



# Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 06-Jun-2019 | Report No: PIDC26456



**BASIC INFORMATION**

**A. Basic Project Data**

Country Bangladesh	Project ID P169880	Parent Project ID (if any)	Project Name Western Economic Corridor and Regional Enhancement Program (P169880)
Region SOUTH ASIA	Estimated Appraisal Date Feb 03, 2020	Estimated Board Date Jun 30, 2020	Practice Area (Lead) Transport
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance	Implementing Agency Roads and Highways Department (RHD), Local Government Engineering Department (LGED)	

**Proposed Development Objective(s)**

To improve regional connectivity, logistics efficiency in the western region, and road sector management in Bangladesh

**PROJECT FINANCING DATA (US\$, Millions)**

**SUMMARY**

<b>Total Project Cost</b>	735.00
<b>Total Financing</b>	735.00
<b>of which IBRD/IDA</b>	400.00
<b>Financing Gap</b>	0.00

**DETAILS**

**World Bank Group Financing**

International Development Association (IDA)	400.00
IDA Credit	400.00
Guarantee	180.00
IDA	180.00

**Non-World Bank Group Financing**



Counterpart Funding	35.00
Borrower/Recipient	35.00
Commercial Financing	300.00
Commercial Financing Guaranteed	180.00
Unguaranteed Commercial Financing	120.00

Environmental and Social Risk Classification

High

Concept Review Decision

Track II-The review did authorize the preparation to continue

Other Decision (as needed)

## B. Introduction and Context

### Country Context

1. Bangladesh is one of the world’s most populous countries with an estimated 165 million people in a geographical area of about 144,415 sq.-km and per capita income of US\$1,751 (WB Atlas method) in 2018, well above the lower middle-income country category threshold which it crossed in FY14. The GDP grew well above the average for developing countries in recent years, averaging 6.5 percent since 2010, with an officially projected growth of 8.13 percent in FY19, driven by manufacturing and construction. Progress on reducing extreme poverty and boosting shared prosperity through human development and employment generation has continued, with the poverty rate declining from 44.2 percent in 1991 to 14.8 percent in 2016. The key challenges for accelerating growth are to ensure financial stability, strengthen revenue mobilization, improve infrastructure, enhance human capital and streamline business regulation. These reforms would also help address the challenges associated with informality, thus reinforcing the basis for future productivity growth.

### Sectoral and Institutional Context

2. Bangladesh has made great strides in developing an extensive transport system, particularly road transport which enjoys a modal share of 70% for passenger traffic and 60% for freight. The total road network size of the country is roughly 375,000 km (road density of roughly 250 km per 100 km<sup>2</sup>), reflecting the tremendous progress in improving connectivity, particularly at the sub-national level. The rural road network makes up 94 percent of the network and Bangladesh has one of the highest scores on the Rural Access Index.

3. The primary road network of Bangladesh – which is under the responsibility of the Bangladesh Roads and Highways Department (RHD), Ministry of Road Transport and Bridges - extends more than 21,000 km, of which 7,000



km are national and regional highways, and 13,100 km are Zilla (district) roads. Improvement of regional road connectivity to boost trade and commerce is a key priority for RHD, who is pursuing a policy of corridor-based road development with a view to accommodate regional as well as international traffic. RHD is participating in different regional connectivity initiatives, including the Asian Highway Network, South Asia Sub Regional Economic Cooperation (SASEC) Road Corridors, Bangladesh-China-India-Myanmar Economic Corridor (BCIM-EC), Bay of Bengal Initiatives for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) Road Corridor, SAARC Highway Corridor, and the BBIN MVA dialogue.

