

Situational Analysis Of Physical Facilities In The Light Of International Norms And Standards At Public High Schools Of Loralai, Balochistan

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Abstract

This study aims to conduct a situational analysis of physical facilities at public high schools in Loralai, Balochistan, in light of international norms and standards. The research focuses on key infrastructure components such as classrooms, laboratories, libraries, and playgrounds, which are crucial for the provision of quality education. A descriptive research design was used, involving 25 high schools (13 girls' and 12 boys' schools), with data collected from the principals using a closed-ended questionnaire protocol. The findings indicate significant discrepancies between existing physical facilities and international standards. Many schools lack adequate space, functional laboratories, libraries, and computer labs, and there are critical shortages in playgrounds and essential amenities like electricity and first aid facilities. These inadequacies hinder academic achievement and student well-being, highlighting the urgent need for government intervention to upgrade the educational infrastructure in this region.

Keywords: Physical facilities, public high schools, educational infrastructure, international standards, school infrastructure, classroom size.

INTRODUCTION

Education encompasses a person's intellectual, physical, philosophical, religious, artistic, and moral development (Akram et al., 2021; Li & Akram, 2023). Education is the most fundamental opportunity in life to get to be a visionary because visionaries speak and walk the vision (Mahmoudi et al., 2012). Education also helps us understand our traditions and beliefs better (Hollins, 2015). It promotes the adoption of social norms and the development of good citizens for their country. Education encompasses a person's mental, physical, conceptual, religious, artistic, and moral development. Education is really the most fundamental opportunity in life to become a visionary because visionaries talk and walk the vision (Mahmoudi et al., 2012). Education also helps us understand our traditions and beliefs better.

In 1947, speech to the first National Education Conference, Quaid-e-Azam Muhammad Ali Jinnah emphasized the value of education and the necessity of giving our children a quality education if we hope to compete with other countries around the world that are developing their educational systems at a rapid rate. Positive behavioural changes in people can be brought about via education. Also, learning is a social process that involves a person's whole nourishment and enables them to comprehend both the universe's creator and them (Shah, 2003 & Jalalzai et al., 2024).

Pakistan is ranked 150th out of 189 countries by the United Nations Development Program (2018), with a Human Development Indicator (HDI) value of 0.562. (with 1 being the maximum value). In terms of educational indicators, only Afghanistan trails Pakistan in the context of regional comparison. In comparison to Pakistan, all other regional countries have improved their HDI (Haider et al., 2021).

According to Hansi (2020), literacy rates in 2017-18 were 62.3 percent (up from 60.7 percent in 2014-15), with males ranging from 71.6% to 72.5% and females ranging from 49.6% to 51.8%. According to an area-by-area analysis, literacy rates increased in both rural (51.9% to 53.3%) and urban (76.0% to 76.6%). It has also been observed that the male-female disparity is narrowing over time. Literacy rates have increased in all provinces except Sindh (63.0% to 62.2%) and Khyber Pakhtunkhwa (54.1% to 55.3%), Punjab (61.9% to 64.7%), and Balochistan (54.3% to 55.5%).

According to Mustafa (2012), Balochistan is Pakistan's largest province in terms of land area, accounting for 44% of the country's total land area. However, the province's educational system is the worst in the country, with only 12,500 primary, middle, and high schools, and over 7,000 of them consisting of a single room and a single teacher. The situation in the remaining schools is even worse because there are no classrooms or teachers to meet the needs of the students. Literacy rates are declining due to a lack of human, material, and financial resources. Male literacy in the province is 39 percent, while female literacy is only 29 percent, the lowest in the country. Because of poverty, nearly 66% of children aged 5 to 16 are not in school and instead work.

Infrastructural environment or material resources are critical in ensuring quality education around the world. Physical facilities include structures available for use as a dormitory or other housing facility, such as student housing, a dining hall, an administration building, an academic building, a library, a laboratory, a research facility, a classroom, an athletic facility, a health care facility, and a maintenance, storage, or utility facility, as well as other structures or facilities related to or required or useful for student instruction (Maqsood, 2018).

