



Report and Recommendation of the President to the Board of Directors

Project Number: 46452-002
September 2016

Proposed Multitranche Financing Facility and Technical Assistance Grant People's Republic of Bangladesh: South Asia Subregional Economic Cooperation Chittagong– Cox's Bazar Railway Project, Phase 1

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 5 September 2016)

Currency unit	–	taka (Tk)
Tk1.00	=	\$0.01276
\$1.00	=	Tk78.3500

ABBREVIATIONS

ADB	–	Asian Development Bank
EMP	–	environmental management plan
FAM	–	facility administration manual
km	–	kilometer
LIBOR	–	London interbank offered rate
MFF	–	multitranches financing facility
NIS	–	National Integrity Strategy
OCR	–	ordinary capital resources
SASEC	–	South Asia Subregional Economic Cooperation
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., FY2016 ends on 30 June 2016.
- (ii) In this report, “\$” refers to US dollars.

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PROJECT^a AT A GLANCE

1. Basic Data		Project Number: 46452-002			
Project Name	South Asia Subregional Economic Cooperation Chittagong-Cox's Bazar Railway Project, Phase 1	Department /Division	SARD/SATC		
Country Borrower	Bangladesh People's Republic of Bangladesh	Executing Agency	Bangladesh Railway		
2. Sector	Subsector(s)	ADB Financing (\$ million)			
✓ Transport	Rail transport (non-urban)		1,500.00		
	Transport policies and institutional development		1.00		
		Total	1,501.00		
3. Strategic Agenda	Subcomponents	Climate Change Information			
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Adaptation (\$ million)	128.00		
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns	Mitigation (\$ million)	1,372.00		
Regional integration (RCI)	Pillar 1: Cross-border infrastructure	CO ₂ reduction (tons per annum)	46,647		
		Climate Change impact on the Project	High		
4. Drivers of Change	Components	Gender Equity and Mainstreaming			
Governance and capacity development (GCD)	Institutional development	Effective gender mainstreaming (EGM)	✓		
5. Poverty Targeting		Location Impact			
Project directly targets poverty	No	Nation-wide	High		
6. Risk Categorization:	Complex				
7. Safeguards Categorization [Tranche 1]		Environment: A Involuntary Resettlement: A Indigenous Peoples: C			
8. Financing					
Modality and Sources	Indicative Tranches (\$million)				Amount (\$million)
	I	II	III	IV	
ADB					1,501.00
Sovereign MFF-Tranche (Loan): Asian Development Fund	90.00	0.00	0.00	0.00	90.00
Sovereign MFF-Tranche (Loan): Ordinary capital resources	210.00	400.00	500.00	300.00	1,410.00
Sovereign : Technical Assistance Special Fund	1.00	0.00	0.00	0.00	1.00
Cofinancing					0.00
None					
Counterpart					512.00
Government	400.00	50.00	50.00	12.00	512.00
Total	701.00	450.00	550.00	312.00	2,013.00
9. Effective Development Cooperation					
Use of country procurement systems		No			
Use of country public financial management systems		Yes			

PROJECT^a AT A GLANCE

10. Country Operations Business Plan

CPS

<http://www.adb.org/sites/default/files/institutional-document/33002/files/cps-ban-2011-2015-0.pdf>

COBP

<http://www.adb.org/sites/default/files/institutional-document/175184/cobp-ban-2016-2018.pdf>

11. Investment Program Summary

The project will support the Government of Bangladesh in constructing the 102-kilometer (km) Dohazari-Cox's Bazar section of the Chittagong-Cox's Bazar railway corridor in southeastern Bangladesh. The government is rehabilitating the 47-km Chittagong-Dohazari section with its own funds. The project will also strengthen the capacity of Bangladesh Railway for project implementation management. The South Asia Subregional Economic Cooperation (SASEC) trade facilitation and transport working group endorsed the project at a meeting held in Tokyo on 26 November 2015.

The government has requested for an multitranche financing facility (MFF) in an amount up to \$1.5 billion from ADB's ordinary capital resources (OCR) and Special Fund resources to help finance the project. An MFF using the time-slicing approach is proposed as the modality to finance this large-scale stand-alone project through long-term works, goods and services, and consultant contracts. The project was fully appraised as part of the due diligence for the MFF, and each tranche will finance parts of this project. The MFF allows a long-term partnership with the government for policy dialogue and capacity development.

Impact: Efficient and safe railway transport in Bangladesh and improved subregional connectivity and trade

Outcome: Railway transport system in the Chittagong-Cox's Bazar corridor improved

Outputs: (i) New railway line commissioned, and (ii) Project implementation capacity of Bangladesh Railway strengthened

Implementation Arrangements: Bangladesh Railway will be the executing agency.

Project Readiness: Consultants recruited under the Subregional Transport Project Preparatory Facility prepared the project's design, which considered engineering design measures to minimize the need for land acquisition and resettlement. Given that Bangladesh is a low-lying country and the project area experiences high rainfall, the main climate change-related impact on the project is increased flooding and river flow volumes due to more rainfall. Embankment height, drainage structure design, and bridge height were adjusted to account for these impacts.

Bangladesh Railway's capacity to operate and maintain assets was strengthened by updating several operations manuals as part of the railway reform project. Bangladesh Railway will maintain all assets financed under this loan in such a way that they are available for safe railway operation, and will establish a dedicated maintenance unit for the new line.

