

Chapter 4

Access and Equity in Higher Education

Access 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 on account of its efforts and initiatives in this regard.

In order to assess the performance of HEIs in Odisha 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: Whether equitable access to quality Higher Education was ensured to all?

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



To achieve these outcomes, specific policies and schemes targeted towards easy access, broad based equity and affordability have to be designed. Appropriate funding should be made available for developing infrastructure such as institution buildings, laboratories, libraries, ICT facilities, *etc.* Moreover, scholarships/ freeships and disabled friendly facilities must be ensured especially for the benefit of socio-economically backward and the disadvantaged sections of society.

Audit observations regarding performance of the State and HEIs in achieving the above outcomes are discussed below:

4.1 Access to Higher Education

Paragraph 21.187 of Twelfth Five Year Plan envisages that focus should be towards achieving higher access through better utilisation of the existing infrastructure, upgradation of the infrastructure and creation of new institutions primarily to meet the objective of regional equity. Besides, RUSA provides strategic funding to eligible state Higher Educational institutions throughout the country for infrastructure development in colleges. The grant is provided to States for expanding institutional base by creating additional

capacity in existing institutions and establishing new institutions to correct imbalances in access to higher education.

4.1.1 Higher Educational Institutions in Odisha

As per the AISHE Reports and Students Academic Management System (SAMS)¹, the number of all types of universities, colleges, college density² and average enrolment per college in Odisha during 2014-15 to 2018-19 are given in the table 4.1 below:

Table 4.1: Number of all types of Higher Educational Institutions in Odisha

Year	Number of all types of universities	Number of all types of degree colleges (SAMS)	Colleges Density	Average enrolment per college
2014-15	21	705	23	606
2015-16	21	721	23	661
2016-17	24	800	23	682
2017-18	25	842	23	685
2018-19	28	883	23	682

(Source: SAMS and AISHE Reports)

It is seen from the above that during the period from 2014-15 to 2018-19, the number of universities had increased from 21 to 28 and colleges had increased from 705 to 883. During the same period, the average enrollment per college had increased from 606 to 682, signifying that there is a growing demand for higher education in the State. The college density has, however, remained constant at 23 during the same period. This college density was low as compared to the national average and the better performing states, as depicted in the table below:

Table 4.2: College density of Odisha, better performing States and All India average

Name of States	College density				
	2014-15	2015-16	2016-17	2017-18	2018-19
Odisha	23	23	23	23	23
Karnataka (best performing State)	49	50	53	51	53
Kerala	41	43	44	44	45
Andhra Pradesh	47	45	48	48	49
All India	27	28	28	28	28

(Source: AISHE Reports)

Though the number of colleges increased but the college density remained constant during last five years, showing no improvements. There also remains a huge gap in the College Density between Odisha (4.19 crore population) and States with comparable population like Kerala (3.34 crore population) and Andhra Pradesh (4.94 crore population).

4.1.2 Regional accessibility

As per Rule 3(1) of Orissa Education (Establishment, Recognition & Management of Private College) Rules (OER) 1991, the Director of Higher Education (DHE) shall prepare a Master Plan each year listing out the Blocks/

¹ Students Academic Management System (SAMS) is a web based Students Information and Admission system introduced in Odisha from 2012-13 at all the under graduate level colleges

² College density means number of colleges per lakh population of age group 18-23 years

Municipalities/ Notified Areas in which there is no college, and where establishment of a new college is justified. The Master Plan shall also project the requirement of additional seats or new streams of subjects in the existing colleges within a Block, Municipality and Notified Area.

Audit observed that the DHE had neither made any assessment nor prepared Master Plans for establishment of new Government colleges in Blocks/ Municipalities/ NACs, despite having a provision in the OER 1991. The last Government college was established in the year 1991. It was only after a substantial gap, that eight Model Degree Colleges were established in the educationally backward districts of the State in 2016-17.

4.1.2.1 Geographical distribution of HEIs in Odisha

Paragraph 21.207 of Twelfth Five Year Plan envisages that geographical mapping of HEIs should be done to identify habitations and settlements where there is lack of higher education facilities so as to take corrective measures for regional and disciplinary imbalances in distribution of institutions. As mentioned earlier, OER, 1991 also envisages preparation of Master Plan for opening of new colleges in deprived Blocks/Municipalities/ NACs.

As stated in **Paragraph 4.1.2**, no Master Plan for the establishment of new colleges was prepared. Audit observed that Government colleges had not been established in all 30 districts of the State. As of 2018-19, three districts (Jharsuguda, Jagatsinghpur and Kendrapara) remained devoid of a Government college in their jurisdiction.

It was also seen that the distribution of Government HEIs was skewed in favor of urban areas of the State with only six out of 49 Government colleges (12 *per cent*) functioning in rural areas.

