

SBF Project Completion Note

Bangladesh: Distribution System Upgrade and Expansion

1. Project Information

Project ID:	P000003	Instrument ID:	L0003A
Member:	Bangladesh	Region:	Southern Asia
Sector:	Energy	Sub-sector:	Electricity transmission and distribution
Instrument type:	Loan	E&S category:	B
Co-financier(s):	NA		
Borrower:	Government of the People's Republic of Bangladesh		
Project Implementing Entities (PIEs):	Dhaka Electric Supply Company Limited (DESCO) Bangladesh Rural Electrification Board (BREB)		
Project Team Leader:	Raqib Ahmed Chowdhury, PTL Hongliang Yang, EX-PTL		
Project Team Members:	Liu Yang, LEG – Counsel Shonell Robinson, OSD - Financial Management Specialist Sheikh Naveed Ahmed, OSD - Social Development Specialist Pedro Ferraz, OSD - Environment Specialist Guoping Yu, OSD - Procurement Specialist		
Site Visits by AIIB:	March 2019 August 2019 December 2019 December 2020 September 2021 August 2022		

2. Project Summary and Objectives

The project's objectives are to enhance distribution capacity and increase the number of rural and urban electricity consumers in Bangladesh. The project is designed to (i) provide 2.5 million new service connections in rural areas, (ii) upgrade distribution systems to reduce technical losses and enhance distribution efficiency, (iii) help remove system bottlenecks by expanding distribution capacity, and (iv) improve the quality and reliability of power supply.

The project has two components:

- Provision of about 2.5 million service connections to rural consumers (BREB Component); and
- Upgrade of two grid substations and conversion of 85 km overhead distribution lines into underground cables in north Dhaka (DESCO Component)

It is estimated that approximately 12.5 million rural people have benefitted from the project.

3. Key Dates

Approval:	June 24, 2016	Signing:	November 11, 2016
Effective:	February 06, 2017	Restructured (if any):	NA
Orig. Closing:	December 31, 2019	Rev. Closing (if any):	December 31, 2021

4. Disbursement Summary (US Dollar million)

a) Committed:	165.00	b) Cancelled (if any):	20.88
c) Disbursed:	144.12	d) Last disbursement: (amount /date)	4.95/June 30, 2021
e) Undisbursed (if any):	0.00	f) Disbursement Ratio (%) ¹ :	100.00

5. Estimated and Actual Costs

Estimated:

- Total project cost: USD 262.29 million
- Out of which, the approved AIIB loan was USD 165 million

Actual:

- Total project cost: USD 206.67 million
- Out of which the approved AIIB loan was USD 144.12 million
- Partial AIIB-loan cancellation: USD 20.88 million

6. Project Implementation, including major changes to the original Objective, Project Design, and Indicators

Both the components are now completed. Project design and indicators remained the same.

Component one (BREB component) was completed in 2018, and objectives were fulfilled. There were loan savings of USD 13.27 million, which PIE requested, through the Ministry of Finance, for cancellation. AIIB canceled the requested loan portion in a due manner.

¹ The disbursement Ratio is defined as the volume (i.e., the dollar amount) of the total disbursed amount as a percentage of the net committed volume, i.e., $f = c / (a - b)$

Component two (DESCO component) was behind the original schedule. Initially, there was a delay in 2018 in getting the required permissions from Dhaka City Corporation authority to cut the streets to lay down the underground cables. Afterward, in 2020 construction work was paused temporarily due to the impact of Covid-19. For these reasons, the loan closing date was extended twice during the loan period. The first time it was extended from December 31, 2019, to December 31, 2020. It was further extended for one year until the end of December 31, 2021. Within the second extended period, DESCO completed its components.

After the construction completion, DESCO requested to cancel the remaining unutilized loan amount of USD 7.61 million.

Components	Physical Progress	Environmental & Social Compliance	Procurement
BREB Component: Provision of 2.5 million service connections	100%	Complied	Completed
DESCO Component: Upgrade of two substations from 250 MVA to 480 MVA and installation of 85 KM underground cables	100%	Complied	Completed

Financial Management:

The project's financial management performance is rated as satisfactory. The project's audited financial statements were generally submitted six to ten months after the due date of December 31 each year. However, the auditors have issued opinions on the financial statements indicating that Financial Statements present fairly, in all material respects, the cash and cash equivalents of the project, and the funds were utilized for the purposes described in the Financing Agreements.

Internal control deficiencies were noted regarding the non-compliance with national regulations, such as the need for deduction of VAT and respective payments that were to be collected from Contractors on behalf of the Government of Bangladesh. However, the main internal controls around expenditures financed by AIIB were deemed acceptable.