12. Milestones

Modality	Estimated Approval	Estimated Completion ^b
Multitranchise financing facility	28 September 2016	1 July 2025
Tranche I	28 September 2016	31 December 2024
Tranche II	30 September 2018	31 December 2021
Tranche III	30 September 2020	31 December 2022
Tranche IV	30 September 2022	30 September 2023

13. Project Data Sheet (PDS)

PDS^c

<http://www.adb.org/projects/46452-002/main>

^a Multitranchise Financing Facility (MFF).

^b For MFF, this refers to the end of the availability period; for tranches, this refers to the tranche closing date.

^c Safeguard documents can be viewed by clicking the Document's hyperlink in the Project Data Sheet (PDS) page.



I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed multitranche financing facility (MFF) to the People's Republic of Bangladesh for the South Asia Subregional Economic Cooperation (SASEC) Chittagong–Cox's Bazar Railway Project, Phase 1. The report also describes the proposed technical assistance (TA) for Project Implementation Management, and if the Board approves the proposed MFF, I, acting under the authority delegated to me by the Board, approve the TA.

2. The project will support the Government of Bangladesh in constructing the 102-kilometer (km) Dohazari–Cox's Bazar section of the Chittagong–Cox's Bazar railway corridor in southeastern Bangladesh.¹ The government is rehabilitating the 47-km Chittagong–Dohazari section with its own funds. The project will also strengthen the capacity of Bangladesh Railway for project implementation management. The SASEC trade facilitation and transport working group endorsed the project at a meeting held in Tokyo on 26 November 2015.²

II. THE PROJECT

A. Rationale

3. Bangladesh has the potential to become a transport and transshipment center for the subregion. It borders India and Myanmar and is close to the landlocked countries of Bhutan and Nepal. Bangladesh is also located at the main corridor of the Trans-Asia Railway network linking South and Southeast Asia. Nonetheless, railways account for a low market share in subregional transport. Only 11.9% of Bangladesh's imports from India (876,855 tons) and 1.1% of its exports to India (17,832 tons) in 2011 were transported by rail. Only one passenger train operating twice a week links Dhaka with Kolkata, India. On average, only one freight train per day crosses the border. Major constraints in subregional rail connectivity are the lack of connectivity between the rail networks, the differences between the track gauges in the member states, incompatibilities in rolling stock, limited line capacity, and the overall condition of the rail network in Bangladesh.

4. The project will connect Cox's Bazar district for the first time to the national and subregional railway network, and support efficient development in the Dhaka–Chittagong–Cox's Bazar–Myanmar border corridor through improved, reliable, safe, and environmentally friendly railway connectivity, contributing to the overall development of the national economy. The railway corridor is part of the Trans-Asia Railway network and will facilitate access for the Cox's Bazar district's population and products to subregional markets and trade. The project will improve connectivity toward Myanmar by intermodal facilities for passengers and freight transferring to road transport toward the Myanmar border. The project will be constructed in dual-gauge tracks to enable future direct connectivity toward western Bangladesh and India, where railways are constructed mostly in broad gauge, as well as toward northeastern India and Southeast Asia, where railways are mostly constructed in meter gauge.

5. Cox's Bazar is being developed to become a major domestic and regional tourist destination. Tourism in Cox's Bazar is expected to grow by at least 5% annually and the Government of Bangladesh intends to develop the district into a regional tourist hub and seaside resort, and other areas of the district and the Chittagong Hill Tracts into eco-tourist destinations. Developing tourism in Cox's Bazar is expected to contribute significantly to the district's economic growth and create jobs in tourism and supporting industries. But tourists can

¹ The Asian Development Bank (ADB) provided project preparatory TA under the Subregional Transport Project Preparatory Facility (TA loan 2688-BAN).

² The design and monitoring framework is in Appendix 1.

travel to the district only by road via the two-lane national highway or on a very limited scale by air; most tourists use the bus and come from Bangladesh's urban centers, such as Dhaka (located 470 km north of Cox's Bazar), Comilla, and Chittagong. Each year, around 1.875 million tourists visit Cox's Bazar and stay in the district's more than 200 hotels and numerous guesthouses and dormitories. Annually, more than 9 million bus trips are made to the district from Chittagong alone. It is expected that the railway will serve as an alternative mode of transport for about 50% of trips currently using buses. Through this modal shift from road to rail, the project will help reduce greenhouse gas emissions and improve road safety. Special tourist trains will be operated between Dhaka and Cox's Bazar to accommodate the demand.

6. In addition, significant local demand from the district's population of about 2.2 million is expected from trips related to work, educational, social, medical, and administrative reasons. To accommodate this local demand, all train stations will be equipped with multimodal facilities, and local as well as mail trains will operate on the line. Inbound freight demand is expected mainly from supplies for the district and its tourism industry, while outbound freight will carry goods from the district, such as salt, fish products, and timber. The project will also facilitate access to investments by other development partners, such as Japan International Cooperation Agency's (JICA) planned power plant and deep-sea port in Matarbari Island near Cox's Bazar.