Further, the DHE had not done any geographical mapping for assessing Block wise requirements of HEIs. From the records available it was noted that, the distribution of Government colleges, across blocks, was uneven. Out of 314 blocks, 32 blocks had both Government and non-Government colleges whereas 19 blocks were devoid of any college. These 19 blocks include 13 blocks under six Aspirational Districts³, identified by NITI Aayog (January 2018). In the remaining 263 Blocks, only non-Government colleges were functioning. Lack of even geographical distribution of Government colleges, impacts uniform access to affordable higher education for students in these blocks since they would depend on private HEIs that generally have a higher fee structure.

Thus, the objective of closing regional and disciplinary imbalances in distribution of HEIs (Twelfth Five Year Plan) could not be fully met in the State and discrepancies between rural and urban areas and between blocks remained. Further, the State had also not made sufficient efforts to assess the regional requirement for HEIs to ensure easy and affordable access for all.

³ The 117 districts from across 28 states having low socio- economic status were identified as Aspirational districts by NITI Aayog (January 2018). Number of blocks in the Aspirational districts are : Gajapati (1), Kalahandi (1), Kandhamal (1), Koraput (3), Nabarangpur (3) and Rayagada (4)

4.1.2.2 Accessibility to different Academic Choices

Academic choices in terms of the discipline an aspiring student seeks to study through higher education, is a crucial aspect of access to quality education. In this regard, 12th Five Year Plan states that the aim should be to correct disciplinary imbalances in the distribution of institutions.

The position of stream-wise availability of government and non-Government colleges in Odisha during the academic session⁴ 2017-18 and 2018-19 is shown in the table below.

Table 4.3: Availability of streams in the colleges of the State

Admission Year	Total number of general colleges	Arts stream	Science stream	Commerce stream
		Number of colleges (per cent)	Number of colleges (per cent)	Number. of colleges (per cent)
2017-18	842	735 (87)	465 (55)	268 (32)
2018-19	883	751 (85)	516(58)	286 (32)

(Source: SAMS database)

Audit observed that all the three general streams are not available in every college. During 2018-19, while 85 per cent colleges had Arts streams, availability of Science (58 per cent) and Commerce streams (32 per cent) was much more limited, restricting the choice of these streams for students. Thus, due to limited academic choices available in HEIs in Odisha, the State failed to achieve the objectives of equity and accessibility for all students.

Government stated (September2020) that colleges open the subjects depending on the demand of the locality. The reply is not convincing as Government has not made any assessment of local/regional demands of students in order to ascertain the actual requirement of the courses as per current need.

4.1.3 Gross Enrolment Ratio

MHRD aimed to expand the Higher Education sector in all its modes of delivery and to increase the Gross Enrolment Ratio (GER)⁵ in Higher Education from 15 per cent in 2011-12 to 30 per cent by the year 2020. Further, RUSA 1.0 had set the target of GER at 32 per cent by the end of 12th Five Year Plan i.e., March 2017. The State has, however, not fixed any such target with regard to GER.

In this context and to assess the efforts of GoO in this regard, *an increase in Gross Enrolment Ratio with respect to its target during 2014-19 was used as an indicator (Sl. No. 14 of Appendix 2).*

Government of Odisha did not have any specific plans in place to achieve the above mentioned targets of MHRD and RUSA. Further, it was observed that the State did not maintain any data regarding GER and depended on the data

⁴ Data prior to 2017-18 (academic session) was not available in the SAMS portal maintained by Government of Odisha due to which two years data was taken

⁵ Gross Enrolment Ratio (GER) in Higher education in India is the ratio of population in the 18-23 age group to the number of people enrolled in higher education. It is used to show the general level of participation and capacity of higher education

from the AISHE reports which are reliant on the participation of the HEIs in the survey. A comparison of the GER of Odisha *vis-a-vis* national GER and best performing UT/State is given in the table below:

Table 4.4: GER of Odisha vs. Highest GER State and National GER

Year	GER of Odisha	Percentage of Growth in comparison to previous year	GER of Highest performing UT/State	National GER	Odisha Ranking of GER
2014-15	17.7	--	50.6 Chandigarh	24.3	26
2015-16	19.6	10.73	56.4 Chandigarh	24.5	25
2016-17	21.0	7.14	56.1 Chandigarh	25.2	23
2017-18	22.0	4.6	57.6 Chandigarh	25.8	22
2018-19	22.1	0.45	53.9 Sikkim	26.3	24

(Source: AISHE Report for the above years)

During the last five years, there has been a slight increase in GER (by 4.4 Point) between 2014-15 and 2018-19. The growth rate of GER compared to previous years had slowed down from 10.73 *per cent* in 2015-16 to 0.45 *per cent* by 2018-19. There was a continuous increase in the rank of Odisha in respect to GER from 2014-15 to 2017-18 which shows a rise of four ranks, but a slight decrease of two ranks in 2018-19 as compared to 2017-18. The GER of the State also remained less than the National GER during this period.

Government stated (September 2020) that DHE maintained its own UG students' data in SAMS since 2012 and this is supplemented by AISHE data. It further added that a very few colleges did not take part in AISHE survey and their non-participation did not have much impact on the GER.

