

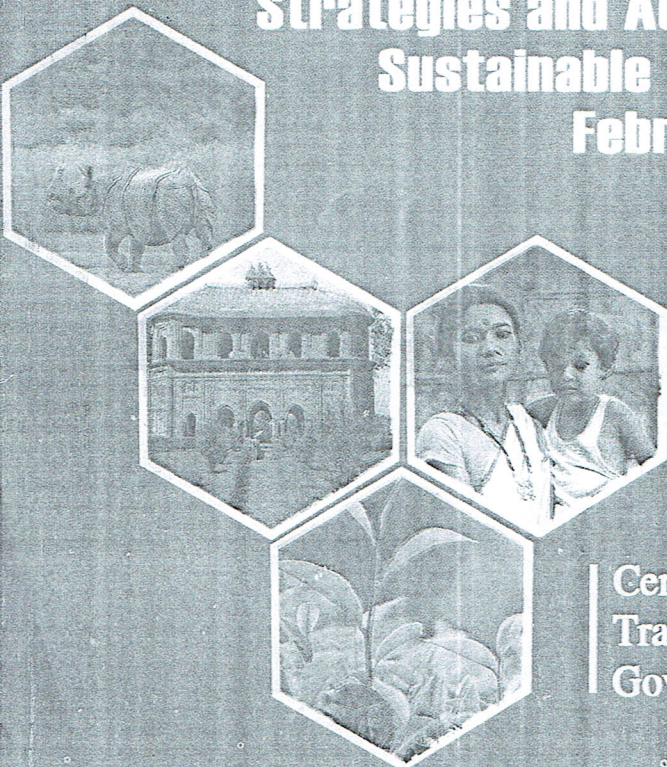


Government of Assam

# ASSAM AGENDA : 2030



**Strategies and Actions for Achieving the  
Sustainable Development Goals  
February 2018**



Centre for Sustainable Development Goals, AASC  
Transformation and Development Department  
Government of Assam

## Chapter 3: Promoting inclusive and quality education for all

**Goal 4:** Ensure inclusive and quality education for all and promote lifelong learning opportunities for all in Assam by 2030.

### 1. Introduction

This chapter discusses the Sustainable Development Goal 4 on inclusive and quality education. Consistent with this Goal, the Government of Assam has adopted a vision of ensuring by 2030 that “all children (will be) in school and (experiencing) learning with quality within and outside schools, “signifying its determination to achieve universal access to inclusive and quality education from at all levels of education from primary to tertiary and achieving ‘*Sabka Saath, Sabka Vikas*’. Education is the main driver of development, especially in achieving all the other SDGs as well. Education plays a key role in eradicating poverty, generating decent work, raising incomes and workers’ productivity that fuels economic development. It creates opportunities for human development and is also a means of achieving gender equality, by empowering girls and women to fully participate socially, politically, and in the work force. Education also contributes to improving health, especially in combating diseases, malnutrition, and improves maternal and child care amongst others.

Assam ranks low in education attainments, finishing 30th among 35 states and union territories in the composite educational development index (EDI)<sup>15</sup> in upper and lower primary levels taken together for the year 2013-14 in the country. Identifying where schools are failing to meet their commitments to children, is vital to formulate appropriate actions towards addressing education gaps. There are over 47,000 primary schools in Assam with 54,32,053 children enrolled in 2015-16<sup>16</sup> and 1,06,646 children who are out of school – roughly 1.9% of the total population of children in the age group of 6-14 years.<sup>17</sup> The Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) at upper primary levels for the state is 80.7 and 67.5 respectively. The GER and NER again both fall considerably at secondary levels with 74.6 and 53.5 respectively indicating relatively poor enrolment levels as children move from primary to secondary.<sup>1</sup> In higher education, GER is lower still at 16.8% which is also far below the national goal of 32%.

Currently the Government is pursuing many programmes at all levels of education. In 2014, the Government of Assam rolled out the National Early Childhood Care and Education (ECCE) Policy recognizing the importance of investing in Early Childhood Development and its impact on lifelong development and on breaking the inter-generational cycle of inequity. There are critical gaps in the quality of pre-primary/early childhood education (ECE) programmes, gender differences in preschool/primary school participation, both with respect to government-run Anganwadi Centres (AWCs) and private preschools, with low school readiness levels in children, particularly cognitive and language skills required for school. Issues related to lack of appropriate curriculums, learning materials, funds and convergence of all departments need to be addressed.

