



## Initial Poverty and Social Analysis

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June 2019

### Bangladesh: Improving Computer and Software Engineering Tertiary Education Project

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Asian Development Bank

## **CURRENCY EQUIVALENTS**

(as of 30 April 2019)

Currency unit	–	Taka (Tk)
Tk1.00	=	\$0.01185
\$1.00	=	Tk84.3750

## **ABBREVIATIONS**

ADB	–	Asian Development Bank
CPS	–	Country Partnership Strategy
IT	–	information technology
ITES	–	information technology-enabled services
CSE/IT	–	computer science and engineering and information technology
TA	–	technical assistance

## **NOTES**

- (i) The fiscal year (FY) of the Government of Bangladesh and its agencies ends on 30 June. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2019 ends on 30 June 2019.
- (ii) In this report, "\$" refers to United States dollars.

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## INITIAL POVERTY AND SOCIAL ANALYSIS

Country:	Bangladesh	Project Title:	Improving Computer and Software Engineering Tertiary Education Project
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Lending/Financing Modality:	Project	Department/Division:	South Asia Department Human and Social Development Division
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### I. POVERTY IMPACT AND SOCIAL DIMENSIONS

#### A. Links to the National Poverty Reduction Strategy and Country Partnership Strategy

The National Education Policy 2010 sets out purpose of higher education to generate and make innovations in knowledge, and at the same time build up a skilled workforce. The proposed project closely aligns with this objective, and aim to increase access, quality and relevance of higher education as highlighted in Bangladesh's Seventh Five-Year Plan. The proposed project is particularly relevant for Digital Bangladesh which is an integral part of Vision 2021. The government aims to diversify main contributor to economic growth other than garment sector, and information technology (IT) and IT-enabled services (ITES) industry are expected to become a driving force for inclusive growth by nurturing highly skilled workforces. The proposed project is also aligned with ADB's Country Partnership Strategy for Bangladesh (2016–2020) that prioritizes enhancing the quality of workforce through better education and skills development. It will also contribute to CPS's strategic objective of promoting economic diversification to enhance the economy's long-term growth potential.

#### B. Poverty Targeting

☐ General Intervention ☐ Individual or Household (TI-H) ☐ Geographic (TI-G) ☒ Non-Income MDGs (TI-SDG 4 Quality Education)

#### C. Poverty and Social Analysis

##### 1. Key issues and potential beneficiaries.

Bangladesh's aspiration to realize Digital Bangladesh needs to be bolstered by innovations through quality and relevant higher education participation. The Seventh Five-year plan (2016–2020) aims to increase higher education enrollment from 12% to 20%, but the current higher education enrolment rate of 17.6% in 2017, below the average rate of 23% of lower middle-income countries. The strategic plan for higher education for 2018–2030 aims to increase the university admission from 350,130 in 2015 to 369,095 in 2026, and the proposed project will contribute to achieve this goal. Bangladesh IT/ITES industry is constrained by lack of qualified human resources. Companies and more than 500,000 freelancers are engaged in low-end services. The job opportunities are concentrated in urban areas, and people from rural areas have very limited access to CSE/IT education and IT sector job opportunities.

The proposed project will address (i) access, (ii) quality, (iii) relevance of CSE and IT education as well as lack of research and development activities to support IT/ITES industry growth. The students from four universities (Bangladesh University of Engineering and Technology, University of Dhaka, Jashore University of Science and Technology, East West University) will be the main beneficiaries. Across four universities, the current annual intake will be increased from 675 (29.9% women) to 1,835 students at undergraduate level and from 307 (25.7% women) to 765 at postgraduate level (Master and PhD) by 2025, and they are selected based on academic merit. Diploma and professional certificate courses will also cater a larger number of IT professionals for upgrading skills. An unaccounted number of future generations of university students and staffs will continue to benefit beyond project implementation period. Private and public employers, more specifically the IT/ITES companies, will benefit from recruitments of more qualified graduates. Research and innovation activities in CSE/IT departments will also contribute to improve IT/ITES industry competitiveness. The proposed project will expand the foundation of skilled workers in formal sector through tertiary education, professional certificate courses as well as start-up support in urban area as well as rural area in Jessore where Sheikh Hasina Software Park is established by the government funding.