7. **Road map.** The government's Vision 2021 lays out development targets that would help Bangladesh reach middle-income status by its 50th anniversary in 2021.³ To achieve this, the 7th Five-Year Plan, FY2016–FY2020 (the seventh plan) aims to accelerate economic growth, employment generation, and poverty reduction; and intends to raise the annual average growth rate to 7.4%.⁴ The project is part of the government's strategy to connect more districts of the country to the railway network. It will further support the objectives to (i) generate employment by developing Cox's Bazar's tourism industry; (ii) improve subregional connectivity and trade; (iii) increase the market share of the railway system, especially for long-distance passenger and freight traffic; and (iv) improve the integration of different modes of transport.

8. **Strategic context.** The seventh plan includes the improvement of railways as energy-efficient multimodal transport systems to reduce carbon emissions. It also refers to the establishment of proper regional rail connectivity as a major investment priority. The government's strategy in the seventh plan is to increase Bangladesh Railway's market share from 4% to 15% in freight transport, and from 4% to 10% in passenger transport. The railway will focus on lucrative market segments and provide long-distance passenger transport by intercity trains as well as long-haul freight transport and container trains. The subsector policies for rail transport are set out in the National Integrated Multimodal Transport Policy, which states that the railway can help avoid the construction of roads by attracting current and future road users through improvements in long-distance intercity train service quality, timetabling, and capacity.⁵ The Railway Master Plan pointed out that the rail transport subsector must significantly improve its efficiency, service quality, intermodal connectivity, and network coverage to serve as a viable mode of transport.⁶

9. **Policy framework.** To ensure the sustainability of the project, Bangladesh Railway will pursue ongoing reforms by (i) improving its accounting; (ii) implementing annual adjustments to the passenger and freight tariff; (iii) fully operationalizing the container company to increase the

³ Centre for Policy Dialogue. 2007. *Bangladesh Vision 2021*. Dhaka.

⁴ Government of Bangladesh, Planning Commission, General Economics Division. 2015. *7th Five-Year Plan, FY2016–FY2020: Accelerating Growth, Empowering Citizens*. Dhaka.

⁵ Government of Bangladesh, Ministry of Communications, Roads Division. 2013. *The National Integrated Multimodal Transport Policy*. Dhaka.

⁶ Government of Bangladesh, Ministry of Railways. 2013. *Railway Master Plan (July 2010 to June 2030)*. Dhaka.

market share between Dhaka and Chittagong Port from 10% to 15%; (iv) setting up a separate unit to operate and manage the more luxurious tourist trains on the new Dhaka–Chittagong–Cox’s Bazar line, targeting to increase revenues while maintaining a higher standard of comfort and reliability for passengers by charging special tariffs; and (v) establishing an operation and maintenance unit for the new infrastructure between Chittagong and Cox’s Bazar.

10. **Railway reform.** The sector reform framework agreed between the government and ADB, JICA and the World Bank formulated a detailed reform program. The Asian Development Bank (ADB)-financed Railway Sector Investment Program provided support for the implementation of these key sector policy, organizational, and capacity-building reforms to make the state-owned Bangladesh Railway more commercially focused, and improve governance and accountability.⁷ It restructured Bangladesh Railway into a lines-of-business structure; established an accounting system based on this structure; and introduced an information technology system to support enterprise resource planning and improve asset management, financial management and governance, accounting systems, and human resource utilization and governance. The full rollout of the enterprise resource planning system is ongoing; it is expected that FY2017 financial statements for Bangladesh Railway can be prepared by the system. Reforming the railway industry in addition to investing in increased transport capacity is one of the priorities of the government under the seventh plan. As a first step in transforming itself into a more commercially focused transport service provider, Bangladesh Railway set up a container company in April 2016 to handle the container business as a government-owned corporate entity in close coordination with private sector clients, especially from the garments and logistics industries. A tariff reform was introduced in February 2016, which rationalized the passenger and freight tariff and provides for annual tariff adjustments based on cost indicators. A detailed description of the railway reform activities is in the railway reform progress report.⁸

11. **Investment program.** The project has been identified as one of the priorities in the seventh plan and the Railway Master Plan. It will focus on financing the construction of the 102 km Dohazari–Cox’s Bazar section as phase 1 of the planned improvement for the Chittagong–Cox’s Bazar railway corridor. The Government of the Republic of Korea plans to finance the replacement of the road cum railway bridge over Karnaphuli River in Chittagong. The project design includes provisions for future capacity enhancement, and extensions of the line to Gundam at the Myanmar border and to the planned deep-sea port on Matarbari Island. These future extensions are expected to be financed under phase 2 of the proposed project. The dual-gauge conversion of the Dhaka–Chittagong section will be financed under a future ADB project. The project will also continue to support the implementation of the railway reform program.

12. **ADB-financed railway projects.** The Railway Sector Investment Program (Footnote 7) finances (i) the double tracking of the 64 km Tongi–Bhairab Bazar section of the Dhaka–Chittagong corridor (ii) the extension of loop lines and modernization of signaling in the Ishurdi–Darsana section; and (iii) the procurement of 150 passenger carriages. In 2014, ADB approved the SASEC Railway Connectivity: Akhaura–Laksam Double Track Project, which is cofinanced by the European Investment Bank.⁹ It will upgrade the 72 km Akhaura–Laksam section of the Dhaka–Chittagong corridor to a double track railway line with modern signaling equipment. In

⁷ ADB. 2006. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility and Technical Assistance Grant to the People’s Republic of Bangladesh for the Railway Sector Investment Program*. Manila.

