

Chapter - IV
Access and Equity in
Higher Education

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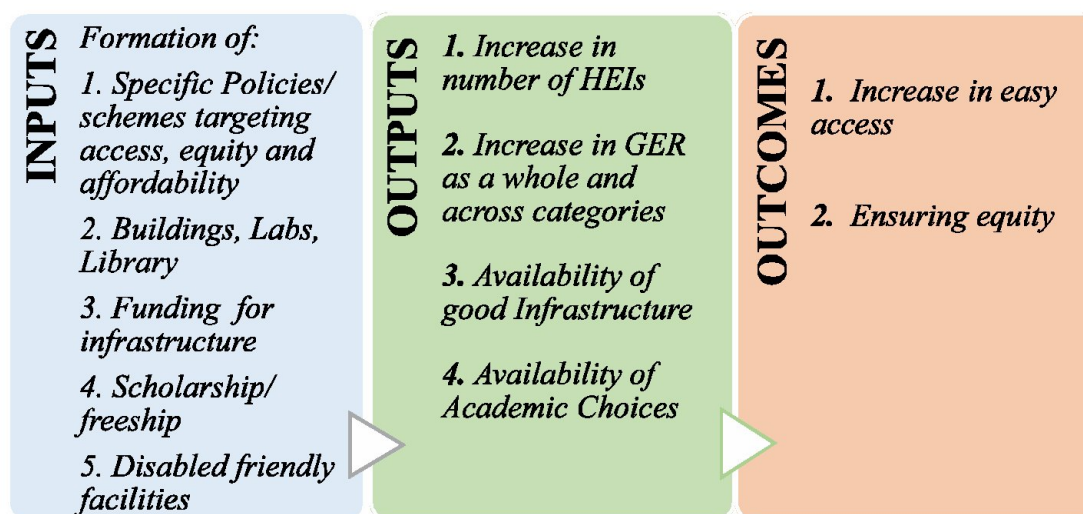
Access and Equity in Higher Education

Access to and equity in higher education have been widely regarded as the basic and key responsibilities of any government. Creating a high-quality higher education system which is easily accessible to all sections of society is thus one of the main higher education outcomes that a government seeks to achieve. Access to higher education has been defined as availability of sufficient number of institutions across the serviced region to adequately fulfil the demand from that region. Equity means equal opportunity to all sections of the society to participate in higher education.

In order to assess the performance of HEIs and GoR towards achieving the goal of creating a high-quality higher education system which is easily accessible to all sections of society, the following audit objective was framed.

Audit Objective 3: Whether Equitable Access to Quality Higher Education was ensured for all.

The equity and access related outcomes and their relationship with the contributing factors can be understood from the representation below.



A number of crucial steps such as specific policies and schemes targeted towards easy access, broad based equity and affordability have to be taken by the government as well as the HEIs concerned to ensure achievement of these outcomes. Moreover, scholarships/freeships and disabled friendly facilities must be ensured especially for the benefit of socio-economically backward and the disadvantaged sections of the society. This would lead towards a planned and equitable increase in the number of HEIs across the concerned region and

encourage higher enrolments thus increasing GER across different regions and societal categories.

In paragraphs 4.2.3 (i) and 4.3.2.2 (i) UoR, Jaipur and JNVU, Jodhpur did not provide consolidated and complete information for all their departments. In the absence of complete information, Audit collected such information from selected 11 departments⁵⁶ of universities concerned.

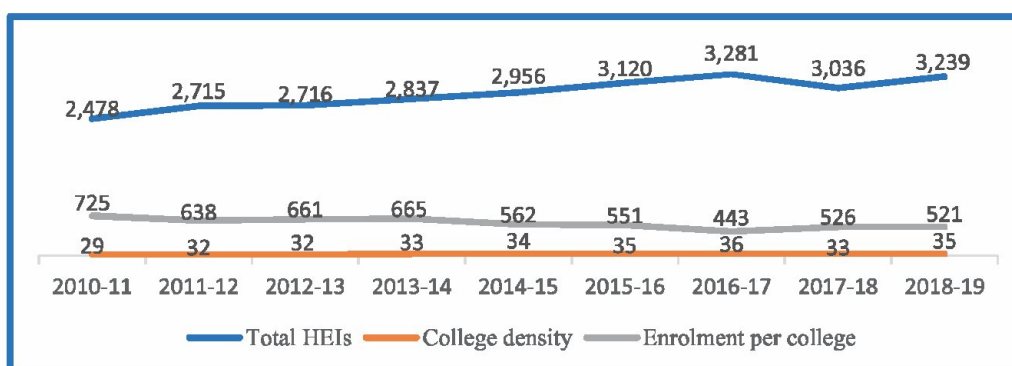
4.1 Easy Access to Higher Education

Twelfth FYP stated that focus should be given towards achieving higher access through expansion by consolidation and better utilization of the existing infrastructure, upgradation of the infrastructure and creation of new institutions primarily to meet the objective of regional equity. Moreover, GoI's output outcomes frameworks⁵⁷ and GoR's Outcome Budgets⁵⁸ over the last few years have also laid emphasis on increasing access to higher education through establishment of new HEIs and increasing the capacities of existing HEIs. In this section easy access to higher education in Rajasthan with regards to number of HEIs, regional accessibility, availability of academic choices and Gross Enrolment Ratio as a whole as well as across categories is being discussed.

4.1.1 Number of HEIs in Rajasthan

According to All India Survey on Higher Education (AISHE) Reports prepared by MHRD, the number of all types of HEIs⁵⁹, college density (colleges per lakh population) and average enrolment per college in Rajasthan during 2010-19 is shown in **Chart 4.1** below:

Chart 4.1: Availability of HEIs in Rajasthan



⁵⁶ Chemistry, Zoology, Physics, Accountancy & Business Statistics, Business Administration, Hindi, English, Sociology, Political Science, Geography and Economics

⁵⁷ Under Grant No 58 of GoI's output outcomes framework 2017-18 onwards.

⁵⁸ Grants are being provided under budget head 4202 for construction of college buildings.

⁵⁹ State public universities, state private universities, deemed universities, institutes of national importance, Government colleges, private colleges etc.

