaning your premises? What surfaces are cleaned regularly? How often is it cleaned? Is there a periodic monitoring method for the various buildings in your establishment? Is there a building maintenance frequency? Where does the funding for the maintenance of your buildings come from? The other questions are given on the survey sheet which can be found in Annex I of this article.

### 4. Results analysis and discussion

The results of the survey conducted reveal that the city of Bafoussam has nearly 46 schools spread across the city center and its outskirts, including 31 primary schools and 15 secondary schools, and have nearly 312 buildings housing students and staff in the establishment. These buildings include classrooms, buildings for offices, specialized rooms, buildings for latrines or toilets and buildings for school canteens. These buildings are on one level and level buildings.

87% of these school buildings in the city of Bafoussam are more than 10 years old, i.e. 271 buildings, 50% are between 10 and 30 years old i.e. 156 buildings, 27% are between 30 and 50 years old i.e. 84 buildings and 10% an age between 50 and 100 years i.e. 31 buildings. The majority of primary school buildings are old.

Table 1 and Figure 2 show the state of wood joinery, metal joinery and glazing of public primary and secondary school building in the city of Bafoussam. We observe the very poor condition of the metal carpentry, which is linked to the lack of paint, aging, student stinginess and acts of vandalism. In addition, the wood joinery and the glazing show just a few dilapidations, even if the glazing is rare and sometimes nonexistent. 78% of the primary school buildings of the city of Bafoussam present a very bad state in metallic joinery i.e. 102 of buildings, while 65 % of secondary school buildings are in poor condition with metallic carpentry i.e. 119 buildings. The school buildings of primary schools in the city of Bafoussam are more degraded than those of secondary schools in terms of carpentry (wood carpentry, metal carpentry and glazing).

The combined degradations or defects on the wood joinery, the metallic joinery and the glazing of the administrative primary and secondary school buildings of the city of Bafoussam are given in figure 3. Figure 4 illustrates the poor condition of the doors of some school buildings.

Table 1. Carpentry condition

Degradations/defects on buildings	Primary schools		Secondary schools		Total	
	Number of buildings /130	%	Number of buildings /182	%	Number of buildings /312	%
Poor condition of the woodwork	26	20	11	06	37	12
Poor condition of metal carpentry	102	78	119	65	221	71
Poor state of the glazing	06	02	04	02	10	03

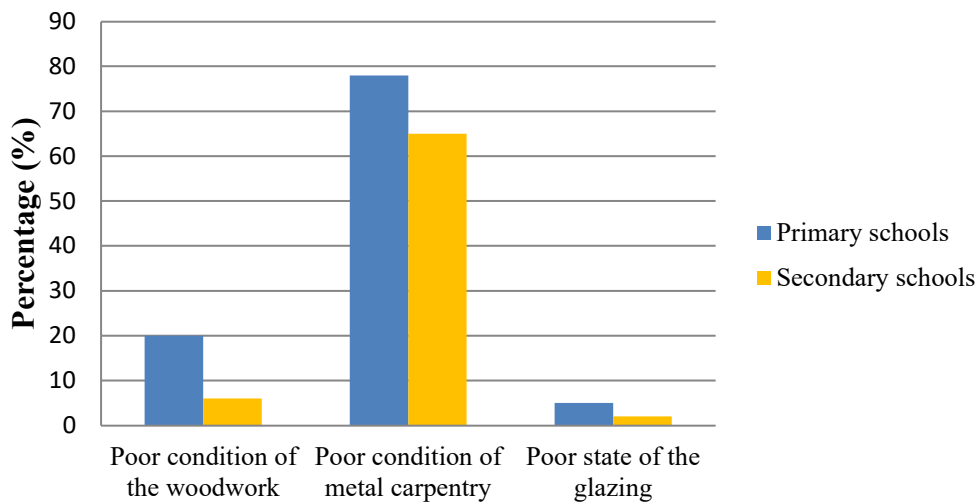


Figure 2. Histogram of the state of the carpentry of public primary and secondary school buildings in the city of Bafoussam

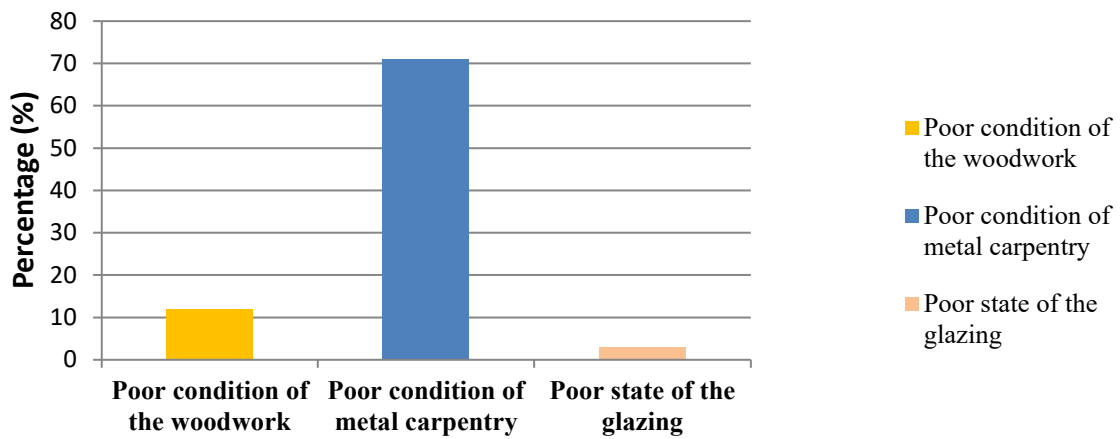


Figure 3. Global histogram of the state of the carpentry of public primary and secondary school buildings in the city of Bafoussam



