



Report and Recommendation of the President to the Board of Directors

Project Number: 40540-016
September 2017

Proposed Multitranche Financing Facility and Technical Assistance Grant People's Republic of Bangladesh: South Asia Subregional Economic Cooperation Dhaka– Northwest Corridor Road Project, Phase 2

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 1 September 2017)

Currency unit	–	taka (Tk)
Tk1.00	=	\$0.01231
\$1.00	=	Tk81.2250

ABBREVIATIONS

ADB	–	Asian Development Bank
km	–	kilometer
LGED	–	Local Government Engineering Department
MFF	–	multitranches financing facility
PIU	–	project implementation unit
RHD	–	Roads and Highways Department
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 United States dollars.

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PROJECT^a AT A GLANCE

1. Basic Data		Project Number: 40540-016			
Project Name	South Asia Subregional Economic Cooperation Dhaka-Northwest Corridor Road Project, Phase 2	Department /Division	SARD/SATC		
Country Borrower	Bangladesh People's Republic of Bangladesh	Executing Agency	Roads and Highways Department		
2. Sector	Subsector(s)	ADB Financing (\$ million)			
✓ Transport	Road transport (non-urban)		1,200.00		
		Total	1,200.00		
3. Strategic Agenda	Subcomponents	Climate Change Information			
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive Global and regional transboundary environmental concerns Pillar 1: Cross-border infrastructure	Adaptation (\$ million)	55.60		
Environmentally sustainable growth (ESG)		Climate Change impact on the Project	Medium		
Regional integration (RCI)					
4. Drivers of Change	Components	Gender Equity and Mainstreaming			
Governance and capacity development (GCD)	Organizational development	Effective gender mainstreaming (EGM)	✓		
Partnerships (PAR)	Bilateral institutions (not client government) Official cofinancing				
5. Poverty and SDG Targeting		Location Impact			
Geographic Targeting	No	Regional	High		
Household Targeting	No				
SDG Targeting	Yes				
SDG Goals	SDG9				
6. Risk Categorization:	Complex				
7. Safeguards Categorization [Tranche 1]	Environment: B Involuntary Resettlement: A Indigenous Peoples: C				
8. Financing					
Modality and Sources	Indicative Tranches (\$million)				Amount (\$million)
	I	II	III	IV	
ADB					1,200.00
Sovereign MFF-Tranche (Concessional Loan): Ordinary capital resources	50.00	0.00	0.00	0.00	50.00
Sovereign MFF-Tranche (Regular Loan): Ordinary capital resources	250.00	300.00	300.00	300.00	1,150.00
Cofinancing					0.00
None	0.00	0.00	0.00	0.00	0.00
Counterpart					472.60
Government	171.40	100.00	100.00	101.20	472.60
Total	471.40	400.00	400.00	401.20	1,672.60
Note: An attached technical assistance will be financed on a grant basis by the Technical Assistance Special Fund (TASF-6) in the amount of \$2,000,000					
9. Country Operations Business Plan					
CPS	https://www.adb.org/documents/bangladesh-country-partnership-strategy-2016-2020				
COBP	https://www.adb.org/documents/bangladesh-country-operations-business-plan-2017-2019				
10. Investment Program Summary					
The project will improve the road connectivity and efficiency of Dhaka-Northwest international trade corridor. To ensure the sustainability of the outcome, an associated technical assistance is proposed to assist the government in updating its master plan for roads and improving its planning capacity.					

PROJECT^a AT A GLANCE

Impact: An efficient and modern road transport system in Bangladesh achieved.

Subregional connectivity and trade improved.

Outcome: Road connectivity of the Dhaka-Northwest international trade corridor improved.

Outputs: (i) Phase 2 of the Dhaka-Northwest international trade corridor (Elenga-Hatikumrul-Rangpur section) upgraded, (ii) RHD's institutional capacity in road operation and management enhanced, and (iii) stronger road safety and gender-responsive features, and cost overrun for phase 1 of the Dhaka-Northwest international trade corridor (Joydeypur-Chandra-Tangail-Elenga) financed and completed.

Implementation Arrangements: Roads and Highways Department will be the executing agency.

Project Readiness: Advance action on procurement and consulting services.

11. Milestones

Modality	Estimated Approval	Estimated Completion ^b
Multitranche financing facility	26 September 2017	31 August 2027
Tranche I	6 October 2017	31 December 2020
Tranche II	31 December 2019	31 December 2022
Tranche III	31 December 2021	31 December 2024
Tranche IV	31 December 2023	31 August 2027