The reply given by the Government is not satisfactory as the GER needs to be calculated, taking into consideration not just the UG, but also the PG level courses⁶. Further, as noted by Audit, there were a significant number of HEIs that did not participate in the AISHE survey (198 General and 82 Sanskrit colleges). The fact, therefore remains that, Government had not developed any specific plans to improve the GER of the State which continued to remain below the National GER during 2014-19.

4.2 Ensuring Equity in Higher Education

Para 21.239 of 12th Five Year Plan document stated 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

⁶ Enrollment data at PG level from the year 2020-21 only was available in the SAMS database

Other Backward Classes (OBCs) will be critical for enhancing their inclusion in the mainstream of higher education. Further, as per Para 2.2.2 (a) of the Report on ‘Inclusive and Qualitative Expansion in Higher Education’, the 12th Five Year Plan shall aim at complete elimination of gap of men and women in access to Higher Education.

Audit observation about aspects related to increase in GER of disadvantaged groups and efforts made by test checked institutions including strengthening of SC/ST Cell, organising gender equity promotion programs, etc., are discussed below.

4.2.1 Gross Enrolment Ratio of disadvantaged groups

SCs, STs, OBCs, minorities, disabled, and women have generally been considered as the disadvantaged sections of our society and many policies and schemes target their enhanced enrolment in higher education. Category wise GER is the most common metric used to assess the improvement in enrolments of these sections and the effectiveness of measures targeted towards such improvement.

Further, to assess efforts of the State Government in this regard, *increase in Category-wise Gross Enrolment Ratio with respect to All India Ratios/targets during 2014-19 was used as an indicator (Sl. No 15 of Appendix 2).*

Audit observed that GoO had not maintained the data regarding GER of the disadvantaged groups like SC/ST and women categories (parity index) and depended on the data published in AISHE Report of MHRD. The details of GER of disadvantaged sections as per AISHE Reports for the period from 2014-15 to 2018-19 are given in the table below:

Table 4.5: GER of SC and ST category and Gender Parity Index

Year	GER of SC category		GER of ST category		Gender Parity Index ⁷					
	All India	Odisha	All India	Odisha	All India			Odisha		
					All	SC	ST	All	SC	ST
2014-15	19.1	12.2	13.7	7.9	0.92	0.91	0.81	0.81	0.79	0.77
2015-16	19.9	14.7	14.2	9.4	0.92	0.91	0.83	0.83	0.78	0.77
2016-17	21.1	17.4	15.4	11.3	0.94	0.93	0.85	0.82	0.73	0.74
2017-18	21.8	18.8	15.9	12.5	0.97	0.96	0.87	0.85	0.73	0.75
2018-19	23.0	20.0	17.2	12.8	1.00	1.02	0.92	0.82	0.76	0.78

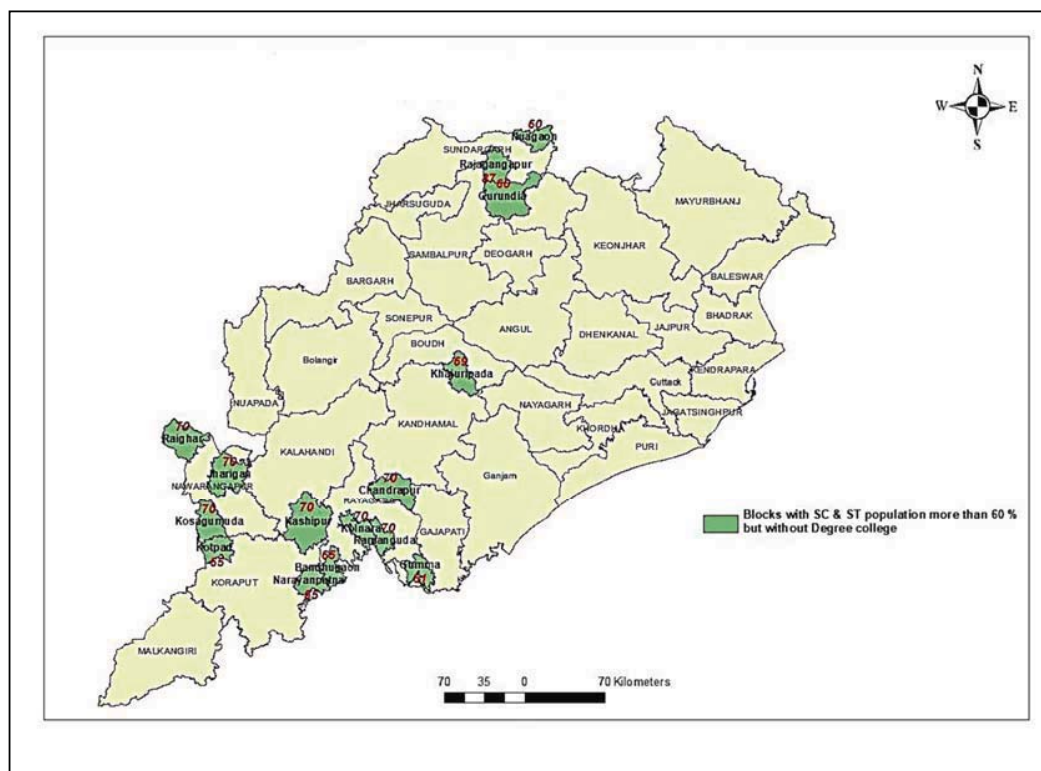
(Source: AISHE Report)