Figure 4. Poor condition of the doors of some school buildings

Table 2.State of electricity and fire safety

Degradations/defects on buildings	Primary schools		Secondary schools		Total	
	Number of buildings /130	%	Number of buildings /182	%	Number of buildings /312	%
Bulbs and sockets not working	115	88	91	91	206	66
Faulty electrical installations	59	45	38	38	97	31
Insufficient bulbs and sockets	61	47	46	46	107	34
Absence of fire extinguishers	124	95	168	92	292	94

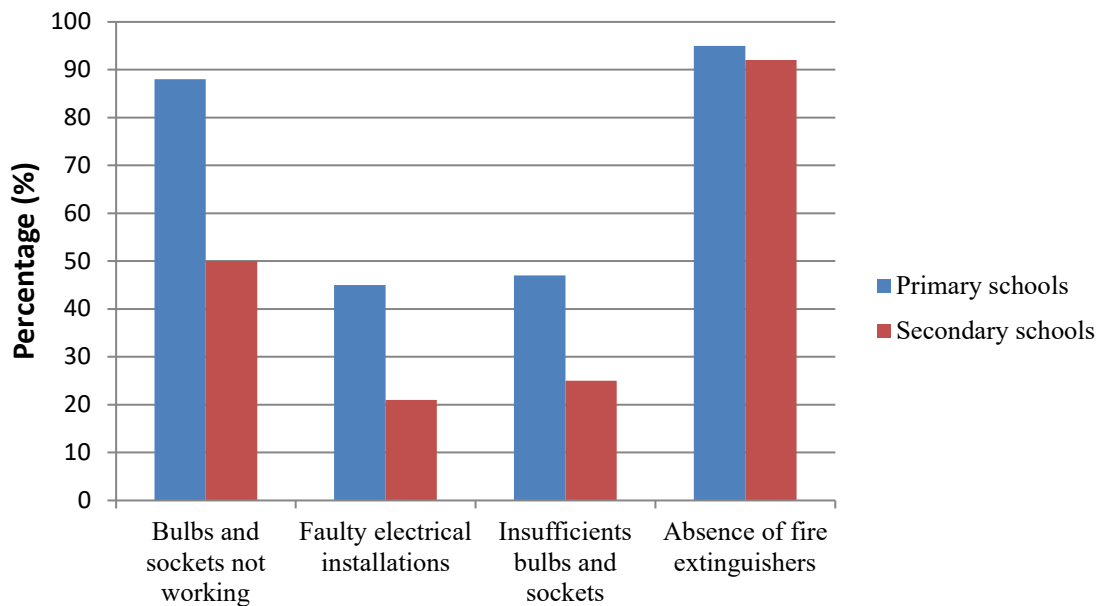


Figure 5. Histogram of the state of electricity and fire safety of public primary and secondary school buildings in the city of Bafoussam

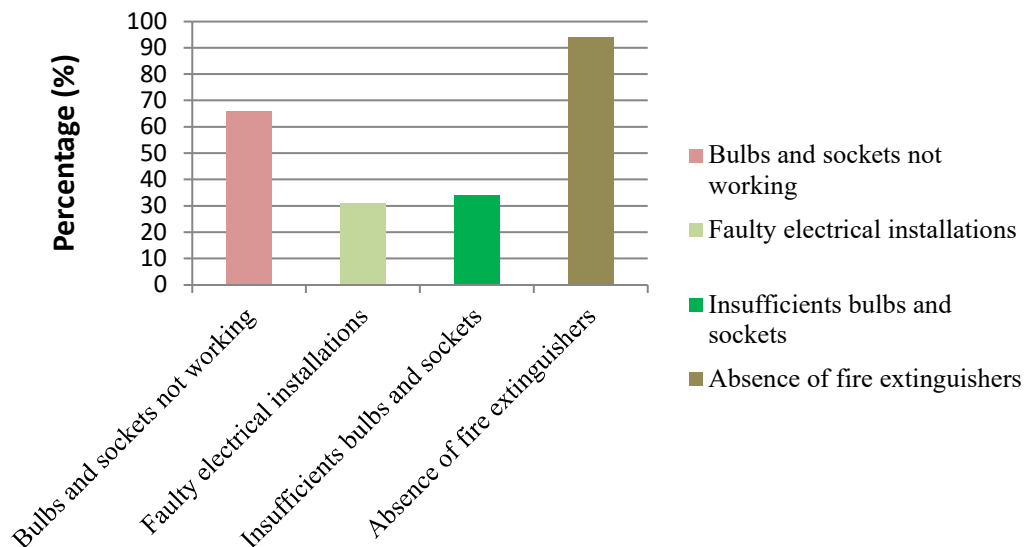


Figure 6.Global histogram of the state of electricity and fire safety of public primary and secondary school buildings in the city of Bafoussam

The state of the electricity and fire safety of school buildings in the city of Bafoussam are given in Table 2 and in Figure 5. Figure 6 reports the combined degradations or defects on electricity and fire safety of the administrative buildings of the primary and secondary schools in the city of Bafoussam. In general, the electricity and fire safety of school buildings in the city of Bafoussam are in an deplorable condition. We observe that certain school buildings have non-functional light bulbs and sockets while other school buildings do not even have light bulbs and sockets, jeopardizing the smooth running of school activities, particularly in the specialized classrooms

(laboratories, multimedia rooms, workshops etc.). The often apparent and unprotected electrical installations jeopardize the safety of students and staff. We note the absence of fire extinguishers in the workshop rooms. The poor state of the electricity is due to the use of unskilled labor, the poor quality of the sockets, the poor quality of light bulbs and electrical equipment used and the students' bad behavior.

