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BANGLADESH

TRANSPORT POLICY NOTE

**Transport Unit
Sustainable Development Department
South Asia Region**

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***Abstract:** This policy note provides an overview of the main characteristics of the transport sector in Bangladesh and the challenges going forward. It also provides guidance to the Bank in its dialogue with the Government of Bangladesh on the strategic priorities in the sector and the areas where the Bank can provide the most support consistent with the overall strategic objectives of the Bank in the transport sector. The note recommends that the Bank support the Government in developing and implementing policies and infrastructure investments in the transport system to help sustain economic growth momentum in the face of the global financial crisis, and to improve access of the rural and urban poor to jobs and essential services. The note also recommends supporting initiatives to open up mutually beneficial transit opportunities with neighboring countries and to enable the transport sector to play its full role in strengthened disaster preparedness.*

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CURRENCY EQUIVALENTS

(Exchange Rate Effective as of February, 2009)

Currency Unit = Bangladeshi Taka (Tk)
USD \$1.00 = Tk 67.7 (February 8, 2009)

ACRONYMS

ADB	Asian Development Bank
BIWTA	Bangladesh Inland Water Transport Authority
BIWTC	Bangladesh Inland Water Transport Corporation
BR	Bangladesh Railway
BRT	Bus rapid transit
BRTA	Bangladesh Road Transport Authority
GDP	Gross Domestic Product
IMTP	Integrated Multi-modal Transport Policy
IR	Indian Railways
IWT	Inland Water Transport
JBIC	Japan Bank for International Cooperation
MOC	Ministry of Communications
NLTP	National Land Transport Policy
RHD	Roads and Highways Department

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SUMMARY

1. **Background and Challenges.** The transport sector in Bangladesh faces the challenge of providing equitable services and opportunities in an extremely densely populated country and an environment prone to disasters potentially aggravated in the future by the impact of climate change. While the Government of Bangladesh has achieved fast expansion of the road network, thus providing considerable benefits to population lacking accessibility, however this created a tradeoff with other modes of transport such as waterways and railways, safety of transport users and the environment. Facing these challenges requires to reexamine priorities and to develop a strategy which allows for a sustainable contribution of the transport sector to the national development objectives. This policy note provides an overview of the main characteristics of the transport sector in Bangladesh and the challenges going forward. It provides guidance to the Bank in its dialogue with the Government of Bangladesh on the areas where the Bank can provide the most support consistent with the overall strategic objectives of the Bank in the transport sector.

2. **Sustaining economic growth despite the global financial crisis:** To sustain, despite the global financial crisis, economic growth at about its recent rate of 6 percent averaged for the past four years, Bangladesh needs to focus on the transport demand of the main export industries, which would gain from quicker, less costly transport of containers along the Dhaka-Chittagong corridor, through the port and to its markets. More broadly, both industry and agriculture will gain if the reliability of transport infrastructure is assured by better maintenance, adequately funded and efficiently carried out.

3. **Mutually beneficial trade and transit with South Asia neighbors:** South Asia is the least integrated region and the cost of trading across borders is one of the highest in the world. Co-operation with its neighboring countries offers benefits to Bangladeshi-owned road, rail and water transport services and port services. Opening up Chittagong or Mongla Port will earn huge revenue for Bangladesh. Similarly such benefits could be realized if the Government offer Bhutan, Nepal and the North-East India states, the opportunity to transit through Bangladesh to reach the heartland of India, in exchange for the right of Bangladeshi truck and river vessel operators and Bangladesh Railways to share in this traffic.

4. **Alleviating poverty for the 50 million people living below the poverty line (less than 1.25 dollar a day):** Continued progress toward achieving the Millennium Development Goals will require public policies and budgets aimed at raising rural incomes, improving schools and public health facilities for the poorest and disadvantaged including women, and at improving rural-urban linkages. For transport, this means maintaining rural roads, promoting country boat services, and dredging and maintaining more waterways. It also means improving the urban environment for health reasons and

for access to urban jobs through improved public transport services, and policies that discourage private car ownership and use.

5. **Mitigating impact of climate change: coping with disastrous floods and preparing for worse in the future:** The perennial problems caused by cyclone flooding are likely to get worse, as climate change raises the sea level and causes more frequent, unpredictable and more violent storms. The World Bank is supporting Government efforts to formalize its emergency preparedness plans, to mitigate the risk of flooding and to help those who are displaced to find temporary shelter and minimize their loss of livelihood. This has implications for where to build dikes that can also serve as road and railway embankments, and for government powers to mobilize private transport operators during emergencies.

6. **Strengthening governance:** In addition to measures to fight corruption, the transport sector needs to put in place a framework which ensures that the country's population and economy are capable of maximizing the benefits from the transport sector. This includes improved planning and budgeting of limited resources but also more consideration given to provision of equal opportunities in particular to the women, the poor and disadvantaged section of the population, and to safe, cleaner and affordable transport. The role of stakeholders in moving the sector forward needs to be recognized and strengthened by a political economy analysis providing guidance on overcoming resistance as well as building support to key reforms and programs.