Population of SC (17.13 per cent) and ST (22.85 per cent) categories constitute about 40 per cent of the total population of the State. Despite such huge population of SCs and STs, the GER and Gender Parity Ratio of these

⁷ Gender parity Index is the ratio of number of female students enrolled to the number of male students enrolled

categories remained below the national average. In this context, Audit observed that 15 blocks of six districts⁸ with more than 60 per cent SC and ST population have no degree colleges, (as depicted in the map given below), contributing to low GER of these disadvantaged groups.

Chart 2: showing Blocks having SC/ ST population more than 60 per cent of total population but without any Degree college



The GER of SC and ST category people for the year 2018-19 had remained at 20 and 12.8 against the National average of 23 and 17.2 respectively, and was also lower than the overall GER (22.1) for the State.

Overall Gender parity index of Odisha increased from 0.81 to 0.82 only, against all India increase from 0.92 to 1.00 during 2014-15 to 2018-19. The Gender Parity Index for the SC and ST category in Odisha remained far below the National index for these two categories. Further, the overall Gender Parity Index for Odisha during 2014-19 also remained low (between 0.81 to 0.85). This can be linked to the skewed geographical distribution of HEIs wherein a number of blocks in districts with majority SC/ST population remained without a Government degree college.

In view of the poor Gender Parity Index of the State, planned efforts for enhancing GER of female students across the disadvantage categories need to be undertaken and sustained over a long period of time. Continuous, sustained

⁸ Gajapati-1 (Gumma), Nabarangpur-3 (Jharigram, Kosagumuda and Raighar), Rayagada-4 (Chandrapur, Kolnara, Ramanguda and Kashipur), Koraput-3 (Bandhugaon, Kotpad and Narayanpatna), Sundargarh-3 (Gurundia, Nuagaon, and Rajgangpur) and Kandhamal-1 (Khajuripada)

efforts need to also be made, to carry on with the improvement in the overall GER for disadvantaged groups and bring it above the National average.

4.2.2 Institutional mechanisms to assist disadvantaged groups

Report on 'Inclusive and Qualitative Expansion in Higher Education' issued under 12th Five Year Plan (Paragraph 6.1.2) envisages that SC/ST/OBC Cells (Community Education Development Cell (CEDC)) should be formed in HEIs for monitoring intake of students, performance, capacity building efforts along with intake in faculty and administrative staff from deprived social groups. As per 'Guidelines for scheme of equal opportunity cell', issued by the UGC under the 12th Five Year Plan, an Equal Opportunities Cell (EOC) should be set up in universities to run specific schemes for coaching of SC/ ST/ OBC/ Minorities to enhance employability and success.

On scrutiny of records of two universities and test checked colleges, Audit observed the following:

Utkal University and test checked colleges

While an EOC was functioning at Utkal University, there was no CEDC Cell in place. In the 24 test checked colleges of the University, the CEDC was formed in only seven (29 *per cent*) colleges whereas no Cell was formed in 16 of the 24 colleges. One college (Dhenkanal Autonomous College) did not furnish any information regarding formation of the Cell.

To safeguard the interests of SC/ST/OBC/Minority, during 12th Five-Year Plan, UGC had made a provision for financial assistance of ₹5 lakh as a non-recurring grant and ₹7 lakh as a recurring grant (2012-17) to the Universities. This grant was to be used for a scheme for organising remedial classes to improve academic skills and linguistic proficiency of the students in various subjects, strengthening knowledge/ skills/ attitudes, *etc.*

Although, Utkal University stated that they had held remedial classes in some departments, details regarding number of classes held, number of students who participated, subjects on which classes were conducted, *etc.*, were not maintained. As a result, the University did not apply to UGC for this grant that could have been used for the benefit of students of these disadvantaged categories.

While accepting the Audit observation, Utkal University assured to provide remedial coaching facility to students of deprived/educationally weaker sections and also to apply to UGC for the grant for remedial classes.

North Odisha University and test-checked colleges

The University had set up both the EOC and CEDC for SC/ST/OBC students. However, five out of eight (63 *per cent*) test checked colleges of the University did not have the SC/ST/OBC Cells in place.

Due to non-constitution of SC/ST/OBC Cells in most of the colleges, the students belonging to disadvantaged sections in the test checked universities and colleges were not proactively made aware of all the initiatives and programs for increasing student's strength, capacity building, enhancing performances, *etc.*, as envisaged in the guidelines. Further, due of lack of these

EOC and CEDC cells, single point monitoring of the intake, performance, *etc.*, of SC/ST/OBC students could not be carried out.