The school buildings of primary schools in the city of Bafoussam are more degraded in the field of electricity and fire safety than those of secondary schools.

Table 3.State of sanitation, plumbing and sanitary facilities

Degradations/defects on buildings	Primary schools		Secondary schools		Total	
	N/130	%	N/182	%	N/312	%
Water drop nonexistent or in bad condition	118	91	91	50	209	67
Toilet or latrine in poor condition	23	62	14	58	37	61
Absence of channels or channels in poor condition	125	96	113	62	172	55

N= Number of buildings containing this defect

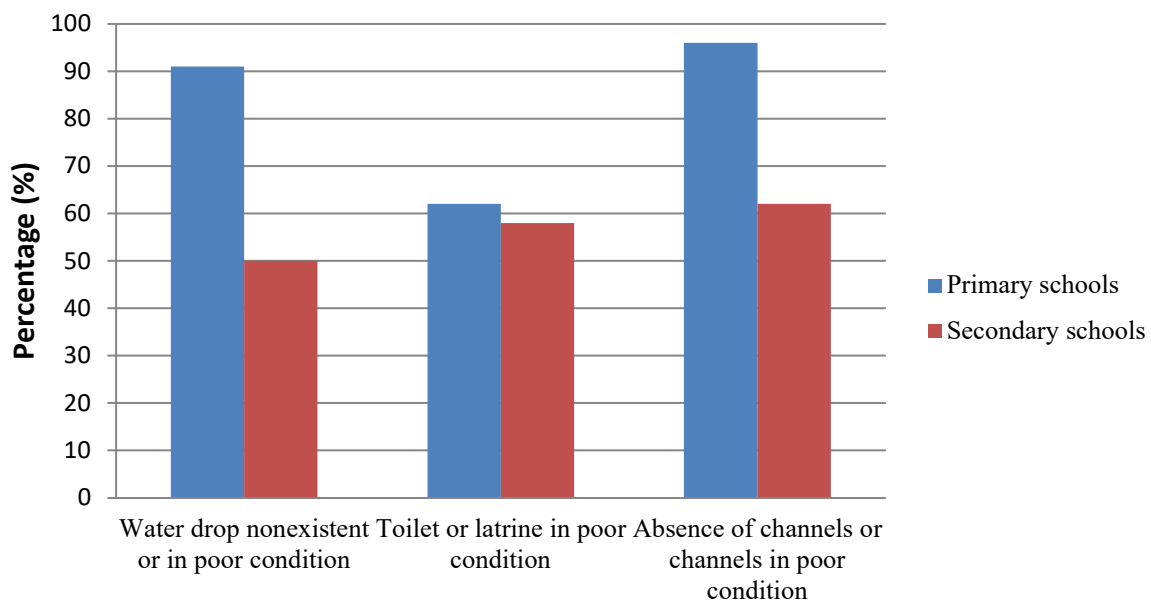


Figure 7. Histogram of the state of sanitation, plumbing and sanitary facilities of public primary and secondary school buildings in the city of Bafoussam

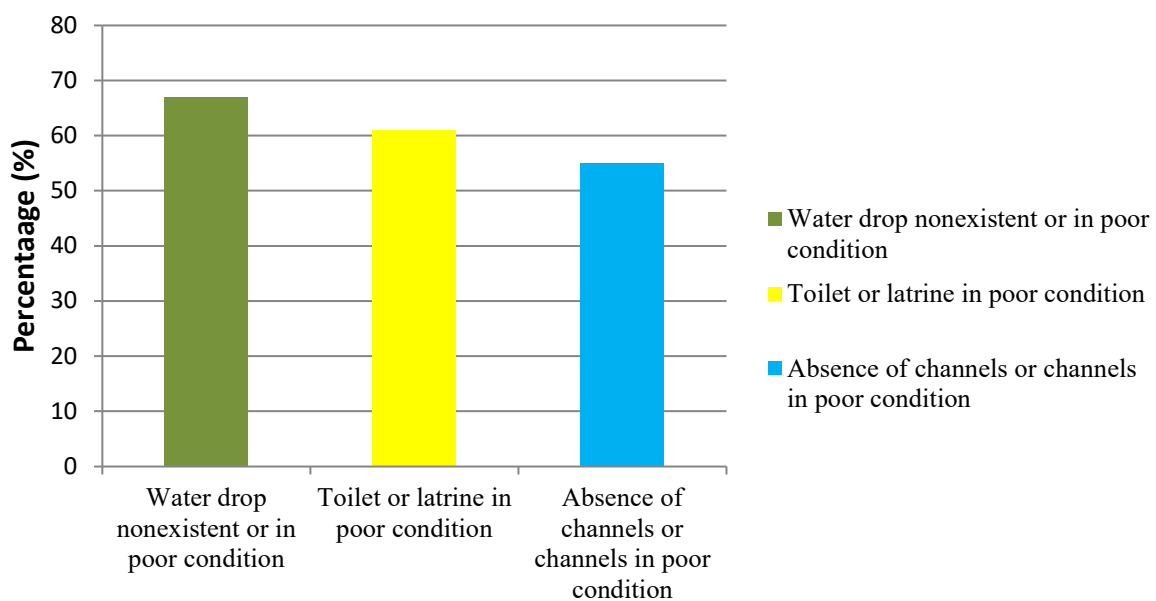


Figure 8. Global histogram of the state of sanitation, plumbing and sanitary facilities of public primary and secondary school buildings in the city of Bafoussam



Figure 9. Defective water descent

Figure 7 and Table 3 report the state of sanitation, plumbing and sanitation facilities. The combined degradations or defects in the field of sanitation, plumbing and sanitary facilities of administrative buildings of primary and secondary schools in the city of Bafoussam are listed in Figure 8.