In school education, the Government is vigorously implementing the Right of Children to Free and Compulsory Education Act 2009 which mandates that every child in India aged 6 to 14 years has the right to quality, inclusive and child friendly education. Nevertheless, there are still 106,646 out of school children (OOSC) as of 2015-16 of which 69,862 are at lower primary level and 36,784 at upper primary level. Assam envisions a total elimination of out of school children by 2030. The

<sup>15</sup>EDI comprises of The EFA Development Index (EDI) is a composite index using four of the six EFA goals, selected on the basis of data availability. The goals are: Universal primary education (UPE), Adult literacy, Quality of education and Gender. For information: <http://en.unesco.org/gem-report/education-all-development-index>

<sup>16</sup>U-DISE ‘School Education in India Report’, 2015-16

<sup>17</sup>SSA Assam, 2015-16

quality of school education also remains very poor. According to ASER estimates in 2016, only 49.5% of children in standard III to V could read a standard I text while only 34.9% of them could do simple subtraction; and amongst children studying in Class VI-VIII, only 54.7% could read at least Std. II text and only 22% could do simple division. Moreover, as per National Achievement Survey, conducted by MHRD, 63% and 66% of Class III students could successfully answer questions on Language and Mathematics respectively while only 47% and 53% of Class V students respectively could do the same. To improve the quality of learning areas of priority are teacher training, absorption of more teachers into the system, need for technological upgradation and use of ICT tools and improving community involvement.

In higher education, access and quality are issues too. Developing outcome based learning processes through courses which promote employable manpower, appropriate infrastructure for promoting these forms of learning along with adequate human resources for teaching are critical at this level. In technical education, the Government is determined to give access to technical education to all corners of the state by establishing more technical institutions in the state and upgrading the existing ones to national level institutions. The Government proposes to expand the number of Engineering Colleges from 4 to 10 and Government Polytechnics from 10 to 31 by 2020. Establishment of a Women's University, a Science and Technology University, introduction of skill development initiatives by community colleges, expansion of Engineering Education through the private sector and constituent colleges of Universities, and undertaking Collaborative Research Projects with University of Melbourne, and Curtin University are some other recent initiatives.

## 2. Indicators and targets

Table 3.1: Early Childhood and Elementary education indicators: baselines and targets

Indicators	Baseline (2016-17)	Target (2019-20)	Target (2023-24)	Target (2030-31)	Remarks
Proportion of age 3+ pre primary children being provided ECE	49.80(2008)	58.20	84.20	100.00	
GER (upper primary)	80.75	85.25	100.00	0	GER & NER of Lower Primary level has already been achieved. However, GER & NER target has been fixed for Upper Primary level.
NER (upper primary)	67.54	72.54	100.00	0	
Proportion of OoSC (%)	1.91		1.00	0.00	
Dropout rate		12.4	8.4	0.00	
Lower primary	15.4	8.5	6.0	0.00	
Upper primary	10.5				
Retention rate		74.75	81.75	100.0	
Lower primary	68.75	91.40	94.4	100.0	
Upper primary	87.40				
Learning outcomes (lower primary)					
L-I		72	100	100	
Math	53				

EVS	61	72	100	100
	51	65	100	100
Learning outcomes (upper primary)				
L-I				
Math	58	65	100	100
Science	38	57	100	100
	45	60	100	100

Source: DISE 2015-16

Table 3.2: Secondary education indicators: baselines and targets

Indicators	Baseline (2016-17)	Target (2019-20)	Target (2023-24)	Target (2030-31)
GER	74.62	81.82	87.12	100.00
NER	53.5	66.3	76.3	100.0
Dropout rate	17.0	12.0	8.0	0.0
Retention rate	79.4	85.2	89.6	100.0
Learning outcomes NAS 2015 Score (core subjects)	38.0	55.0	100	0
Vocational enrolment (proportion of secondary enrolment)	2.0	5.00	12.00	25.0