12. Project Data Sheet (PDS)

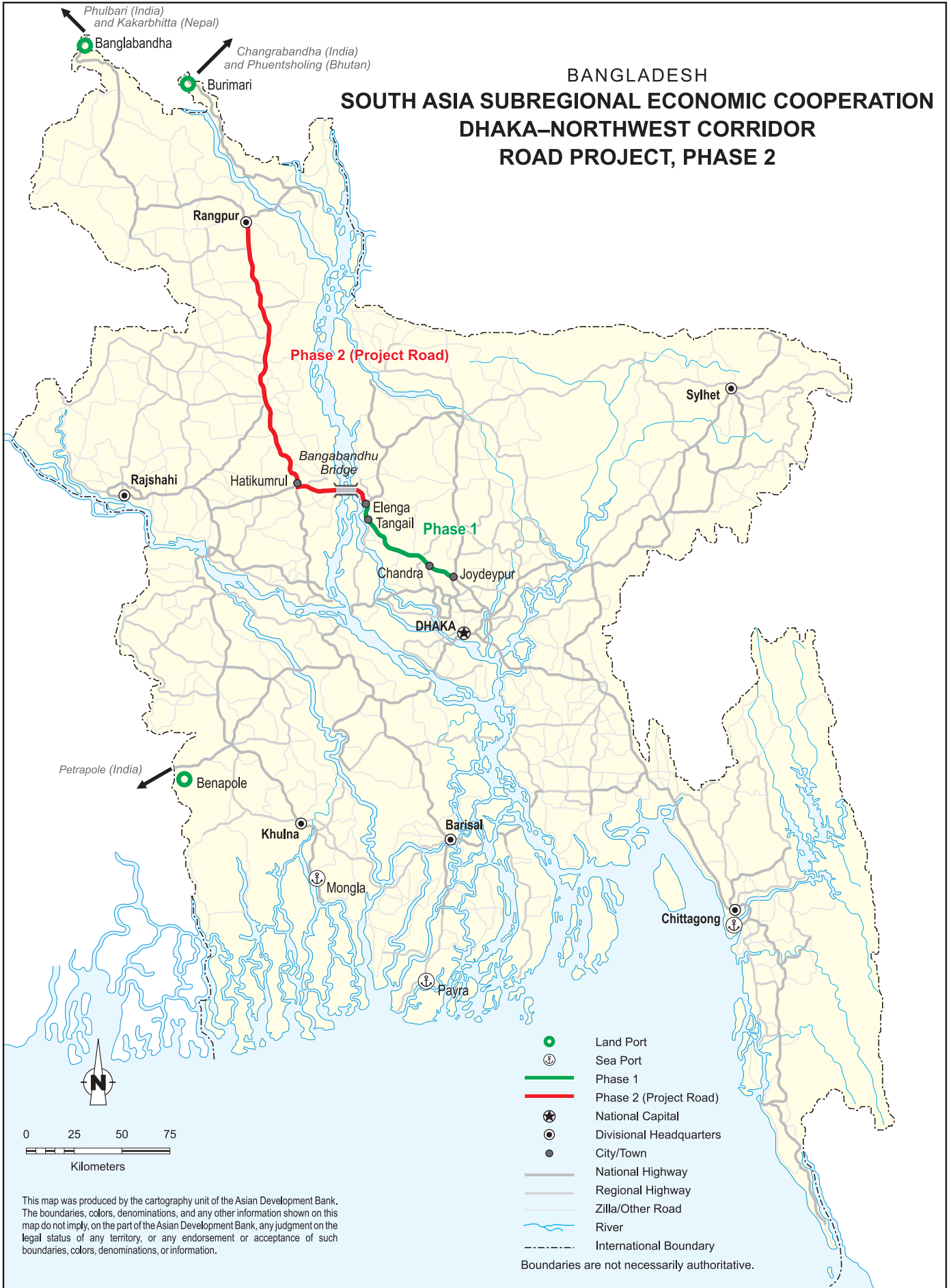
PDS^c <http://www.adb.org/projects/40540-016/main>

^a Multitranche 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.

BANGLADESH SOUTH ASIA SUBREGIONAL ECONOMIC COOPERATION DHAKA-NORTHWEST CORRIDOR ROAD PROJECT, PHASE 2



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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 Dhaka–Northwest Corridor Road Project, Phase 2. The report also describes proposed technical assistance (TA) for Updating the Road Master Plan, 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 improve the road connectivity and efficiency of the Dhaka–Northwest international trade corridor.¹ Three outputs will be delivered: (i) Dhaka–Northwest international trade corridor (Elenga–Hatikumrul–Rangpur) upgraded; (ii) institutional capacity of the Roads and Highways Department (RHD) for road operation and management enhanced; and (iii) stronger road safety and gender-responsive features, and the cost overrun for phase 1 of the Dhaka–Northwest international trade corridor (Joydeypur–Chandra–Tangail–Elenga) financed.² To ensure the sustainability of the outcome, associated TA is proposed to assist the government in updating its master plan for roads and improving its planning capacity.

II. THE PROJECT

A. Rationale

3. **Strategic context.** Bangladesh reached lower middle-income status in July 2015. With its young and rapidly growing population, Bangladesh has the potential to become a major exporter of labor-intensive products. Its location between South and Southeast Asia provides the country good prospects of becoming a regional trading hub. But the country's transport infrastructure is inadequate, which raises costs, reduces competitiveness, and impedes intra-regional trade. As such, Bangladesh's successive 5-year development plans embed regional cooperation and integration, which the Asian Development Bank (ADB) supports through its projects in Bangladesh.³

4. **Sector road map.** Bangladesh's transport system consists of roads, railways, inland waterways, maritime shipping facilities, and civil aviation. Road transport's modal share is over 70% for passenger traffic and 60% for freight. Traffic has been growing at an average rate of above 8% per year. The government has three main policy documents for the road subsector: (i) the Seventh Five Year Plan, FY2016–FY2020,⁴ (ii) the Road Master Plan,⁵ and (iii) the National Integrated Multimodal Transport Policy.⁶ Guided by these policies, the government is gradually

¹ The project is included in Asian Development Bank (ADB). 2016. *Country Operations Business Plan: Bangladesh, 2017–2019*. Manila. The project's title was changed to reflect its location and nature. The Government of Bangladesh refers to the project as "SASEC Road Connectivity Project-II: Improvement of Elenga-Hatikumrul-Rangpur Road to a 4-Lane Highway". No project preparatory TA and/or project design advance is required.

² ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Loan and Technical Assistance Grant to the People's Republic of Bangladesh for South Asia Subregional Economic Cooperation Road Connectivity Project*. Manila. The Road Connectivity Project is considered phase 1 of this proposed project, since there is strong correlation between these two segments of the Dhaka–Northwest international trade corridor.

