

SECTOR ASSESSMENT (SUMMARY): TRANSPORT (SUBREGIONAL ROAD TRANSPORT SUBSECTOR)

Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. **Subregional transport connectivity.** Transport demand in South Asia is expected to increase given the positive economic growth outlook for the region, rising incomes, more consumption, and more travel. Greater participation of enterprises in global value chains could generate additional trade and boost demand for transport services. The overall intraregional travel in terms of passenger and freight has been growing steadily. Road is the dominant transport infrastructure throughout the subregion. It caters to about 70% of the freight movement in the region. Road transport represents the primary means of domestic connectivity, and is also the main medium for the conveyance of intraregional and external trade, either directly through land borders or via their intermodal connectivity to the seaports. While much progress was achieved in improving the roads within the subregion, road connectivity remains suboptimal. Poor road conditions have badly affected transport and trading costs.

2. In support of the physical infrastructure investments underway across the South Asia Subregional Economic Cooperation (SASEC) areas, and to relieve severe congestion at border-crossing points and ports, the Bangladesh–Bhutan–India–Nepal Motor Vehicle Agreement (BBIN MVA) was signed in Thimphu, Bhutan in June 2015 and ratification by all parties is anticipated in 2017.¹ This groundbreaking MVA facilitates passenger, personal, and cargo vehicular cross-border traffic between and among the four countries to reduce costly and time-consuming transshipment of people and goods at border crossings, and create opportunities for greater economic exchanges along designated key trade routes in the four countries. Following ratification, the BBIN countries will consider formulation of the MVA Protocols, with technical assistance from the Asian Development Bank (ADB).

3. **Bangladesh's role.** The SASEC program proposes six transport corridors connecting Bangladesh, Bhutan, India, and Nepal. Four of these corridors go through Bangladesh territory. When completed, these corridors will increase trade and transport among SASEC members, and with non-member countries. Mongla and Chittagong were designated as important regional gateways into Bhutan, India, and Nepal. These corridors will lift the economic status of depressed regions, especially those along the corridor sections passing through Bangladesh.

4. The transport system of Bangladesh consists of roads, railways, inland waterways, maritime shipping facilities, and civil aviation. The country has about 271,000 kilometers (km) of roads, including about 21,000 km of major roads; 2,835 route-km of railways; 3,800 km of perennial waterways (about 6,000 km during the monsoon); seaports at Mongla and Chittagong; and three international and eight domestic airports. Road transport's modal share is over 70% for passenger traffic and 60% for freight. Traffic has been growing at an average rate of over 8% per year. The number of vehicles has increased at an annual average rate of over 10% since 2003. According to the statistics of the Bangladesh Road Transport Authority (BRTA), the number of registered vehicles reached 2,984,231 in March 2017. In the two decades since 1994, the government has gradually upgraded the main transport corridors to facilitate international trade with and between Bhutan, India, Myanmar, and Nepal. However, the limited capacity and deteriorating conditions of the road infrastructure has created a major bottleneck on many

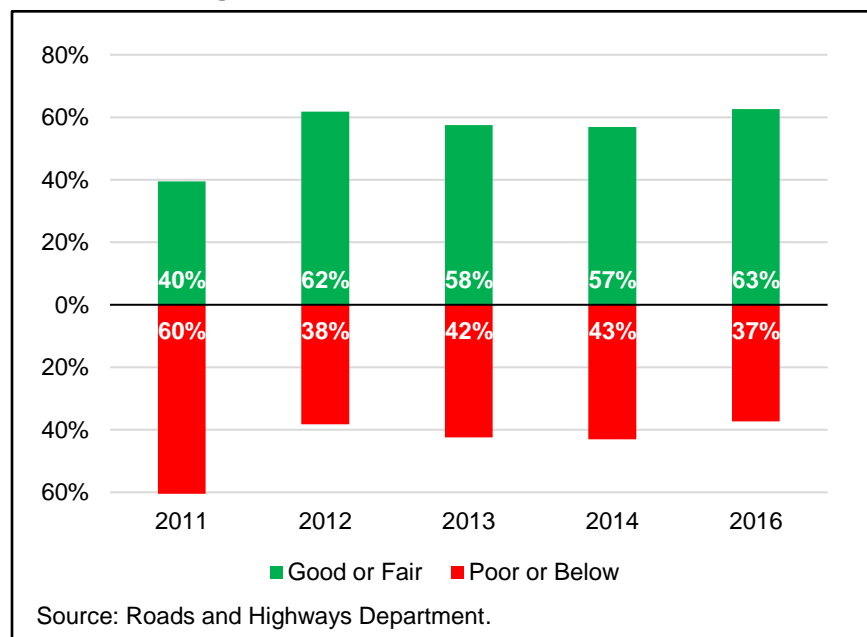
¹ See www.sasec.asia/index.php?page=news&nid=513&url=second-bbin-trial-run

subregional trade corridors. The road capacity is further constrained by the mixture of slow- and fast-moving traffic. Road agencies' limited human, technical, and financial resources have in turn lessened their capacity to remove the bottlenecks.