According to (Lyons, 2001; Noor et al., 2021), there is a significant relationship between learning and the condition and utility of educational infrastructure. The performance of students is impacted by teachers' ineffectiveness and poor classroom conditions. Regrettably, Pakistan's educational institutions are underfunded, which leads to their failure. Bad and inadequate educational facilities have an effect on the institutions' overall effectiveness. Facilities that are adequate promote academic success and enhance the institution's overall effectiveness. Academic achievement is negatively impacted by unsightly and outdated school buildings, damaged classroom walls and floors, a lack of toilets, a lack of desks and benches, a lack of transportation, a poor security system, a lack of drinking water, a lack of electricity, a lack of playgrounds, a shortage of teachers, inadequate classrooms, larger class sizes, a lack of academic technology, a lack of first aid facilities, and other factors. So, it is accurate to say that academic excellence and accessibility to educational facilities are closely related (Hussain et al., 2012 & Jalalzai et al., 2023).

Norms and standards for physical facilities of schools play an important role in providing quality education to the students. A norm is a statement of the most favorable condition while a standard is an expression, at a particular point in time, of the minimum acceptable quality. Every country has its own norms and standards for establishing a school, college or university. The concerned department approves the norms and standard for to setup a school. The construction of a school building based on standard criteria, a standardize Campus Area, Classroom Area/Size, Per Student Space, Area for a Library, Science Laboratory, Computer Lab, Gymnasium, Playground, Examination Hall, Multipurpose Hall and Gardens etc. The standard for number toilets for teachers and students, teachers' staff room and principal's office etc. Unfortunately, the findings of numerous research studies revealed that there is no specific standard criteria for establishing a secondary school in Pakistan (Nga, Maw & Tun, 1992).

1.1 Problem Statement

The current population of Balochistan is 13.4 million, out of that, over 70% are 14-29 years old. The projected population by the year 2040, will be 24 million, keeping in view the average annual population growth rate of 3.37%. Over 1250 people are added per day into the population of Balochistan. A rapidly expanding population results in rising needs for infrastructure, jobs, schools, and other services, as well as increased pressure on the government to keep up with the demand for these services. About 7,200 primary schools will be needed by 2040.

At present, Balochistan is without a good education system, and it is very poor indeed considering the following facts: About 58% girls and 38% boys (age 5-16) are out of school in Balochistan. The reason so many children are not in school is not lack of will on the part of parents, it is a failure of provision by the province. Poor management and quality are also major problems in Balochistan's public school system. Most of the teachers do not turn up to schools in rural areas each day. Hundreds of schools that could be open are not (ghost schools) (Amin, 2019). The present study was designed to explore the Situational Analysis of Physical Facilities in the Light of International Norms and Standards at Public High Schools of Loralai, Balochistan.

1.2 Objective of the study

To conduct situational analysis of physical facilities (classrooms, science laboratories, libraries, computer labs) in the light of international norms and standards at public high schools of Loralai, Balochistan.

1.3 Research Questions

What is the existing status of physical facilities (school size, classrooms, science laboratories, libraries, computer labs) at public high schools of Loralai, Balochistan?

1.4 Significance of the study

The research study will be significant to provide sufficient information to the Government of Balochistan regarding the existing status of physical facilities at public high schools of Loralai, Balochistan. It will serve as a guiding map for district education officers to utilize findings of the study to ensure the provision of physical facilities in the light of international norms and standard.

1.5 Delimitation of the study

Keeping in view the available resources, regulations, and time constraint, the scope of this study will be limited to Public Girls and Boys High Schools of district Loralai, Balochistan.