³ ADB. 2016. *Country Partnership Strategy: Bangladesh, 2016–2020*. Manila.

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

⁵ Government of Bangladesh, RHD. 2009. *Road Master Plan, Volume I: Main Text*. Dhaka.

⁶ Government of Bangladesh, Ministry of Road Transport and Bridges, Road Transport and Highways Division. 2013. *The National Integrated Multimodal Transport Policy*. Dhaka.

upgrading the main corridors to facilitate international trade with and between Bhutan, India, Myanmar, and Nepal. However, road agencies' human, technical, and financial resource limitations have hindered progress in eliminating the bottleneck issues caused by limited road capacity, deteriorated conditions, and the mixture of slow- and fast-moving traffic.

5. **Policy framework.** The Seventh Five Year Plan aims for a well-maintained, cost-effective, durable, and safe road network. RHD is implementing a series of institutional development actions to meet the target.⁷ The Road Master Plan focused on the main roads when it was prepared in 2009 and is now due for an update to meet the needs for subregional corridors and rural roads. The government requested ADB support in updating the Road Master Plan.

6. **South Asia Subregional Economic Cooperation.** Transport infrastructure is the centerpiece of the ADB-supported South Asia Subregional Economic Cooperation (SASEC) program, which promotes regional prosperity.⁸ Since 2001, SASEC member countries have invested over \$9.17 billion in projects with a regional dimension, including 31 transport projects worth \$7.30 billion. SASEC transport investments in Bangladesh and neighboring member countries focus on developing South Asian Association of Regional Cooperation highway corridors. The SASEC Operational Plan, 2016–2025 identified 128 priority regional cooperation and integration transport projects worth about \$63 billion—of which 35 are in Bangladesh.⁹

7. **Dhaka–Northwest International Trade Corridor.** Among the subregional corridors, the government considers the Dhaka–Northwest international trade corridor on South Asian Association of Regional Cooperation highways 4 and 8 as top priorities.¹⁰ The corridor is the second busiest artery in Bangladesh after the Dhaka–Chittagong road. At the northwestern end of the corridor is the Burimari Land Port, which is managed by the Bangladesh Land Port Authority and provides a gateway to Bhutan through India. Improving the transport infrastructure is expected to significantly increase trade in the land port. ADB has been a partner of the government in improving the Dhaka–Northwest international trade corridor since 1994.¹¹

8. **Road Connectivity Project.** In 2012, ADB approved a \$198 million loan for the SASEC Road Connectivity Project (footnote 2), which is considered phase 1 of the proposed project, since there is strong correlation between the phase 1 and phase 2 segments of the Dhaka–Northwest international trade corridor. Phase 1 (i) increased road capacity on 70 kilometers (km) of the Joydeypur–Elenga section of the international trade corridor, (ii) improved operational efficiency of the Benapole and Burimari land ports, and (iii) enhanced the institutional capacity of the RHD.¹² The project is performing well based on the following criteria:

⁷ Institutional Development Action Plan Update (accessible from the list of linked documents in Appendix 2).

⁸ SASEC comprises Bangladesh, Bhutan, India, Maldives, Myanmar, Nepal, and Sri Lanka.

⁹ ADB. 2016. *South Asia Subregional Economic Cooperation Operational Plan, 2016–2025*. Manila.

¹⁰ Because of the large financing and implementation resources required, the government plans to improve the corridor in three phases: (i) Joydeypur–Elenga section and the Burimari Land Port, (ii) Elenga–Hatikumrul–Rangpur section, and (iii) Rangpur–Burimari section.

¹¹ ADB. 1994. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the People's Republic of Bangladesh for the Jamuna Bridge Project*. Manila; ADB. 1996. *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 Jamuna Bridge Access Roads Project*. Manila.

¹² The financing plan of the SASEC Road Connectivity Project comprises (i) a loan in various currencies equivalent to SDR128,114,000 (\$198 million equivalent) from ADB's Special Funds resources; (ii) a \$30 million loan from the OPEC Fund for International Development, administered by ADB for procurement and disbursement supervision; and (iii) a \$30 million loan from the Abu Dhabi Fund for International Development for the parallel financing of the civil works to upgrade about 10 km of project road. The government is financing the remaining local cost of \$86.7 million equivalent, based on cost estimates during project preparation.

- (i) **Delivery of expected outputs.** The output delivery is *satisfactory*: project roads will be completed by December 2018 and improvement of the land ports is *on track*. The RHD is implementing the institutional development actions as planned.
- (ii) **Satisfactory implementation progress.** As of 30 June 2017, or 82% into the loan period, the cumulative contract award eligible for ADB loan financing was \$243.09 million¹³ (140.00% of projection) and the cumulative disbursement was \$75.83 million (31.20% of cumulative contract award and 114.20% of projection).
- (iii) **Satisfactory compliance with safeguard policy requirements.** The project's compliance with safeguard policy requirements is proceeding satisfactorily.
- (iv) **Successful management of risks.** The mitigation measures have been well implemented. Project implementation is not threatened by major risks.
- (v) **On track rating.** The project has been rated *on track* for over 12 months as of second quarter 2017.

9. However, phase 1 faces a cost overrun of about \$150 million on the components financed by ADB because the (i) depreciation of the special drawing rights relative to the US dollar raised costs by about \$33.3 million;¹⁴ (ii) road safety and gender-responsive features were further strengthened, which added about \$34.3 million; and (iii) actual contract prices are about \$82.4 million higher than the engineer's estimates. Other lessons from phase 1 are: (i) procurement of civil works should be advanced to minimize the delays, (ii) the quality of the engineering design and cost estimate should be assured through systematic reviews, (iii) the government should release counterpart funds in a timely manner, (iv) safeguard actions should be advanced to the extent possible, and (v) institutional enhancement requires long-term support.