The state of sanitation is generally poor; the problem of non-functionality of the toilets is due to:

- A very aging water supply network
- Under sizing of the piping that does not take into account population growth
- Absence or low pressure of water
- Misuse of sanitation facilities by students and school staff
- The use of unskilled maintenance labor

The nonexistent or poor water downspouts (Figure 9) and the absence or poor condition of the channels (Figure 12) are respectively the cause of the deterioration of the paintwork of the building and the erosion which causes bare foundations and steps.

Table 4. State of the exterior fittings

Degradations/defects on buildings	Primary schools		Secondary schools		Total	
	Number of buildings /130	%	Number of buildings /182	%	Number of buildings /312	%
No paving or paving around buildings	98	75	74	41	172	55
Brush around buildings	03	02	02	01	5	03

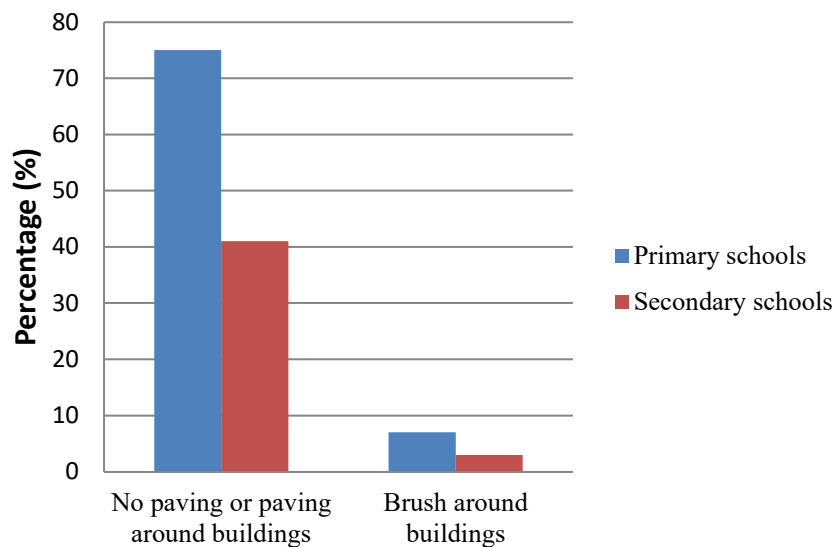


Figure 10. Histogram of the state of the exterior fittings of public primary and secondary school buildings in the city of Bafoussam

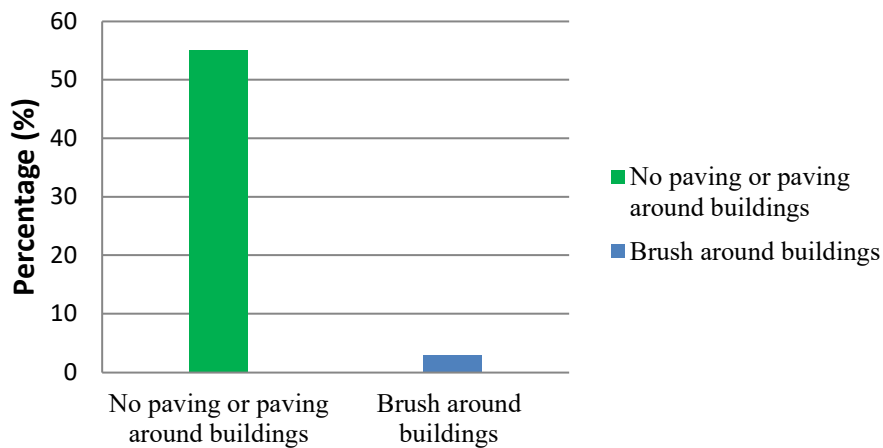


Figure 11. Global histogram of the state of the exterior fittings of public primary and secondary school buildings in the city of Bafoussam



Figure 12. Absence or poor condition of the channels

Figure 10 and Table 4 show the external appearance of public school buildings for primary and secondary schools in the city of Bafoussam. Figure 11 shows the overall external state.

One of the positive points here is the effectiveness of the cleaning work around the buildings by the students during manual work sessions. This is what explains the absence of brush around school buildings. Furthermore, the absence of paving or paving around the buildings promotes erosion and this is what is causing the bare foundations (Figure 15) of the buildings without channels. The school buildings of primary schools in the city of Bafoussam are more degraded than those of secondary schools in external appearance.