LITERATURE REVIEW

2.1 Physical Facilities

According to Lackney and Picus (2005), an effective school building provides a physical environment that is pleasant, secure, stable, easily accessible, well-lit, well-ventilated, and visually pleasing, at the very least. The school building consists of a number of building systems, such as mechanical, sewer lines, electrical and power, information technology, stability, and firefighting systems, in addition to the actual physical construction. The facility also comprises other elements of the building grounds,

such as sporting fields, play areas, open-air study areas, as well as furniture, supplies and materials, tools and information systems, roads, and parking lots.

The school building is an essential component of the educational environment and serves as more than just a silent container for the learning system. Students, teachers, and community members' experiences of a location are influenced by the building's structure and architecture. The facility can contribute to a feeling of ownership, safety and security, customization and control, privacy and sociality, and spaciousness or crowdedness depending on the calibre of its design and management. When designing, creating, or managing the school facilities, these place-related factors should be taken into account wherever practical (Lackney & Picus, 2005).

The phrase "physical facilities" refers to the school's physical infrastructure, which includes the school's buildings, classrooms, library, research labs, restrooms, offices, and other resources and infrastructure that may help kids learn. Ample physical amenities are necessary for students' academic achievement and optimal learning (Akomolafe & Adesua, 2016).

The infrastructure of the school, which includes the construction of schools and classrooms, is considered to be an important aspect of the institution. These facilities play an important role in attracting, retaining, and contributing students to institutions. Larger classrooms, more appealing school buildings, and improved facilities reduce tension, melancholy, distress, and anxiety in the school environment (Akram & Yang, 2021).

Facilities like as libraries, classrooms, and playgrounds have also been identified as crucial elements influencing social studies teaching and learning. According to Mutai¹², the availability and utilisation of physical resources such as laboratories, classrooms, and libraries contribute to a pleasant classroom learning environment. School facilities make the classroom atmosphere more fascinating and dynamic, attracting more pupils (Wambua et al., 2018).

2.2 International Standards of Physical Facilities at Secondary School Level

The size of secondary school sites ranges from 2 to 15 acres. The average area per pupil ranges from 54 square feet in Pakistan to 2,777 square feet in India (Thailand). International values vary greatly and are influenced by a variety of factors (Nga, Maw & Tun, 1992).

The land requirements for secondary schools range from 5.4 acres to 22.23 acres. 9.8 acres have been set aside for 750 students (Govt of Manitoba, 2012). Albuquerque Public Schools asserts that the site of the school should be advantageous for the student body in a way that minimizes busing and permits community, parent, and student-controlled safe pedestrian and vehicular access to the school (2021). Place the school in a primarily residential area on enough land; the size of current school grounds should be ideal. 45–50 acres should be enough for a high school.

Secondary schools should have a minimum of 2.1 acres of land. The location of the school must not be adjacent or close to noise sources, commercial or industrial sites, or potentially hazardous locations such as police stations that could interfere with the teaching process (Supreme Education Council). A secondary school with a population of 750 should have at least 30 classrooms (Nga, Maw & Tun, 1992).

The Oklahoma State University's schools recommend a typical classroom area of 750 square feet. The recommended number of classrooms in high schools (9-12) is 30, so the total area covered by classrooms is 22500 sq ft.

A typical 93 m² /1,000 sq. ft. room can accommodate 25 full-time students. When 10 to 15 students are enrolled, the room size is reduced to 70 m² /750 sq. ft. The room size is reduced to 46 m² /500 sq. ft. when there are 9 or fewer students enrolled. In such cases, the long-term viability of the programme must be clearly established. A merged kindergarten and other elementary grades class with at least 15 students has a room size of 80 m² /860 sq. ft. The classroom size is reduced if there are fewer than 15 students. A standard 74.3 m² /800 sq. ft. classroom can accommodate 25 students from all grade levels. Class size and class composition are the two most important factors in determining classroom size. When a class is expected to have fewer than 20 students, the room size is reduced to 65 m² /700 sq. ft. The classroom size is reduced to 46 m² /500 sq. ft. in smaller school settings with fewer than 15 students (Govt of Manitoba, 2018).