⁸ Railway Reform Progress Report (accessible from the list of linked documents in Appendix 2).

⁹ ADB. 2014. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the People’s Republic of Bangladesh for the South Asia Subregional Economic Cooperation Railway Connectivity: Akhaura–Laksam Double Track Project*. Manila (Loan 3169/3170-BAN).

2015, ADB approved the Railway Rolling Stock Project¹⁰ and Additional Financing to the Subregional Transport Project Preparatory Facility,¹¹ which is preparing transport projects in Bangladesh to improve project readiness and expedite project implementation.

13. **Development coordination.** In the Bangladesh rail transport subsector, interventions by key development partners are well-coordinated. The sector reform framework agreed by the government, ADB, JICA and the World Bank is supported by the ADB-financed Railway Sector Investment Program (Footnote 7) and provides a platform for institutional development as basis for infrastructure financing investment programs. Infrastructure investments are concentrating on the two key rail corridors, Dhaka–Chittagong–Cox’s Bazar and Dhaka–Khulna. In addition to the ADB-financed projects, JICA financed (i) double tracking of the 61 km Laksam–Chinki Astana section of the Dhaka–Chittagong corridor; (ii) remodeling of the Chittagong station yard; and (iii) procurement of 11 diesel locomotives. The Export-Import Bank of Korea prepares financing (i) the improvement of the signaling system in the Chinki Astana–Chittagong section; (ii) procurement rolling stock; and (iii) the new Karnaphuli river road cum railway bridge in Chittagong. The Government of India is supporting (i) construction of the second Bhairab Bridge and the second Titas Bridge in the Dhaka–Chittagong corridor; (ii) procurement of passenger coaches, freight wagons, and locomotives; (iii) construction of the Kulna–Mongla Port Rail Line; (iv) construction of the third and fourth dual-gauge track between Dhaka and Tongi; and (v) rehabilitation of the Kulaura–Shahbazpur section. JICA is supporting design for construction of the new Jamuna railway bridge in the Dhaka–Khulna corridor.

14. **Investment plan and MFF modality.** The government has requested for an MFF in an amount up to \$1.5 billion from ADB's ordinary capital resources (OCR) and Special Funds resources to help finance the project. An MFF using the time-slicing approach is proposed as the modality to finance this large-scale stand-alone project through long-term works, goods, and services; and consultant contracts. The project was fully appraised as part of the due diligence for the MFF, and each tranche will finance parts of this project. The MFF allows a long-term partnership with the government for policy dialogue and capacity development. Once a tranche is disbursed, the government will submit a periodic financing request for a subsequent tranche, which will continue to finance the contracts awarded under tranche 1.

B. Impact and Outcome

15. The impact of the project will be efficient and safe railway transport in Bangladesh and improved subregional connectivity and trade. The outcome will be improved railway transport system in the Chittagong–Cox’s Bazar corridor.

C. Outputs

16. The project will support (i) the construction of a new railway line and (ii) the strengthening of the project implementation capacity of Bangladesh Railway. For the first output, 102 km of new railway line will be commissioned, with nine stations, integrating design features that are friendly to elderly people, women, children, and people with disabilities. The second output will involve implementation of a safeguard monitoring system, public communication plan, and safety awareness. Tranche 1 will finance part of the construction contract for the project.

¹⁰ ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People’s Republic of Bangladesh for the Railway Rolling Stock Project*. Manila (Loan 3301-BAN).

¹¹ ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Additional Financing to the Subregional Transport Project Preparatory Facility*. Manila (Loan 3295/2688-BAN).

D. Investment and Financing Plans

17. The project is estimated to cost \$2.012 billion (Table 1), including taxes and duties, physical and price contingencies, interest, and other charges during implementation.

Table 1: Project Investment Plan
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Railway construction component	1,714.0
2. Institutional development component	100.0
Subtotal (A)	1,814.0
B. Contingencies^c	140.0
C. Financing Charges During Implementation^d	58.0
Total (A+B+C)	2,012.0

^a Includes taxes and duties for civil works equivalent to \$115 million to be financed from Asian Development Bank (ADB) loan resources. ADB may finance local transportation, insurance costs, and bank charges.

^b In 2016 prices.

^c Physical contingencies computed at 8% for civil works. Price contingencies computed at an average of 1.5% annually on foreign exchange costs and 6% annually on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges; financing charges under the ADB loan are to be capitalized. Interest during construction for the ADB loan from ordinary capital resources has been computed at the 5-year fixed swap London interbank offered rate (LIBOR) plus a spread of 0.5% and a maturity premium of 0.1%. Commitment charges for the ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Interest during construction for the ADB loan from ADB's Special Funds resources is computed at 2% per annum. There are no commitment charges for loans from the Special Funds resources.

Sources: Asian Development Bank and Bangladesh Railway estimates.

18. The government has requested ADB financing through an MFF in an amount up to \$1,500,000,000 or 74.6% of the project cost from ADB's ordinary capital resources and Special Funds resources.¹² The MFF will consist of several tranches, subject to the government's submission of related periodic financing requests, execution of the related loan agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the framework financing agreement. Each tranche will finance parts of the works, goods, and services; and consulting services contracts using the time-slicing approach for large-scale stand-alone projects. Once a tranche is disbursed, the government will submit a periodic financing request for a subsequent tranche, which will continue to finance the contracts awarded under tranche 1.