10. **Phase 2.** In 2017, the government plans to start phase 2, which is to improve the 190 km section from Elenga through Hatikumrul to Rangpur.¹⁵ The proposed project will continue ADB support to the corridor. To manage the issues faced during phase 1, RHD has (i) set up a project implementation committee to review engineering designs; (ii) obtained government approval for the project proposal in advance to set up project implementation units (PIUs), prepare procurement documents, and initiate safeguard actions; and (iii) requested ADB support to update its Road Master Plan.

11. **Financing modality.** An MFF is proposed as the financing modality.¹⁶ Table 1 explains why an MFF is more suitable than other modalities. Based on phase 1 implementation, the governance risks, security issues, and political concerns are manageable. The ADB project team has completed due diligence for the entire MFF scope to enable financing as a large stand-alone project applying a time-slice approach.

Table 1: Comparison of Financing Modality

Issues	Comparison		Remark
	MFF	Project Loan	
The project cost is about \$1,672.6 million.	An MFF enables ADB to offer financial resources in tranches.	The possible size is significantly less than the requirement.	MFF is preferred.

¹³ Based on latest review, further contract variations are expected, which will add about \$36.31 million.

¹⁴ Consists of currency depreciation of about \$23.4 million, and estimated financing charges of about \$9.9 million for the additional financing of phase 1.

¹⁵ Excluding the Bangabandhu bridge (also known as the Jamuna bridge).

¹⁶ Comparison of Financing Modality and Approach to Time-Slice Financing (accessible from the list of linked documents in Appendix 2).

Issues	Comparison		Remark
	MFF	Project Loan	
The sustainability of subregional road improvements requires continuous efforts.	An MFF allows ADB assistance to be aligned with the client's long-term needs.	Client needs are mainly assessed in the country programming dialogue.	MFF is preferred.
The government will strengthen its institutional capacity for the corridor operation.	An MFF allows ADB to enter a sustained partnership on the institutional strengthening plan.	The support provided by a project loan is subject to the size and term of the loan.	MFF is preferred.

ADB = Asian Development Bank, MFF = multitranche financing facility.
Source: Asian Development Bank.

B. Impacts and Outcome

12. The impacts will be that (i) an efficient and modern road transport system in Bangladesh is achieved, and (ii) subregional connectivity and trade are improved. The outcome will be that the road connectivity of the Dhaka–Northwest international trade corridor is improved.

C. Outputs

13. The proposed project will deliver three outputs: (i) phase 2 of the Dhaka–Northwest international trade corridor (Elenga–Hatikumrul–Rangpur section) is upgraded; (ii) the RHD's institutional capacity in road operation and management is enhanced; and (iii) stronger road safety and gender-responsive features, and cost overrun for phase 1 of the Dhaka–Northwest international trade corridor (Joydeypur–Chandra–Tangail–Elenga section) are financed and completed.

D. Investment and Financing Plans

14. The project is estimated to cost \$1,672.6 million (Table 2).

Table 2: Project Investment Plan
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Phase 2 road improvement	1,060.7
2. Project management and institutional enhancement	93.4
3. Phase 1 road improvement	155.9
Subtotal (A)	1,310.0
B. Contingencies^c	284.5
C. Financing Charges During Implementation^d	78.1
Total (A+B+C)	1,672.6

^a Includes taxes and duties of \$95.7 million to be financed from Asian Development Bank (ADB) loan resources, and \$50.8 million from government resources.

^b In 2017 prices.

^c Physical contingencies computed at 10% for civil works. Price contingencies computed at about 1.5% on foreign exchange costs and about 6.0% 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. Interest during construction for regular ADB loans from ordinary capital resources has been computed at the 5-year forward London interbank offered rate (LIBOR) plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Interest during construction for concessional ADB loans from ordinary capital resources has been computed at 2% per year. There is no commitment charge for concessional ADB loans from ordinary capital resources.

Source: Asian Development Bank and Roads and Highways Department estimates.

15. The government has requested an MFF of up to \$1,200 million equivalent from ADB's ordinary capital resources to help finance part of the project. The MFF will consist of about four

tranches, subject to the government's submission of related periodic financing requests, execution of the related loan and project agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the framework financing agreement.¹⁷ The MFF will provide regular and concessional loans from ADB's ordinary capital resources up to the aggregate MFF amount. Any allocation for concessional loans will be subject to (i) the availability of such resources, (ii) Bangladesh's access to such resources pursuant to ADB's Graduation Policy¹⁸ and the requirements of donors for such resources, and (iii) the availability of such resources to Bangladesh given ADB's policy of performance-based allocation of such resources.¹⁹ Any change in the amount of concessional loans will be balanced by a corresponding change in the regular loans—total financing provided under the MFF is not to exceed the aggregate MFF amount.

16. The Japan International Cooperation Agency, as a collaborative cofinancier for the project, will finance the Western Bangladesh Bridge Improvement Project through a loan of ¥29,340 million. Under the collaborative project, about 60 bridges will be constructed in the same area covered by this proposed project, which will enhance land transport connectivity toward India.

17. **Time-slice financing.** The financing plan and an indicative tranche schedule for the project are in Table 3. The MFF will finance slices of long-term contract packages, each tranche will finance slices of a group of contracts per the indicative tranche schedule, and the amount for each tranche will be requested per the disbursement progress and projection. The tranche schedule is based on the disbursement projection. Preconstruction activities such as land acquisition, resettlement, and procurement will be all advanced to the first 3 years of the project. The government has completed preparation and due diligence for the project, and, following the disbursement-based tranche approach, it intends to request tranche 1 together with the MFF to finance the first slice of the project.