4.2.3 Gender equity promotional programs and gender sensitive facilities

NAAC evaluates the performance of an institution on promotion of gender equity and sensitivity and considers it as a key indicator of 'Institutional Values'. Underscoring this is the fact that during accreditation of a higher educational institution, an HEI's initiatives in terms of the number of gender equity promotional programs (sexual harassment and violence against women, women's right and access to criminal justice, legal awareness about women related laws, *etc.*) organised and gender sensitivity facilities (safety and security, counseling and common room, *etc.*) being provided, are assessed.

On scrutiny of records/ information provided by the test checked Universities and colleges, Audit observed the following:

Utkal University and test checked colleges

During 2018-19, nine gender sensitisation programs were conducted by the University, wherein 678 students participated. No gender sensitisation programs were conducted during the period from 2014-15 to 2017-18.

Out of 24 test checked colleges, gender awareness programs were conducted only in three⁹ colleges during 2014-19. A total of 391 students participated in these programs.

North Odisha University and test checked colleges

During 2016-17, one gender sensitisation program was conducted by the University wherein 100 students participated. No gender sensitisation programs were conducted during the years 2014-16, 2017-18 and 2018-19.

Of the eight test checked colleges, only one college (Baripada college) conducted three gender awareness programs in which 182 students participated. No other test checked colleges had organised any Gender sensitisation programs.

Thus, it is a matter of concern that only a few HEIs conducted gender equity promotional awareness programs. The State should take effective steps like issue of suitable instructions, strengthening grievance redressal system and provisions of funds for conducting gender equity programs, *etc.*, to enhance performance of the HEIs with respect to this criterion.

While accepting the Audit observation, Government stated (September 2020) that Universities would be instructed to develop web-based grievance registering facility very soon.

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

⁹ P.N. College Bolagarh (three programs, 211 students), Rajdhani College, Bhubaneswar (two programs, 80 students) and SMS College, Puri (one program, 100 students)

scholarships/free-ships factors that contribute towards making higher education affordable.

4.3.1 Uniform 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.

In spite of these specific provisions given in the regulations, fee structure was decided by the test-checked affiliated colleges on their own. Both Utkal University and North Odisha University did not approve fees structure for their affiliated colleges except under few categories like examination fees, center charges, issue of provisional certificates, enrolment fees, fees for marks, supervision fees, late fees *etc.* There was also no system in place either at the level of the University or the DHE to monitor the fees being charged by various affiliated colleges.

As a result, there was no uniformity in the fees being charged by various colleges of a University with typically, non-government charging higher fees from students. A comparison of course-wise annual fees charged by the test checked Government and Non-Government colleges from the students are given in the table below:

Table 4.6: Range of annual fees charged in Government & Non-Government Colleges

Name of the courses	Range of annual fee charged in 4 test checked Government colleges (Amount in ₹)			Range of annual fee charged in 28 test checked Non-Government colleges (Amount in ₹)		
	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
BA	881-2042	991-2042	1,082-2210	1,876-6015	1,876 - 7700	2,400- 9000
BSc	902-2042	1,022-2042	1,113-2263	2,952-9000	3,125 - 9500	3,661- 9520
B.Com	872-2042	982-2042	1,073-2190	2,399-6000	2,572 - 7700	3,453- 9000

(Source: Data furnished by test checked colleges)

It was observed that under the two universities (Utkal University and North Odisha University), four test checked government colleges had charged annual fees ranging from ₹1,073 to ₹2,263 per annum for BA, B.Sc, B. Com while 28 test checked non-Government colleges charged annual fees ranging from ₹2,400 to ₹9,520 for the same courses during 2018-19. The average annual fees charged in non-Government colleges was higher by 198 *per cent* in Arts stream, 289 *per cent* in Science stream and 206 *per cent* in Commerce stream, than the fees charged by Government colleges for the same streams for the year 2018-19. The break-up of the fee structures also showed that the non-Government colleges were charging higher fees in the name of development fees. Thus, in absence of adoption of any mechanism for monitoring the fee structure, Non-Government colleges charged significantly higher fees as compared to Government colleges.

While admitting the Audit observation, Government stated (September 2020) that the aided colleges collect more fees for infrastructure and development activities of the colleges and for payment of salary to the teachers appointed by management.

The reply is not acceptable as the Universities did not take steps to review and approve the fee structure for all categories and their approval was limited to some categories of fees only. Further, there were 263 blocks of the State,

where only non-Government HEIs exist and students in these blocks would perforce be dependent on these institutes, with a higher fee structure for their educational needs, impacting the goal of equity in access to affordable education.

4.3.2 Scholarships/freeships

As per para 6.1.2 (c) of Report on ‘Inclusive and Qualitative Expansion in Higher Education’ issued under the 12th Five Year Plan, for enhancing participation of SC/ST/Minorities, scholarships and fellowships for students of SC/ ST/ OBC/ Minorities may be enhanced at all levels. Further, under the key indicator of ‘Student Support and Progression’, NAAC assesses the average percentage of students benefited by scholarships and freeships¹⁰ during assessment and accreditation of HEIs.