Primary schools have a mean gross value of 24.6 SQ ft per pupil, middle schools have a mean gross value of 57.5 SQ ft per pupil, and high schools have a mean gross value of 58.0 SQ ft per pupil. If Australia, New Zealand, and Singapore's high values are excluded, the mean gross area values for primary are 14.7 square feet per pupil, 32.4 square feet per pupil for lower secondary, and 33.0 square feet per pupil for upper secondary. These appear to be appropriate for Myanmar conditions (Nga, Maw & Tun, 1992).

According to Earthman (2002), a student's ability to learn in the classroom depends on their ability to hear. According to Morgan's (1917) research, children studied more when the noise level in the classroom was reduced to 40 dB. Noise was shown to be a distraction that interfered with learning.

The Manitoba government advises 1000 square feet for computer labs in high schools. Depending on the lab's size and the demands of the students, a lab may have one computer or many. A conventional computer lab might have forty or more computers, whereas a tiny lab might just have a few. Typically, a mobile lab is housed on carts that have reliable management systems that let computers charge while not in use during the day. Up to twenty laptops can fit in a cart, although ten laptop carts are simpler to transport from classroom to classroom (Schneideman, 2004).

A science lab is typically 93 m² /1,000 sq. ft. in size. Science labs are only available to students in grades 7-12. The science curriculum for grades K-6 is taught in classrooms that have running water and a sink. The number of awarded laboratories is determined by the student population and course offerings. A single science facility can typically meet the science needs of up to 150 students. In smaller schools, the science lab can easily be used for other instructional purposes. Larger labs of 112 m²/1,200 sq. ft. are provided for grades 9-12, subject to various course offerings and individual course enrolments more than 25 students.

The minimum space demands for each primary learner are 9m² + 0.05m² or +0.12m² for each secondary pupil, according to government regulations and the School Library Association. K-8 elementary schools or schools with some of those grade

levels must have a minimum of 149 m²/1,600 square feet and a maximum of 223 m²/2,400 square feet. A minimum of 149 m²/1,600 sq. ft. and a maximum of 372 m²/4000 sq. ft. apply to grades 9-12 collegiates or schools with those grades. Smaller schools with fewer than 150 students will be evaluated on an individual basis. In such cases, the Resource Centre's versatility will be assessed alongside other instructional requirements such as computer instruction, resource teaching, and so on (Barron-Millar et al., 2021).

According to UNESCO design criteria, the hall's length should be 1.25 to 1.50 times its breadth. The standards also require an average of 8.6 square feet per location. The assembly hall shall also include a raised platform of 323 square feet. A full-scale gymnasium should be 59 ft x 29.5 ft in size. According to Maldives rules, the hall should seat half of the student body and provide covered access from the major school buildings.

Various United Nations (UN) agencies reported that approximately 780 million people worldwide lack access to safe drinking water. According to the World Health Organization (WHO), poor access to safe drinking water causes 6.3 percent of all fatalities. The Millennium Development Goals, one of which is to cut in half the number of people who do not have access to safe drinking water and basic sanitation by 2015. According to the United Nations, more than 14,000 people die each day as a result of water-borne illnesses. The world is on track to meet the Millennium Development Goal (MDG) water target based on the indicator "use of an improved drinking water source," but at the current rate of progress, 672 million people will still lack access to improved drinking water sources in 2015, and possibly hundreds of millions more will lack sustainable access to safe drinking water (WHO, 2012).

The most recent Joint Monitoring Program (JMP) report on WASH in schools states that in 2021, 71% of schools had a basic supply of drinking water, 14% had a limited supply, and 15% had no supply. Around the world, 546 million children lacked access to clean water for drinking at school (WHO, 2012).