It can be seen that number of HEIs⁶⁰ increased by 30.71 *per cent* from 2,478 to 3,239 and college density increased by 20.69 *per cent* from 29 to 35 colleges per lakh population during 2010-11 to 2018-19.

4.1.1.1 Policies for establishment of new HEIs

Twelfth FYP envisaged the use of geographical mapping of HEIs to identify habitations and settlements lacking HEIs.

It was observed that GoR did not have a specific policy for opening of government colleges in rural, urban, tribal and unserved areas. It did not have a policy for geographical mapping of HEIs in the State nor did it conduct any geographical mapping to identify number of habitations that lack higher education facilities and accordingly assess total requirement of HEIs in the state.

4.1.1.2 Distribution of HEIs in Rajasthan's Education Blocks

Scrutiny of records of Commissionerate (College Education) revealed that there were 289 education blocks in Rajasthan of which 12 blocks (4.15 *per cent*) had neither government nor private colleges, 89 blocks (30.80 *per cent*) did not have any government college and 238 blocks (82.35 *per cent*) did not have any girls' government college upto 2018-19.

The State Government stated (August 2020) that policy for opening of new government college in college-less blocks was framed in December 2019 and accordingly, new government colleges at college-less blocks would be opened in phased manner by considering its population, demand for opening of college and for increasing the gross enrolment average of the state.

4.1.2 Regional Accessibility

The Twelfth FYP (2012-17) states that the regional imbalances in the distribution of institutions should be corrected.

Audit assessed the status of accessibility to higher education in Rajasthan by comparing availability of HEIs in urban versus rural areas, and across different geographical regions (northern, eastern, western i.e. desert area, and southern i.e. tribal area)

4.1.2.1 Accessibility in urban and rural areas

Audit observed that urban and rural area wise distribution of private colleges were neither available in AISHE reports nor with Commissioner, College Education. Further, it was also informed that the latter did not have complete information about urban/rural area wise distribution of general degree private

60 Universities increased by 93.02 *per cent* and colleges increased by 29.61 *per cent*

colleges. Hence, due to limited availability of information, audit analysis was limited to urban/rural area wise distribution of general degree government colleges during 2014-19.

Urban/rural area wise distribution of general degree government colleges *vis a vis* projected population⁶¹ of persons of age group 18-23 years in Rajasthan on the basis of census 2011 during 2014-19 is given in **Table 4.1** below:

Table 4.1: Urban/rural area wise distribution of government colleges

Year	Number of general degree government colleges			Projected Population (age group 18-23 years, as per census 2011)	
	Total colleges	Colleges in urban area (%)	Colleges in rural area (%)	Urban area (%)	Rural area (%)
2014-15	175	74.86	25.14	24.89	75.11
2015-16	180	71.67	28.33	24.57	75.43
2016-17	192	69.79	30.21	23.92	76.08
2017-18	209	66.99	33.01	23.34	76.66
2018-19	237	62.87	37.13	22.80	77.20

Sources: Information provided by Commissioner, College Education and download from site of Office of the Registrar General & Census Commissioner of India

It can be observed that though number of government colleges increased from 175 in 2014-15 to 237 in 2018-19, the urban/rural area wise distribution of these colleges was not in accordance with proportion of population residing in these areas. During 2014-19, only 25.14 *per cent* to 37.13 *per cent* government colleges were available in rural areas for providing higher education to 75.11 *per cent* to 77.20 *per cent* population of age group 18-23 years.

The State Government stated (August 2020) that for better access to higher education in rural and urban areas, new government colleges at college-less blocks would be opened in phased manner.

4.1.2.2 Accessibility in different geographical areas of the State

Physical/geographical aspects of a region also impact the ease of access to higher education, region wise availability of government and private colleges providing higher education in general streams by distributing these colleges⁶² in eastern region (nine districts), western region (six districts), northern region

61 As per Single Year Age Data (C-13 Table) table downloaded from website of Ministry of Home affairs, Office of the Registrar General & Census Commissioner of India

62 Name of districts clubbed in **Eastern area**- Ajmer, Alwar, Bharatpur, Dausa, Dholpur, Karauli, Jaipur, Swaimadhopur and Tonk; **Western area**- Barmer, Jaisalmer, Jalore, Jodhpur, Pali and Sirohi; **Northern area**- Bikaner, Churu, Hanumangarh, Jhunjhunu, Nagaur, Sikar and Sri Ganganagar; **Southern area**- Banswara, Baran, Bhilwara, Bundi, Chittorgarh, Dungarpur, Jhalawar, Kota, Pratapgarh, Rajsamand and Udaipur.

(seven districts) and southern region (11 districts). Region wise availability of government and private colleges during 2014-19 is given in **Table 4.2** below:

Table 4.2: Region wise availability of colleges

Geographical area	Number of Government colleges		Number of private colleges		Number of total colleges		Population in 2018-19 in lakh (%)
	2014 -15 (%)	2018 - 19 (%)	2014 - 15 (%)	2018- 19 (%)	2014 - 15 (%)	2018 -19 (%)	
Eastern region	61 (34.86)	74 (31.22)	555 (41.05)	612 (40.16)	616 (40.34)	686 (38.96)	30.47 (33.25)
Western region	27 (15.43)	44 (18.57)	94 (6.95)	162 (10.63)	121 (7.92)	206 (11.70)	16.36 (17.86)
Northern region	38 (21.71)	48 (20.25)	515 (38.09)	544 (35.69)	553 (36.22)	592 (33.61)	22.13 (24.15)
Southern region	49 (28.00)	71 (29.96)	188 (13.91)	206 (13.52)	237 (15.52)	277 (15.73)	22.67 (24.74)
Total	175	237	1352	1524	1527	1761	91.63

Source: Information provided by Commissioner, College Education.

It can be seen that percentage of general degree colleges decreased from 40.34 to 38.96 *per cent* in eastern region and 36.22 to 33.61 *per cent* in northern region, while it increased from 7.92 to 11.70 *per cent* in western region and 15.52 to 15.73 *per cent* in southern region during 2014-19.

Further, during 2018-19, population of age group 18-23 years were almost equal in 7 districts of northern region (22.13 lakh) and in 11 districts of southern region (22.67 lakh), but number of colleges in northern region (592 colleges) was more than twice that of southern region (277 colleges). This indicates that region wise distribution of general degree colleges in the State was not proportionate. The State Government did not furnish reply in this regard.