##### 2. Impact channels and expected systemic changes.

The proposed project aims at improving tertiary CSE/IT education to meet industry demand through (i) increasing enrolment in public and private universities; (ii) improving the quality and relevance of education through international accreditation, (iii) promoting innovation through competitive grant funding mechanism partly targeting industry relevant research; and (iv) improving student career guidance and industry attachment. Three public universities enroll students by merit, and tuition is negligible. East-West University is a private university. The project will provide stipends for rural and female students to help with their living expenses and make university education more affordable. Successfully completing CSE/IT education will help poor and disadvantaged students to get skilled jobs with higher salary. One of the proposed four universities is outside of Dhaka (Jessore) and it will offer quality education and professional training opportunities to the rural population. The competitive research grants and startup supports will leverage highly skilled human resource in universities to collaborate with IT/ITES industry and other academic disciplines to develop new products and services using IT solutions, thus contributing to IT/ITES industry development and utilization of IT services for socio-economic development. The project will contribute to the

realization of the Sustainable Development Goal 4: *Quality Education*, Goal 5: *Gender Equality*, and Goal 8: *Decent Work and Economic Growth*.

3. Focus of (and resources allocated in) the transaction TA or due diligence.

Consultants to conduct due diligence have already been fielded to carry out (i) environment impact assessment and (ii) social safeguard assessment on proposed infrastructure development. Other reviews including economic and financial analysis as well as gender analysis will be conducted by ADB staff during project preparatory period.

## II. GENDER AND DEVELOPMENT

1. What are the key gender issues in the sector/subsector that are likely to be relevant to this project or program?

While enrollment figures are higher for girls than boys in primary and secondary education, female enrollment for the higher education is considerably lower than males in 2017 (14.5% for female and 20.6% for male) and only 31% of university enrollment is women. Despite improvement in female enrollment in recent years, the gap of women's participation in higher education, particularly related to advanced science and technology fields, needs to be reduced. In CSE/IT related faculties, female students only account for around 22%, and addressing gender stereotyping remains a significant challenge. From employment perspectives, although the country's unemployment rate has been stable around 4.2% in the last few years, youth unemployment rate (age 15–24) has continuously increased since 2010, reaching 12.3% in 2016. The unemployment rate with tertiary education background (overall: 11.2%, male: 8.3%, female: 21.4%) is more than twice than overall unemployment rate, and transition from higher education to labor market needs further improvement, particularly for females. The female unemployment rate is around 6.7% in 2016, which is consistently higher than that of males (3.1%). Lower female labor force participation (36.3% for female as opposed to 80.5% for male) has been a key policy challenge, which remains quite low compared with other lower middle-income countries. Informal economy, female child marriage, skills mismatch, access to finance and disparities in wages, among others, are hindrance to increase female labor force participation. In addition, in public university CSE/IT programs, female students are 25%, but in IT/ITES industry, 19% of entry level workers are women. This ratio drops to 16% of overall human resource indicating low retention rate and career progression among female workers. In the Bangladesh IT sector, recruitment of female university graduates is less than half of male university graduates in 2017–2018. The female employees have less turnover, good dedication to work, and ability to take challenges, but employers consider security, working location and family commitments when they recruit female employees. The focus group discussions with female graduates suggest the areas of improvement in career guidance, on-the-job-training, computer equipment infrastructure development, more practical sessions, and specialization in certain field. The ability to work in a team with problem solving skills and communication skills in English are other areas which make differences during the job interviews.

2. Does the proposed project or program have the potential to make a contribution to the promotion of gender equity and/or empowerment of women by providing women's access to and use of opportunities, services, resources, assets, and participation in decision making? ☒ Yes ☐ No

*Key areas the proposed project should address for mainstreaming gender include: increasing female students' retention in CSE/IT programs, especially in private university; improving female graduates' employability; and transforming social norms and attitudes that restrict women's enrolment in CSE/IT education and relevant jobs.*

3. Could the proposed project have an adverse impact on women and/or girls or widen gender inequality?

☐ Yes ☒ No

4. Indicate the intended gender mainstreaming category: ☒ GEN (gender equity) ☐ EGM (effective gender mainstreaming) ☐ SGE (some gender elements) ☐ NGE (no gender elements)

## III. PARTICIPATION AND EMPOWERMENT

1. Who are the main stakeholders of the project, including beneficiaries and negatively affected people? Identify how they will participate in the project design.

The main stakeholders of the project are the Ministry of Education, University Grants Commission, universities, private education providers, private and public sector employers, university students and their parents. Communities adjacent to the proposed universities will also benefit from the new business that will be generated from the increased student influx. Key stakeholders were consulted to identify the nature of the development need, the availability of resources (such as land for infrastructure construction), and partner capacity. The consultations have also been held during project design stage, especially with female and male students, lecturers and education providers, employers, and civil society organizations to incorporate their views and recommendations. For instance, tracer study of CSE/IT graduates and employer survey of the Bangladesh IT sector, including key informant interview and gender disaggregated focus group discussions have been conducted and informed the proposed project design.