5. **Operation and management.** The road network is managed by two ministries. The Ministry of Road Transport and Bridges, through its Roads and Highways Department (RHD), manages the primary network of national, regional and *zila* (district) roads. The Ministry of Local Government, Rural Development and Cooperatives, through its Local Government Engineering Department (LGED), manages the rural network of *upazila* (subdistrict), union, and village roads. The development of the road subsector is guided by three policy documents: (i) the Seventh Five Year Plan (SFYP, 2016–2020), approved in 2015;² (iii) the Road Master Plan (2007–2017), approved in 2009; and (ii) the National Integrated Multimodal Transport Policy, approved in 2013. The Road Master Plan is due for an update to meet the needs for subregional corridors and rural roads.

6. The road network managed by the RHD faced major maintenance backlog until 2011. About 60% of roads were in poor or worse conditions requiring immediate rehabilitation or reconstruction. The maintenance backlog was caused by insufficient funds for road maintenance, weak control of vehicle overloading, and inefficient implementation arrangements. Since then, the RHD has cleared a large portion of the maintenance backlog by increasing the maintenance expenditure and enhancing the implementation arrangements, and finally in 2016 improved the network to about 63% of roads in good or fair condition. With assistance from ADB, the RHD has started piloting performance-based maintenance. Some lessons from similar contracts in the region are that (i) the bidding documents and contracts need to be carefully structured to ensure that the contractor will complete the maintenance period, (ii) the performance-based payment mechanism requires developing the capacity of both road agencies and contractors, and (iii) the maintenance contracts help the road agencies to secure funds for long-term maintenance.

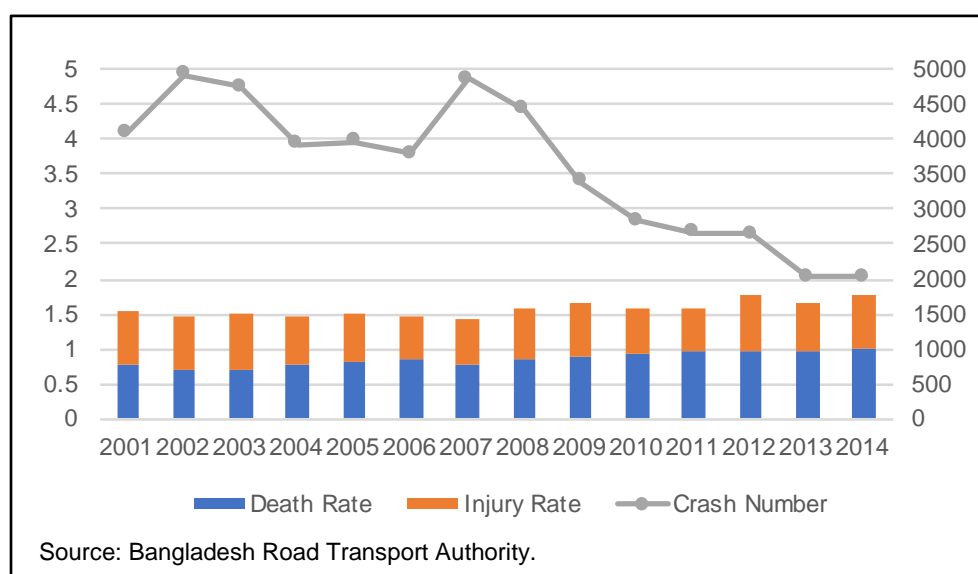
Figure 1: Road Condition, 2011–2016



² General Economics Division, Planning Commission, Government of the People's Republic of Bangladesh. 2015. *Seventh Five Year Plan (FY2016–FY2020)*. Dhaka.