19. For the first tranche of the MFF, the government has requested an OCR loan of \$210 million and a loan in various currencies equivalent to SDR64.374 million from ADB's Special Funds resources.¹³ The OCR loan will have a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility,¹⁴ a commitment charge of 0.15% per year and such other terms and conditions set forth in the draft OCR loan agreement. The loan from ADB's Special Funds resources will have a 25-year term, including a grace period of 5 years, an interest rate of

¹² Financing includes taxes and duties of about \$115 million for civil works, to help offset the financial burden of counterpart funds by the government, especially for land acquisition and resettlement. The amount is within the reasonable threshold identified during the country partnership strategy preparation process, is not excessive (7.67% of ADB loan resources), applies only to ADB-financed expenditures, and is material and relevant to the success of the project.

¹³ The loan from ADB's Special Funds resources includes \$40 million from the subregional pool. The OCR loan includes \$100 million from the regional cooperation and integration set-aside.

¹⁴ The interest includes a maturity premium of 10 basis points. This is based on the above loan terms and the government's choice of repayment option and dates.

2% per annum during the grace period and thereafter, and such other terms and conditions set forth in the draft special funds resources loan agreement.

20. The proposed tranching schedule and financing plan is in Table 2.¹⁵ The government will finance the remaining cost equivalent to \$512 million, including land acquisition and resettlement, project management, and other miscellaneous costs. The government will provide the ADB loans to Bangladesh Railway through the budgetary allocation in the form of a grant.

Table 2: Financing Plan

	Tranche 1 (2016)	Tranche 2 (2018)	Tranche 3 (2020)	Tranche 4 (2022)	Total	
Source	Amount (\$ million)	Amount (\$ million)	Amount (\$ million)	Amount (\$ million)	Amount (\$ million)	Share of Total (%)
Asian Development Bank	300.0	400.0	500.0	300.0	1,500.0	74.6
Ordinary capital resources (loan)	210.0	400.0	500.0	300.0	1,410.0	70.1
Special Funds resources (loan)	90.0	0.0	0.0	0.0	90.0	4.5
Government	400.0	50.0	50.0	12.0	512.0	25.4
Total	700.0	450.0	550.0	312.0	2,012.0	100.0

Sources: Asian Development Bank and Bangladesh Railway estimates.

E. Implementation Arrangements

21. The implementation arrangements are summarized in Table 3 and described in detail in the facility administration manual (FAM).¹⁶

Table 3: Implementation Arrangements

Aspects	Arrangements		
Implementation period	September 2016–July 2025		
Estimated completion date	1 July 2025		
Management			
(i) Executing agency	Bangladesh Railway		
(ii) Implementation unit	Chittagong, 1 project director with 34 staff		
Procurement	International competitive bidding	1 contract (2 lots)	\$1,200 million
Consulting services	1. CSC: QCBS	4,056 person-months	\$67 million
	2. PMC: QCBS	1,860 person-months	\$13 million
Retroactive financing and advance contracting	Retroactive financing and advance contracting is proposed for works, goods and services, and consultant recruitment. Retroactive financing will be provided to finance expenditure incurred prior to loan effective date but not earlier than 12 months before signing the loan agreements and not exceeding 20% of the respective loan amount.		
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, CSC = construction supervision consultant, PMC = project management consultant, QCBS = quality- and cost-based selection method.

Sources: Asian Development Bank and Bangladesh Railway.

22. ADB-financed works will be procured through international competitive bidding in accordance with ADB's Procurement Guidelines (2015, as amended from time to time).

¹⁵ The Export–Import Bank of Korea has indicated its interest to contribute an equivalent of \$99 million loan cofinancing for the construction of a new road cum railway bridge over Karnaphuli River in Chittagong. If such cofinancing becomes available, it will be on a parallel basis and not administered by ADB.

¹⁶ Facility Administration Manual (accessible from the list of linked documents in Appendix 2).

Bangladesh Railway has sound experience in procurement and contract management under ADB financing. ADB will play an active facilitation role in the bidding process to ensure timeliness and quality in the process, and will engage its own consultants to help with this work. Construction supervision and project management support will require two consultants, which will be engaged in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). All consulting services will be recruited using the 90:10 quality- and cost-based selection method, considering the complexity of multidisciplinary railway projects.

III. TECHNICAL ASSISTANCE

23. Capacity development TA for project implementation management will be provided under the first tranche.¹⁷ The TA will support Bangladesh Railway (i) in the monitoring of safeguards implementation by an independent external monitor for environment and resettlement, (ii) in public stakeholder communication through development of a website, (iii) in a safety awareness campaign for railway crossings, and (iv) through procurement support and advisory services. The executing agency for the TA will be Bangladesh Railway. The TA implementation period will be from January 2017 to December 2024.

24. The TA is estimated to cost \$1,250,000, of which \$1,000,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V). The government will provide counterpart support in the form of office accommodation, support facilities, counterpart staff, reports, and other logistical support and in-kind contributions. ADB will engage national and international consulting firms as well as individual consultants according to its Guidelines on the Use of Consultants, using the 90:10 quality- and cost-based selection method due to the highly specialized knowledge required for the railway sector.