Source: DISE 2015-16

Table 3.3: Higher Education indicators: baselines and targets

Indicators	Baseline 2016-17 to 2018-19	Target 2019-20 to 2021-22	Target 2022-23 to 2024-25	Target 2030-31
Population	35408292	37214114	39112034	42436556
Population of ages 18-24	2393773	2515855	2644164	2855697
Enrolment	402154	628963	793249	999493
Number of Universities	12	15	18	21
Number of Colleges	301	311	315	325
Number of Teachers	12972	20962	22664	24987
PTR	31	30	30	40

Source: Department of Higher Education Data

Table 3.4: Technical Education indicators: baselines and targets

Indicators	Baseline (2016-17)	Target (2019-20)	Target (2023-24)	Target (2030-31)
No of Govt. Engineering Colleges	04	10	10	-
Intake	1095	2175	2175	-
No of Polytechnics	10	31	31	-
Intake	1545	5325	5325	-
No of Community Colleges	06	31	35	35
Intake	1100	6200	7000	7000

Source: Department of Technical Education data

### 3. Major strategic interventions proposed

#### A. Expanding access to education for all

Education for All requires ensuring that all children have access to basic education of good quality. The Government of Assam is determined to achieve this vision. To achieve this vision, it will create an environment in schools and in basic education programmes in which children are both able and enabled to learn. Such an environment will be inclusive of children, effective with children, friendly and welcoming to children, healthy and protective for children and gender sensitive. Quality education will be achieved by improving learning outcomes, through strengthening inputs for education, processes and evaluation of outcomes and mechanisms to measure progress. Special attention will be paid to the following areas.

**i. Focus on Early Education Interventions:** Good quality education is the first step towards lifelong learning processes. The Government will accordingly emphasise on all the seven components UNOCEF considers critical for developing early education namely 1. Physical learning environment, 2. Teaching and learning processes, 3. Teacher quality, 4. Curriculum, 5. School readiness outcomes, 6. Leadership, 7. Parent and community involvement

**ii. Bringing all Out of School Children (OOSC) within schooling.** As highlighted in the Introduction to this chapter, over one lakh children of primary school going age remained out of schools, of which around two-thirds of OOSC were in lower primary and one third in upper primary levels. All efforts will be made to bring all these children into the school system so that by 2030 none are left out.

**iii. Inclusive schooling.** Making efforts to include all sections of the student population is essential for ensuring access to education for all. The Government will make school environments and curriculum appropriate for the ethnic and cultural backgrounds of the students and promoting sustainability as a core element in the educational platforms. Continued efforts to encourage secondary schooling and tertiary education of women will continue to be made to ensure gender parity at all levels of education by 2030. Special efforts to include students with disabilities will also be made. Provisions will be made in every school to cater to the needs of students with disabilities. Regulations for both public and private schools will mandate creation of disabled friendly infrastructural facilities (such as toilets/ classrooms etc.) Provision for specialised teaching for such children will also be available. The Government also plans to expand the hostels for women, SC/STs and persons with disability.

**iv. Ensuring rapid expansion of secondary school enrolment.** Vision 2030 in line with the SDGs envisions rapid expansion of enrolment in secondary education from a net enrolment ratio (NER) of a little over 50% currently to 100% by 2030. The Government is determined to meet this massive expansion target with provision required physical and human resources as needed (see Section 4 below).

v. **Expansion of higher and technical education.** In keeping with the SDGs, Vision Assam 2030 aims to expand access to higher and technical education to students in the state. A large expansion of higher and technical education institutions is therefore planned by the Government as shown in Tables 3.3 and 3.4 above.

vi. **Sports for health and joyful learning:** Sports is critical for nurturing young children's development and for joyful learning. An annual sports calendar in synchronization with the academic calendar for active participation of students in sports competitions and basic sports facilities in schools and colleges and making sports an integral part of the curriculum of schools would be prepared by January, 2019. In addition, in order to identify sports talent and develop sports skills, a scheme for advanced talent determination, and engagement of professional coaches for specific sports etc. will be taken up; and at least one teacher from each school trained as physical instructor by December, 2020.

vii. **Fostering partnerships in education to improve access.** To improve access in all levels of education, government plans to expand and strengthen partnerships. The Government will involve all stakeholders, including the Departments of Primary and Secondary Education, SSA, RMSA, SEBA, AHSEC in the process. To ensure greater private sector participation in the Technical Education sector, it is planned to set up an Industry Institute Partnership Cell (IIPC) to encourage co-operation between industries and technical institutions. Other actions include undertaking joint projects relating to specific state needs, and organizing industrial visits and training of students and faculty for technical education. Grant funders, foundations and donors who are interested will also be contacted and encouraged to support such efforts including scaling up research and innovations in universities and other educational institutions.

