

# Quality Education for All: Preparing for the Fourth Industrial Revolution

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# Structural changes of the economy

- Progress in human development, education, and health has been impressive and sustained over the last decade;
- The country produced a healthier and better-educated working population;
- More women are joining the workforce while gender gaps in pay are gradually narrowing;
- The country transitioned from agro-based to industry and service driven economy;
- Technological progress is rapidly changing the production and service modality;
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- Growing and youthful workforce in Bangladesh provides a window of opportunity to improve productivity and accelerate economic growth

# Education Streams

## Types of Education

- General Education;
- Madrasah Education;
- Technical Education;
- Professional Education;
- Teacher Education;
- Specialized Education;

## Level of Education

- Early Childhood Education;
- Pre-Primary Education;
- Primary Education;
- Secondary Education;
- Higher Secondary Education;
- Tertiary Education

# Education Statistics as of 2018

## Primary level

- Number of Primary Education Institution: 134147;
- Gross enrollment Rate: 114.23% (boys: 110.32% and Girls: 118.30%);
- Net Enrollment Rate: 97.85% (Boys: 97.55%; Girls: 98.16%);
- Dropout Rate: 18.60% (Boys: 21.44% and Girls: 15.69%);
- Completion Rate: 81.40% (Boys: 78.56% and Girls: 84.31%);

## Secondary Level

- Number of Institutions: 20465 (Public: 727)
- Gross Enrollment Rate: 75.32% (Boys: 69.56%; Girls: 74.68%);
- Net Enrollment Rate: 69.38% (Boys: 64.47%, Girls: 74.68%);
- Dropout Rate: 37.62% (Boys: 36.01%, Girls: 40.19%);
- Completion Rate: 62.38% (Boys: 63.99%, Girls: 58.81%);

# Education Statistics as of 2018

## Technical Education

- Polytechnic Institutes: 439 (Public: 52; Private: 387);
- Technical Schools: 174 (Public: 64; Private: 110);
- Vocational School and College: 6865 (public: 866; Private: 5999) (Attached: 4653; Independent: 2212);
- Number of Students: 1067484 (Boys: 803222; Girls: 264262);
- Number of teachers: 50931 (Male: 40719; Female: 10212)

## Madrasah Education

- Number of Institutions (Post Primary): 9294 (Public: 3, Private: 9291);
- Number of Student: 2477962 (Boys: 1108762, Girls: 1369200);
- Number of Teacher: 109918 (Male: 95276, Female: 14642)

# General Features of Secondary Education

- 95% of secondary Education Institutions is Private, mostly supported through public subsidies;
- The country pursue a service delivery strategy where public-private partnership model is adopted by combining public financing with private provisions;
- 95% of secondary level students enroll in private institutions;
- Various types of non-state providers in the providers in the provision of secondary education ;
- 12 million students of 6-12 grade across 20300 general schools and 9400 madrasah with more than 2 million students;
- All institutions receive free textbooks, stipends for meritorious students, financial assistance and tuition fees for disadvantaged students;
- Monthly Pay Orders (MPOs) for teachers' salary in private institutions;
- 20224 institutions and 265390 teachers receive salary support in the form of MPOs;

# Tertiary Education Statistics 2018

	<b>Private University</b>	<b>Affiliated Madrasah under Islamic Arabic University (IAU)</b>	<b>Bangladesh Open University (BOU)</b>	<b>Affiliated Colleges under National University (NU)</b>	<b>Public University (Excluding NU, BOU, IAU)</b>
Number of Institutions	85	1285	01	2223	34
Number of Students	350130	598031	207829	2073069	244363
Number of Teachers	15058	22921	136	44000	12131

# Policy Framework

- **Election manifestos of present government**
- **SDG**
- **Vision 2021 and 2041**
- **Five Year Plans**
- **National Education Policy (NEP) 2010**
- **Bangladesh Delta Plan 2100**
- **Policies and Strategies;**



# Fourth Industrial Revolution

- 4th Industrial has both challenges and promises;
- Super automation and robotics would heavily influence the manufacturing process;
- Virtual reality, artificial reality, genome editing, wearable technology, 3-D printing would appear as the important features of lifestyle and economy;
- Ministry of Education aware of the challenges and promises of upcoming fourth industrial revolution;
- digital readiness in terms of human capital is the most crucial elements to face the challenges of the IR4;
- Curriculum, research will be aligned in line with the demand of the industry, manufacturing and service sector;

# Challenges and future Interventions in Secondary Education

## Challenges

- **Equitable access and retention;**
- **Quality and relevance of curriculum;**
- **Classroom assessment and national examination;**
- **Governance and Management, Accountability**

## Future area of interventions

- Reforming curriculum to make it more integrated across the grades, sufficiently bench-marked against national goals;
- Improving teachers' quality;
- Standardization of examinations and assessments;
- Improved teaching-learning in Bangla, English, Mathematics, Science;
- Utilization of ICT for Pedagogy;
- Introduction of pre-vocational and vocational in general stream

# Challenges in tertiary education

- Gross enrollment is (17%), lower middle income countries (24%);
- Access to tertiary education across gender and income groups, with females at a disadvantage;
- The female share of enrollment across the Technical Education Institutions (TEIs) stood at around 38% in Bangladesh, lower than other South Asian Countries;
- Participation in science, technology, engineering, and mathematics (STEM) is low, particularly the case for tertiary colleges, which account for more than half of the tertiary enrollments.
- Around 9% of college students are enrolled in STEM courses.
- Oversupply of graduates in humanities subjects and skills shortage for technology to be addressed;

# Challenges in tertiary education

- **Traditional teaching & learning and assessment system;**
- **Student teacher ratio;**
- **Full utilization of potentials of academic researchers;**
- **Industry – academic researchers collaboration;**
- **Governance and fiduciary accountability;**
- **Quality assurance;**

# Tertiary Education: Future intervention area

- Expanding poverty-targeted scholarship and tuition support for students to encourage low income secondary school graduates, especially females, who are proven meritorious to continue with higher education in the universities and colleges;
- Establishment of a trust or company to operate loan program for poor and meritorious students of the universities;
- Enhancing universities' ICT capabilities through increasing investments in teaching and learning and ICT facilities;
- Improvement of the governance and financial management system in universities;
- Implementation of Bangladesh Accreditation Council Act 2017 in its entirety;
- Formulation of policy guidelines for Islamic Arabic University to make madrasah education compatible with mainstream education;

# Tertiary Education: Future intervention area

- Implementation of Strategic Plan for Higher Education:2018-2030;
- Establishment of a national research center and capacity building of the UGC;
- Increase of public spending on enhancing research capabilities, provision of lab and facilities and research skills training;
- Establishment of a residential pedagogical training academy for the university teachers;
- Promotion of university-industry collaboration for generating funds, particularly for research;
- Forging partnership with renowned foreign universities through twinning or joint programs is an effective means to raise the quality of teaching and learning in Bangladeshi universities.
- Establishment of a flagship university in Bangladesh;

# Expected result by 2030

- All girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes;
- All women and men have equal access to affordable and quality technical, vocational and tertiary education, including university;
- Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship; and
- Ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including among others, through education for sustainable development and sustainable lifestyles, human rights, gender equity, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development.