IV. DUE DILIGENCE

A. Technical

25. Consultants recruited under the Subregional Transport Project Preparatory Facility¹⁸ prepared the project's design, which considered engineering design measures to minimize the need for land acquisition and resettlement. Given that Bangladesh is a low-lying country and the project area experiences high rainfall, the main climate change-related impact on the project is increased flooding and river flow volumes due to more rainfall. Embankment height, drainage structure design, and bridge height were adjusted to account for these impacts. Bangladesh Railway's capacity to operate and maintain assets was strengthened by updating several operations manuals as part of the railway reform project. Bangladesh Railway will maintain all assets financed under this loan in such a way that they are available for safe railway operation, and will establish a dedicated maintenance unit for the new line.

B. Economic and Financial

26. Economic and financial analyses were undertaken and concluded that the project is economically and financially viable. The project economic internal rate of return is 14.8%. The economic analysis compared the benefits and costs of with-project and without-project situations. The main benefits are savings in vehicle operating costs and travel time, and a reduction in accidents. A sensitivity analysis tested the effects of possible negative changes in the key parameters that determine the project's costs and benefits. The analysis indicates that

¹⁷ Attached Technical Assistance (accessible from the list of linked documents in Appendix 2).

¹⁸ ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of Bangladesh for the Subregional Transport Project Preparatory Facility*. Manila.

the project's economic viability would remain satisfactory even under adverse scenarios. The financial assessment was undertaken to examine the viability of the project investment. The incremental revenues being generated under the project will be adequate to fully finance the project's incremental recurrent costs, and partially contribute to capital repayment and debt servicing. The project's lending decision is based more on economic viability than financial viability. Overall, Bangladesh Railway's operations are supported by the government's budgetary commitment; the yearly government support is adequate to sustain operations, reflecting the systemic importance of Bangladesh Railway.

C. Governance

27. **Financial management.** The financial management assessment was updated following ADB's Guidelines for the Financial Management and Analysis of Projects,¹⁹ Financial Due Diligence: a Methodology Note,²⁰ and related technical guidance notes. The assessment found that the capacity is adequate and the overall risk is moderate. Bangladesh Railway has prior and ongoing experience in implementing ADB projects, and understands ADB's procurement, disbursement, and financial management procedures. The capacity is further strengthened through the Bangladesh Railway Reform Project by improving the financial accounting and reporting system.²¹ Details of risks and key mitigating measures are in the FAM (footnote 16).

28. **Procurement and anticorruption measures.** ADB will review procurement-related documents at all major milestones before proceeding with the procurement process. Two large works packages will be procured and two consultants recruited; the works and consulting packages will be to complete the entire project, and will be financed by ADB under tranche 1 and all subsequent tranches. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and Bangladesh Railway. The specific policy requirements and supplementary measures are described in the FAM.

29. The procurement rules for the selection of contractors required by international financial institutions such as ADB are considered sufficiently robust to deter corruption. National procurement regulation has also improved through the Public Procurement Act, 2006 and the related Public Procurement Rules, 2008 (with subsequent amendments); and the establishment of a Central Procurement Technical Unit under the Implementation Monitoring and Evaluation Division of the Ministry of Planning of the Government of Bangladesh. In October 2012, the National Integrity Strategy (NIS) was approved and a National Integrity Advisory Committee was formed with the Prime Minister as the chair to steer the anticorruption movement and implement the strategy. The NIS includes a road map for strengthening both state and non-state accountability institutions to fight corruption and improve governance. Under the NIS, all line ministries and key watchdog institutions have formed an ethics committee and appointed a focal point to implement a corruption prevention program and corresponding actions in their respective ministries or agencies.

D. Poverty and Social

30. The project's direct area of influence includes six administrative *upazilas* (subdistricts) in Chittagong and Cox's Bazar districts.²² Overall, poverty rates in the project area are lower

¹⁹ ADB. 2005. *Guidelines for the Financial Management and Analysis of Projects*. Manila.

²⁰ ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila.

²¹ The Bangladesh Railway Reform Project is financed under tranche 1 of the Railway Sector Investment Program (footnote 7).

²² Chandanaish, Lohagara, and Satkania in Chittagong district; and Chakaria, Cox's Bazar Sadar, and Ramu in Cox's Bazar district. Estimates are based on the 1991 population census, taking population growth into account.

(13%–34%) than the national average (31.5%).²³ According to the poverty and social analysis, the main sources of income are agriculture, businesses, remittances, day labor, and services. Tourism is important and growing; Cox's Bazar's 120 km of sandy beaches make it one of the most visited destinations in the country. The project will improve accessibility for the estimated 2 million residents living in the project's direct area of influence (who do not have access to the railway system at present) and support the growth of businesses, trade, and services.

31. **Gender.** Surveys conducted under the poverty and social analysis revealed that only 5% of women in the project-affected area have used the train, since no rail connection exists between Dohazari and Cox's Bazar. Overall, women had a positive perception of the project and the majority (61%) said they would feel comfortable traveling alone on a train. Moreover, 50% of the women viewed the new train line as a way for them to access new income-generation opportunities. But 44% expressed concerns about their personal safety, particularly in relation to theft and harassment, while others were worried about train delays.