4. Bangladesh's rural road network - which is under the responsibility of the Bangladesh Local Government Engineering Department (LGED), Ministry of Local Government, Rural Development & Cooperatives - consists of 37,800 km of Upazila Roads, 44,750 km of Union Roads, and 215,750 km of Village Roads. Bangladesh's rural road network is essential for improving the livelihoods of about 66 percent of the country's people. Rural access connectivity to the country's main transport corridors is a key priority for the government. LGED aims to double-lane high volume Upazila Roads and Union Roads that are predominantly used by commercial vehicles and connect to the main transport arteries. It will also invest in other rural infrastructure, such as rural markets to promote inclusive growth by expanding economic opportunities to the poorer rural communities.

5. Despite improvements in developing an extensive road network, the overall quality of the road network remains poor. Only 27 percent of the rural roads and 40 percent of the main roads are paved, half of which are in good condition. Bangladesh needs to move away from the "build, neglect, rebuild" mindset and improve its asset management practices across policy, institutional and operation level including reviewing its Axle Load enforcement regime.

6. The transport sector faces institutional fragmentation, weak co-ordination and capacity constraints. At the national level, there are 5 ministries and 21 agencies responsible for the transport sector with overlapping mandates, and conflicts between service provision and regulatory responsibilities. The capacity of various agencies needs considerable enhancements in vast areas of emerging needs (PPPs, climate change, gender risks) as well as traditional road sector management and operations (e.g. Innovative contracting methods, cost and resource efficiencies, road safety etc.). Transport infrastructure projects are most often identified and selected independently along modal lines through separate ministries without a comprehensive, coordinated and continuous planning process. In the absence of a multi-sectoral mechanism or platform that can facilitate an integrated approach to infrastructure development, large transport projects tend to primarily focus on the physical investments with little consideration for how these investments impact the local and regional economies and how the benefits may be deepened through complementary interventions (e.g. logistics infrastructure and services).

7. The Road Network needs to be built "Greener" and "Resilient." Bangladesh faces a significant challenge in developing and maintaining the transport system because of its unique geographic conditions. Situated in the delta of three major and highly active rivers, Meghna, Jamuna, and Padma, Bangladesh is one of the most disaster-prone and climate vulnerable countries in the world and frequency as well intensity of floods and cyclone has been increasing. The damage to the country's infrastructure, particularly transport network from such events can be extremely detrimental to the economy. According to Multi-Hazard Risk Assessment reports by the Bangladesh Ministry of Disaster and Relief (MRVAM), more than 50% of all road types are exposed to different levels of flooding<sup>1</sup>. To increase resilience, there is a need for a transformational shift towards policies and institutions that enable climate resilient investments.

<sup>1</sup> Resilience of the Transport Network in Bangladesh, World Bank, TU Delft, 2018



8. The transportation system is congested across all modes, resulting in excessively high logistics costs and constraining Bangladesh in playing a more active role in regional integration despite its strategic geographical location. Many parts of the regional road network are narrow, operating at or near maximum capacity and there are sections incapable of handling more freight vehicles. The average speeds on these corridors are low; 2018 speed surveys carried out by the WB2 show the average speeds at strategic locations on regional trade corridors in Bangladesh the were 28km/h. According to the Logistic Performance Index (LPI, 2018), Bangladesh ranks 100 out of 167 countries, and is below the regional average for South Asia. A recent WB report<sup>3</sup> estimated that pervasive congestion across the national logistics system of Bangladesh increases standard trucking costs by 100 percent.

9. The overall logistics costs<sup>4</sup> in Bangladesh are high due to significant inventory carrying costs. An in-depth study of 10 products revealed that just monetary logistics costs range from 2-33 percent of revenues. These costs can be especially high for agricultural products. For example, the average monetary logistics costs for horticulture are 33 percent of total revenues and for milk are 12.5 percent of revenue. Within direct logistics costs (transportation, storage and handling, and trade facilitation) transportation costs represent the largest share for most value chains. Average road transport tariffs in Bangladesh are relatively high at 9.5 USD Cents per ton-km. There are several reasons for this including limited competition in the trucking sector, high incidence of accidents on the road, need for facilitation payments, excessive congestion on the roads, and a large share of empty hauls.

