

Infrastructure Facilities in Educational Institutions in Gujarat State

Dr. Rajnikant Parsaniya

Assistant Professor, Post Graduate Department of Economics, Sardar Patel University, Vallabh Vidyanagar -388120,
Anand, India,

Email : rajnikant_parsaniya@spuvvn.edu

Abstract: In the 21st century, when knowledge is power, it is very important to increase the level of education. It is very important to have various basic facilities in the school. In Gujarat, schools have 95 to 99% of basic infrastructure facilities such as electricity, drinking water facilities, toilets, a library, etc. Modern infrastructure facilities such as computers, internet, arts and crafts room, water harvesting, solar panels, etc., are very lacking in the schools of Gujarat.

Gujarat has allocated 14.1% of its total expenditure for education in 2022-23. This is lower than all states' average allocation (15.2%) for education (2021-22 BE). (Gujarat Budget Analysis 2022-23, 2023) There is a need for a head change in government spending on education. In Gujarat, there are 7 teachers per school, against which 214 students are enrolled yearly.

Keywords: Infrastructure facilities, Educational institutions, Analysis of Education.

JEL Code: I200, I210, I250 (JEL Classification Codes Guide)

1. INTRODUCTION:

In this paper, information about the total number of schools in Gujarat state from class 1 to 12 and various types of infrastructural facilities provided in these schools is presented. Gujarat had an estimated 8.2 million children enrolled in the primary classes, with the Gross Enrolment Ratio (GER) reaching almost 100%. There were about 2.77 million children enrolled in institutions imparting secondary and higher secondary education. (Education in Gujarat fact file, 2023) The present paper first discusses the infrastructure facilities in schools at the Indian level and then examines the infrastructure facilities in schools at the Gujarat level.

2. OBJECTIVES:

- To know the total number of schools in Gujarat
- To know about the infrastructural facilities in schools in Gujarat

3. METHODOLOGY:

The study relies on secondary data, specifically the data from the educational report released by the Government of India. This study has analysed the information regarding the infrastructural facilities available in schools. In analysing this secondary data, primarily percentage and percentage change methods are utilised.

4. IMPORTANCE OF STUDY:

The infrastructure of the school favours an environment conducive to learning. Infrastructural facilities include various aspects such as classrooms, libraries, laboratories, playgrounds, sanitation facilities, transportation and technology. Well-designed and adequate infrastructure can enhance the overall learning experience for students and facilitate their overall development. (Varthana, 2023)

5. SCHOOL INFRASTRUCTURE AT THE INDIAN LEVEL:

Table No. 1 compares a few major infrastructure facilities available in the schools from 2020-21 to 2021-22. This includes electricity connection, library, internet, ramp, hand wash, drinking water, etc. The UDISE +2021-22 data shows that all the major infrastructural facilities have improved in 2021-22 compared to the previous year. For the first time, further disaggregated data on facilities have been presented separately for State Government Schools, KVS, JNVS, Government aided, Private, etc. Similarly, some of the important key performance indicators, such as the availability of an Integrated Science Lab, Co-curricular activity room, arts and crafts room facility, sustainable development activities related to the environment, viz., schools with solar panels, rainwater harvesting, kitchen garden, etc., have been presented in the table. (UDISE, 2021-22)

Table no. 5.1: Infrastructure facilities on the Indian level – 2020-21 to 2021-22

Infrastructure facilities (in Percentage)	2020-21	2021-22
Schools with having electricity connection	86.90	89.34
Schools have drinking water facilities	97.45	98.22
Schools having a toilet facility	98.49	98.71
Schools having a boys' toilet facility	96.20	96.22
Schools having a girls' toilet facility	97.32	97.48
Schools having hand-washing facilities	91.99	93.64
Schools have a playground facility	75.76	76.96
Schools having a computer facility	41.25	47.51
Schools having internet facilities	24.51	33.91
Schools having CWSN-friendly toilets	25.25	26.96
Schools have ramps with handrail facilities for CWSN students	48.31	49.72
Schools having Kitchen Gardens	26.05	27.65
Schools having Rain Water Harvesting System	20.34	21.02
Schools having Libraries/Reading Corner/Book Bank facilities	85.58	87.30

Source: UDISE+ 2021-22, Pages, 25

It can be seen from the above table, no.1 above, that in India-level schools, various infrastructural facilities like electricity, toilets, drinking water facilities, hand washing, etc., are available in most of the schools, but the number of computers, internet, CWSN-friendly toilets, ramp, kitchen garden, etc., facilities are very low. Also, the number of schools with playgrounds and libraries and books, etc. The government and local people need to pay attention to increasing the infrastructure facilities at the school.