Chapter 1. The Transport Sector – Background and Evaluation

Historical Background

1. Bangladesh has a vast network of highways and rural roads, inland waterways, two seaports, maritime shipping, a railway system, and civil aviation and a national airliner. Yet, this has not always been the case. At the time of the Indian sub-continent's partition in 1947, the landmass comprising today's Bangladesh was served primarily by a network of inland waterways that provided informal boat services to isolated rural communities and some long-distance cargo and passenger services. The road network was almost non-existent, with only 600 km of narrow paved roads. The railways inherited from the British Indian Railway system was a disjointed network of about 2,800 km in route length, separated by the Jamuna River with two separate and incompatible gauges. The main rail network in the west (broad gauge) was primarily oriented toward Kolkata, and another peripheral network in the east (meter gauge) connected Chittagong Port to the seven North-East Indian states. The railway system was not operationally oriented to serve the country after its independence. During the war of liberation in the early 1970s, most of the transport infrastructure that existed up to that time was practically destroyed or damaged; many bridges, ports and airports had to be rebuilt.

2. From this low-level transport endowment, Bangladesh has made big strides to develop a modern transport system to support the needs of a developing economy. Most of the improvement has happened in the roads, followed by the ports and civil aviation. The road network expanded to an impressive 271,000 km, most of which were built after independence in 1971. Bangladesh has developed major road corridors connecting Dhaka with key economic centers and towns, and a network of village roads connecting communities to market centers and the main roads. New bridges connect communities with road transport and integrate whole regions, including the Jamuna Bridge that combines roadways, a rail track and a natural gas pipeline, providing uninterrupted east-west road and rail connection for the first time.

3. **Road network has been improved:** In 1984 the Bangladesh government outlined its rural development strategy, focusing on development of infrastructure including roads, markets, storage facilities, and minor irrigation. Since then, improved rural roads and other infrastructure, through various Government- and donor-funded projects, have created opportunities for economic growth and poverty reduction through a range of mechanisms. Roads have reduced transport costs and in turn the cost of goods and services. The easier access to markets and technology has expanded farm and non-farm production through increased availability of inputs at lower cost, as well as growth in rural enterprises. Road-related studies in Bangladesh have also suggested that household consumption has gained, reducing poverty. At the household level, road development contributes to higher productivity and demand for labor and improved education and health, including for women and girls. Rural road investments have been pro-poor: gains are proportionately higher for the poor than for the non-poor.

4. **Still roads remain unsafe:** Injury and death rates from road accidents in Bangladesh are among the highest in the world. Bangladesh has around 0.7 million

motorized vehicles and 1.5 million non-motorized vehicles, with the former expected to double in the next 10 years. According to police statistics, road traffic crashes cause 4,000 deaths annually, but the unofficial figures are much higher. Even using official figures, road accident fatalities in Bangladesh would be about four times those of India (57 deaths per 10,000 motorized vehicles in Bangladesh versus 13 in India).

5. **Other transport modes have lost market share:** The Chittagong Port has been progressively expanded with additions of a container terminal and several berths to cater to the growing foreign trade. A civil aviation system was established in 1972 and Biman Bangladesh Airline commenced international and domestic services. On the other hand, inland water transport (IWT) has declined, as the navigable waterways have shrunk from about 8,000 km in 1970 to 6,000 km today, in part due to inadequate dredging. Similarly, the rail track infrastructure remained largely as it was in 1947, with the exception of the dual-gauge rail link on the Jamuna Bridge. Without much spending on infrastructure and rolling stock, rail's services deteriorated and its market share declined.

6. While the priority given by the Government to roads may be criticized because it lead to a reduced role of waterways and railways, expanding the road network has generated benefits both in terms of economic growth and poverty alleviation that have likely largely exceeded the additional costs resulting from the use of road transport more expensive than the two others. The problem of the respective share of the various transport modes is thus more a question for the future in a context where creating accessibility is less a priority than maximizing the benefits generated by the transport sector in the country on its economy and population in a more difficult environment (global financial crisis, cost of energy, climate change).

7. **Transport demand has grown vigorously:** The economic expansion and social development witnessed in Bangladesh since independence was accompanied by rapid growth in transport demand, at 9 percent per year. Much of this growth was met by road transport, which emerged as a dominant mode of transport over the years. Table 1 shows the evolution of the modal composition of transport demand. The share of passenger transport demand provided by road transport increased from 54 percent in 1975 to 88 percent in 2005, while rail declined from 30 to 4 percent and IWT from 16 to 8 percent. A similar change also happened for freight transport demand.