For future projects, better coordination and planning amongst Project Management Units and the Foreign-Aided Projects Audit Directorate (FAPAD) is needed to ensure the timely submission of audit reports. In addition, internal controls around compliance with government laws and regulations are required.

7. Implementation of Environmental and Social Policy and Project specific E&S instruments, including the project-level Grievance Redress Mechanism (GRM)

The project was classified as Category B under the then Environmental and Social Policy (ESP) 2016 of the Bank, and the provisions of Environmental and Social Standard 1: Environmental and Social Assessment and Management (ESS1) have been applied to the project.

On this basis, following due diligence, it was determined by the Bank that: (a) BREB Component required a focused Environmental and Social Review (ESR) given the minimal potential risks and impacts; and (b) in the case of DESCO Component, the environmental and social risks, and impacts are limited and confined during the construction stage. An Initial Environmental Examination (IEE) was an appropriate instrument. DESCO complied with Bank's requirements accordingly and submitted periodic ES reports to the Bank; moreover, an E&S audit was prepared. Project-level GRM was in place during the implementation phase.

8. Results Achieved (Against the original indicators and/or revised indicators. RMF table will be exported on the last page of this PCN.)

1. Number of service connections increased
2. Number of small low-voltage transformers installed
3. Upgrade of two grid substations from 250MVA to 480 MVA
4. Length of 33kV underground cable installed

Remarks:

Indicators 1 and 2 are for the BREB component, while Indicators 3 and 4 are for the DESCO component. Year-wise indicator results are shown on the last page of PCN.

9. Investment Sustainability (operational, financial/commercial, institutional)

Both BREB and DESCO have an established operation and maintenance team to ensure the sustainability of the infrastructure during the operational phase. For BREB, this is led by a senior official in the rank of Additional Chief Engineer (Operations, Maintenance, and Distribution). For DESCO, this is headed by Chief Engineer (Operations). BREB also engages its countrywide zonal offices and PBSs to perform the smooth operation of its infrastructure. Both the PIEs traditionally manage their operation and maintenance costs from their operational revenue.

10. Compliance and Alignment with AIIB's Policies and Strategic Priorities

This project was approved before the Bank's Energy Sector Strategy was approved. However, it is aligned with Bank's previous and current Energy Sector Strategy in (i) promoting access to electricity in rural parts of Bangladesh and (ii) improving the reliability and quality of electricity supply to serve productive uses and modern society needs in part of Dhaka city.

The overall project implementation has complied with AIIB's relevant policies (e.g., Operation Financing Policy, ESP, and Procurement Policy).

11. Any outstanding issues not yet resolved, if applicable

No outstanding issues

12. Lessons learned that can be considered for future investments

This was the first project financed by AIIB in Bangladesh's energy sector. Building relationships with key energy sector entities helped the Bank to get a good initial understanding of the country's energy infrastructure status and the potential challenges that need to be resolved going forward.

This was also the Bank's first sovereign investment in Bangladesh. Also, this helped the project team and the Bank to get accustomed to government work practices that may vary from country to country. For example, for every sovereign project, implementing entities need to prepare a Development Project Proforma (DPP) under the supervision of the line ministry, which then needs to be placed to the Ministry of Planning, as well as with the Ministry of Finance, before getting final approval from the Executive Council of National Economic Committee (ECNEC), chaired by Prime Minister. It is to be noted that only upon approval of DPP the Government of Bangladesh can sign loan agreements with development partners, and Project Management Unit can be formally established at PIE-end. Understanding this entire project cycle would be helpful for AIIB staff to streamline the process and ensure sufficient periods are considered for the implementation phase. This project also provided the initial experience to AIIB staff to manage environmental and social aspects based on AIIB's ESF.

This project helped build up an extensive portfolio in Bangladesh. Currently, the member stands fourth in the AIIB lending list in terms of total lending amount.

13. Implementation of project-specific Environmental and Social instruments

The project was classified in Category B under the ESP of the Bank, and the provisions only of ESS 1 have been applied to both Component 1 and Component 2. So, during the implementation phase of both components, no land was acquired, and no resettlement was taken place.

For the DESCO component, PIE was responsible for implementing Environment and Social Management Plan (ESMP), formulated during the IEE assessment, and submitting periodic ES monitoring reports. The monitoring reports for noise, water, air quality data, and Occupation Health and Safety (OHS) were adequate, with no red flags. GRM was in place and functional. No major issues occurred during the project implementation.

For the BREB component, PIE, through its rural clusters (a total of 80 clusters countrywide) named Palli Bidyut Samity (PBS), informed people about the timing of the work and related information. GRM had been formed for the project level and local level. No severe injuries, accidents, or death records were identified.