Research Methodology

The study was descriptive in nature. A descriptive research design is a type of research design that seeks information in order to describe a phenomenon, situation, or population in a systematic manner. All the Principals of 25 Government Boys and Girls High Schools in District Loralai, Balochistan constituted the population of the study. The number of Government Girls High Schools were 13 and the Government Boys High Schools were 12 in number. The participants of the study were principals of the above-mentioned schools. All the 25 principals of the Government High School for boys/girls constituted the sample of the study. In order to collect data from the participants a closed-ended questionnaire was developed with the help of a supervisor in relation to the objectives of the study. The interview protocol consisted of 17 Primary and 77 Secondary Questions. The questions were constructed on a dichotomous scale. The researcher used SPSS software to examine the first-hand data, which was acquired via a survey method approach called semi structured interview. To explain the existing situation and analysis of gap, descriptive statistics i.e. measure of central tendency and measure of variability were employed.

ANALYSIS OF DATA

4.1 Existing Status of Physical Facilities

Table 4.1.1 Area of School

Items	N	Mean	SD	Min	Max	IS
Total Area of Schools in Acres	25	2.01	7.29	0.06	36.93	7.5
Open Area of Schools in Acres	25	1.87	7.18	0.003	36.24	
Covered Area of Schools in Acres	25	0.14	0.15	0.04	0.69	

The table 4.1.1 showed the statistical values of total area of 25 public sector high schools for boys and girls in Loralai. Government Boys Model High School Loralai was identified as the largest school based on 36.93 acres area. Government Girls High School Mekhtar was found as the smallest school based on 0.06 acres area. The GBMODHS has maximum open area 36.24 acres while GGHS Kudezai has minimum area 0.003 acres among all the schools. The GBMODHS has maximum covered area 0.69 acres while GBHS has minimum covered area 0.04 acres among all schools.

Table 4.1.2 Boundary Wall

Items	N	Mean	SD	Min	Max	IS
Height of boundary wall in sq ft	25	8.92	1.55	6.00	12.00	8.00
Perimeter of the boundary wall	25	781.96	950.22	213.0	5117	

The table 4.1.2 showed the statistical values regarding boundary walls of 25 public sector high schools for boys and girls in Loralai. The GBHS Dargai Sargarh and GBHS Muhallah Kudezai have maximum height 12 ft. The mean value 8.92 showed that the average height is 8 sq ft. GBMODHS has maximum boundary wall's perimeter **5177** ft, while GGHS Mekhtar has minimum boundary wall's perimeter **213** ft.

Table 4.1.3 Cover Area of School

Items	N	Mean	SD	Min	Max	IS
Number of classrooms	25	10	10.06	4	54	30
Area covered by classrooms in sq ft	25	4178	3992	1312	9852	24000
Area of Type 1 classroom in sq ft	2	331	87	168	600	800

Area of Type 2 classroom in sq ft	18	346	78	180	475	
Area of Type 3 classroom in sq ft	5	280	102	130	380	
Student strength in type 1 classroom	2	27	15	5	60	25
Student strength in type 2 classroom	18	29	14	9	64	
Student strength in type 3 classroom	5	33	13	17	48	
Space per student in type 1 classroom	2	17	14	4	64	33
Space per student in type 2 classroom	18	14	7	5	36	
Space per student in type 3 classroom	5	10	6	2	18	
Illuminance level in type 1 classroom	2	78	57	1	205	160
Illuminance level in type 2 classroom	18	62	6	4	223	
Illuminance level in type 3 classroom	5	24	35	0	72	
External noise level in type 1 Classroom	25	52.64	4.12	2.00	200.00	57
External noise level in type 2 classroom	18	61.66	4.11	7.00	189.00	
External noise level in type 3 classroom	5	64.00	3.27	11.00	98.00	
Internal noise level in type 1 Classrooms	25	66.12	18.84	21.00	89.00	35
Internal noise level in type 2 Classrooms	18	67.05	18.19	29.00	89.00	
Internal noise level in type 3 Classrooms	25	110.80	69.52	75.00	235.00	
Capacity for students in building	25	269.52	234.96	21.00	800.00	750