10. Logistics costs are further aggravated by many road crashes, which represent about 11 percent of truck operating costs. It is estimated more than 20,000<sup>5</sup> people are killed and 200,000 seriously injured every year in road traffic crashes, which is estimated to cost Bangladesh 2-3 percent of GDP annually. Road traffic crashes are responsible for 12 percent of all deaths among men in the 15-49 age bracket, for whom transport injuries in 2016 was the 2nd leading cause of death - up from 11th in 1990. Dangerous roads throughout the country are evident with alarming annual death rates per kilometer of highway. WB analysis revealed that the annual fatalities per kilometer at two key road corridors in Bangladesh - Jessore to Kanchpur and Kanchpur to Akhaura – averaged 0.40 and 0.98, respectively from 2014 to 2017. The low but rapidly growing rates of motorization (2.5 time increase from 2014 to 2017) provides the best crude marker of what to expect in future road safety terms, and unless rapid, scaled-up road safety investments are made, a continued upward trend in fatalities and injuries must be expected.

11. Road Sector Financing needs are enormous. A rough estimate suggests that the road sector alone would require annual investment of US\$ 11bn over the next 25 years to meet the aspiration of the country to become upper middle-income country by 2041. While there is a realization among policymakers that such investments cannot be supported through budgetary allocation and ODA envelopes are shrinking, ensuring sustainable road sector financing, is an urgent need of the sector. GoB needs to explore models to leverage public/MDB resources with alternative financing such as private/commercial financing. The PPP regulatory framework has been established and the pipeline of projects include road sector projects. However, progress in this area has been discouraging in parts due to the absence of a national toll policy and road fund, which have been established but not operationalized. Furthermore, Bangladesh has no established Project Finance market in local currency which calls for a pronounced need for credit enhancement tools.

<sup>2</sup> Investing in Road Safety in South Asia (draft), World Bank, 2019

<sup>3</sup> Mind the Gap, Connectivity, Logistics, and Economic Geography in Bangladesh, World Bank, 2019

<sup>4</sup> Defined as monetary logistics costs and inventory carrying costs

<sup>5</sup> Depending on the source, the estimates of annual deaths range from 2,538 (reported fatalities in 2012) to nearly ten times that – between 20,736 (Global Burden of Disease, 2016)<sup>5</sup> and 21,316 (WHO, 2015).<sup>5</sup> The Global Burden of Disease (GBD) estimate implies a death rate of 12.8 per 100,000 people.

<sup>6</sup> Global Burden of Disease Report, 2016

<sup>7</sup> Note that there is strong evidence to suggest that these data are significantly under-reported



12. Digital connectivity remains a challenge in Bangladesh, especially outside the main cities. Bangladesh ranks 78 on the Global Connectivity Index for 2018. While Mobile broadband subscription rate continues to grow, it has also become less affordable. Most of the optical fiber system is overhead and suffers from frequent cuts, requiring new OFC to increase coverage and reliability. To achieve the government's 'Digital Bangladesh by 2021' vision to mainstream ICTs as a tool to eradicate poverty, establish good governance, ensure social equity, significant investments in broadband infrastructure will be required.

#### Relationship to CPF

13. The proposed program is fully aligned with the Bangladesh Country Partnership Framework (CPF) FY2016-20208. The program will primarily contribute to the CPF Focus Area 19 by upgrading and rehabilitating targeted sections of the primary, secondary and tertiary road network in Western Bangladesh. The program will contribute to Focus Area 210 supporting logistics infrastructure such as storage facilities, collection points, and warehouses which will help stimulate the local economy along the corridor. The Program is also aligned with the Systematic Country Diagnostic which specifies upgrading and integrating key transport corridors and better maintenance of existing assets, as 'Priority Areas with Potentially Transformative Impact on the Twin Goals.'

14. The program is aligned with the World Bank Group's South Asia Regional Strategy which recognizes regional cooperation and integration as a key strategic objective. It highlights the importance of easing policy, structural and capacity constraints to cross-border connectivity, with trade with transport among the priority areas.