Of importance is **partnership with parents and communities** in delivering education. Involvement of parents and communities are particularly relevant for early childhood education and school education. The Government will make every effort to ensure greater involvement of parents and panchayati raj institutions (PRIs) and municipal governments so that no children are left out; providing better environments for pupils within and outside the schools; and better home environments for learning

## **B. Improving quality and efficiency of public services in education**

Education is of little value if it is of poor quality. The Government is determined to improve quality in a time bound manner as measured by the indicators set out in Tables 3.1 and 3.2 for school education. For higher and technical education too, the Government will establish monitorable quality indicators by December 2018 (such as dropout rates, teaching quality, adequacy of infrastructure, placement rates etc.) and use them to measure improvements in quality till 2030. At the same time, major efforts will be made to improve efficiencies in delivery of education services at all levels. The most critical interventions in these areas are discussed below.

i. **Improving quality and reducing dropout rates in school education:** As highlighted in the Introduction, the quality of school education remains very poor. Poor quality and lack of enabling school environments leads to poor regularity at school. Additionally, students may not be receiving needed attention from teachers, leading to learning challenges and drop-outs. To reduce drop-out rates the Government will strengthen the quality of education, provide support to students who are getting left behind through remedial or additional classes, and through para-teachers to provide additional support. This will ensure that all children get attention and quality education. Improving the quality of classrooms and facilities in schools especially clean water for all and separate toilets for girls and boys will also be emphasized. Nutritional supplements and access to transportation which are also critical for preventing dropouts will also be stressed. Students will also be provided with health services in schools are part of this objective.

**ii. Quality assurance of higher education institutions.** A State Assessment and Accreditation agency will be established in line of the NAAC to administer Academic and Administrative Audit (AAA) of Higher Educational Institutions in the State. The quality of individual teachers in higher education will also be tested regularly by developing standardised tests and improving quality of existing testing methods and creating additional certification processes to assess their capacities, knowledge and skills.

**iii. Human Resource (HR) expansion and capacity building:** Improving the adequacy and quality of teachers is essential for improving the quality of education. The Government will therefore develop by June 2024 a comprehensive HR policy covering areas of recruitment; transfer and development of teachers (including training in teaching, leadership skills and developing a learning conducive environment); creation of new and strengthening of existing Teacher's Training Institutes (DIET, TTIs, CTEs etc); recruitment and filling up of vacancies relating to administrative and technical positions; strengthening community engagement and participation. The number of Teacher Training Institutes (TTIs) will be increased from 61 currently to 87 by 2024 where trainers will be trained themselves as per global standards.

**iv. Curriculum development.** The Government intends to thoroughly review and revise textbooks and curriculums to make learning more interesting, enjoyable and useful. Useful of ICT and technological innovations will be actively considered also (see further in section on Technological Innovations). Curriculum and textbooks will be revised by 2020.

**v. Developing vocational and skills-based learning:** The Government will place special emphasis on quality vocational education to equip students with skills for specific skill intensive trades and occupations to meet labour market needs and reduce youth unemployment. Strategies to be adopted will focus on skills gap analysis, inclusive approach and developing appropriate policies and institutions to further skills development and employment. The vocational stream in secondary education will be expanded as indicated in Table 2 to reach a quarter of all secondary enrolment by 2030. Secondary schools and post-secondary technical institutions will have needed technical equipment and workshops to impart quality vocational education. Skills based learning beyond secondary level will include practical training and professional advancement courses which are professionally certified. The practical relevance of such vocational education and training will be chalked out with strong linkages to private organisations and in close partnership with them to ensure future employment. Sustainable financing models for the graduates of vocational education and training will also be developed. Special attention to skills and vocational training of girls and women will be provided. (A more detailed discussion on skills development is provided in Chapter 5 on Growth, Industry, Infrastructure and Employment).

**vi. Diversifying learning and expanding career choice:** Students enter schools/colleges with diverse interests and needs. The Government will therefore provide students more options for choosing between a variety of programmes and formats best suited for their needs. Government plans to introduce a larger number of Diploma and Certificate courses in engineering, technical and service sectors such as tourism, accountancy etc.