2. How can the project contribute (in a systemic way) to engaging and empowering stakeholders and beneficiaries, particularly, the poor, vulnerable and excluded groups? What issues in the project design require participation of the poor and excluded?

The four selected universities under the proposed project use merit-based university admission system, but poor students have hard time to earn living expenses for continuing education. Dropout is high in private university as well as post-graduate courses in public universities, mainly due to financial issues. The proposed project will provide stipend for these students, particularly for females, and aim to improve completion rate. The project will also conduct

consultations among underprivileged students regarding other forms of support they need and which can be covered by the project (e.g. securing scholarships from companies for underprivileged but deserving students) to help them pursue and complete the undergraduate degree programs.

3. What are the key, active, and relevant civil society organizations in the project area? What is the level of civil society organization participation in the project design?

☐ Information generation and sharing ☐ Consultation M ☒ Collaboration M ☒ Partnership

Civil society organizations working on gender equality, social inclusion, and private sector engagement would include chambers of commerce, women's organizations and International Labor Organization. Effective collaborations and partnerships with such organizations already working in the area of female labor force participation, technical education and employability can underpin better impacts.

4. Are there issues during project design for which participation of the poor and excluded is important? What are they and how shall they be addressed? ☒ Yes ☐ No Participation of the poor and excluded during the project design is important to identify strategies and approaches in addressing constraints related to expanding IT related tertiary education opportunities and employment constraints to students from rural and vulnerable groups.

#### IV. SOCIAL SAFEGUARDS

**A. Involuntary Resettlement Category** ☐ A ☐ B ☒ C ☐ FI

1. Does the project have the potential to involve involuntary land acquisition resulting in physical and economic displacement? ☐ Yes ☒ No

The environment and social safeguards due diligence confirms no involuntary resettlement impact. In University of Dhaka, the building site is currently used for bachelor staff quarter for 25 persons, but they will be given new flats at a new university residential building, which will be completed by June 2019. They will move to the new premise well before the civil work commences. All proposed constructions will be on already available lands belonging to universities, within the existing campus.

2. What action plan is required to address involuntary resettlement as part of the transaction TA or due diligence process? ☐ Resettlement plan ☐ Resettlement framework ☐ Social impact matrix ☐ Environmental and social management system arrangement ☒ None

**B. Indigenous Peoples Category** ☐ A ☐ B ☒ C ☐ FI

1. Does the proposed project have the potential to directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples? ☐ Yes ☒ No There are no indigenous people within the project area who fall within the purview of ADB Safeguard Policy Statement.

2. Does it affect the territories or natural and cultural resources indigenous peoples own, use, occupy, or claim, as their ancestral domain? ☐ Yes ☒ No

3. Will the project require broad community support of affected indigenous communities? ☐ Yes ☒ No

4. What action plan is required to address risks to indigenous peoples as part of the transaction TA or due diligence process?

☐ Indigenous peoples plan ☐ Indigenous peoples planning framework ☐ Social Impact matrix ☐ Environmental and social management system arrangement ☒ None

#### V. OTHER SOCIAL ISSUES AND RISKS

1. What other social issues and risks should be considered in the project design?

☐ Creating decent jobs and employment (L) ☐ Adhering to core labor standards (L) ☐ Labor retrenchment  
☐ Spread of communicable diseases, including HIV/AIDS ☐ Increase in human trafficking (L)  
☐ Affordability (L) ☐ Increase in unplanned migration (L) ☐ Increase in vulnerability to natural disasters  
☐ Creating political instability ☐ Creating internal social conflicts

2. How are these additional social issues and risks going to be addressed in the project design?

HIV/AIDS awareness program will be provided to laborers and adjacent communities, including use of awareness materials displayed and distributed to workers and dwellers in the project area.

#### VI. TRANSACTION TA OR DUE DILIGENCE RESOURCE REQUIREMENT

1. Do the terms of reference for the transaction TA (or other due diligence) contain key information needed to be gathered during transaction TA or due diligence process to better analyze (i) poverty and social impact; (ii) gender impact, (iii) participation dimensions; (iv) social safeguards; and (v) other social risks. Are the relevant specialists identified? ☒ Yes ☐ No

2. What resources (e.g., consultants, survey budget, and workshop) are allocated for conducting poverty, social and/or gender analysis, and participation plan during the transaction TA or due diligence?

Consultants are mobilized to conduct due diligence on environment and social safeguards. A tracer study and an employers survey as well as focus group discussions were carried out by the TA for gender and social analysis.