6. ANALYSIS OF INFRASTRUCTURAL FACILITIES AT THE GUJARAT LEVEL:

The total number of schools for classes 1 to 12 in Gujarat and the number and percentage of schools with various infrastructure facilities are shown in Table No. 2 (In the year 2021 – 22) (UDISE, 2021-22)

Total all management schools = 53851
Total government schools = 34699
Total government aided schools = 5590
Total Pvt. Unaided schools = 13559
Total other schools = 3

Total number of enrolments = 11542276
Total number of teachers = 378118
Pupil-teacher ratio = 31
Teachers per school = 7
Enrolments per schools = 214

Table No. 6.1: Infrastructural Facilities in Schools in Gujarat State, 2021-22

Infrastructure Facilities	Schools with facilities					Percentage of Schools with facilities**				
	All management	Government	Government aided	Pvt. Unaided	Others	All management	Government	Government aided	Pvt. unaided	Others
Electricity	53829	34678	5589	13559	3	100	99.9	100	100	100
Drinking water	53836	34687	5590	13556	3	100	100	100	100	100
Boys' toilet *	51674	33219	5204	13249	2	99.3	98.9	99.6	99.9	100
Girls' toilet*	52334	33516	5457	13358	3	99.5	99.3	99.8	99.9	100
Toilets	53742	34594	5588	13557	3	99.8	99.7	100	100	100
Hand wash	52090	34037	5002	13048	3	96.7	98.1	89.5	96.2	100

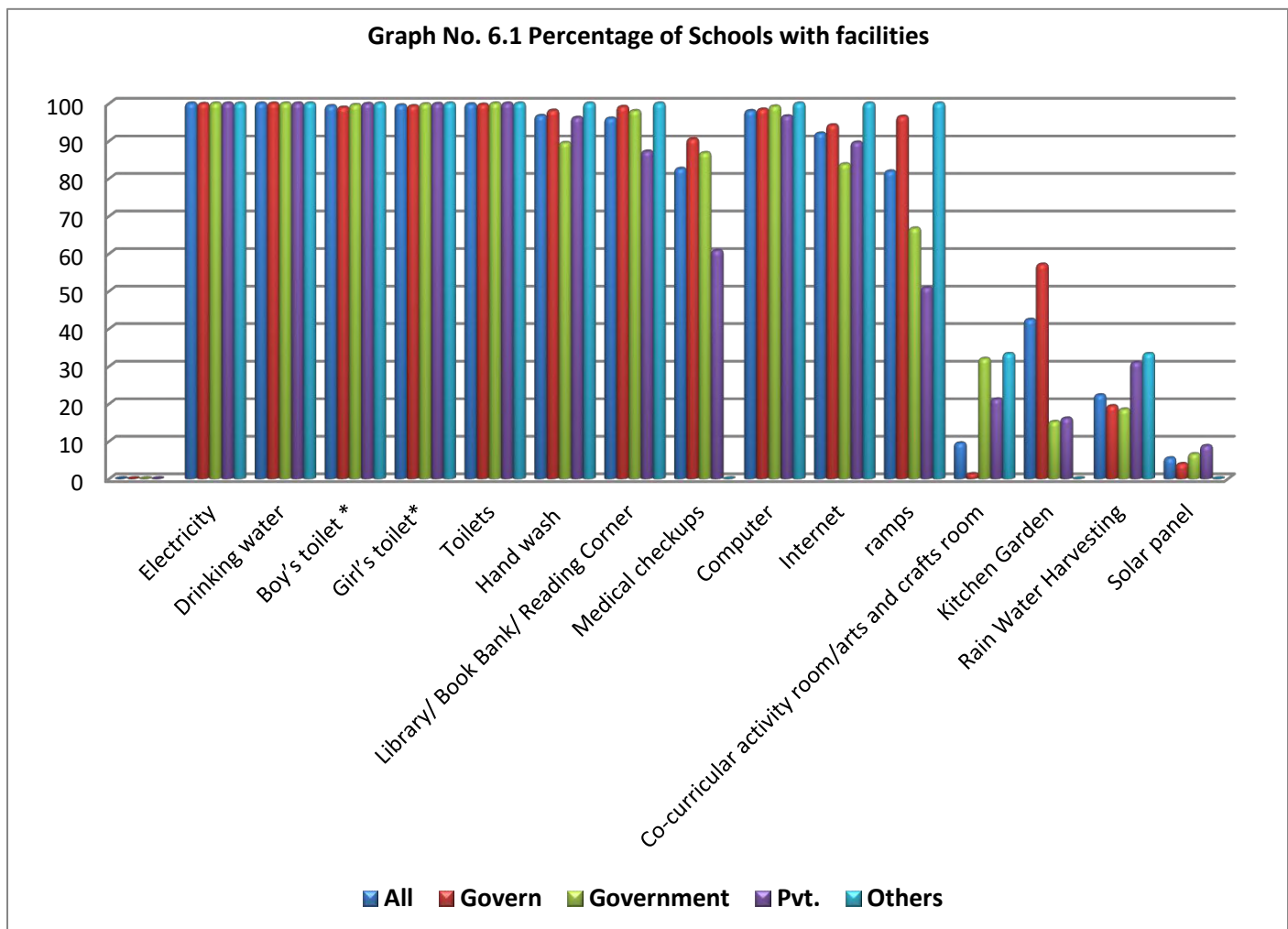
Library/ Book Bank/ Reading Corner	51693	34385	5477	11828	3	96	99.1	98	87.2	100
Medical checkups	44500	31405	4851	8244	0	82.6	90.5	86.8	60.8	0
Computer	52781	34131	5548	13099	3	98	98.4	99.2	96.6	100
Internet	49522	32681	4685	12153	3	92	94.2	83.8	89.6	100
ramps	44126	33490	3727	6906	3	81.9	96.5	66.7	50.9	100
Co-curricular activity room/arts and crafts room	5109	441	1790	2877	1	9.5	1.3	32	21.2	33.3
Kitchen Garden	22829	19797	850	2182	0	42.4	57.1	15.2	16.1	0
Rain Water Harvesting	11985	6747	1036	4201	1	22.3	19.4	18.5	31	33.3
Solar panel	2963	1398	366	1199	0	5.5	4	6.6	8.8	0