4.1.2.3 Accessibility to different Academic Choices

Twelfth FYP advocates for correcting the disciplinary imbalances in the distribution of institutions. Scrutiny of information revealed that the Commissioner, College Education did not have details of stream wise number of private colleges in the state. In the absence of such data, Audit analysed only number of colleges, availability of seats in first year and enrolment of students in Arts, Science and Commerce streams in general degree government colleges during 2014-19 as given in **Table 4.3** below

Table 4.3: Availability of different academic choices in government colleges

Year	Total no. of govt. colleges	Art stream			Science stream			Commerce stream		
		No. of colleges (%)	% seats available	% enrolment	No. of colleges (%)	% seats available	% enrolment	No. of colleges (%)	% seats available	% enrolment
2014-15	175	161 (92.00)	64.67	67.05	100 (57.14)	17.69	16.25	108 (61.71)	17.64	16.70
2015-16	180	170 (94.44)	65.02	67.57	100 (55.55)	17.52	17.14	111 (61.66)	17.46	15.29
2016-17	192	182 (94.79)	65.75	67.83	103 (53.64)	16.91	17.80	112 (58.33)	17.34	14.37
2017-18	209	190 (90.90)	64.86	68.42	112 (53.58)	17.95	18.18	114 (54.54)	17.19	13.40
2018-19	237	223 (94.09)	66.22	69.96	115 (48.52)	17.53	17.97	114 (48.10)	16.25	12.07

Source: As per data provided by Commissionerate College Education

The following observations can be made on this data:

- Proportionate availability of colleges having Science and Commerce streams were decreasing continuously while number of colleges having Arts stream was increasing continuously.
- Availability of seats in both, Science and Commerce streams decreased while it increased in Arts stream.
- Enrolment of students in Arts stream was more than double the enrolment of students in the Science and Commerce streams during 2014-19.

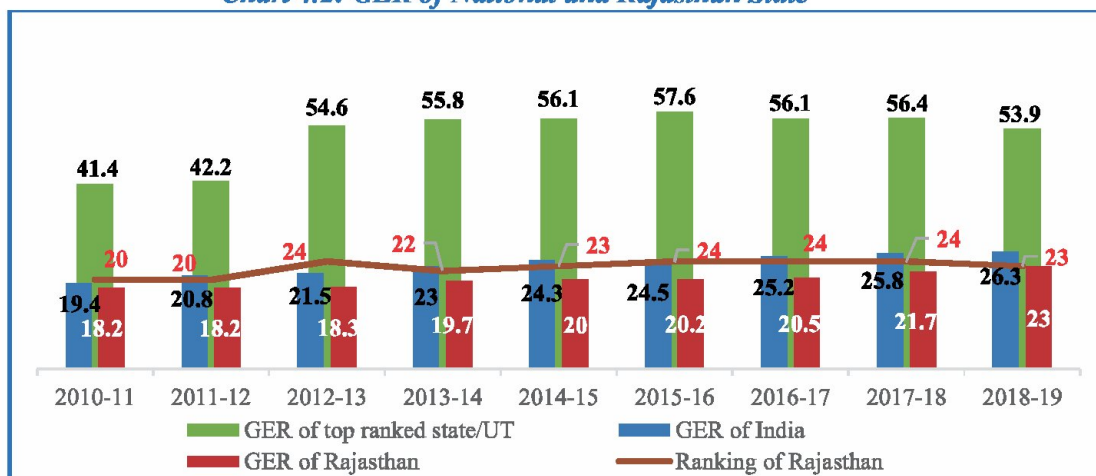
Thus, the failure of the State to provide academic choices proportionately across all the streams seems to have impacted the stream specific enrolment trends during 2014-19, highlighting the lack of academic choices available to prospective students.

4.2 Gross Enrolment Ratio

Ministry of Human Resource Development (MHRD), GoI aims to expand the Gross Enrolment Ratio⁶³ (GER) in higher education from 15 *per cent* in 2011-12 to 21 *per cent* by 2016-17 and further to 30 *per cent* by the year 2020. In State Higher Education Plan (2015-22) targets were fixed to increase GER in higher education to 26 by year 2019 and to 32 *per cent* by year 2022.

In this regard audit observed that GoR did not maintain an independent database regarding GER and enrolment of students in all HEIs and it was dependent on data published in AISHE reports. The GER of Rajasthan as well as all India and ranking of Rajasthan in higher education for the period 2010-19 are given in **Chart 4.2** below:

Chart 4.2: GER of National and Rajasthan State



It can be observed that:

⁶³ Gross Enrolment Ratio is total enrolment in higher education, regardless of age, expressed as a percentage to the eligible official population (18-23 years) in a given year.

- Though GER of Rajasthan exhibits an increasing trend but it has consistently been lower than national GER during 2010-19. Significantly, ranking of Rajasthan in terms of GER amongst 36 states/Union Territories went down from 20th place in 2010-11 to 23rd place in 2018-19.
- Further, as per AISHE reports 2018-19, Rajasthan is at fourth position in terms of number of colleges (3,156 colleges) and at eighth position in terms of college density⁶⁴ (35 colleges per lakh population) amongst 36 states/UTs in 2018-19. Data of district-wise distribution of colleges⁶⁵ shows that four districts (12.12 *per cent*) had more than 200 colleges each while 14 districts (42.42 *per cent*) had less than 50 colleges each. Thus, comparatively low GER of Rajasthan even though having higher number of colleges and college density could be explained by the skewed availability of colleges across different regions/districts and low enrolment.

The State Government stated (August 2020) that GER is not calculated by Commissionerate, College Education because it is responsible only for general education while GER is calculated for all higher education enrolments i.e. engineering, medical, polytechnic, general education, etc. Further, GoR is dependent on AISHE Reports published annually by MHRD for the GER data. The reply should be viewed in light of the fact that for better planning, the State Government should obtain disaggregated regional/district-wise GER data.