Table 3: Financing Plan

Source	Amount				Total	
	Tranche 1 (\$ million)	Tranche 2 (\$ million)	Tranche 3 (\$ million)	Tranche 4 (\$ million)	Amount (\$ million)	Share of Total (%)
Asian Development Bank						
Ordinary capital resources (concessional loan)	50.0				50.0	3.0
Ordinary capital resources (regular loan)	250.0	300.0	300.0	300.0	1,150.0	68.7
Government	171.4	100.0	100.0	101.2	472.6	28.3
Total	471.4	400.0	400.0	401.2	1,672.6	100.0

Source: Asian Development Bank.

18. The first tranche of the MFF will comprise a regular loan of \$250 million and a concessional loan of \$50 million.²⁰ The regular 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;²¹ a commitment charge of 0.15% per year, and such other terms

¹⁷ Framework Financing Agreement (accessible from the list of linked documents in Appendix 2).

¹⁸ ADB. 2008. *Review of the 1998 Graduation Policy of the Asian Development Bank*. Manila.

¹⁹ ADB. 2004. *Review of the Asian Development Bank's Policy on the Performance-Based Allocation of Asian Development Fund Resources*. Manila; ADB. 2008. *Refining the Performance-Based Allocation of Asian Development Fund Resources*. Manila.

²⁰ The government has chosen the single-currency option of United States dollars for the concessional loan.

²¹ The interest includes a maturity premium of 10 basis points. This is based on the loan terms in para. 18 and the government's choice of repayment option (straight-line method) and dates.

and conditions set forth in the draft regular loan agreement. The concessional loan will have a 25-year term, including a grace period of 5 years; an interest rate of 2% per year during the grace period and thereafter; and such other terms and conditions set forth in the concessional loan agreement.

19. The first tranche will cover (i) time-slice financing for the works and goods contract packages and for consulting services; and (ii) additional financing for the phase 1 cost overrun and for stronger road safety and gender-responsive features.²² Implementation of the additional financing will adhere to existing arrangements under the SASEC Road Connectivity Project, whose project completion date is extended until 31 December 2018.

E. Implementation Arrangements

20. The implementation arrangements are summarized in Table 4 and described in detail in the facility administration manual.²³

Table 4: Implementation Arrangements

Aspects	Arrangements		
Implementation period	September 2017–August 2027		
Estimated completion date	31 August 2027		
Management			
(i) Oversight body	Ministry of Road Transport and Bridges		
(ii) Executing agency	Roads and Highways Department		
(iii) Implementation units	Phase 1: head office of the project implementation unit in Dhaka and three project site offices with 45 staff deployed Phase 2: head office of the project implementation unit in Dhaka and eight project site offices with 126 staff proposed		
Procurement	International competitive bidding	11 works contracts	\$742.0 million
	National competitive bidding; shopping	14 goods contracts	\$2.4 million
Consulting services	Project implementation consultants (QCBS)	887 international and 2,497 national person-months	\$48.0 million
Retroactive financing and advance contracting	Retroactive financing and/or advance contracting will be used for goods, civil works, and consulting services financed. Retroactive financing will be provided to finance expenditure incurred prior to loan effectiveness date but not earlier than 12 months before signing the loan agreements and not exceeding 20% of the loan amount.		
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, QCBS = quality- and cost-based selection.

Sources: Asian Development Bank and the Government of Bangladesh.

III. TECHNICAL ASSISTANCE

21. Transaction TA for Updating the Road Master Plan will be provided along with the project.²⁴ The TA will support the government in (i) updating the Road Master Plan, (ii) enhancing

²² Such features will be incorporated in the existing civil works contracts. In general, the MFF policy allows for additional financing for “purely price or financing arrangement changes.” ADB. 2008. *Mainstreaming Multitranchise Financing Facility*. Manila (para. 78). In this project, the features are introduced to enhance road safety and gender responsiveness within the project scope.

²³ Facility Administration Manual (accessible from the list of linked documents in Appendix 2). The contracts awarded under phase 1 will be completed with variations for the stronger road safety and gender-responsive features. Those of the project implementation consultants will be extended as necessary to complete construction supervision.

²⁴ Attached Technical Assistance (accessible from the list of linked documents in Appendix 2). Because of the multidisciplinary expertise required to manage the TA tasks, the government requested ADB to provide TA and directly supervise the consultants together with the executing agencies.

the planning capacity of RHD and the Local Government Engineering Department (LGED), and (iii) facilitating and monitoring key project implementation activities, such as procurement and land acquisition. LGED is responsible for provision of rural roads, but does not have any master plan. The updated Master Plan will expand its scope to include national highways, including subregional corridor highways, and rural roads. RHD and the LGED will be the executing agencies for the TA, which will be implemented from January 2018 to December 2023. The TA is estimated to cost \$2,220,000, of which \$2,000,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-6). The government will provide counterpart support in the form of counterpart staff, data, reports, and other in-kind contributions. ADB will engage consulting firms and individual consultants following its Guidelines on the Use of Consultants (2013, as amended from time to time).

IV. DUE DILIGENCE

A. Technical

22. **Phase 2.** The engineering designs are optimized for economy, construction efficiency, road safety, and gender responsiveness following applicable international and national design standards. The construction method will use proven technology and standard materials compatible with local conditions, including concrete pavement used at the locations of bus stations. The contracts will incorporate performance-based maintenance for 6 years as part of public-private partnership initiatives. Bangladesh is one of the most climate-vulnerable countries globally, and the government has anticipated future increases in intensity and frequency of rainfalls and floods that require road design modifications. Accordingly, the RHD has strengthened the engineering design regarding embankment level, bridge height, and pavement and drainage structures. The incremental costs for the climate change adaptation measures is about \$55.6 million. The project implementation consultants will conduct road safety audits during the design, construction, and maintenance stages.