32. **HIV/AIDS and human trafficking.** Although district data on HIV prevalence for Chittagong and Cox's Bazar is lacking, health officials have pointed out that tourism and cross-border population movements may have increased the incidence of sexually transmitted diseases. As for human trafficking, while neither local data nor nationally collected data exist on the number of trafficked persons to and from Bangladesh, discussions with community-based organizations during project preparation indicate the existence of people smuggling in Cox's Bazar, which is near the Myanmar border. Although the project is not expected to facilitate international human trafficking given that train services are subject to greater control than the current routes used by the traffickers, it may contribute to more rural–urban migration flows. These migrants may then be vulnerable to being coerced and exploited by organized traffickers.

33. **Rail crossing safety.** Given that the project consists of a new line located in a community that is not used to train services, the risk of train collisions with vehicles and pedestrians is high—residents and drivers along the corridor may not be aware of the train's braking limitations (compared with vehicles) and the need to clear the rail tracks in advance.

34. **Gender action plan.** The MFF and tranche 1 are categorized as effective gender mainstreaming. A gender action plan was prepared for tranche 1 and the MFF to ensure women-friendly design features and mitigate the social risks mentioned above. The action plan includes the following activities: (i) integrate features that would make the stations friendly to elderly people, women, children, and people with disabilities; (ii) promote rail crossing safety awareness campaigns to communities along the corridor, targeting pedestrians, drivers, parents, schoolchildren, and professional drivers; (iii) include personal safety and/or anti-sexual harassment protocol in station and capacity building; (iv) run a public, preventive awareness-raising campaign on sexually transmitted disease and human trafficking; (v) take proactive measures to support the rehabilitation of affected women; (vi) launch a website and communication platform about the project, its impact, and its implementation progress.

E. Safeguards

35. **Environmental impact.** The project as a whole was assessed as category A in accordance with ADB's Safeguard Policy Statement (2009). The project scope includes the construction of a greenfield rail line passing through elephant crossings and three protected areas (Chunati Wildlife Sanctuary, Faisakhali Wildlife Sanctuary, and Methakatchpia National

²³ Government of Bangladesh, Bangladesh Bureau of Statistics. 2011. *Report of the Household Income & Expenditure Survey 2010*. Dhaka.

Park). Accordingly, tranche 1 and all subsequent tranches will be classified as category A. An environmental impact assessment was prepared and disclosed on ADB's website on 26 May 2016. An environmental assessment and review framework was also prepared for the MFF as a whole and disclosed on ADB's website. Key impacts during project construction will include the removal of about 240,000 trees, earthworks, and hill cutting works that pose dust and erosion risks, occupational health and safety risks, disturbance to elephants, and further disturbances to the three protected areas. Creating a barrier to elephant crossing routes and generating noise from the new rail line are key long-term risks. A comprehensive environmental management plan (EMP) was prepared to mitigate all identified impacts. It will be mandatory for the contractor to implement the EMP requirements during construction. Innovative measures such as elephant overpasses, use of thermal imaging cameras, and habitat enhancement have been proposed to avoid rail–elephant collisions and enable continued movement of elephants in the project area. Extensive consultations were held with over 350 people during project preparation, including people affected by the project, relevant government agencies,²⁴ local women's groups, and nongovernment organizations. Their concerns were incorporated in the project design. The project will continue to address concerns and grievances of affected people through a grievance redress mechanism proposed under the project.

36. A project implementation unit in Chittagong will manage on-site project implementation, with support from the project management and construction supervision consultants; all will have environment safeguard officers. The contractor will be responsible for implementing the EMP. An independent monitor to be recruited under the TA will conduct third-party monitoring of environmental safeguards and provide technical guidance on the elephant crossing design.

37. **Involuntary resettlement.** The project as a whole was assessed as category A; accordingly, tranche 1 and all subsequent tranches will be classified as category A as per ADB's Safeguard Policy Statement. A detailed survey of involuntary resettlement impacts was conducted, which identified the acquisition of 562.83 hectares of land and impacts on 1,984 households (9,946 persons), the majority of whom (80%) will have to physically relocate. Most affected households (65%) are titleholders. About 80% of physically affected titled households will lose less than 30% of their land and will be able to relocate their homestead to their residual plot. The project is also expected to affect 44 community structures.

38. The resettlement plan was designed using a participatory approach, which led to several realignments and design changes. Its measures adequately deal with the identified impacts and reflect lessons learned from other projects being implemented in Bangladesh. The resettlement plan includes compensations at replacement cost, income restoration measures, shifting and reconstruction assistance, special provisions for vulnerable households, and assistance in identifying alternative plots of land to buy or rent. In addition, it includes a livelihood improvement program with special measures to encourage women's participation. The resettlement plan will be financed entirely by the government, and its budget has been approved. It will be implemented by Bangladesh Railway, with support from a nongovernment organization. Bangladesh Railway is familiar and experienced with ADB's involuntary resettlement requirements, as it is conducting land acquisition and resettlement activities for two ADB-financed investments (footnote 7 and footnote 9). Measures to develop Bangladesh Railway's capacity will be included as part of project inception. The resettlement plan is disclosed on ADB's website²⁵ and will be disclosed by Bangladesh Railway locally as well. Since the project

²⁴ This includes forestry officials responsible for the three protected areas in the project area. The forestry officials support the project, and their technical recommendations were incorporated in the project.