4.2.1 GER of disadvantaged groups

Twelfth FYP envisages that a targeted approach focusing on Scheduled Caste (SC) and Scheduled Tribes (ST) dominated regions and convergence of various equity schemes in a composite manner to address the educational needs of the disadvantaged sections including the Other Backward Classes (OBCs) would be critical to enhance their inclusion in the mainstream of higher education. Further, as per paragraph 2.2.2 (a) of Report on 'Inclusive and Qualitative Expansion in Higher Education', issued under Twelfth FYP, the aim is complete elimination of gap between men and women in access to higher education.

Category wise GER is the most common metric used to assess the improvement in enrolments of vulnerable sections and the effectiveness of measures targeted towards such improvement. Audit observed that data with respect to GER of OBCs, minorities and disabled categories is neither available in AISHE Reports nor maintained by GoR. In the absence of complete data, Audit could only analyse data of GER of SC/ST categories and gender parity index⁶⁶ for All India and Rajasthan for the period 2014-19 as detailed in **Table 4.4** below:

64 Number of colleges per lakh population.

65 10-19 colleges in 2 districts, 20-49 in 12 districts, 50-99 in eight districts, 100-199 in seven districts, 200-299 in three districts and 500-999 in one district.

66 It is calculated as the quotient of GER of females by GER of males enrolled in higher education institutions.

Table 4.4: GER of SC and ST category and Gender Parity Index

Year	GER of SC category		GER of ST category		Gender Parity Index	
	All India	Rajasthan	All India	Rajasthan	All India	Rajasthan
2014-15	19.1	14.7	13.7	15.8	0.92	0.82
2015-16	19.9	15.2	14.2	15.2	0.92	0.85
2016-17	21.1	16.1	15.4	17.9	0.94	0.89
2017-18	21.8	17.2	15.9	18.5	0.97	0.91
2018-19	23.0	20.0	17.2	21.3	1.00	1.00

Source: As per AISHE reports

- It can be seen that during 2014-19, though GER of SC category of Rajasthan increased but it was still less than All India average in all the years. GER of ST category of Rajasthan increased and it was more than All India average in all the years indicating a positive trend.
- Gender parity index of all categories of Rajasthan increased and matched the All India average. Scrutiny of AISHE reports further revealed that gender parity index of SC and ST categories increased from 0.77 to 0.93 and 0.76 to 0.92 respectively during 2014-19.

Good practice: Increasing trend in overall gender parity index and of SC and ST category may be due to State Government's interventions for easy access, such as waiving off of tuition fee for girls' students, and distributing two-wheeler (scooty) to girl students under 'Meritorious Girls Students Scooty Distribution Scheme', and 'Devnarain Girls Students Scooty Distribution Scheme'.

4.2.2 Institutional mechanisms to assist disadvantaged groups

Report on 'Inclusive and Qualitative Expansion in Higher Education' issued under Twelfth FYP, emphasis on monitoring of performance with respect to improving equity at the institutional level. Eleventh FYP had initiated establishment of SC/ST Cell for students belonging to SC and ST categories and Twelfth FYP envisaged constitution of Community Education Development Cell⁶⁷ (CEDC) for monitoring the intake of students, performance, capacity building efforts etc., of students of all deprived social groups including minorities mandatorily in all recognized institutions. Scrutiny of information revealed the following:

(i) Test checked universities:

- UoR, Jaipur constituted SC/ST Cell but selected constituent colleges did not constitute the SC/ST Cell separately. CEDC Cell was not constituted

⁶⁷ As per Report on 'Inclusive and Qualitative Expansion in Higher Education' issued under Twelfth FYP, CEDC should monitor the intake of students, performance, capacity building efforts, along with intake in faculty and administrative staff from deprived social groups, including minorities

both in the University and constituent colleges during 2014-19. Details regarding activities conducted by SC/ST Cell were not provided by the University. The university stated (January 2021) that action would be taken in this regard.

- JNVU, Jodhpur and constituent college constituted the SC/ST Cell. It organized a seminar and two short terms courses each year during 2014-18 to generate awareness among students of SC/ST/OBC/ Minority communities about equal opportunities available and about their fundamental rights. However, CEDC was not constituted.
- GGTU, Banswara did not constitute SC/ST Cell or CEDC in the university.

(ii) Test checked government colleges:

SC/ST Cell was constituted in 23 (63.88 *per cent*) out of 36 test checked government colleges but CEDC was not constituted in none of the test checked government colleges.

4.2.3 Gender equity promotional programmes and gender sensitive facilities

Often considered as the largest disadvantaged section of our society, upliftment of women in general and enhancing gender equity in higher education in particular has been the foremost concern. An HEI's initiative in terms of the number of gender equity promotional programmes (on sexual harassment and violence against women, women's rights and access to criminal justice, legal awareness about women related laws etc.) organized and gender sensitivity facilities (safety and security, counselling and common room etc.) provided are assessed. In this regard Audit observed that:

(i) In test checked universities:

- UoR, Jaipur including selected two constituent colleges did not organize gender equity promotional programmes during 2014-19. The constituent colleges intimated that being exclusively girls/boys' colleges they were not required to conduct such programmes. The replies of constituent colleges are not acceptable as awareness and knowledge raised through gender equity and sensitivity programmes like women's right and access to criminal justice are not limited in their scope only to the time spent by students in HEIs. These programmes are expected to play an important role in sensitizing students, both boys and girls, about gender issues prevalent in society and how they could respond to them through their interactions with society in general. UoR, Jaipur stated (January 2021) that corrective action would be taken in this regard in future and effort would be taken to organize gender promotional programmes giving equal importance to both boys and girls students.

- JNVU, Jodhpur and constituent college organized 30 such programmes in which 363 teachers and students participated during 2014-19. However, GGTU, Banswara did not organize such programmes during 2014-19.

(ii) Test checked government colleges: In 20 (55.56 per cent) out of 36 test checked government colleges on an average 27 gender equity promotional programmes⁶⁸ were organized in which on an average 3,312 students participated during 2014-19.

Good practice: Govind Guru Government College, Banswara organized gender equity promotional programmes for four consecutive years during 2015-19.