23. **Phase 1.** The RHD reviewed and strengthened the engineering designs for the road safety and gender-responsive features. Two flyovers at congested junctions, six underpasses, 22 km of footpath, and two bridges for slow-moving vehicles will be added to the civil works.

B. Economic and Financial

24. **Economic viability.** The economic analysis compared the societal cost of transportation with and without the project, considering the benefits of capacity augmentation and better service on the project road sections. The project will reduce vehicle operating costs and travel time for road users and improve road safety for motorized and non-motorized traffic. Without the project, traffic congestion will cripple movement on the road corridors.

25. The project benefits will include vehicle operating cost savings, travel time savings, fewer accidents, reduced vehicle emissions, and less congestion along the corridor. The project will also aid the economic development of the region served by the corridor. The economic internal rate of return for the project is estimated at 17.4% for the phase 2 road section, 19.9% for the phase 1 road sections with updated costs, and 18.4% for the combined project, which indicates that the overall project is economically viable. Sensitivity analysis was conducted to test the effects of unfavorable changes in the key parameters that affect the project's costs and benefits. The economic viability remained satisfactory in the sensitivity analyses.

26. **Financial sustainability.** The project will be implemented with performance-based maintenance included in the contract for an extended period of 6 years after construction. The government has substantially increased the allocation for maintenance from \$88 million in FY2012 to \$183 million in FY2016. As a result, the proportion of roads in good-to-fair condition increased from 40% to 63% in that period. Upon completion of performance-based maintenance under the project for 6 years, incremental recurrent costs (annualized) associated with the project road sections are estimated to be 2.8% of the RHD's projected maintenance budget. The maintenance budget requirement estimated for the project road is within the limits of the proportionate maintenance budget allocation for these road sections. Therefore, it is reasonable to expect that funds will be available to meet the maintenance requirements.

C. Governance

27. **Institutional and financial management.** The RHD has the experience and sufficient capacity to implement externally funded projects, particularly with regard to ADB disbursement procedures. The implementation consultants will support the RHD in construction supervision and institutional enhancement. ADB has conducted a financial management assessment, which rated the risk *moderate*.

28. **Procurement and anticorruption.** ADB will recruit consultants following its Guidelines on the Use of Consultants (2013, as amended from time to time). National procurement regulation has improved through the Public Procurement Act, 2006 and the related Public Procurement Rules, 2008 (with subsequent amendments). The World Bank also supports capacity development in procurement under the Public Procurement Reform Project II. Procurement of works and goods will follow ADB's Procurement Guidelines (2015, as amended from time to time) and use bidding documents that are in line with ADB policies and include a policy statement on avoiding corrupt practices. Bidding packages procured using national competitive bidding will follow the government's Public Procurement Act and Public Procurement Rules, with modifications agreed between the government and ADB, as set out in the procurement plan. The RHD will publish on its website (i) procurement information relating to the project, including business opportunities; and (ii) the project implementation track record. To enhance good governance, the RHD will involve in its procurement processes a procurement advisor to be engaged under the attached TA.

29. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the RHD. The specific policy requirements and supplementary measures are described in the facility administration manual.²⁵

D. Poverty and Social

30. **Social.** The project is expected to improve accessibility between Dhaka and the northwestern region of Bangladesh. This will in turn facilitate intra-regional and international trade and contribute to poverty reduction. Overall, poverty rates in the districts²⁶ crossed by the road range from 20% to 47%, with the main sources of income being business, day labor, and agriculture. Road safety remains a major challenge, with pedestrians, bicyclists, and motorcyclists accounting for 80% of fatalities. The project is expected to reduce road accidents and fatalities through the inclusion of key safety design features, notably lanes dedicated to slow-moving vehicles (i.e., rickshaws, bicycles, motorcycles, and tractors) and footbridges for pedestrians. The

²⁵ Facility Administration Manual (accessible from the list of linked documents in Appendix 2).

²⁶ Bogra, Gaibandha, Rangpur, Sirajganj, and Tangail.

project's key beneficiaries will be the estimated 15 million residents in the districts, as well as businesses, particularly those in the trade sector.

31. Bangladesh has a low HIV prevalence rate (0.7% reported among high-risk groups). The country remains an important source of internal and cross-border human trafficking. The project is not expected to contribute to an increase in HIV incidence or human trafficking because it is only expanding an existing corridor. The contractor will conduct an awareness program on preventing HIV transmission and human trafficking for its personnel and the local community.

32. **Gender.** Tranche 1 is classified *effective gender mainstreaming*. The same category is expected for the subsequent tranches because due diligence already covers the entire scope of the MFF. Women's modes of transport in the project area are mixed but are dominated by walking (55%) followed by using slow-moving vehicles such as rickshaws (33%). The majority of women surveyed during due diligence (64%) stated that they would be comfortable traveling alone by bus. The objectives of women's most frequent motorized journey patterns are to visit relatives, shop, and go to work. Given their preference for walking and rickshaws, women are particularly vulnerable to road accidents. The project will thus improve women's accessibility to these destinations while making their journeys safer.