7. **Road safety.** The situation in Bangladesh with respect to road safety is alarming. According to estimates by the World Health Organization, substantial underreporting occurs, and the actual number of fatalities may be around 20,000. The annual national loss related to road casualties is estimated to be about Tk50 billion (about \$715 million), which is nearly 2% of the country's gross domestic product. However, statistics by the Bangladesh Road Transport Authority (BRTA) show a downtrend from 4,000 casualties during 2007–2008 to 2,500 casualties during 2014–2015. The significant discrepancies between official statistics and independent estimates can be further attributed to the deficiencies in the road accident reporting and analysis system. It is noted that the statistics of the BRTA indicate an increasing rate of deaths per accident, suggesting that the severity of reported road accidents is increasing.

Figure 2: Road Crash Statistics, 2001–2014



8. To tackle the road safety challenges, the National Road Safety Council prepares a national road safety strategic action plan every three years, but implementation is seriously hampered by lack of funding and inadequate implementation capacity. The key agencies involved in road safety management are (i) the BRTA, which through a road safety and enforcement cell is in charge of road safety operations and maintains an electronic accident database; (ii) the RHD, which through its Road Safety Division manages the engineering aspects of road safety along its highways; (iii) the Accident Research Institute, which conducts road safety research to support the development of accident-reduction programs; and (iv) the Home Ministry, which has a dedicated highway patrol operating on the national highways.

9. **Opportunities.** Following 10 years of sound and sustained growth, Bangladesh reached lower middle-income status in July 2015. With its young, rapidly growing population, it has the potential to become a major exporter of labor-intensive products. The progress achieved in health and education is helping increase the productivity and competitiveness of the young labor force. The country's location between South and Southeast Asia provides it good prospects of becoming a regional trading hub. Overcoming infrastructure deficiencies remains a top priority; poor transport infrastructure raises costs, reduces competitiveness, and is a major barrier to expanding intraregional trade. The SASEC Operational Plan 2016–2020 considers as Operational Priority 1 upgrading and expanding the road network in the SASEC subregion along the major trade routes. Three implementation measures under the priority are (i) upgrading key SASEC trade routes to

Asian Highway Class I standards, (ii) upgrading road links to primary SASEC routes and key borders, and (iii) upgrading access roads to borders and ports to meet the need for “last mile” connectivity. With two main SASEC trade routes across the country, Bangladesh has good opportunities to improve the road network and meet international and domestic transport demand.

2. Government’s Sector Strategy

10. Under the National Integrated Multimodal Transport Policy, the government aims to improve transport services, minimize transport costs, and integrate transport services with the regional transport network.³ Regional cooperation and integration are also embedded in Bangladesh’s successive five-year development plans. In the SFYP 2016–2020, the following actions aim to achieve a well-maintained, cost-effective, durable, and safe road network:

- (i) improving the road safety situation in the country by achieving a 50% reduction in road traffic accident fatalities by 2020, in line with the United Nations Decade of Action for Road Safety;
- (ii) gradually developing the now interrupted highways to uninterrupted arterial roads by adopting two-tiered, access-controlled layout configuration for segregating mobility and accessibility functions of highways;
- (iii) constructing interchange facilities that should increase the overall capacity of the highways, besides widening the highway at the major junctions;
- (iv) achieving arterial highway configuration by reducing road side frictions and conflicting highway uses, and by adopting strict roadside land use development and right-of-way control policies;
- (v) reducing the maintenance frequency of highways by selectively using concrete pavement;
- (vi) developing coastal embankment and/or polder structures as climate-resilient infrastructure to save assets within the protection area; and
- (vii) implementing a road damage monitoring system with enforcement of penalties for violation, to solve the issue of road damage from overloading.

3. ADB Sector Experience and Assistance Program

11. ADB supports regional cooperation and integration projects in Bangladesh.⁴ The recently launched SASEC Operational Plan, 2016–2025 has registered 35 potential transport projects in Bangladesh, the second largest number among the six SASEC countries.⁵

12. Since 1973, ADB has been active in four transport subsectors: road, rail, port, and urban transport. The RHD has implemented 15 ADB loans since 1977, totaling over \$1.2 billion. Project completion reports prepared for loans assess the RHD’s performance as satisfactory. However, projects often experienced start-up delays, cost underestimation, and overoptimistic scheduling. The lessons learned have been incorporated into the design of the proposed project. Institutional development and capacity enhancement, along with capital investments, will be continuously provided for sustainable road transport development.

³ Government of the People’s Republic of Bangladesh, Ministry of Communication, Roads Division, 2013. *National Integrated Transport Policy*. Dhaka.

⁴ ADB. 2016. *Country Partnership Strategy: Bangladesh, 2016–2020*. Manila.

⁵ ADB. 2016. *South Asia Subregional Economic Cooperation Operational Plan: 2016–2025*. Manila.

Problem Tree for Subregional Road Transport