4.3 Affordability

Affordability is an important enabler for equitable and easy access to higher education. Regulated fee structure, comparable fees in government and private colleges, attractive student loan schemes and ample opportunities for availing scholarships/free-ships are some of the factors that contribute towards making higher education affordable. Scrutiny of information and replies received from GoR as well as test checked HEIs revealed the following:

4.3.1 Uniformity in fee structure

As per UGC (Affiliation of Colleges by University) Regulation, 2009 fees to be charged from each student should be approved by the affiliating university. Further, UoR in para 33 of University statute reiterated that in every college the fees charged shall be approved by the University.

(i) Audit observed that in spite of specific provision given in UGC Regulation 2009, the three test checked universities did not approve fees structure for its affiliated private colleges. Fees structure was decided by all the 30 test checked private affiliated colleges on their own.

Also, GoR did not regulate fee structure for private colleges as well as government colleges. On being asked about regulation of fees, Commissioner, College Education informed (November 2020) that finalisation of norms for deciding uniform fee structure for government colleges was under process as of October 2020.

(ii) Scrutiny of course-wise annual fee charged by 66 test checked affiliated government colleges and private colleges during 2018-19 revealed that 36

⁶⁸ Beti Bachao Beti Padhao, Self-defence skill programme, Anaemia and malnutrition programme, Workshop on sexual Assaults, Precious daughter Programme and Workshop of fashion designing.

government colleges and 30 private colleges charged annual fees⁶⁹ ranging from ₹ 649 to ₹ 5,000 and ₹ 5,000 to ₹ 45,000 respectively during 2018-19. Thus, in the absence of mechanism for monitoring the fee structure, private colleges charged significantly higher fees as compared to government colleges.

As already discussed in *Paragraph 4.1.1.2*, since 89 blocks did not have government colleges, students would have been compelled to take admission in expensive private colleges or travelled long distances.

The State Government stated (August 2020) that determination of uniform fee structure for private colleges is a policy decision and the State Government has not constituted a regulatory body for this purpose. UoR, Jaipur stated (January 2021) that as per Hand Book of university, private colleges should not charge more than 50 *per cent* of fee being charged by government colleges from students and prior permission of the university was required if more fees was to be charged. The fact remains that in spite of explicit provision mentioned in the hand book, UoR, Jaipur did not take action against colleges that did not follow the prescribed rules.

4.3.2 Scholarship/freeship

Scholarship/freeship⁷⁰ schemes, as a facilitative mechanism, have been widely used by governments not only to encourage meritorious students but also to enhance equity in access to higher education. Report on 'Inclusive and Qualitative Expansion in Higher Education' issued under Twelfth FYP advised that for enhancing participation of SC/ST/Minorities, scholarships and fellowships for students of SC/ST/OBC/Minorities may be enhanced at all levels.

4.3.2.1 At state level

Tuition fees were not charged for girl students studying in government universities and colleges in Rajasthan during 2014-19. Further, Director, College Education had instructed (June 2011) the government colleges that admission fee would not be charged from disabled students for admission in government colleges from Academic Year 2011-12.

69 **Government colleges** fee charged for BA: ₹649 to ₹2,524, B Com: ₹649 to ₹2,524, BSc: ₹649 to ₹2,524, MA: ₹748 to ₹5,000, M Com: ₹748 to ₹2,245 and MSc: ₹779 to ₹1,156; **Private colleges** charged fees for BA: ₹5,000 to ₹40,000, B Com: ₹6,000 to ₹40,000, BSc: ₹10,000 to ₹45,000, MA: ₹7,500 to ₹20,500, M Com: ₹6,000 to ₹20,500 and MSc: ₹20,000 to ₹43,000. Fees charged by government and private from all type of students have been considered.

70 Scholarship means a sum of money or other aid granted to a student, because of merit, need, etc., to pursue his or her studies. Free ship means total education fee is paid by the sponsoring or aiding authority for the period they have approved.

Audit observed that GoR gave scholarship amounting to ₹3,392.79 crore⁷¹ to 33.78 lakh students through Higher Education department, Social Justice & Empowerment department (SJED), Tribal Area Development (TAD) and Department of Minority Affairs during 2014-19. Audit further noticed that for availing scholarship, students applied online to concerned sanctioning department and the latter transferred the scholarship amount directly in bank account of the applicant.

When enquired, number of students eligible for each type of scholarship was not provided by any of the departments. Thus, audit was not able to ascertain the extent to which eligible students were getting benefitted by scholarship at state level and the positive effect such schemes had, if any, in increasing access and equity in higher education.

4.3.2.2 At institution level

Scrutiny of information provided by the selected HEIs revealed the following:

(i) Universities and constituent colleges:

- On an average of 27.39 *per cent* students benefited from scholarships and on average of 0.25 *per cent* students benefited from freeships provided by the government in UoR, Jaipur and two constituent colleges during 2014-19.
- JNVU, Jodhpur and constituent college did not maintain data regarding number of students benefited through scholarships and freeships given by government.
- An average of 78.92 *per cent* students benefited through scholarships in GGTU, Banswara during 2014-19.

(ii) Test checked government and private colleges:

- An average of 40.05 *per cent* (1,35,101 out of 3,37,330) students benefited through scholarships and on an average 32.99 *per cent* (1,11,297 out of 3,37,330) students benefited through freeships by government in 36 test checked government colleges during 2014-19.
- On an average 15.56 *per cent* (8,960 out of 57,598) students benefited through scholarships while no freeships were given in 30 test checked private colleges during 2014-19.

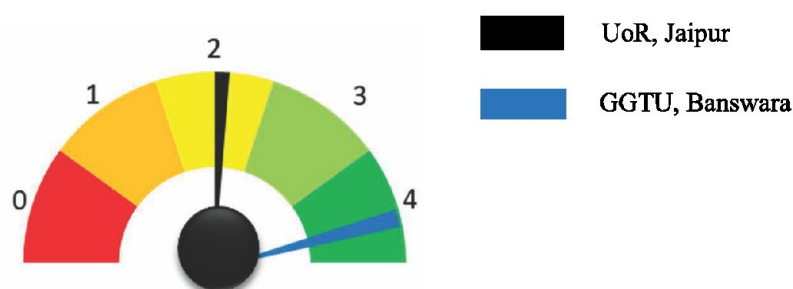
71 Higher Education department: ₹254.68 crore to 4.41 lakh students, SJED: ₹3,034.83 crore to 27.19 lakh, TAD: ₹90.68 crore to 1.98 lakh and Minorities department: ₹12.60 crore to 0.23 lakh students.