Table 5. Defects in General aspect

Degradations/defects on buildings	Primary schools		Secondary schools		Total	
	Number of buildings /130	%	Number of buildings /182	%	Number of buildings /312	%
Poor plaster condition	21	16	16	9	37	12
Poor paint condition	127	98	157	86	284	91
Floor covering in poor condition	63	48	75	41	138	44
Humidity	12	9	04	2	16	05
Crack with concrete peeling	04	3	05	3	09	03
Poor foundation condition and Erosion	67	52	68	37	135	43
Waterproofing and roof in poor condition	86	66	79	43	165	53
Ceiling in poor condition	111	85	132	76	243	78

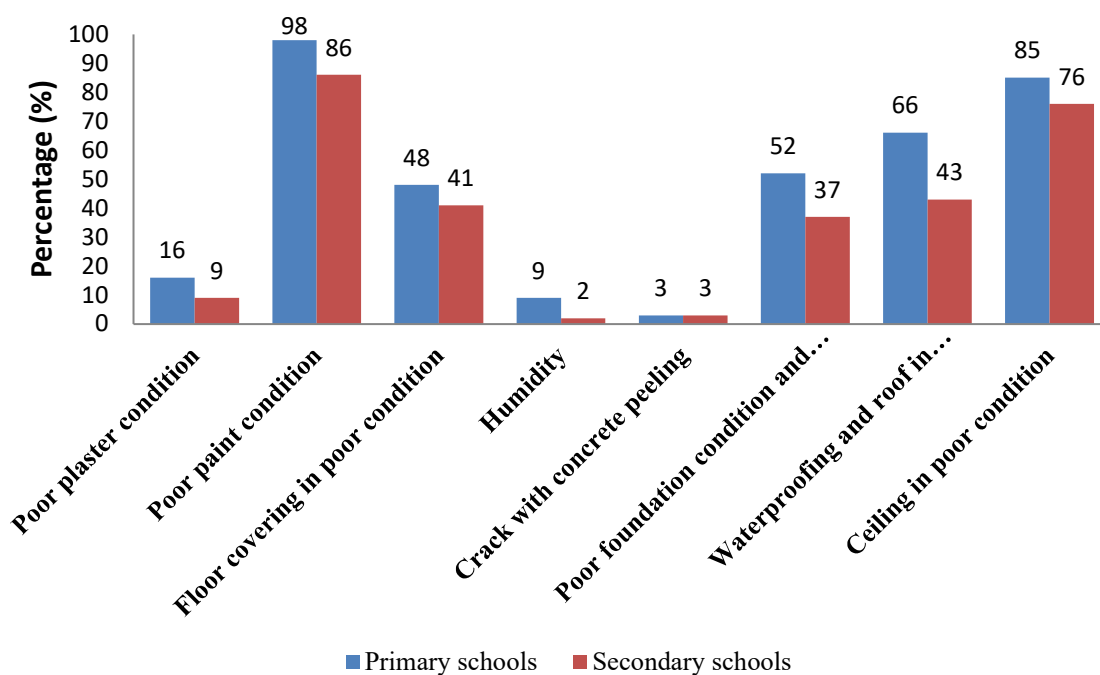


Figure 13. Histogram of the general aspect of public primary and secondary school buildings in the city of Bafoussam

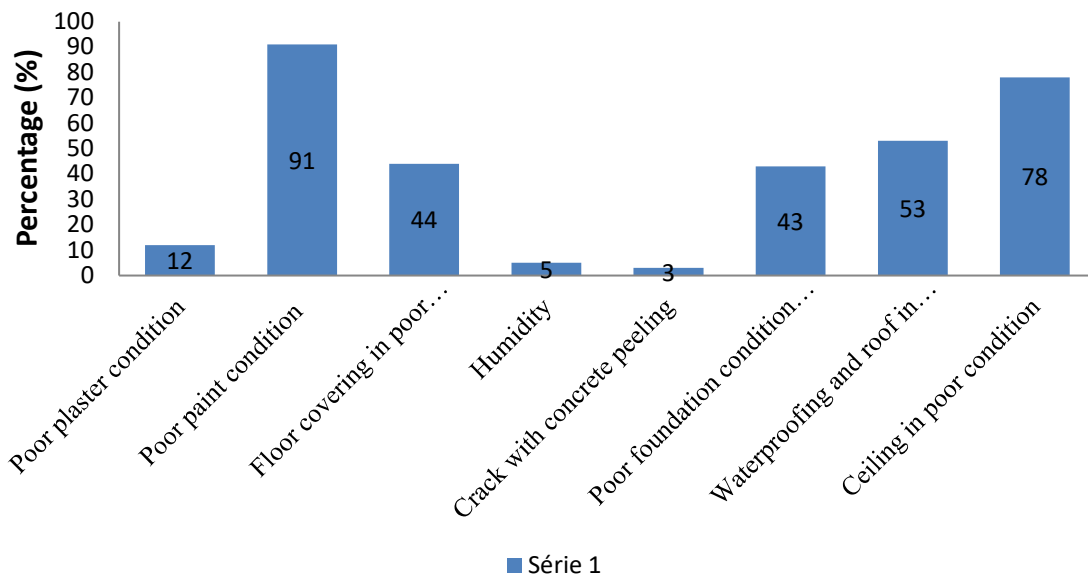


Figure 14. Global histogram of the general aspect of public primary and secondary school buildings in the city of Bafoussam



Figure 15. Foundation degradation



Figure 16. Poor paint condition / paint aging



Figure 17. Defective ceiling

Table 5 and Figure 13 show the state of the plaster, paint, floor, ceiling, roof terrace, etc. of administrative primary and secondary schools buildings in the city of Bafoussam visited. Figure 14 shows the combined degradations or defects due to poor condition of the plaster, paint, floor, ceiling, roof terrace etc. of administrative primary and secondary schools buildings in the city of Bafoussam. We observe that some buildings have an attractive general appearance; others on the other hand, and in majority, have a disastrous face. The defects cited above have their origin in the students' incivism, acts of vandalism, insecurity in the schools, the poor quality of the work carried out, the use of unskilled labor, the aging and poor quality of the materials used, the lack of a sewerage network, faults building design and non-compliance with architectural standards.

