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Architectural Standards and State of Court of Recreation Course in the Schools of the Community of Likasi

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Abstract: ***The playground is a space where schoolchildren meet for a short time during which they live together, exchange on different themes, play and rest.It must be organized according to the legal prescriptions established by the legislation in the matter. In terms of safety and entertainment, it must be followed and supervised, have a playground in accordance with the number of schoolchildren to receive in a school. As they spend a big part of their day there. The various actors in a school are sometimes called upon to recreate themselves en masse. By providing a large playground at their disposal.***

Keywords: School children, playground, architecture and standards

1. Introduction

Being hygienic, the man must be educated to the health to allow him to arrange his living space by making it better, clean, hygienic and frequentable.

Today, many standards related to school hygiene are almost neglected by the majority of leaders and managers of schools established in our community. Indeed, the sanitary installations are at the base of the propagation of the diverse diseases: cholera, Typhoid fever, bacillary dysentery, amebiasis, etc.

In the school environment, the observation of hygienic conditions by the actors of education is a good step of different ways in the prevention of diseases.

Health education, observation of standards of design and achievements of sanitary facilities in schools in Likasi commune is essential.

Neufert (1996: 258) states that "sanitary facilities must be as much as possible ventilated and directly lit; the space of a playground is calculated according to the total number of pupils.

The observation we have made in schools is such that the secondary schools of Likasi as well have too small playgrounds; so the fundamental question that we ask ourselves is to know:

How can you enlarge the playground of the different schools built on the sites already limited in space?
Our goal is for school promoters to build schools by taking into account the need and importance of playgrounds in proportional and quality dimensions, that is to say by respecting the standards required in the determination of the space that a schoolyard will have to shelter in order to guarantee a good development of the pupils. This article proposes to give a solution and recommendation pistol in order to fight against the fights and wounds often recorded in schools between schoolchildren in Likasi commune.

To collect the data and verify the hypothesis raised by the question of our study, we resorted to the descriptive method supported by the techniques of observation and maintenance. Our sample consists of some schools of the municipality of Likasi.

The study is in the field of school safety where we analyze the playgrounds of public and private secondary schools approved in the municipality of Likasi during the 2016-2017 school year. It is of interest to all partners in the education sector.

2. Conceptual and Theoretical Aspects

School
Francis Mulder and Pierre Van Hoye, (2005, p.221), states that: "The educator in a school environment has to play a key role: to consider each child / adolescent and adult (in social advancement education) in his singularity of subject and help him find a place in his school and social environment. The school is an institution, in which we give a collective education,Histories, (1883, p206) states that: "The school is a general educational institution. Children's school, secular, free, mixed, school of brothers, village."

3. Architectural Standards

Architectural, from the term architecture, the art of constructing buildings according to proportions and rules determined by their character and their destination. It has been described as a social art, but also as an artistic science. It must be the expression of design at its best, and brings, in the words of Marcus Vitruvius, great architect and Roman historian: "solidity, utility and beauty".

According to Neufert (see page 258), for a school the surface of a playground must be determined from the number of schoolchildren to be received, and for the secondary cycle the standard provides for 2 m^2 / pupil as space to be occupied in the courtyard during the school year recreation.

4. Methodological Aspects

Considering the Likasi commune as investigative fields, we took a school population to do our study. We say that the population designates all individuals or groups of individuals under a scientific investigation. As part of our research, the population is exclusively composed of schoolchildren in the schools of the Likasi community.