At University and college level, five types of scholarship schemes are under implementation by the DHE, Government of Odisha, as detailed in table below:

Table 4.7: showing details of scholarship schemes implemented by HE Department

Name of the Scholarship	Beneficiaries	Period	Amount in ₹
E-Medhabruti	Undergraduate students of lower income strata of all categories (parental income less than six lakh)	Three years	5,000 per annum
	Post Graduate students of lower income strata of all categories (parental income less than six lakh)	Two years	10,000 per annum
Vyasakabi Fakir Mohan Bhasabruti	Meritorious students of Undergraduate Odia (Hons.) and Post Graduate Odia Students of all categories.	One time	20,000
Gopabandhu Shikshya Sahayata Yojana	Only for underprivileged students (HIV affected family, destitute, children of single mother, etc.) both at UG & PG level	Annual (three years for UG courses and two years for PG courses)	20,000 per annum
PG Merit scholarship	Post Graduate students (University rank holder of Undergraduate exam) of all categories	Two Years	3,100 per month
PG Merit scholarship for single girl child	Post Graduate students of all categories (parents having single girl child)	Two Years	3,100 per month

(Source: Records of Higher Education Department)

Besides, another Scholarship scheme ‘PRERANA’ is also implemented for the SC/ST/OBC students of both UG and PG levels by the SC/ST Department.

¹⁰ Freeship means full or partial waiver of fees

The scholarship amounts are different for different categories of students¹¹.

So, to assess the efforts made by test checked institutions in encouraging students to avail benefit of scholarship and freeship schemes of government and in implementing these schemes, *average percentage of students benefitted by scholarships and freeships by the Government during 2014-19 was used as an indicator (Sl. No. 16 of Appendix 2).*

Scrutiny of information provided by two test checked universities and 32 test checked colleges revealed the following:

Utkal University and test checked colleges

On an average, 22 *per cent* of the total students enrolled in the University benefitted from scholarships during 2014-19. In 24 test checked colleges, 30 *per cent* students of the total enrolled students availed scholarships during 2014-19. Under freeship scheme, no students of the University and the test checked colleges benefitted during the above period.

North Odisha University and test checked colleges

In the University, on an average 26 *per cent* of the total enrolled students benefitted from scholarships during 2014-19. Similarly, 31 *per cent* of the total enrolled students in eight test checked colleges benefitted from scholarships. In all the cases, no students had availed any benefit under freeship scheme during this period.

During accreditation of universities, NAAC awarded maximum marks for the indicators stated above, to the institutions where an average 40 *per cent* of enrolled students get scholarship and freeships. Both the universities are far from getting maximum grade points and need to take concrete steps like increased publicity for these schemes, in order to improve coverage under such scholarships and freeships.

4.4 Good Infrastructure

As per RUSA-2.0 guidelines, the critical infrastructures were technologically enabled classrooms, automation of Library, availability of e-resources, adequate classrooms, auditorium, sports facilities, hostel (separate for boys and girls) and toilets (separate for boys and girls), converting existing buildings to disabled friendly, *etc.*

Some of these aspects were assessed during audit and the related observations are discussed in the following paragraphs.

4.4.1 Availability of ICT facilities

Use of ICT in teaching has been discussed in detail in Chapter 3 of this report. In this section, we discuss the availability of the inputs that are required to enable faculty to utilise ICT as a tool of imparting education. This is also one of the key indicators used by NAAC during assessment and accreditation process of HEIs.

¹¹ For UG Courses - SC/ST- ₹300 per month, OBC – ₹210 per month, for PG Courses – SC/ST- ₹530 per month, OBC- ₹335 per month for maintenance allowance

To assess the efforts made by test checked institutions to encourage advanced teaching methods through the use of ICT, (i) *percentage of classrooms/seminar halls with ICT-enabled facilities such as smart class, Learning Management System, etc., during 2018-19* and (ii) *Student Computer ratio (during 2018-19) were used an indicator (Sl. No 17 and 18 of Appendix 2).*

4.4.1.1 ICT enabled classrooms

Paragraph 21.265 of 12th Five Year Plan focuses on use of ICT in higher education by providing smart classrooms and setting up classrooms with interactive video-conferencing facilities, linking Meta universities and affiliating universities. Further, the State Government also provides grants to government colleges for setting up of smart classrooms. The position of IT enabled classrooms in two test checked universities is given in the table below:

Table 4.8: ICT enabled classrooms in the test checked Universities

<i>Name of the University</i>	<i>Total number of classrooms</i>	<i>ICT enabled classrooms (Percentage)</i>	<i>Number of students as of March 2019</i>	<i>Number of Computers</i>	<i>Student-Computer Ratio</i>
Utkal University	103	60 (58)	2293	461	5:1
North Odisha University	45	20 (45)	780	200	4:1

(Source: Data furnished by Test checked Universities)

As seen from the table above, adequate numbers of computers were available in both the Universities, in comparison to NAAC norms of 10:1. However, the universities failed to get maximum grade points in respect of ICT enabled classrooms as they could not achieve the NAAC norm of more than 80 *per cent* IT enabled classrooms.