98% of primary school buildings in the city of Bafoussam show an aging of the paint on the walls, i.e. 127 buildings, while those of secondary school buildings show 86% i.e. 157 buildings. 85% of primary school buildings in the city of Bafoussam have a ceiling in poor condition i.e. 111 buildings, while those of secondary schools buildings have 76% i.e. 132 buildings.

The primary school buildings in the city of Bafoussam are more degraded than those of secondary schools in general aspect. Figure 16 and Figure 17 respectively illustrate the poor condition of the paint on the walls and the defective ceiling of some school buildings.

## 5. Maintenance activities

Maintenance work includes preventive maintenance and corrective maintenance. Preventive maintenance can be defined according to Cruzan (2009) (as cited in Sivanathan et al., 2012) as a scheduled program of regular inspections, adjustment, lubrication, or replacement of worn or failing parts in order to maintain an asset's function and efficiency, it is also 'a set of activities performed while the building is still in a good or fair condition to inhibit progressive failure and therefore extend the service life of the building' and corrective maintenance is all the activities carried out after the failure of a building or the degradation of its function.

Preventive maintenance aims to reduce the probability of failure or damage of a building.

Maintenance work includes all monitoring, maintenance and renewal actions during the use of an asset.

### 5.1. Maintenance - cleaning

The maintenance-cleaning tasks of the premises and the external spaces of the school buildings of the primary and secondary schools of the city of Bafoussam are carried out in school time, by the students under the supervision of the school staff on a daily, weekly, quarterly basis. Daily tasks include cleaning the floor, gutters, toilets and latrines, picking up papers in the yard and traffic lanes. Weekly tasks include the organization of student manual work sessions by supervisory staff, consisting of cleaning the various equipment and quarterly tasks include the organization of manual student work sessions by supervisory staff, consisting of cleaning various equipment. However, we noted that the maintenance-cleaning activities are done on irregular basis, without the use of suitable equipment and products such as detergents, bleach, liquid soaps, window cleaners, scented gel, etc...

### 5.2. Preventive maintenance

The information from the various survey sheets shows that no action is taken in the area of preventive maintenance in all schools in the city of Bafoussam.

### 5.3. Corrective maintenance

Information from the survey sheets reveals that corrective maintenance of administrative school buildings is rare and very ineffective. The frequency is non-existent; the interventions are punctual but poorly executed in the rare cases carried out.

Table 6 presents the statistics of corrective maintenance activities undertaken on public school buildings in the city of Bafoussam over the past ten years. Combined corrective maintenance activities undertaken on electricity and fire safety, on plumbing and sanitary facilities etc. are shown in Figure 19.

Table 6. Corrective building maintenance statistics for the past decade

Maintenance activities	Primary schools		Secondary schools		Total	
	Number of buildings maintained /130	%	Number of buildings maintained /182	%	Number of buildings maintained /312	%
General aspect	04	03	20	11	24	08
Electricity and fire safety	32	25	61	34	93	30
Sanitation and plumbing	05	13	06	19	11	15
Carpentry	04	03	18	10	22	07
Landscaping	04	03	09	05	13	04

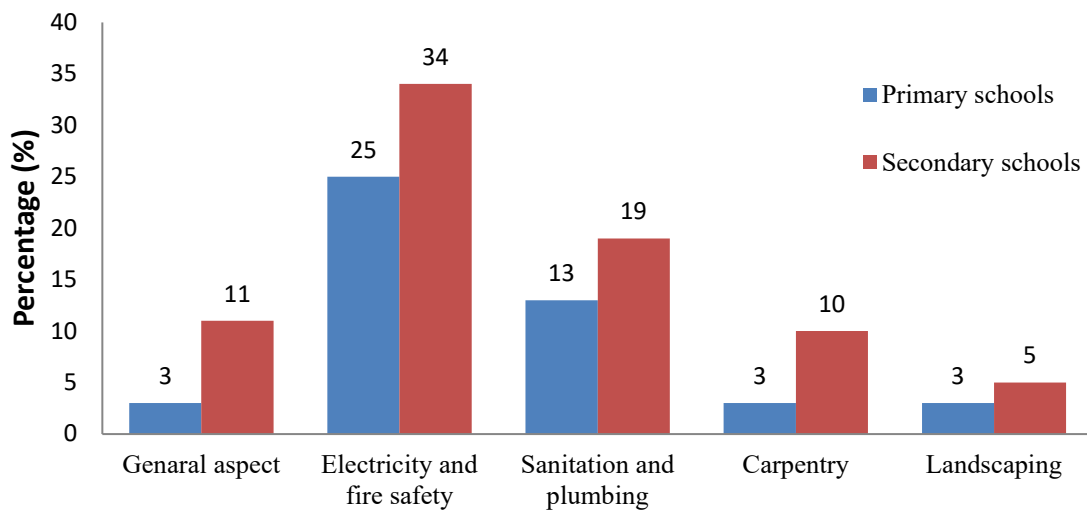


Figure 18. Histogram of maintenance activities of public school buildings in the city of Bafoussam