Table 1: Presentation of the study population in the different schools of the municipality of Likasi

No	Schools	Membership	Localisation	School population					
				Management Committee	Teacher and administrative staff	Pupils			Effective
						G	F	T	
1	C.S. STE THERESE	CATHOLIC	C / LIKASI	3	18	134	218	352	373
2	C.S MYAMBA	PRIVATE	C / LIKASI	3	27	200	405	605	635
3	INST. TECH. SNCC/ LIKASI	SNCC	C / LIKASI	5	43	998	86	1084	1132
4	INST. KALUNGA	PRIVATE	C / LIKASI	4	40	220	380	600	644
5	C.S. TECHNIQUE NYELE	PRIVATE	C / LIKASI	3	31	490	104	594	629
6	C.S LES ELITES II	PRIVATE	C / LIKASI	3	89	900	934	1834	1926
7	C.S. LES MOINEAUX	PRIVATE	C / LIKASI	3	39	490	361	851	893
	TOTAL			**31**	**391**	**5818**	**3505**	**9323**	**9746**

Source: Data collected in the city of Likasi

Comment: The data in this table show that out of the seven schools in our sample, we have: 9323 students**.**

Table 2: Presentation of recreation yard areas in schools Sample of the city of Likasi

No	SCHOOLS	AREAS
1	C.S MYAMBA	450 m^2
2	I.T.I SNCC	1.210 m^2
3	I.KALUNGA	260 m^2
4	C.S T NYELE	266 m^2
5	C .S LES MOINEAUX	300 m^2
6	COLLEGE DES ELITES II	1.350 m^2
7	C S STE THERESE	393 m^2

Source: *the data collected in the different schools.*

Comments : the data given in the table below show the areas of the different recreation courses for the schools taken as a sample and it should be noted that only the college of elites II, CS MYAMBA, ITI SNCC, CST NYELE and CS LES MOINEAUX have Rectangular courses, the remaining schools have circular courses.

No.	SCHOOLS	Occupied area / student
1	Collège des ELITES II	0,7 m^2
2	C.S MYAMBA	0,4 m^2
3	I.T.I SNCC	1,06 m^2
4	I.KALUNGA	0,406 m^2
5	C.S.T NYELE	0,47 m^2
6	C.S LES MOINEAUX	0,25 m^2
7	C.S Ste THERESE	1,05 m^2

Source: Author

Comment: The data in the table above are derived from a determination based on the following equation.

$$\text{Occupied area/student} = \frac{\text{total area of the recreation yard}}{\text{total student population}}$$

5. Method and Techniques

As part of our study, we used the descriptive method and allowed us to describe quantitatively the areas of playgrounds in the schools of the municipality of Likasi, and to determine the relationship that must exist between the number of pupil and space occupied by a student during a recreation:

- The observation allowed us to study the forms, locations and to carefully monitor the areas in the different schools in the municipality of Likasi to verify the construction standards in this area.
- The interview allowed us to get in touch with the administrative staff and design engineer of these schools in order to have information related to, the types of latrines as well as the number of toilets in their respective report.

6. Search Results

Space Deficit In The Heart Of School Recreation Sample

No	Schools	Areas Needed	Existing Areas	Areas of Deficiency
1	COLLEGE DES ELITES II	3.852 m^2	1.350 m^2	2.502 m^2
2	C.S MYAMBA	1.270m^2	260 m^2	1.010 m^2
3	I.T.I SNCC	2.264 m^2	1.210 m^2	1.054 m^2
4	I.KALUNGA	1.288 m^2	260 m^2	1.028 m^2
5	C.S.T NYELE	1.258 m^2	300 m^2	958 m^2
6	C.S LES MOINEAUX	1.786 m^2	230 m^2	1.556 m^2
7	C.S Ste THERESE	746 m^2	393 m^2	353 m^2

Source Author

- Comment: The data in the table were determined from school enrollment by school according to the equation below
- Area required = number of pupils x $2m^2$/schoolchildren

7. Discussion of the Results

The results presented after the field trip in each of the schools, show that each school is a case and presents a failure on standards such as Neufert (op cit) says.

The deficits in space demonstrates and validates the observations and complaints regularly formulated by school heads during recess, I quote Mr. URBAIN IRAGI Head of school of CS LES MOINEAUX, presents 12 cases of injuries between students in September 2017,27 case in May 2018, a static index of 200 percent, an increase of 100 percent.