In the test checked colleges of both the Universities, 449 out of 504 (89 *per cent*) classrooms were not ICT enabled and 687 (85 *per cent*) out of 805 teachers were not using ICT tools in the classrooms, depriving students of modern methods of imparting education as well as familiarising them with use of ICT. Further, 11 colleges had no IT infrastructure for the use of the students and in remaining 21 colleges, the number of PCs available ranged between two to 87. In these colleges, the student to computer ratio was in the range of 15:1 to 516:1 (*Appendix 3*) and needs to be substantially improved.

Thus, all the test checked colleges were not sufficiently equipped with ICT facilities and were far from achieving the NAAC accreditation norm and improving the quality of education being imparted by using modern methods of teaching.

4.4.2 Availability of buildings, libraries, etc.

Buildings, classrooms, laboratories and equipment are crucial elements of learning environment in universities and colleges. Sufficiency of infrastructure was evaluated in audit on the basis of norms fixed by UGC for affiliation of colleges as per UGC (Affiliation of Colleges by University) Regulation, 2009.

The Regulation specifies requirements of buildings, library, and laboratories, etc.

Audit observed that both Utkal and North Odisha Universities had adequate class rooms and laboratory facilities. These Universities, however, lacked efficient library¹² facilities and the libraries were not computerised. There was no Radio Frequency Identification Device (RFID) system in Utkal University for identification of user, theft protection and automation of book transactions. In North Odisha University, although a RFID system had been procured, the same was lying defunct since March 2018.



UGC guidelines (2009) specify that there should be a minimum of 15 square feet available per student for provision of classrooms. In this regard it was noted that 10 out of 32 test checked colleges did not have adequate classrooms in place.

All the 22 test checked colleges that had a Science stream, had the required laboratories.

4.4.2.1 Physical infrastructure for differently abled students

The Persons with Disabilities (PwD) Act 1995 indicates that differently abled persons should have access to education at all levels. Para 2.2.2 (c) of Report on ‘Inclusive and Qualitative Expansion in Higher Education’ issued under 12th Five Year Plan envisages improvement in basic infrastructure facilities to enable access for differently abled students to all institutions of higher education. Further, during accreditation of an institution, NAAC considers availability of physical facilities such as lifts, ramps/rails, Braille software, restrooms, scribes for examinations, skill development, etc., in an institution.

RUSA 1.0 guidelines (2013-18) envisaged conversion of all the existing buildings into fully disable friendly buildings to improve access, ensure special facilities/equipment for the disabled students, to make the campus disabled-friendly, and provide special facilities/equipment for the disabled.

The number of PwD students in Odisha is given in the table below:

Table 4.9: Statement showing number of Persons with Disability (PwD) students in Odisha

Year	Male	Female	Total
2014-15	661	389	1050
2015-16	757	517	1274
2016-17	961	520	1481
2017-18	967	600	1567
2018-19	1158	803	1961

(Source: AISHE Reports)

¹² Availability of books, periodicals, journals both offline and online for students and faculties, computerisation of libraries, use of RFID system for identifying users, etc.

Audit observed that though the number of PwD students in HEIs had been gradually increasing, yet the colleges and universities were not equipped with the required facilities for them. Availability of infrastructure for PwDs in test checked HEIs is discussed below:

Utkal University

As per information provided by the University, almost 80 *per cent* of the buildings were disabled friendly. Audit, however, test checked nine departments¹³ out of 27 departments, all of which were housed in individual buildings and observed that no facilities like ramps, lift, rest rooms, Braille software, accessible website *etc.* for the PwD students were available in six departments (Botany, Chemistry, Library and Information Science, English, Odia and Public Administration) indicating that the physical infrastructure for PwDs available in the University as a whole, was not adequate.

While noting the Audit observation, the University assured to follow the provisions of Disability Act 1995, RUSA guidelines and instructions of the Government in this regard.

North Odisha University

As per information provided by the University, 60 *per cent* of the buildings are disabled friendly while adequate disabled friendly infrastructure had not been made available in the remaining 40 *per cent* of the buildings as per NAAC/UGC guidelines.

Test checked colleges

In the 32 test checked colleges physical facilities like lift, braille/sign board, audio books, sign language, accessible website were not available for PwD students. Ramps were available in only eight colleges, rest rooms in three colleges and only two colleges had facilities for accessible study materials.

Further out of 32 colleges only nine colleges had 216 PwD students. Out of nine colleges three colleges¹⁴ had 60 PwD students but no facilities for them and six college had only ramp and allowed scribes at the time of examination.

Thus, HEIs in the State were not making satisfactory efforts to provide basic infrastructure facilities to PwDs to enable them to access all educational institutions of higher learning and thus achieve the desired outcome of equity in access to education.