²⁵ Resettlement Plan (accessible from the list of linked documents in Appendix 2).

is financed through an MFF modality, a resettlement framework was prepared and is also disclosed.²⁶

39. **Indigenous peoples.** The MFF and tranche 1 are classified as category C as per the Safeguard Policy Statement. The alignment does not affect tribal lands, and the survey confirms that no indigenous person is affected. Given that the project will be financed through an MFF, an indigenous peoples planning framework was prepared and disclosed.²⁷

F. Risks and Mitigating Measures

40. Key project risks are (i) project implementation delays, (ii) inadequate safeguard compliance, and (iii) uncertain financial sustainability. These risks and mitigating measures are discussed in the Risk Assessment and Risk Management Plan.²⁸ The integrated benefits and impacts are expected to outweigh the costs.

V. ASSURANCES

41. The government and Bangladesh Railway have assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the FAM and loan documents.

42. The government and Bangladesh Railway have given ADB certain undertakings for the MFF, which are set forth in the framework financing agreement. Specific covenants agreed by the government and Bangladesh Railway with respect to individual tranches under the MFF are set forth in the loan agreement for the respective tranches.

VI. RECOMMENDATION

43. I am satisfied that the proposed multitranche financing facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the multitranche financing facility to the People's Republic of Bangladesh for the South Asia Subregional Economic Cooperation Chittagong–Cox's Bazar Railway Project, Phase 1 in an aggregate principal amount not exceeding the equivalent of \$1,500,000,000, which comprises

- (i) the provision of loans from ADB's Special Funds resources, with interest and other terms to be determined in accordance with ADB's applicable policies relating to Special Funds resources; and
- (ii) the provision of loans from ADB's ordinary capital resources, with interest and other terms to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility;

and is subject to such other terms and conditions as are substantially in accordance with those set forth in the framework financing agreement presented to the Board.

Takehiko Nakao
President

5 September 2016

²⁶ Resettlement Framework (accessible from the list of linked documents in Appendix 2).

²⁷ Indigenous People's Planning Framework (accessible from the list of linked documents in Appendix 2).

²⁸ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

DESIGN AND MONITORING FRAMEWORK

Impacts the Project is Aligned with Efficient and safe railway transport in Bangladesh (7th Five-Year Plan, FY2016–FY2020) ^a Improved subregional connectivity and trade (7th Five-Year Plan, FY2016–FY2020) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Railway transport system in the Chittagong–Cox's Bazar corridor improved	By 2024 a. 10 passenger trains operate daily between Chittagong and Cox's Bazar (2016 baseline: no train services) b. 2.9 million annual passengers transported between Chittagong and Cox's Bazar (2016 baseline: 0) c. Cox's Bazar district connected to the national and subregional railway network (2016 baseline: not connected)	a. Bangladesh Railway's passenger timetable b. Bangladesh Railway's passenger records c. Bangladesh Railway's project completion report	Delay in releasing counterpart funds
Outputs 1. New railway line constructed 2. Project implementation capacity of Bangladesh Railway strengthened	By 2023 1a. 102 kilometers of new railway line commissioned 1b. 9 stations constructed, integrating design features that make them friendly to elderly people, women, children, and people with disabilities 2. Safeguard monitoring system, public communication plan, and safety awareness implemented	1–2. Bangladesh Railway's progress and project completion reports	Sufficiently qualified contractors and consultants might not participate in the project
Key Activities with Milestones 1 New railway line commissioned 1.1 Bid documents floated (Q2 2016) 1.2 Contract awarded (Q3 2017) 1.3 Contractor mobilized (Q4 2017) 2 Project implementation capacity of Bangladesh Railway strengthened 2.1 Safeguard monitoring system implemented (Q4 2023) 2.2 Communication plan submitted (Q4 2017) 2.3 Safety awareness campaign implemented (Q4 2023) Project Management Activities 1. Project implementation unit established and project director appointed (Q2 2016)			

2. Construction supervision and project management consultants mobilized (Q3 2017) 3. Advertisements for expression of interest issued (Q2 2016) 4. Submission of proposals (Q4 2016) 5. Consulting contracts awarded (Q2 2017)
Inputs Asian Development Bank: \$1,500,000,000 (MFF); \$1,000,000 (technical assistance grant) Government: \$512,000,000
Assumptions for Partner Financing Not applicable.

FY = fiscal year, MFF = multitranchise financing facility; Q = quarter.

^a Government of Bangladesh, Planning Commission, General Economics Division. 2015. *7th Year Plan, FY2016–FY2020: Accelerating Growth, Empowering Citizens*. Dhaka.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=46452-002-3>

1. Framework Financing Agreement
2. Periodic Financing Request for Project 1
3. Sector Assessment (Summary): Transport (Rail transport [nonurban])
4. Facility Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Attached Technical Assistance
8. Economic and Financial Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Gender Action Plan
12. Environmental Impact Assessment
13. Environmental Assessment and Review Framework
14. Resettlement Plan
15. Resettlement Framework
16. Indigenous Peoples Planning Framework
17. Risk Assessment and Risk Management Plan

Supplementary Documents

18. Climate Risk Assessment and Management Report
19. Comparison of Financing Modality
20. Approach to Time-Slice Financing
21. Updated Railway Reform Progress Report