(iii) Performance evaluation based on indicators:

To assess performance of test checked universities vis-a-vis number of students benefited through scholarships and freeships, an indicator, *Average percentage of students benefited by scholarships and freeship by the Government during 2014-19* (Sl. No. 25 of *Appendix 1.1*), was evaluated. NAAC awarded maximum marks to an institution where on average 40 per cent and above students benefited through scholarships and freeships in the institution. Hence, as per NAAC benchmarks:

- GGTU, Banswara was eligible for award of maximum marks (four).
- Due to non-availability of complete information for UoR, Jaipur, audit could not comment on their performance, however, based on information received from selected 11 departments, UoR, Jaipur was eligible for award of two marks for this indicator.
- Due to non-maintenance of such data in JNVU, Jodhpur audit could not comment on their performance for this indicator at any level.

Chart 4.3: Performance of selected universities in respect of chosen outcome indicators



4.4 Proper Infrastructure

Buildings, classrooms, laboratories, and equipment are crucial elements of learning environment in universities and colleges. High-quality infrastructure facilitates better instruction, improves access and retention rates of students which in turn improve student outcomes, among other benefits.

4.4.1 Availability of buildings, laboratory, library etc.

Norms that specify the minimum requirement of buildings, laboratory, library etc., for a university were neither made available by the test checked universities nor found in the records, so audit evaluated availability of such infrastructure on the basis of norms fixed for affiliated colleges under the UGC (Affiliation of Colleges by University) Regulation, 2009. The Regulation specifies requirements of buildings (lecture/seminar rooms with a minimum 15 square feet (sqft) per student, library, and laboratories with 20 sqft per student), library with 1000 number of books, fully equipped laboratory etc.

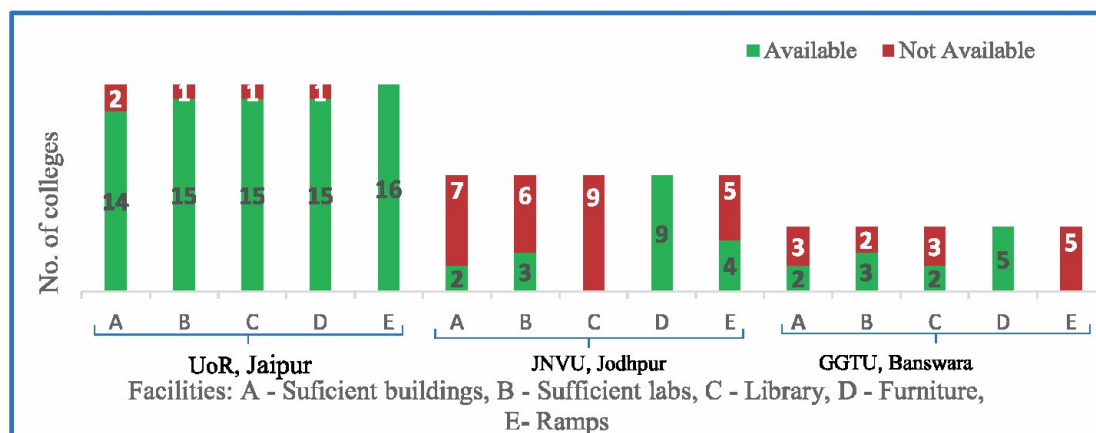
4.4.1.1 Test checked universities

- (i) **UoR, Jaipur:** Sufficient administrative and academic buildings, laboratories and number of books in central library were available and were being maintained in good condition in the university during 2014-19.
- (ii) **JNVU, Jodhpur:** Sufficient administrative and academic buildings, laboratories, central library were available in the university during 2014-19. However, 20⁷² out of 33 posts sanctioned for library were vacant. In spite of availability of ₹26.43 lakh meant exclusively for purchase of books, the university did not purchase 5069 books as required by departments. Library was not fully automated and Radio Frequency Identification (RFID) of books was incomplete and non-functional due to lack of budget. Physical verification of the books was not done during 2014-19. Roofs/ceiling and walls of library room/hall were badly damaged due to seepage of water in rainy season due to which thousands of books were destroyed. JNVU, Jodhpur accepted the facts.
- (iii) **GGTU, Banswara:** The University is operated from rented buildings. Construction of its own building which was scheduled to be completed in February 2019 is still in progress. Due to this, the university was not able to start new courses, centralized evaluation system and other academic works. Library of the university was running in a room of Govind Guru Government College one kilometer away from the university.

4.4.1.2 Affiliated colleges

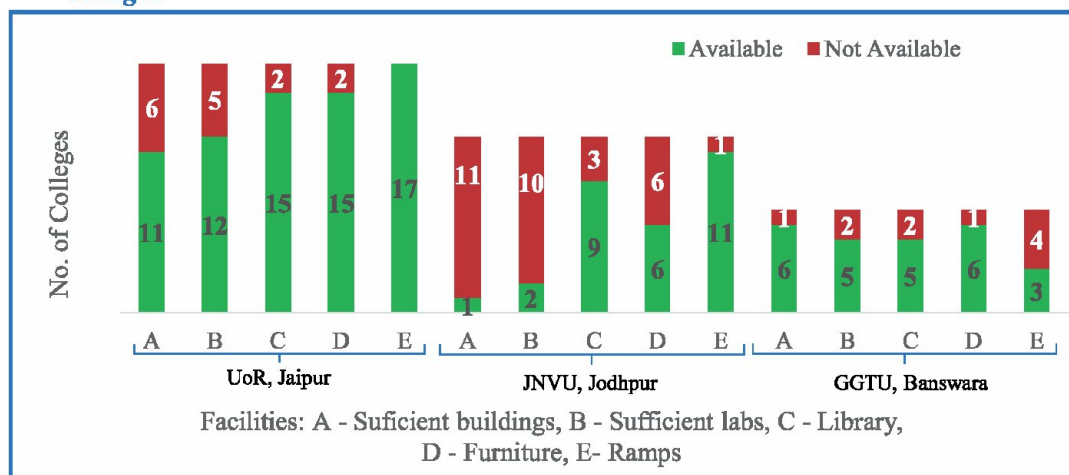
The position of availability of college building, library, laboratory, furniture etc., in 66 test checked colleges of the three selected universities are given in **Charts 4.4 and 4.5**.