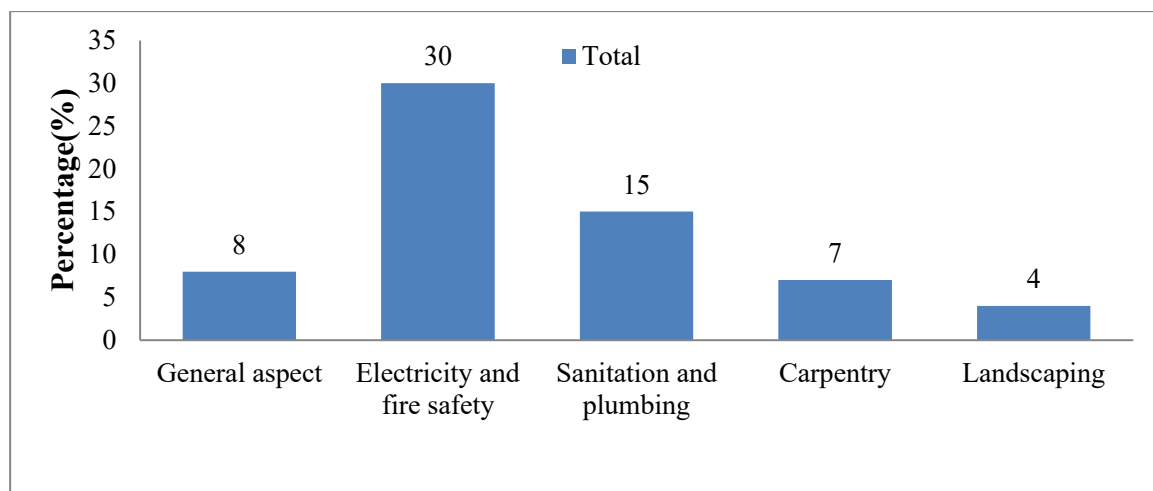


Figure 19. Global histogram of maintenance activities of public school buildings in the city of Bafoussam over the past ten years

Figure 18 and Table 6 sufficiently show the scarcity of maintenance activities for administrative school

buildings in the city of Bafoussam; indeed, on average 8% of school buildings in general and only 3% of primary school buildings have been the subject of maintenance work relating to the general appearance during the last decade; that is to say a general annual average of 0.8%, we can easily understand why these buildings present a dilapidated face and particularly those of primary schools.

25% of primary school buildings in the city of Bafoussam have undergone maintenance work in the field of electricity and fire safety, i.e. 32 buildings, while 34% of those in school buildings in secondary schools have undergone maintenance work in the field of electricity and fire safety, i.e. 61 buildings. 13% of the primary school buildings in the city of Bafoussam have undergone maintenance work in the field of sanitation, plumbing and sanitary facilities, i.e. 5 buildings, while 19% of those in secondary school buildings have undergone maintenance work in the field of sanitation, plumbing and sanitary facilities, i.e. 6 buildings. The secondary school buildings in the city of Bafoussam have undergone more maintenance work than those of primary schools.

## 6. Conclusions

The aim of this study was to assess the degradations/defects and maintenance of administrative primary and secondary school buildings of the city of Bafoussam, Cameroon. To achieve this goal, we administered questionnaires to various managers of public primary and secondary schools in the three districts of Bafoussam namely, Bafoussam I, Bafoussam II and Bafoussam III. Based on data obtained, the following conclusions are drawn:

- ✓ The city of Bafoussam has nearly 46 schools including 31 primary schools and 15 secondary schools
- ✓ The city of Bafoussam has 312 school buildings
- ✓ The school buildings of primary schools in the city of Bafoussam are more degraded in the field of electricity and fire safety than those of secondary schools.
- ✓ The primary school buildings in the city of Bafoussam are more degraded than those of secondary schools in general aspect.
- ✓ 78% of the primary school buildings of the city of Bafoussam present a very bad state in metallic joinery i.e. 102 of buildings, while 65 % of secondary school buildings are in poor condition with metallic carpentry i.e. 119 buildings.
- ✓ The secondary school buildings in the city of Bafoussam have undergone more maintenance works than those of primary schools as an example 25% of primary school buildings in the city of Bafoussam have undergone maintenance work in the field of electricity and fire safety, i.e. 32 buildings, while 34% of those of secondary schools have undergone maintenance work in the field of electricity and fire safety, i.e. 61 buildings.
- ✓ 87% of the school buildings in the city of Bafoussam are more than 10 years old, i.e. 271 buildings
- ✓ 50% are between 10 and 30 years old i.e. 156 buildings
- ✓ 27% are between 30 and 50 years old i.e. 84 buildings
- ✓ 10% an age between 50 and 100 years i.e. 31 buildings
- ✓ The majority of primary school buildings are old

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**APPENDIX I**  
**BAFOUSSAM I SCHOOLS**  
**Secondary schools**

S/N°	Name of school	Total number of buildings	Classrooms and other	Offices	Latrine blocks
1	L.Bde Bafoussam NDIENGDAM	14	12	-	2
2	L. C.de Bafoussam	12	9	1	2
3	L. B. de Bafoussam	16	13	1	2
4	Lycée de Bafoussam Batoukop	13	10	1	2
5	L. T. de Bafoussam BANENGO	20	17	1	2
6	L. T. de Bafoussam TAYIM	11	8	1	2
	TOTAL	86	69	5	12