The Table 4.3.1 indicated the statistical values regarding cove area of the school. On average there were 10 classrooms while the international standard is 30 classrooms. The average area covered by classroom was 4178 sq ft while the international standard 24000 sq ft. The type 1, 2, 3 classrooms covered an average area of 331, 346 and 280 sq ft respectively while the international standard is 800 sq ft. The average strength of students in type 1, 2, 3 classrooms were 27, 29, and 33 respectively while international standard is 25 students per class. The average space per student in type 1, 2, 3 classrooms were 17, 14, and 10 sq ft respectively while the international standard is 33 sq ft. The average Illuminance Level in type 1, 2, and 3 classrooms were 78, 62 and 24 Lux respectively while the international standard is 160 Lux. The average external noise level in type 1, 2 and 3 classrooms were 52.64, 61.66 and 64 dB while the international standard is 57 dB. The average internal noise level in type 1, 2 and 3 classrooms were 66.12, 67.05 and 110.80 dB while the international standard is 35 dB. On average there were 269.52 students in a school while the international standard is 750 students.

Table 4.1.4 Is there a computer lab at school?

Scale	Frequency	Percentage
Yes	3	12
No	22	88

The Table 4.4.1 described the statistical values regarding the computer lab facility. It was observed that out of total 25 public sector high schools for boys and girls 3 schools have computer lab facility. The rest of the schools' classroom have no computer lab facility

Table 4.1.5 Area of computer lab

Items	N	Mean	SD	Min	Max	IS
Area of computer lab	3	541.66	197.125	330.00	720.00	1000
Seating Capacity	3	25.00	5.00	20.00	30.00	40
Number of computers in lab	3	19.00	16.26	7.00	30.00	40

The Table 4.1.5 indicated statistical values regarding total area of a computer lab. The average area of computer lab was 541.66 sq ft while the international standard is 1000 sq ft. The average seating capacity were 25 as compared to the international standard that is 40. On average there were 19 computers in a computer lab while the international standard is 40 computers.

Table 4.1.6 Does the school has a science laboratory?

Scale	Frequency	Percentage
Yes	9	36
No	16	64

The Table 4.1.6 described the statistical values regarding the science laboratory. It was observed that out of total 25 public sector high schools for boys and girls 9 schools have science lab facility.

Table 4.1.7 Area of the science laboratory

Items	N	Mean	SD	Min	Max	IS
Science Laboratory	9	739.44	480.00	340.00	1920.00	1200
Seating Capacity	9	35.00	17.67	20.00	80.00	40

The Table 4.1.7 depicted statistical values regarding total area of a science laboratory. The average area of science laboratory was 739.44 sq ft while the international standard is 1200 sq ft. The average seating capacity were 35 as compared to the international standard that is 40.

Table 4.1.8 Does the school have a library?

Scale	Frequency	Percentage
Yes	4	16
No	21	84

The Table 4.1.8 described the statistical values regarding the library. It was observed that out of total 25 public sector high schools for boys and girls 4 schools have library facility. The rest of the schools' have no library facility.

Table 4.1.7 Area of the Library

Items	N	Mean	SD	Min	Max	IS
Area of Library	4	912.75	516.78	357.00	1580	1600
Seating Capacity	4	44	21.36	20.00	70.00	50

The Table 4.1.7 described statistical values regarding total area of a library. The average area of library was 912.75 sq ft while the international standard is 1600 sq ft. The average seating capacity were 44 as compared to the international standard that is 50.

Table 4.1.8 Does the school have canteen facility

Scale	Frequency	Percentage
Yes	0	0
No	25	25

The Table 4.1.8 indicated the statistical values regarding the canteen facility. It was identified that not a single school have canteen facility.