Chart 4.4: Availability of physical infrastructure in test checked 30 Private colleges



⁷² One post of Librarian, three post of Assistant Librarian, three posts of Senior Technician Assistant, Two posts of Junior Technician Assistant etc.

Chart 4.5: Availability of physical infrastructure in test checked 36 Government colleges



It can be seen that:

- Out of 30 test checked private colleges, only 18 (60 *per cent*) had sufficient administrative and academic building, 21 (70 *per cent*) had sufficient laboratory facilities, 17 (57 *per cent*) had sufficient libraries, 29 (97 *per cent*) had sufficient furniture. Though ramps were available in 20 test checked private colleges, other disabled friendly facilities⁷³ as prescribed in the Regulations 2009 and Persons with Disability Act 1995 were not available in the 30 test checked private colleges. Further, four⁷⁴ colleges affiliated with JNVU, Jodhpur were being run with schools/ITI college.
- Similarly, out of 36 test checked government colleges, only 18 (50 *per cent*) had sufficient administrative/academic buildings, 19 (53 *per cent*) had sufficient laboratory facilities, 29 (81 *per cent*) had sufficient library facilities, 27 (75 *per cent*) had sufficient furniture. Though ramps were available in 31 test checked government colleges, other disabled friendly facilities⁷⁵ as prescribed in the Regulations 2009 and Persons with Disability Act 1995 were not available in all 36 test checked government colleges. Further, three colleges⁷⁶ were being run in school buildings.

73 Section 46 of Person with Disability Act 1995 read with NAAC manual disabled friendly facilities include lifts, braille software, restrooms, scribes for examinations, special skill development for disabled students.

74 MR Memorial College, Dhorimnna; Bhaskar College, Balotra; Hill Grove Col's College Sumerpur and Rooparam Sevda College, Keru.

75 Section 46 of Person with Disability Act 1995 read with NAAC manual disabled friendly facilities include lifts, braille software, restrooms, scribes for examinations, special skill development for disabled students.

76 Government College, Marwar Junction, Government College, Sumerpur and Government College, Simalwara.

Further, during physical inspection of test checked government colleges followings deficiencies were also noticed:

- ***Government College, Jaipur***

Only 345 chairs in 8 classrooms were available to accommodate 1500 students. Neither separate laboratory rooms nor equipment were installed in the makeshift laboratories of Chemistry, Zoology, Botany and Geography in the college. Five classrooms had been converted to laboratory-cum-classroom.



Photo 1: Physics Laboratory being operated in a classroom



Photo 2: Small size of classroom

- ***Govind Guru Government College, Banswara***

Classes were being conducted in open gallery due to non-availability of sufficient number of classrooms. Regular librarian was not posted in the library since 2009. Roof and ceiling of library building were badly damaged due to seepage of water and storage equipment, books were protected from rain water by plastic sheets. Many valuable old books & literature were found damaged/torn due to storage in bad condition.

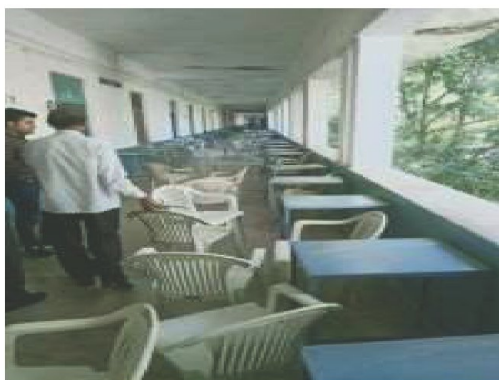


Photo 3: Sitting arrangement in gallery.



Photo 4: Condition of library.

- **Government College, Simahwara**

GoR opened the college for BSc programme in 2017-18 in which 84 to 174 students were enrolled during 2017-19. The government college was operated in only two rooms of a Government Girls school, out of which one room was being used for office purpose and other for storage of furniture.

Classes were conducted in the gallery having a width of seven feet but during physical verification on 19 and 20 November 2019 audit found that classes were not being conducted in the college.



Photo 5: classroom used in storage purpose.

Photo 6: conducting of classes in open gallery

Separate laboratories and library rooms were not available and all lab equipment and books were locked up. Teachers were not posted for Botany, Zoology, Hindi and English subjects since establishment of college (2017-18) till November 2019. 12 out of 13 non-teaching staff posts were vacant since 2017-18.



Photo 7: laboratory Equipment stored in almirah.

Thus, even after completion of two academic years GoR could not provide minimum basic infrastructure facilities like academic and administrative buildings, laboratory, library, etc., and teaching and non-teaching staff in the college.

- **Government College, Banswara**

Sufficient classrooms were not available as there were only 32 classrooms each having an area of 750 sqft to accommodate 7000 students. Some parts of academic building and classrooms were in bad condition (broken windows, damaged roof) with insufficient furniture.

- **Government College, Sumerpur**

GoR started the college in 2015-16 for UG programmes. The college was being run in a school building. Construction of its own building which was scheduled to be completed in July 2019 was under progress. There was no library available in the college and books were stored in four *almirahs* in the staff room and post of librarian was vacant since inception of the college.

In spite of two batches of BSc and BA with Geography having already graduated, laboratories were not available in the college. On being pointed out, the Principal of the college intimated that temporary arrangements were being made in the nearby schools/Colleges. Post of teachers for Sanskrit, History and English subjects and 13 out of 16 non-teaching posts were lying vacant since inception of the college.

- **Student survey result:** In response to student satisfaction survey's question, "Are you satisfied with library, laboratory, toilet and cleanliness available in your campus?" approximately 25 per cent of the students expressed dissatisfaction/partial satisfaction with **library, laboratory, toilets facilities and cleanliness** available in the HEIs.

4.4.2 Funding for infrastructure

Universities receive funds from Central Government, State Government and other agencies for creation of infrastructure. The position of budget allocation for infrastructure and expenditure excluding salary in three test checked universities during 2014-19 is given in **Table 4.5** below.