**vii. Infrastructure and facilities improvement:** Education infrastructure improvements to provide better learning environments and facilities will be pursued. Proper laboratories, libraries and computing facilities in schools and colleges, and toilets and drinking water facilities will be ensured. For higher education, existing infrastructure of universities and institutes will be upgraded simultaneously with increasing intake capacity. Similarly, in technical education, modernization of existing technical institutions will be pursued along with expanding the number of State Engineering Colleges/polytechnics.

**viii. School Safety.** In Assam which is prone to floods and faces earthquake risks, safety of schools and educational institutions is a priority of the Government. Creating safe conditions requires attention to three critical areas: 1) safe school environment and facilities; 2) disaster risk reduction in

schools and educational institutions; and 3) student protection in schools and educational institutions. A comprehensive policy framework covering these three areas along with functional institutional mechanisms will be developed by December 2030. All levels of the education sector will be covered and will be integrated with the state's overall disaster and emergency response mechanisms. **Developing Monitoring Framework:** Monitoring mechanisms which are existing will to be strengthened to better gather and analyse data to assess and monitor the quality and outcomes of education services, with a view to increasing both effectiveness and efficiency. The data generated needs to provide evidence to support policy, regulatory, planning and advocacy processes. Monitoring will also be conducted to ensure equity (across gender/ children with disabilities/ SC/ST/ other deprived groups); and to improve educational services to different population groups, based on their needs.

### C. Fostering technological innovations in education

The Government intends to prioritise the use of new technology and innovations in education to achieve its major objective of expansion of access to quality education for all by 2030. The main areas where technology and innovations will be pursued are the following.

**i. Using technology to expand access:** The Government intends to use technological innovations to achieve rapid expansion of access to secondary and higher education. Secondary schools and higher education institutions will be equipped with ICT infrastructure including telephone and high-speed internet connectivity to enable teachers to teach larger number of students using innovations in teaching methods using ICT, computing and other new technologies. Use of virtual classrooms, use of digital lessons, grading work through computers etc. are some ways already in use which will be actively explored and used. This will require revamping of ICT and computing infrastructure including providing physical space for safe storage of equipment, stable internet and electrical connections with power backup, maintenance services etc.

**ii. Technology for curriculum improvement, fostering learning friendly environment, evaluation etc.** New education technology will be used to remove obsolescence of curricula and course content at all levels of education. Technology will be used to deliver learning friendly course content using more professional and interactive IT tools. In the technical education area, collaborative research project with a top ranking global educational institution such as the University of Melbourne, Australia will be taken up. Programs and courses in new and emerging areas such as Bamboo Technology/Tea Technology/Drilling Technology/Food and Fruit Processing Technology/Cold Storage Technology etc. will be introduced. Standardised tools and methodologies to improve evaluation of students and teachers will also be introduced.

**iii. Promoting teacher training and management and governance of education:** The Government will maximize the use of new technology and innovations for teachers' professional development, as well as to improve education management, governance and administration.

### D. Policy Changes and Organizational reforms to facilitate service delivery

The Government intends to make policy reform a constant process by assessing the functioning of the current education system; identifying gaps; and ensuring that all policies and programmes are meeting the needs of students, teachers and all stakeholders engaged in imparting quality education.

**i. Policy strengthening:** The policy framework to better achieve education outcomes will be scrutinized annually to see if there are policy or regulatory constraints affecting better service delivery. The first such thorough scrutiny will be conducted by March 2020. Policy areas that need review include all intervention areas listed under subsections (A) to (C) discussed above. As the



private sector will be encouraged to play a vastly bigger role in education, policy changes to encourage its greater participation will be a critical component of this exercise.

**ii. Organisational reforms:** The Education Department will strive to improve coordination with other departments to ensure all-round development of children and youth. Apart from better coordination between the school and higher education departments, coordination with the Social Welfare Department (for Early Childhood Education); Labour Department (for skills and vocational education); Health Department (for Medical Education); and various departments responsible for development of specially deprived groups such as WPT&BC, Char Areas, Border Areas, Hill Areas etc. will be crucial. Improved organizational arrangements for ensuring better coordination will be explored by March 2020. Organizational changes will also consider creation of better functioning platforms to ensure greater exchange of ideas and concepts between stakeholders.