Based on all monitoring reports, visits, and E&S audits, the ES instruments for BREB and DESCO performed adequately, and the mitigation measures were managed following the IEE and ESR.

14. Borrower's Feedback

Feedback is received from the client. In summary, both BREB and DESCO have given positive feedback for assistance and support during the implementation phase. They have expressed satisfaction with the AIIB's prompt support and cooperation. Also, they are keen to work with AIIB on other projects in the future. Please refer to Annex for detailed client feedback.

15. Achievement of Project Results

The project has helped the country overcome electricity distribution constraints in its capital (Dhaka City) and rural parts.

In rural areas, under the BREB network, 2.5 million new service connections were created, which contributed to boosting the living standard of about 12.50 million people in Bangladesh and making a socio-economic impact. The availability of electricity promotes productivity and women's empowerment through the growth of small and cottage industries, child education support, and access to information through electronic household appliances.

The underground distribution line installed on 28 routes in Dhaka city significantly reduced maintenance costs, enhanced durability, and ensured an undisrupted distribution network during extreme weather events (e.g., monsoons/ storms). Also, the installation of two new grid substations, by replacing the old inefficient substations, enhanced electricity load capacity, which helped to meet incremental demand from consumers and minimize voltage drop and line outage due to overload. As such, uninterrupted and reliable power to the consumers has been ensured. These have a direct effect on the reliability of the electric supply system of DESCO.

Overall, the project can be considered satisfactory, considering: (i) the project attained its objective despite Covid-19, with the only impact being delayed in implementation; (ii) no change in project scope and all indicators were achieved; (iii) clients were happy with AIIB's services during processing and implementation; (iv) no cost overrun; and (v) this is the first standalone project financed by AIIB, not only the first one in Bangladesh.

Project Objective Indicators	Indicator Level	Unit of Measure	Cumulative Target Values													Frequency	Responsibility	
			Baseline (2016)	2017		2018		2019		2020		2021		End Target (2022)				
			Value	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual			
Number of service connections installed	Project	Million	0	0.8	0.8	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	Annual	BREB
Number of small low-voltage transformers installed	Project	'000	0	20	20	52	65	65	65	65	65	65	65	65	65	65	Annual	BREB
Upgrade of two grid substations from 250 MVA to 480 MVA	Project	MVA	250	250	250	250	250	480	480	480	480	480	480	480	480	480	Annual	DESCO
Length of 33 kV underground cable installed	Project	Kilo meters	0	25	0	70	0	85	37	85	59	85	85	85	85	85	Annual	DESCO

Annex: Client Feedback on the Project

As part of the client feedback process, the project team contacted the PIEs for their feedback/ experiences/ suggestions regarding working with AIIB for the first time. Summarized responses are shown in the table below:

AIIB Questionnaire(s)	BREB	DESCO
Are the services and support the project Team professional provided sufficient and on time during project preparation and implementation?	Yes, whenever the BREB team sent an email for any decision or suggestions, they got prompt responses from the project team each time.	DESCO team was supported by the AIIB team extensively during project preparation and implementation. Concurrences on tender documents, amendments, clarifications, and other necessary requests were given quickly.
Is it convenient to access the project Team's services and support?	Yes, it was convenient to access the AIIB project Team's services and support.	It was very convenient to communicate and get support from the AIIB team. DESCO required opinions and clarifications several times during project preparation and implementation, and they got quick replies with straightforward suggestions and guidelines.
Does the project Team demonstrate flexibility and efficiency during project preparation and implementation?	Yes, during the preparation of the withdrawal application Project team gave us the proper guidance. This was very helpful for the BREB team, as this was the first involvement with the AIIB loan.	In the early stage, during tender document preparation, DESCO found the guidelines flexible and open. Onwards they also found the AIIB team efficient in responding to various implementation-related matters.
What is the value addition of AIIB's financing in the project?	Yes, through this project, BREB gave new consumers connections, supporting the government in achieving the universal electrification goal nationwide.	Close monitoring of the project through designated personnel made it convenient to communicate and provide straightforward service from AIIB. Compliance with EHS issues added additional value to the DESCO team.
Will you consider working with the AIIB again in infrastructure development?	Yes, BREB will be very glad to work with AIIB again.	Due to the warm and comfortable working environment, DESCO management will be happy to work with AIIB in the future.
Any other comments, suggestions, etc., to the AIIB project team	AIIB Should provide a letter of Commitment against LC. It would reduce the risk of the PIE project Director transferring the money.	DESCO hopes that AIIB should continue its cordial support of all the projects in Bangladesh.