15. The program is anchored in the World Bank Group corporate priority to help client countries meet their development and climate objectives (including climate co-benefit targets) by mainstreaming climate resilience in planning and investments in connectivity infrastructure and institutions. Alignment with the South Asia Region Climate Adaptation and Resilience Program (SARCAR): The Program will align with and benefit from the South Asia Regional Climate Adaptation and Resilience Program (SARCAR), which aims to provide support to the region and the individual countries for stronger adaptation efforts. The objective of SARCAR is to enable a transformational shift towards climate resilient policies, planning and investments in South Asia. SARCAR is fully aligned with, and provides a vehicle to, operationalize the recently approved World Bank Action Plan on Climate Change Adaptation and Resilience.

### **C. Proposed Development Objective(s)**

16. To improve regional connectivity, logistics efficiency in the western region, and road sector management in Bangladesh

#### Key Results (From PCN)

17. The PrDO will be achieved over a 10-year period through a three-phase MPA program, starting with Phase 1 ("the project"). Key PrDO indicators, are as follows, the base line and end targets will be identified during preparation.

- I. Percentage change in the efficiency of transportation on highway corridor of the Program (measured using value of time and vehicle operating cost savings).

8 Report No. 103723-BD, discussed at the Board on April 5, 2016.

9 CPF Focus Area 1.2: Improved transport connectivity

10 CPF Focus Area 2.4 Enhanced Rural Income Opportunities for the Poor



- II. Average transport time to Program markets from the closest intersection with the Program highway for targeted value chains
- III. Improvement in condition of overall national road network

18. The proposed program will enhance regional connectivity and economic integration and development of the Western Region both in current and post-Padma demand scenario, through addressing the following long-standing transport sector challenges, relevant to not only the Western Region but also to all of Bangladesh:

- I. Congested and unsafe road network, resulting in excessively high logistics costs and constraining Bangladesh and the western region from leveraging its strategic geographical position as major trade and transit hub for South and Southeast Asia;
- II. Substantial post-harvest losses especially among small farm families in rural areas because of limited connectivity, market access and agro-logistics facilities;
- III. Weak road sector management in terms of planning, implementation, and operation maintenance

#### **D. Concept Description**

19. The proposed program will comprise of upgrading 260km of existing highway corridor<sup>11</sup> (hereafter referred to as the “program corridor”); upgrading and rehabilitating feeder roads; complementary logistics infrastructure improvements; and road sector modernization and capacity building. The program will also support the laying of Optical Fiber/Utility duct along the program corridor and selected feeder roads. The Asian Infrastructure Investment Bank (AIIB) will also support the program and finance the upgrading of 160Km (Jhenaidah-Bonpara–Hatikumrul) of the program corridor through a parallel financing arrangement. The program would have following components:

- I. **Component 1: Upgrading Highway Corridor.** This component will upgrade the following 260km of national and regional highways: (i) Bhomra-Satkhira-Navaron; (ii) Jessore- Jhenaidah; and (iii) Jhenaidah-Bonpara–Hatikumrul. This will encompass upgrading of existing two-lane road from to four lanes. Separate Slow-Moving Vehicle Traffic (SMVT) lanes will be introduced on both sides of the main carriageway. The physical segregation of SMVT from normal motorized traffic is anticipated to decrease the potential for serious accidents. The presence of a central median and safety barrier will also reduce the potential for head-on collisions. This component will also finance the laying of Optical Fiber Cable (OFC)/utility duct alongside the road corridor. Laying duct at the time of road construction would allow for significant cost savings.
- II. **Component 2: Upgrading and rehabilitating feeder connectivity infrastructure.** This component will finance the upgrading of priority Upazila and Union roads that connect to the program corridor, schools, health facilities, and local markets. The selection of roads to be supported by the project will be guided by an assessment of connectivity needs of program corridor to markets to hinterland that will be undertaken during project preparation. In addition, the component will also finance Optical fiber cable duct for select Upazila roads.
- III. **Component 3: Complementary logistics infrastructure improvements.** This component will finance complementary logistics infrastructure improvements, including development of community market structures (with a focus female participation) for fresh produce (fruits, vegetables, dairy, and poultry). The WB will support LGED to carry out an in-depth analysis of agro-logistics needs along the project corridor during project preparation with a view of identifying ancillary logistics infrastructure needs such as storage,