#### 4. Planning for resource requirements in education

**i. Financial resources.** The required expenditures based on the strategy developed to ensure inclusive and quality education for school education, higher education and technical education in the state is shown in Appendix 9.1 of Chapter 9. Financial resource requirements are based on (i) minimum of 20% reduction because partnerships with private sector, communities, civil society etc.; and (ii) minimum 20% reduction through efficiency gains and technical and other innovations. As shown in Appendix 9.1 of Chapter 9, a resource gap still exists even with a significant burden being assumed to be shared by the private sector. The Departments will undertake a plan to eliminate the gap to achieve Assam's vision for education in the state through measures such as securing additional resources from outside the state (additional Central assistance and international funding).

**ii. Human Resources.** Apart from financial resources, a strategy for developing human resources is necessary to achieve Assam's Vision 2030 for the education sector. Fortunately, the student-teacher ratio at different education levels in Assam is highly favorable compared to the rest of India which makes the additional requirement of teachers to achieve Assam's Vision 2030 easier to achieve. However, there is considerable variation across education institutions and there is a significant gap in human resources that needs to be filled as shown in Appendix 1, 2, 3.

The additional teacher requirements will be filled through active measures to better train teachers and recruit them. More attention to producing better quality teachers will be made. The additional teacher requirements at the secondary level may be lower than projected as it is proposed to introduce web-based and self-learning strategies by 2030.

**iii. Infrastructure requirements.** School and higher education physical infrastructure will also need to expand along with growth in education services in line with Vision 2030. The Strategy for education particularly emphasizes the following areas.

Although expansion of access is more essential in Assam at the secondary level, even at the elementary level additional infrastructure is required to achieve Vision 2030. This is because schools that were built some time ago require infrastructure support/retrofitting/major repairs including provision of toilets etc. There is also a requirement for electrification (external & internal) as most elementary and secondary schools do not have electricity. This also prevents them from providing ICT based education and leveraging the efficiency of new technologies. Additional infrastructure requirements include: requirement of boundary walls and other infrastructural needs in elementary schools, computer labs, science/math labs etc.

To give access to both higher and technical education in all corners of the state, there is a construction requirement of more higher education and technical education institutes. Moreover, there need for upgradation of existing institutions to increase the intake capacity. This significant gap of infrastructure in all levels of education need to be filled up by 2030 as shown in Appendix 3.4 to 3.7.

Goal
Goal 4 Quality Education
Elementary & Primary
Additional teachers
Secondary (including higher secondary)
Additional teachers
Source
Number
Number
Number
PTR
Source

## 5. Coordination arrangements for Goal 4

Goals	Lead Department	Supporting Departments		Cross Cutting Departments
Goal 4 Quality Education	Education	Social Welfare (Pre-primary Education), Labour and Employment (Coordination on skills development),	Cultural Affairs, Sports & Youth Welfare.	Social Welfare (Gender), WPT & BC, Tea Tribes Welfare, Minority Development, Char Areas, Hill Areas, Science & Technology, Information Technology, Information & Publicity. Transformation and Development Department, and Finance Department (Oversight)

### Appendix 3.1. Projection of teacher requirements in the school system

	2016-17	2019-20	2023-24	2030-31	Remarks
Elementary teachers (Govt. & Provincialized) needed	168631	173566	181062	196243	1. Supply of Teachers- Primary (30:1 ratio) 2. Supply of Teachers - Upper Primary (minimum 5 teacher for UP and 7 teachers for MV and for high enrolment as per PTR 1:35.)
Additional elementary teachers needed over 2015-16	6462	4935	7496	27612	(Excluding vacancy position).
Secondary teachers (including private) needed	52000	52000	53540	69000	
Additional secondary teachers needed over 2015-16	0	0	1540	14000	

Source: UDISE (2015-16) and Department's calculations

### Appendix 3.2. Projection of teacher requirements in the Higher Education

	2016-17	2019-20	2023-24	2030-31
Number of Universities	12	15	18	21
Number of Colleges	301	311	315	325
Number of Teachers	12972	20962	22664	24987
PTR	31	30	30	40