Mr. DELU KITANDA, Director of Studies of I.T.I SNCC presents 26 cases of injuries between students in September 2017 and 30 cases in May 2018, a statistical index of 115.3 percent; an increase of 15.3 percent.

Mr. COSTON MWAMBA, Director of disciplines at C.S MYAMBA presents 31 cases of fights in September 2017 and 96 cases in May 2018, a statistical index of 309.6 percent, an increase of 209.6 percent.

Mr. KISUBA WA BANZA Alain Head of school of the COLLEGE DES ELITES II presents 34 cases of fights with knives in September 2017 and 93 cases in May 2018, a statistical index of 273.5 percent, an increase of 173.5 percent.

All of the data presented in various end-of-year reports allow us to confirm that when a playground has an insufficient surface area compared to the number of schoolchildren to receive, this leads to fights; between two schoolchildren, two groups of schoolchildren or even a generalized bagar; fading schoolchildren because the natural wind of circulation becoming insufficient, wounds with knives.

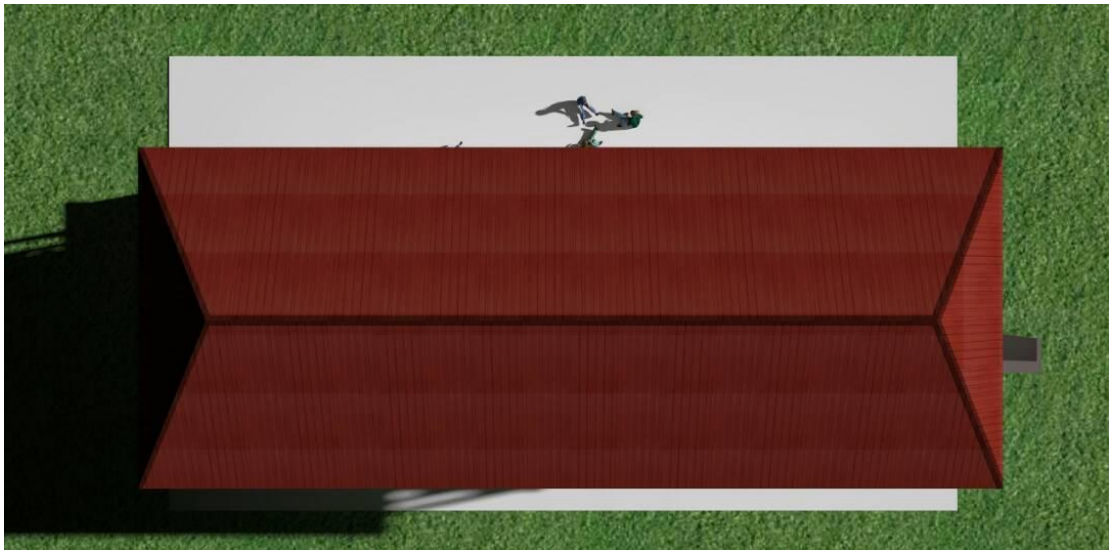
8. Conclusion ET Suggestion

Scientific research is such a vast space that our contribution is focused on the reminder of the fundamental prescriptions in the field of education, more precisely in relation to the space a pupil must occupy exactly during a recreation in schools of the city of Likasi in Democratic Republic of Congo. We place a serious emphasis on meeting the basic requirements of a playground.
The various data presented above prove the ignorance and gross negligence of the educational standards in this area by the private promoters of the schools in the city of Likasi; this generally leads to several damages recorded in schools during recess.

The results presented do not only concern the schools taken as sample but also the other schools, primary and kindergartens of the city of Likasi. Having noted the insufficiency of the space in these schools, we propose in annex a standard model of the playgrounds for these schools which are built in floor.

Annexure

Annex 2



Annnex 3

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