<sup>11</sup> (i) Bhomra-Satkhira-Navaron; (ii) Jessore- Jhenaidah; and (iii) Jhenaidah-Bonpara–Hatikumrul



processing, selling/ distribution facilities as well improving drainage and waste management of existing facilities. An important by-product of these investments will be the improved hygiene of these value chains.

- IV. Component 4: Road sector modernization and capacity building. This component will be designed based on a comprehensive sector diagnostic to identify the gaps in policy, regulatory, institutional and operation level including review of ongoing institutional reforms (both in RHD and LGED) as part of the projects financed by ADB and JICA; and GoB’s own institutional reform to arrive at a series of sustained TAs as sub-components of this ambitious reform exercise. The MPA approach will help test the implementation and impact of identified reforms as the program progresses and correct the approach during the implementation if needed. The component will have the following three subcomponents: (a) Addressing Policy Gaps: This sub-component would identify and implement sectoral policy gaps (for example, the lack of a road sector masterplan, sector financing strategy, lack of road safety lead agency.; (b) Improving Asset Management and Resilience: This sub-component would focus on strengthening and institutionalizing better asset management practices in both institutions to ensure sustainability of investments under this program but more importantly, GoB’s own road sector investments.; (c) Organizational Transformation and Capacity Building: This sub-component would focus mainstreaming innovative and good industry practices in the identified areas. The capacity building activities would include not only the government agencies but also the local industry.
- V. Component 5: Contingent Emergency Response. This component will improve the GoB’s ability to respond effectively in the event of an emergency in line with WB procedures on disaster prevention and preparedness. Following an eligible crisis or emergency, the Recipient may request the Bank to re-allocate project funds to support emergency response and reconstruction. This component would draw from other project components to cover emergency response.

20. The Program would be implemented in three phases. The first phase of this MPA (“the project”) will follow the same component structure as the overall program and will finance the upgrading of national highways from Jessore to Jhenaidah (48 km) and associated feeder roads and rural market infrastructure along this part of the corridor, and road transport sector modernization interventions. In parallel with phase 1, AIIB would finance the upgrading of national highways from Bonpara to Hatikumrul (52km).

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

Based on field visits of the proposed corridor during the identification mission and review of available documents such as existing ESIA’s prepared with support from the Asian Development Bank, the key environmental and social risks and impacts of the proposed program, which mainly supports existing roads and complementary logistics infrastructures, are anticipated to occur largely during the construction phase. Key impacts include: (i) cutting of mature trees along the expanded ROW; (ii) health & safety of workers and communities within the corridor and along the transport routes of construction supplies, materials and equipment; (iii) exposure of population in urban and semi-urban centers along the ROW and transport routes to noise, vibrations and air pollution; (iv) siltation and sedimentation of waterways close to the physical works; (v) significant land acquisition along the expanded ROW; (vi) physical displacement of houses, some





mosques, temples, madrasah, graves and century-old trees; (vii) economic displacement of some vendors and business along the ROW and in market areas where some rural roads will be constructed and/or rehabilitated; and, (viii) increased risk of GBV and road accidents. The program will mainly employ local labor for unskilled labor requirements, but skilled laborers may come from other areas of the country or from abroad; thus risks deriving from labor influx are expected to be substantial to high. During operation & maintenance phase, impacts to the economy from improved roads and connectivity and road safety are expected to be significantly positive.

**Note** To view the Environmental and Social Risks and Impacts, please refer to the Concept Stage ESRS Document.

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**APPROVAL**

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