Source: Department of Higher Education

**Appendix 3.3 Projected scenario of employees under Technical Education in 2019**

Type of Institution	No. of Institution	Faculty	Other staff	Total	Faculty to Students Ratio required as AICTE
Engineering Colleges	14	634	1038	1672	1:15
Polytechnic	31	969	2410	3379	1:20

Source: Department of Technical Education

**Appendix 3.4- Projections of classrooms and other infrastructure needed (Elementary)**

Target for Access:	2016-17	2019-20	2023-24	2030-31
New School Building (Primary)		24	0	0
New School Building (Upper Primary)		60	44	0
Residential Schools		5	4	0
Digital Schools		50	50	0
Addl. Class Room	1511	11964	16268	11000
Dysfunctional toilet-repairing		11060	0	0
Drinking water facility	0	4112	0	0
Ramp with rail	0	7936	2500	0
Boundary wall	0	10606	16000	7971
Retrofitting / Major repair	508	4500	6000	4586
Electrification (External & internal)	0	13917	14500	9500
Requirement of Desk-Bench		213003	213003	0

Source: Department of Elementary Education

**Appendix 3.5- Projections of classrooms and other infrastructure needed (Secondary Education)**

Target for Access	2016-17	2019-20	2023-24	2030-31
Secondary classrooms needed	15100	16772	19652	27014
Laboratories	2124	3315	4052	5052
Libraries	980	3170	3929	3929
Vocational workshops	304	1066	3795	8713

Source: Department of Secondary Education

**Appendix 3.6- Projections of classrooms and other infrastructure needed (Higher Education)**

Target for Access	2016 -17	2019 -2020	2023 -24	2030-31
Commissioning of Govt. Model Degree Colleges	5	3	3	1
Infrastructure development of Colleges	44 Nos.	100	100	100
Introduction of Vocational Courses	5	5	5	5
Upgradation of existing Colleges to Universities	0	1	1	1
New Private Universities	2	2	2	2
Recruitment of Teachers	700	900	1000	1500
Training of Existing Teachers	2000	2500	3000	4000
Introduction of new courses	12	25	50	50

Source: Department of Higher Education

**Appendix 3.7a. Projections of classrooms and other Infrastructure Requirements (Technical Education)**  
Existing technical institutions (2016-2019)

Sl.No.	Category of Institution	Infrastructure	Likely Number
01.	Existing Engineering College (04Number)	Up-gradation of Laboratories	20
		Modernization of Workshop	04
		Modernization of Library	04
		Development of Video Conference Room	04
		Up-gradation of Centralized Computing Center	04
		Setting up of Industry Institute Partnership Cell (IIPC)	04
		Setting up of Training & Placement Cell	04
		Setting up of R& D and Consultancy Service Cell	04
		Setting up of Entrepreneurship Development Cell	04
		Additional infrastructure for introducing new courses	.....
		Additional infrastructure for increasing Intake in existing courses	.....
02.	Existing polytechnics (10 number)	Up-gradation of Laboratories	60
		Modernization of Workshop	10
		Modernization of Library	10
		Development of E-Learning for accessing courses	10
		Up-gradation of centralized Computing Center	10
		Setting up of Industry Institute Partnership Cell (IIPC)	10
		Setting up of Training & Placement Cell	10
		Setting up of R& D and Consultancy Service Cell	10
		Setting up of Entrepreneurship Development Cell (EDC)	10
		Additional infrastructure for introducing new courses	.....
		Additional infrastructure for increasing Intake in existing courses	.....
03	Community College	Setting up additional facility for Community College in existing and new Polytechnics	31
04	Woman University at Jorhat	Additional infrastructure for introducing new courses	----
05	Assam Science & Technology University at Guwahati	Additional infrastructure for introducing new courses	-----
06	Directorate of Technical Education	Establishment of Curriculum Development Cell	01

Source: Department of Technical Education

**Appendix 3.7b. New technical institutions (2022-2023)**

Sl. No.	Category of Institution	Infrastructure	Likely Number
01	New Engineering College	Additional infrastructure for introducing new courses. Proposed Goalpara Engineering College may be in PPP mode as recommended.	.....
02	New polytechnics	Additional infrastructure for introducing new courses	.....
03	New Community College	Setting up additional facility for Community College in existing and new Polytechnics	.....

Source: Department of Technical Education