Table 4.5: Budget allocation on infrastructure and total expenditure excluding salary
(₹ in crore)

Name of university	Year	Expenditure excluding salary (1)	Budget allocation for infrastructure (as % of (1)) (2)	Expenditure incurred on infrastructure (3)
UoR, Jaipur	2014-15	155.00	7.15 (4.61%)	7.22
	2015-16	162.94	6.85 (4.20%)	6.21
	2016-17	174.89	11.80 (6.75%)	12.74
	2017-18	179.80	17.26 (9.60%)	17.58
	2018-19	257.30	5.28 (2.05%)	4.01
Average			5.44%	
JNVU, Jodhpur	2014-15	12.70	0.78 (6.14%)	1.63
	2015-16	10.49	4.02 (38.32%)	3.91
	2016-17	28.08	3.60 (12.82%)	4.03
	2017-18	18.62	7.08 (38.02%)	4.87
	2018-19	22.90	6.78 (29.61%)	6.12
Average			24.98%	
GGTU, Banswara	2014-15	0.00	0.00 (0.00%)	0.00
	2015-16	0.00	0.00 (0.00%)	0.00
	2016-17	0.00	0.00 (0.00%)	0.00
	2017-18	1.58	1.58 (100%)	1.58
	2018-19	3.55	3.55 (100%)	3.55
Average			40%	

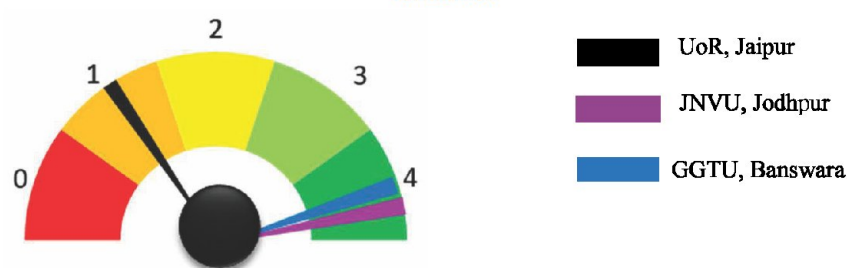
Source: Information provided by concerned universities.

It can be seen that average budget allocation on infrastructure with respect to expenditure excluding salary was on average 5.44 per cent, 24.98 per cent and

40 per cent during 2014-19 in UoR Jaipur, JNVU Jodhpur and GGTU, Banswara respectively.

(i) *Performance evaluation based on indicators*: NAAC for the indicator, *Average percentage of budget allocation, excluding salary for infrastructure augmentation during 2014-19*, awarded maximum score to institutions where on average 20 per cent and above budget allocation excluding salary was for infrastructure augmentation during last five years. Thus, as per NAAC benchmark, JNVU Jodhpur and GGTU Banswara were eligible for award of maximum marks (four) while UoR Jaipur was eligible for only one mark.

Chart 4.6: Performance of selected universities in respect of chosen outcome indicator



4.4.3 *Equipment purchased for research purposes lying idle in UoR, Jaipur*

Scrutiny of records of UoR, Jaipur revealed that seven equipment purchased by the university for research purposes under RUSA/UGC/DST schemes at a cost of ₹ 9.40 crore during 2013 to November 2018 were not utilized since their installation or for a long time as of December 2019.

Further, five out of seven equipment were not utilized in the Chemistry department since installation. Transmission Electron Microscope (TEM) was not utilized since May 2015 and Molecular Beam Epitaxy (MBE) equipment was not utilized since purchase in July 2016.

On being pointed out, the concerned department gave contradictory replies to Audit. In September 2019, they intimated that equipment for Chemistry department were purchased by General Administration Section of the university without its requirement. However, in December 2020, the department intimated Audit that proposals for purchase of the equipment were sent as they were basic requirement for PhD students. Audit found that TEM was not working during last several years as funds for annual maintenance charges were not provided. Director, Center for Converging Technologies (CCT) intimated that MBE could not be operated as its running cost was ₹ one crore per annum and CCT was not in the position to incur such huge expenditure.

Audit observed that very important equipment and machinery were not utilised for the intended purposes. When enquired, information regarding number of

researchers and research projects which suffered due to this was not provided to Audit. Thus, due to failure of Chemistry Department in assessing proper requirement and running cost of research equipment, the procured equipment could not be utilised for the intended purpose.

UoR, Jaipur stated (January 2021) that due to various reasons equipment could not be utilised at full capacity and now after rectification of related problems these equipment would be utilised as per need.

Summing Up and recommendation

GoR did not undertake geographical mapping to identify habitations that lacked higher education facilities. The distribution of general degree colleges both regionally as well as among rural and urban areas of the state was not symmetrical.

Though GER of Rajasthan increased during 2010-19 but it has consistently been lower than national GER. Further, during 2018-19 Rajasthan had a better rank in terms of number of colleges (fourth) and college density (eighth), but was placed much lower in terms of GER (23rd rank) which could be explained by the skewed availability of colleges across different districts of Rajasthan. The GERs of SC and ST categories improved during 2014-19 but GER of SC category was still less than the national average. Further, GoR did not maintain data of GER of OBCs, minorities and disabled categories.

In spite of provision in UGC (Affiliation of Colleges by University) Regulation 2009, the universities did not regulate fee structure for private affiliated colleges. Adequate basic infrastructure like building, laboratory and furniture was not available in majority of the test checked government and private colleges and disabled friendly facilities except ramp were not available in all the 66 test checked colleges.

Recommendation:

The State Government may:

- 1. provide access to higher education in rural areas and undertake the planned efforts to enhance GER across all categories;*
- 2. regulate fee structure of private colleges to make higher education affordable.*
- 3. Recognising the direct relationship between availability of quality infrastructure and higher education outcomes, the State Government should take urgent measures to provide prescribed high-quality basic infrastructure in government colleges for facilitating effective teaching, improving access and increasing retention rates of students.*
- 4. The Universities should ensure availability of basic infrastructure in affiliated private colleges and may regulate the fee structure of these colleges.*
- 5. The Universities should prepare proper plans for infrastructure augmentation including development of e-library and procurement and utilization of advanced scientific equipment.*