33. The project includes a gender action plan with proactive gender-mainstreaming features: (i) integrated gender-responsive and safety design features (i.e., slow-moving vehicular traffic lanes, footpaths, and pedestrian footbridges); (ii) road safety awareness campaigns for communities along the corridor with specific gender targets for pedestrians (target 50% women), drivers, parents, schoolchildren (target 50% schoolgirls), and professional drivers; (iii) public awareness campaign on preventing sexually transmitted diseases and human trafficking, targeting an audience with 50% women; (iv) proactive measures to support the rehabilitation of women who need to be resettled; (v) target to have women make up at least 15% of the road maintenance teams; (vi) target to have women make up at least 40% of tree plantation program teams; and (vii) impact evaluation study on the gender responsiveness of phase 1.

E. Safeguards

34. **Involuntary resettlement.** Tranche 1 is classified *category A* as per ADB's Safeguard Policy Statement given its significant resettlement impacts. The same category is expected for the subsequent tranches, since all activities have been appraised up front. The RHD conducted a detailed survey of involuntary resettlement impacts and identified the acquisition of 198.94 hectares of private land and impacts on 17,200 households (about 53,000 persons), most of whom (70%) are non-titleholders. Most impacts on households are minor. However, close to 6,800 households (about 20,000 persons) need to physically relocate because they will lose their residential or commercial structure. The project is expected to affect 390 community structures.

35. The RHD prepared three resettlement plans and included compensations for 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. The RHD informed the affected persons about the resettlement impacts and related entitlements, and consultations will continue during implementation. The cost of land acquisition and resettlement activities is estimated at \$256.56 million and will be financed entirely by the government, which has already approved the budget. The PIU will implement the resettlement plans with support from a nongovernment organization already recruited for that purpose. The RHD is familiar and experienced with ADB requirements; it is currently conducting land acquisition and resettlement

activities for two ADB-financed projects.²⁷ Capacity development measures for the PIU will be included as part of project inception. A resettlement framework was prepared in compliance with MFF modality requirements.²⁸ Since the project will also finance the stronger safety and gender-responsive features and phase 1 cost overrun, ADB conducted due diligence on the resettlement process, which confirmed the project's compliance with the Safeguard Policy Statement.²⁹ All social safeguard reports, including the entitlement matrix, are disclosed on the ADB website and will be disclosed locally. A local grievance system will be put in place by the PIU. An external monitor will be recruited under the associated TA to assess compliance with the Safeguard Policy Statement and provide guidance in the resettlement process.

36. **Indigenous peoples.** Tranche 1 is classified *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.³⁰

37. **Environment.** Tranche 1 was classified *category B*, as per the Safeguard Policy Statement, since the project scope involves upgrading the existing two-lane road to four lanes and no environmentally sensitive areas are nearby. An initial environmental examination was prepared and disclosed on 18 May 2017 on the ADB website. The team carried out due diligence on phase 1's additional financing component. The anticipated environmental impacts are mainly related to the substantial earthworks required for road embankment and expansion. Dust, noise, siltation, removal of trees, and occupational health and safety issues are also expected. These can be easily mitigated with proper engineering measures and implementation of the environmental management plan, which will be mandatory for the contractor. Increased traffic-related emissions and noise are the expected key impacts during operation. ADB conducted consultations with concerned stakeholders during project preparation in May 2013, January 2014, and March 2017 and will continue the consultations during project construction. A grievance redress mechanism was prepared to deal with concerns during project construction.

38. The PIU has adequate staff for implementing environmental safeguards but will need capacity building and support for monitoring and reporting. Training and support will be provided by the RHD Environment and Social Circle and the project implementation consultants. An environmental assessment and review framework was prepared to provide guidance for the MFF and was disclosed on the ADB website on 18 May 2017.³¹

F. Risks and Mitigating Measures

39. The overall risk assessment is *moderate* without mitigation and *low* with mitigation. The integrated benefits and impacts are expected to outweigh costs. Major risks and mitigating measures are summarized in Table 5 and described in detail in the risk assessment and risk management plan.³²

²⁷ Footnote 2; and ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Loans and Technical Assistance Grant to the People's Republic of Bangladesh for the Greater Dhaka Sustainable Urban Transport Project*. Manila.

²⁸ Resettlement Plan and Resettlement Framework (accessible from the list of linked documents in Appendix 2).

²⁹ Resettlement Due Diligence Report (accessible from the list of linked documents in Appendix 2).

³⁰ Indigenous Peoples Planning Framework (accessible from the list of linked documents in Appendix 2).

³¹ Environmental Assessment and Review Framework (accessible from the list of linked documents in Appendix 2).

³² Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Table 5: Summary of Major Risks and Mitigating Measures

Risks	Risk Assessment	Mitigating Measures
Noncompliance with safeguards	Substantial	Before starting construction, a due diligence mission will be fielded to ensure safeguard compliance and to create awareness among the project stakeholders about the Asian Development Bank's pertinent safeguard requirements (timeline: during project implementation).
Implementation delay	High	The implementation delay is likely caused by slow land acquisition and resettlement, or the procurement process. For this project, the government has approved the budget for land acquisition and resettlement. The Roads and Highways Department has mobilized a nongovernment organization in January 2017 to support the implementation of the Resettlement Plan, and the procurement of civil works started in July 2017 (timeline: ongoing).
Inadequate post-project road operation and maintenance	Moderate	The civil works contracts will include performance-based maintenance for 6 years. The capacity development component will strengthen the RHD's planning and performance management capacity (timeline: during project implementation)

Source: Asian Development Bank.

V. ASSURANCES

40. The government and the RHD 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 facility administration manual and loan documents.