### Primary schools

S/N°	Name of school	Total number of buildings	Classrooms and other	Offices	Latrine blocks
1	E.P BADIENGSO I et II	06	4	-	2
2	E.PBAMENDZI I A <sub>1</sub> et A <sub>2</sub>	06	4	-	2
3	E. P BAMENDZI I B	03	2	-	1
4	E. P BAMENDZI II A <sub>1</sub> et A <sub>2</sub>	06	4	-	1
5	E. P BAMENDZI II B	03	2	-	1
6	E. P BAMENDZIII	03	2	-	1
7	E. PBANEFO BAFOUSSAM	03	2	-	1
8	E. PBANENGO I A et B	06	4	-	2
9	E. PBENENGO II A et B	06	5	-	1
10	E. PBATOUKOP	08	6	-	2
11	E. P CENTRE III A <sub>1</sub> et B <sub>1</sub>	06	4	-	2
12	E. PDJELENG V A <sub>1</sub> et A <sub>2</sub>	06	4	-	2
13	E. PDJELENG V B <sub>1</sub> et B <sub>2</sub>	06	5	-	1
14	E. PDJEMOUN A et B	06	5	-	1
15	E. PEVECHE	03	2	-	1
16	E. PFAMLA	03	2	-	1
17	E. PGENDRAMERIE A et B	03	2	-	1
18	E. PNDIENGDAM I, II et III	03	2	-	1
19	G.B.P.S. BATOUKOP	03	2	-	1
20	G.B.P.S. NDIENGDAM	03	2	-	1
21	EPTOMDJO	03	2	-	1
22	G.B.P.S. TOMDJO	03	2	-	1
	TOTAL	98	70	-	28

### BAFOUSSAM II SCHOOLS

#### Secondary schools

S/N°	Name of school	Total number of buildings	Classrooms and other	Offices	Latrine blocks
1	L. B. de BALENG	18	16	1	1
2	Lycée de TOUGANG II	12	10	-	2
3	Lycée de KONTI	09	8	-	1
	TOTAL	39	34	1	4

### Primary schools

S/N°	Name of school	Total number of buildings	Classrooms and other	Offices	Latrine blocks
1	E. P. de FAMPI I	03	2	-	1
2	E.P. NDIONKOU II	04	3	-	1
3	E. P.DJASSAG <sub>1</sub> et G <sub>2</sub>	03	2	-	1
	TOTAL	10	7	-	3

### BAFOUSSAM III SCHOOLS

#### Secondary schools

S/N°	Name of school	Total number of buildings	Classrooms and other	Offices	Latrine blocks
1	Lycée Bafoussam KENA	15	12	1	2
2	Lycée Bilingue de TOKET <sub>II</sub>	12	10	-	2
3	Lycée Bilingue de GOUACHE	15	13	1	2
4	Lycée de Bafoussam DJUNANG	06	5	-	1
5	L.T de Bafoussam CANADA	09	7	1	1
	TOTAL	57	49	03	08

**Primary schools**

S/N°	Name of school	Total number of buildings	Classrooms and other	Offices	Latrine blocks
1	E. P KENAG1 et G2	05	3	1	1
2	E.P de DJUNANG	04	3	-	1
3	E. P.A (G1, G2, G3, G4, G5) Marie Rural	03	2	-	1
4	EPA G 6 et G7 (Gouache)	04	3	-	1
5	E.P. NDZE	03	2	-	1
6	E.P. TOKETG1 et G2	03	2	-	1
	TOTAL	22	15	1	6

**APPENDIX II**

**SURVEY SHEET**

ESTABLISHMENT \_\_\_\_\_ CREATION DATE \_\_\_\_\_

BAFOUSSAM DISTRICT

DATE : \_/ \_/ \_

**GENERAL DATA**

- How many buildings does the establishment have?
- Does the establishment have an entire fence?  
 Yes  No
- How do the buildings look at first sight?  
 Dilapidated  Attractive
- Does the establishment have a daycare service?  
 Yes  No
- Where does the funding for the maintenance of your buildings come from?  
 Donations  BIP  City hall  APEE  Contributions

**PREVENTIVE MAINTENANCE**

- Is there a periodic monitoring method for the various buildings in your establishment?  
 Yes  No
- If yes, what are the trades involved?  
  - Electricity and fire safety
  - Sanitation, plumbing and sanitation facilities
  - Carpentry  Major works  Finishes
- What are the means used for surveillance?  
 Maintenance schedule  GMAO
- By whom is this monitoring carried out?  
 Support staff  Specialized company  Particular
- Is there a preliminary study of evaluation of repair work?  
 Yes  No
- If yes, by whom?  
 Support staff  Specialized company  Particular



**MAINTAINS - CLEANING**

5. Who takes care of the cleaning of your premises?

Students  Support staff  External company

6. What surfaces are cleaned regularly?

<i>Day</i>	<i>Week</i>	<i>Month</i>	<i>Trimester</i>	<i>Year</i>
Ground	Ground	Ground	Ground	Ground
Glazing	Glazing	Glazing	Glazing	Glazing
Gutter	Gutter	Gutter	Gutter	Gutter
Ceiling	Ceiling	Ceiling	Ceiling	Ceiling
Painting	Painting	Painting	Painting	Painting

7. How often is it cleaned?

Daily  Weekly  Monthly  Quarterly

**CORRECTIVE MAINTENANCE**

8. Does the establishment have a building maintenance service?

Yes  No

9. Is there a global maintenance of the various trades?

Yes  No

10. How is a market or a maintenance task acquired?

Little by little  Tender

11. Is there a way to store light repair material if necessary?

Yes  No

12. How often is the septic tank emptied?

01year  02years  05 years  More

13. Is there a building maintenance frequency? Yes  No