4.4.3 Funding for infrastructure

For filling critical infrastructure gaps in higher education by augmenting and supporting the efforts of the State Government, funds were provided through RUSA. The latter provides infrastructure grants to universities and colleges for upgrading the existing infrastructure by way of new construction, renovation or purchase of equipment. The State Government also provides funds to colleges for improvement of their existing college buildings, establish smart classrooms and purchase computers. This is also one of the indicators used by

¹³ Chemistry, Odia, UDPS, Botany, Library & Information Science, Public Administration, Zoology, Physics & LLM

¹⁴ Dhenkanal autonomous college, P.N college, Bolagarh, and V.N (Autonomous) college

NAAC during the assessment and accreditation process of HEIs.

To assess efforts of the test checked universities in this regard, *Average percentage of budget allocation, excluding salary for infrastructure augmentation during 2014-19 (Sl. No. 19 of Appendix 2) was used as an indicator.*

The position of total budget allocation (excluding salary), expenditure on infrastructure, etc., in Utkal University, North Odisha University during 2014-19 is given in the table below:

Table 4.10: Budget allocation and expenditure on infrastructure (excluding salary) (₹ in crore)

Name of university	Year	Budget allocation	Expenditure		Expenditure on infrastructure with respect to budget allocation excluding salary (in per cent)
		Budget allocation (excluding salary)	Total expenditure (excluding salary)	Expenditure for infrastructure	
Utkal University	2014-15	77.18	32.47	11.67	15.12
	2015-16	50.33	43.46	14.84	29.48
	2016-17	37.51	35.44	10.07	26.84
	2017-18	50.90	40.86	6.93	13.61
	2018-19	Not prepared			
Average		53.98	38.05	10.88	21.26
North Odisha University	2014-15	106.49	20.40	14.43	13.55
	2015-16	101.53	13.96	6.14	6.05
	2016-17	99.13	23.75	9.45	9.53
	2017-18	136.09	17.66	9.57	7.03
	2018-19	142.36	19.57	9.18	6.45
Average		117.12	19.06	9.75	8.52

(Source: Information provided by Utkal University and North Odisha University)

Analysis of data provided by the two test checked universities showed that the average percentage of expenditure on infrastructure with respect to total budget allocation excluding salary was 21.26 per cent (Utkal University) and 8.52 per cent (North Odisha University) during 2014-19.

Out of 24 test checked colleges under Utkal University, 16 had given information in which the average percentage of expenditure on infrastructure with respect to total budget allocation (excluding salary), ranged from three to 70 per cent. Similarly, four out of eight test checked colleges under North Odisha University had furnished data, according to which the average percentage of expenditure on infrastructure compared to total budget allocation (excluding salary), was in the range between 12 per cent and 48 per cent.

NAAC awarded maximum score to the institutions where an average 20 per cent and above of budget allocation excluding salary is meant for infrastructure augmentation during the last five years. Thus, as per NAAC benchmark, Utkal University was eligible to get maximum marks whereas North Odisha University was not eligible for scoring maximum marks.

Insufficient development of infrastructure at University and college levels also impacts the quality of higher education being provided in these institutions as well as expected benefits envisaged from such education.

Summing up and Recommendations

The College Density in Odisha remained stagnant at 23 during 2011-19. Government of Odisha neither prepared any Master Plan for opening of new colleges nor did it undertake any geographical mapping to identify regions/blocks that were lacking higher education facilities. Till date of Audit, three districts and 263 Blocks of the State did not have a Government HEI. In the State, 19 blocks were devoid of any kind of HEI and only 12 *per cent* of Government colleges were present in rural areas exemplifying the non-uniform spread of HEIs in the State.

GER registered only a slight increase in GER (by 4.4) during 2014-15 and 2018-19 highlighting the fact that more sustained efforts are required on the part of the State Government and the HEIs. The GER of SC and ST category were 20 and 12.8 respectively which were lower than the State GER of 22.1. There were 15 blocks in six districts of the State where the SC/ST population was more than 60 per cent but where no degree colleges existed.

Also, the Government was solely dependent on AISHE for GER and did not have its own mechanism to monitor or calculate GER.

Only six test checked HEIs conducted gender equity promotional awareness programs.

The Universities did not approve fees structure for its affiliated colleges in contravention to the UGC guidelines leading to a significant difference between the fee structure of government and non-government HEIs, denying equitable access to higher education for all.

Infrastructure facilities for the PwDs like ramp was available only in eight test checked colleges and in none of the test checked colleges other facilities like, Braille signboard, audio books, sign language, accessible website, *etc.*, were available. Expenditure on creation of infrastructure with respect to total budget allocation remained low especially, in North Odisha University.

Recommendations:

- In order to improve GER, the State Government may undertake a detailed assessment and prepare a Master Plan for establishment of HEIs to address rural-urban divide and inequities in access to higher education, especially by disadvantaged groups.
- In order to make higher education affordable, the State Government may regulate fee structure of the Non-Government colleges particularly in areas which are devoid of Government HEIs and dependent on non-Government HEIs.
- In order to provide quality education in colleges, the State Government may provide prescribed basic infrastructure in Government and non-Government colleges especially to persons with disabilities.
- The funds allotted specifically for creation of infrastructures in HEIs may be spent for the said purpose on priority basis.