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

VI. RECOMMENDATION

42. 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 Dhaka–Northwest Corridor Road Project, Phase 2 in an aggregate principal amount not exceeding the equivalent of \$1,200,000,000, which comprises

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

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

4 September 2017

DESIGN AND MONITORING FRAMEWORK

Impacts the Project is Aligned with			
An efficient and modern road transport system in Bangladesh achieved (Seventh Five Year Plan, FY2016–FY2020) ^a			
Subregional connectivity and trade improved (Seventh Five Year Plan, FY2016–FY2020) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Road connectivity of the Dhaka–Northwest international trade corridor improved	By 2028 Use of project roads (average daily vehicle-km in the first full year of operation) reaches 8.31 million vehicle-km (2016 baseline: 4.20 million vehicle-km)	RHD project performance report	Inadequate post-project road operation and maintenance.
Outputs 1. Phase 2 of the Dhaka–Northwest international trade corridor (Elenga–Hatikumrul–Rangpur section) upgraded 2. RHD’s institutional capacity in road operation and management enhanced 3. Stronger road safety and gender-responsive features, and cost overrun for phase 1 of the Dhaka–Northwest international trade corridor (Joydeypur–Chandra–Tangail–Elenga) financed and completed	By 2027 1a. 190 km of road upgraded with climate-resilient design (2016 baseline: 0 km) 1b. Gender-responsive infrastructure, including 380 lane-km of SMVT lane, 7.5 lane-km of footpath, 25 foot bridges, and 39 underpasses constructed (2016 baseline: 0) 2a. One road research and training center at Dhaka and three road operation units for road safety, maintenance, and overloading control established along the corridor (2016 baseline: 0) 2b. Road Master Plan updated (2016 baseline: not applicable) 3a. 70 km of road upgraded with stronger road safety and gender features (additional two flyovers, two bridges for slow-moving vehicles, six underpasses, and 30 lane-km of footpath) (2016 baseline: 0 km)	1a–b. RHD project performance report 2a. RHD project performance report 2b. Updated Road Master Plan 3a. RHD project performance report	Unstable security conditions delay project implementation.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	3b. Knowledge product on the project's gender impact disseminated (2016 baseline: not applicable)	3b. Report of project implementation consultants	
<p>Key Activities with Milestones</p> <p>1. Phase 2 of the Dhaka–Northwest international trade corridor upgraded</p> <p>1.1 Engage project implementation consultants by December 2017</p> <p>1.2 Complete bidding process for civil works by December 2018</p> <p>1.3 Complete construction of all civil works by December 2025</p> <p>1.4 Implement performance-based maintenance</p> <p>2. RHD's institutional capacity in road operation and management enhanced</p> <p>2.1 Prepare an action plan to establish a road operation and training center by June 2018</p> <p>2.2 Prepare an action plan to establish road operation units along the Dhaka–Northwest corridor by December 2018</p> <p>2.3 Complete bidding process for works and supply contracts by Q4 2019</p> <p>2.4 Update the Road Master Plan by Q4 2019</p> <p>2.5 Implement the action plans by Q4 2025</p> <p>2.6 Implement road maintenance, road safety, and overloading control functions through road operation units</p> <p>3. Stronger road safety and gender-responsive features, and cost overrun for phase 1 of the Dhaka–Northwest international trade corridor financed and completed</p> <p>3.1 Complete civil works for phase 1 of the Dhaka–Northwest corridor by Q4 2018</p> <p>3.2 Complete and disseminate an impact evaluation study on gender responsiveness by Q4 2019</p> <p>3.3 Conduct a workshop with RHD management on the results of the impact evaluation study and develop follow-up actions as appropriate by Q4 2025</p> <p>Project Management Activities</p> <p>Project implementation unit established by Q1 2017</p> <p>Project progress reports submitted quarterly</p> <p>Project completion report submitted within 6 months of loan closure</p>			
<p>Inputs</p> <p>ADB: \$1,200,000,000 (multitranches financing facility), \$2,000,000 (technical assistance grant)</p> <p>Government: \$472,600,000</p>			
<p>Assumptions for Partner Financing</p> <p>Japan International Cooperation Agency will finance the Western Bangladesh Bridge Improvement Project through a loan of ¥29,340 million, as collaborative cofinancing.</p>			

ADB = Asian Development Bank, km = kilometer, Q = quarter, RHD = Roads and Highways Department, SMVT = slow-moving vehicular traffic.

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

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=40540-016-3>

1. Loan Agreement: Ordinary Operations
2. Loan Agreement: Special Operations
3. Framework Financing Agreement
4. Periodic Financing Request for Tranche 1
5. Sector Assessment (Summary): Transport (Subregional Road Transport Subsector)
6. Facility Administration Manual
7. Summary of Project Performance: South Asia Subregional Economic Cooperation Road Connectivity Project
8. Contribution to the ADB Results Framework
9. Development Coordination
10. Attached Technical Assistance Report
11. Economic and Financial Analysis
12. Country Economic Indicators
13. Summary Poverty Reduction and Social Strategy
14. Gender Action Plan
15. Initial Environmental Examination: Elenga–Hatikumrul Road
16. Initial Environmental Examination: Hatikumrul–Rangpur Road
17. Environmental Assessment and Review Framework
18. Resettlement Plan: Improvement of the Elenga to Hatikumrul Road to a 4-Lane Highway
19. Resettlement Plan: Hatikumrul Interchange
20. Resettlement Plan: Improvement of Hatikumrul–Rangpur Road to a 4-Lane Highway
21. Resettlement Framework
22. Indigenous Peoples Planning Framework
23. Risk Assessment and Risk Management Plan

Supplementary Documents

24. Comparison of Financing Modality and Approach to Time-Slice Financing
25. Road Maintenance Financing and Effectiveness, 2012–2016
26. Project Climate Risk Assessment and Management Report
27. South Asia Subregional Economic Cooperation Transport and Trade Facilitation Initiatives
28. Institutional Development Action Plan Update
29. Environmental Due Diligence Report
30. Resettlement Due Diligence Report