Table 4.1.9 Playground Facility

Item	Yes		No	
	f	%	f	%
Does the school have playground?	4	16	21	84
Is it grassy?	0	0	4	100
Is it suitable for outdoor games?	0	0	4	100
Does the school have equipment for outdoor games	0	0	4	100

The Table 4.1.9 indicated the statistical values regarding the availability of playground. It was identified that out of 25 schools only 4 schools have playground facility, and the rest have no playground. The playgrounds were not grassy. It is not suitable for outdoor games. It does not have all the equipment necessary for outdoor games

Table 4.1.10 Area of the playground(s) in Acres (With/without GBMODHS)

Items	N	Mean	SD	Min	Max	IS
Area (with GBMODHS)	4	2.60	4.97	0.05	10.06	2.3
Area (without GBMODHS)	3	0.12	0.09	0.05	0.23	

The Table 4.1.10 showed the statistical values of total area of playground in 25 public sector high schools for boys and girls in Loralai. The average area with GBMODHS was 2.60 acres and without GBMODHS was 0.12 acres as compared to the international standard i.e 2.3 acres.

Table 4.1.11 Garden(s)/Lawn(s)

Item	Yes		No	
	f	%	f	%
Is there any garden(s)/lawn(s) at school?	3	12	22	88
Maintenance of the gardens	3	12	22	88

The Table 4.1.11 indicated the statistical values regarding the gardens/lawns at school. It was identified that out of 25 schools only 3 schools have gardens. It was observed that gardens in all three school were properly maintained.

Table 4.1.12 Area of the garden(s)/lawn(s)

Items	N	Mean	SD	Min	Max	IS
Area	3	0.08	0.01	0.07	0.10	0.41

The mean value of area of the gardens was 0.08 acres. The international standard for garden area is 0.41 acres.

Table 4.1.13 Electricity Facility

Item	Yes		No	
	<i>f</i>	%	<i>f</i>	%
Does the school have electricity?	16	64	9	36
Availability of electricity during the school hours	12	75	4	25
Is there any load shedding?	16	100	0	0

The Table 4.1.13 indicated the statistical values regarding the electricity facility at school. It was identified that out of 25 schools just 16 schools have electricity. It was also found out that only 12 schools have electricity during the school hours. All the 16 schools having electricity facility faced load shedding issue.

Table 4.1.14 Availability of first aid facility

Scale	Frequency	Percentage
Yes	2	8
No	23	92

The Table 4.1.14 indicated the statistical values regarding the availability of first aid facility. It was identified that out of 25 schools only two school have first aid facility.

5.1 Conclusion

The situational analysis of physical facilities in public high schools in Loralai, Balochistan, reveals a significant disparity between the current state of educational infrastructure and the international norms and standards necessary for fostering a quality learning environment. The study shows that most schools are severely under-resourced, lacking essential facilities such as adequate classrooms, fully functional science laboratories, computer labs, and libraries. Furthermore, critical components such as playgrounds, electricity, and first aid facilities are either absent or insufficiently maintained, further exacerbating the challenges faced by students and teachers. Classroom sizes in many schools do not meet the required standards, often leading to overcrowded conditions, which negatively impact student concentration and overall academic performance. The lack of basic laboratory equipment and functional computer labs prevents students from gaining hands-on experience, a vital component of modern education. Similarly, the absence of well-stocked libraries curtails opportunities for independent study and research, which are crucial for the intellectual growth of students. Additionally, the shortage of essential utilities such as electricity, especially during school hours, disrupts teaching and learning activities, while the lack of proper playgrounds and physical education facilities undermines students' physical development and overall well-being. The absence of first aid facilities poses a safety risk, making schools ill-prepared to handle emergencies. The findings emphasize the urgent need for governmental intervention and strategic policy reforms to address these infrastructural deficiencies. Improving the physical facilities in these schools would not only elevate the overall academic experience but also align the region's educational system with global standards.

5.2 Recommendations

1. The government may educate the individual's concerned with building construction to construct school buildings in accordance with international norms and standards and the government officials might constitute a committee for establishing norms and standards for school construction and provision of physical facilities.
2. Efforts might be made by the district education officers to highlight the scarcity of physical resources and the matter might be discussed with high ups.
3. The government may provide adequate funds to ensure the provision of computer lab, science lab and library facility in every school.

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