Source: UDISE+ 2021-22

**** Number of schools having facilities / Total number of schools × 100 = Percentage of Schools with facilities**

The total number of schools for boys and girls is different. This is as follows, from which its quantity and percentage are indicated.

*Boys' toilet	52065	33574	5227	13262	2
*Girls' toilet	52585	33746	5469	13367	3



Source: Table No. 2 data analysis



In the Gujarat level educational field, the infrastructural facilities in the schools are similar to those in India, only in terms of computers, internet, library and books, the facilities are good at the Gujarat level. The amount of water harvesting, solar panels, and arts and crafts rooms in Gujarat schools is very small.

7. FINDINGS AND RECOMMENDATIONS:

Key findings and recommendations from this study are as follows.

- The total number of schools in Gujarat is 53851.
- The number of teachers is 7 against the school's enrollment of 214, which is much less, and needs to be increased.
- 95 to 99% of Gujarat schools have electricity, drinking water facilities, toilets, libraries, etc. In this sector, the government has achieved success.
- Facilities like medical checkups are still not reached in 18% of schools, which also has a lot of work to do.
- Co-curricular activity room/arts and crafts room is 9.5 %, its number is very low, so we need to increase this level.
- Rainwater harvesting facilities are 22.3% of schools and only 5.5% of solar panel facilities. In this era, this facility is very important and necessary for the future.
- Kitchen Garden facilities are only in 42.4% of schools; their facilities are necessary to be increased in the schools.
- To increase the facilities in the schools, the government has to allocate more grants and keep changing its heads.

8. CONCLUSION:

The condition of schools in Gujarat is good overall, but it has yet to reach 100%. In modern times, there is a special need to increase the availability of computers and the Internet. Keeping in view the coming information era, the government must work in that direction. Infrastructural facilities in the school are very important to increase education. A comprehensive network of educational institutions should be created to make Gujarat a globally recognised knowledge society. (AISHE, 2020-21)

REFERENCES:

1. AISHE. (2020-21). *All India Survey on Higher Education*. New Delhi: Government of India, Ministry of Higher Education, Department of Higher Education.
2. *Education in Gujarat Fact File*. (2023, 10 9). Retrieved 10 12, 2023, from Gujarat Infrastructure Development Board: [#https://www.gidb.org/education-afact-file #](https://www.gidb.org/education-afact-file)
3. *Gujarat Budget Analysis 2022-23*. (2023). Retrieved 10 15, 2023, from PRS Legislative Research: <https://prsindia.org/budgets/states/gujarat-budget-analysis-2022-23>
4. *JEL Classification Codes Guide*. (n.d.). Retrieved 10 15, 2023, from American Economic Association: <https://www.aeaweb.org/jel/guide/jel.php#>
5. UDISE. (2021-22). *UNIFIED DISTRICT INFORMATION SYSTEM FOR EDUCATION*. New Delhi: Government of India, Ministry of Education, Department of School Education and Literacy.
6. *Varthana*. (2023, June 26). Retrieved 10 15, 2023, from How School Infrastructure Impacts Your Child's Learning Journey: <https://varthana.com/school/how-school-infrastructure-impacts-your-childs-learning-journey/>