Table 1: Evolution of Transport Demand Mode Share (1975-2005)

Year	Passenger				Freight			
	Total Pass-km (billion)	Mode Shares (%)			Total Ton-km (billion)	Mode Shares (%)		
		Road	Rail	IWT		Road	Rail	IWT
1975	17	54	30	16	2.6	35	28	37
1985	35	64	20	16	4.8	48	17	35
1989	57	68	17	15	6.3	53	17	30
1997	90	72	11	17	12	65	7	28
2005	112	88	4	8	20	80	4	16

Source: Bangladesh Transport Sector Review (The World Bank publications), People's Republic of Bangladesh: Revival of Inland Water Transport-Options and Strategies, 2007

8. A key reason for road transport's dominance is its efficiency relative to other modes. It provides door-to-door services, is more flexible, and completes the service in less time than competing modes. An important element in the dominance of road transport has also been the government's public expenditure policy that has favored the road sector, at the expense of rail and river transport.

Government Transport Sector Policy and Institutional Framework

9. The government's policy for the transport sector is spelt out in the **National Land Transport Policy** approved in April 2004. The policy objectives include provision of safe and dependable transport services, and improving the regulatory and legal framework. The policy is designed to play an important role in helping reduce the transport costs of goods for export and in keeping the costs of Bangladeshi goods competitive in the world market. The policy also introduces an integrated multimodal transport system, linking road, rail and water transport. Under the last government a draft **Integrated Multimodal Transport Policy** was prepared but has not yet been approved. It is designed to build upon the Land Transport Policy and help in achieving more rational and balanced investments across transport modes and achieve better coordination among them.

10. However, implementation of the transport sector policy has been hampered by the weak institutional framework governing the sector. In particular, achieving a balanced and coordinated transport system has not been possible because the Government does not have a system for coordinating development plans and budgets in a fragmented institutional framework, whereby three ministries and several agencies oversee transport sector policy and development.

11. The institutional set-up to address road safety has not been able to make an impact on the country's high accident rate. A program coordinated by a more dynamic and action-oriented multi-agency organization is needed to make progress on road safety.

12. **Private-sector participation** in Bangladesh's transport sector is moderate compared to neighboring countries, in part due to the lack of a regulatory framework and government proactive actions to promote public/private partnerships in transport infrastructure financing and management. Private firms operate road, water and air transport services, but until recently played no part in the ports. It was not until 2007 that a private operator was first awarded a concession to handle cargo in part of Chittagong port, a practice that has become increasingly common in neighboring countries and many emerging economies.

Public Expenditure on the Transport Sector

13. Public expenditure in the transport sector was Taka 413 billion (\$6.7 billion) during fiscal years 2002-3 to 2006-07. This constituted about 2.2 percent of GDP, which is comparable to many other countries in the world. Of this, 69 percent was allocated to development projects through the Annual Development Plan, and 31 percent was allocated to recurrent and maintenance expenditure through the Revenue Budget. The budget preparation system directs adequate resources to roads, and rural road networks

are well developed. However, the overall efficiency in the use of resources allocated to the transport sector remains to be evaluated and in particular widespread corruption takes its toll on the results achieved.

Chapter 2. Challenges

14. The main challenges result from insufficient allocation of resources, poor planning and inadequate policies influenced by political agendas.
15. **Road transport falls short on quality and safety:** Notwithstanding the massive expansion of the transport infrastructure since independence, albeit mostly in the road sector, the services provided to users have not kept up with the demand in terms of quality and safety. The quality of the road network is poor, as roads are often too narrow for the traffic they carry. Congestion, overloading, air pollution, and safety are major problems in Bangladesh's transport sector. Delays in urban areas, especially in Dhaka and main highway corridors, as well as congestion in the Chittagong Port, continue to be major concerns for users.
16. **Roads have been under-maintained:** While the extended network has provided great benefit to the society by facilitating movement of people and goods and providing critical access to previously isolated population, the long-term sustainability of the road network is at risk. Appropriate institutional arrangements and sustainable financing mechanisms are not yet in place. As a result, only about 40 percent of the main roads (the National and Regional highways and the Zila roads) are in good condition, and the rural roads are in about the same state.
17. An additional factor contributing to road deterioration is a high level of truck overloading, estimated to cost 3 billion taka (\$43 million) per year in additional maintenance and rehabilitation. Lack of enforcement of current regulations is the main reason behind overloading. The single-axle limit is 10 tons –toward the lower end of current international practice-- and the maximum combined weight for a truck is only 30 tons. Loaded tractor-semitrailer combinations –rare in Bangladesh but the norm for long-distance haulage in middle-income and richer countries– normally weigh 38-42 tons, spread over five axles. The 30-ton limit is unduly restrictive, and on all but lightly trafficked roads stronger pavements and bridges may be economically warranted. That is, additional investment in the pavement and bridges is likely to be more than offset by operating cost savings by trucks carrying a higher maximum permitted payload.¹ Since the trucking market is competitive, such savings are likely to be passed on to consumers through lower prices.
18. **Rural roads should better benefit the poor:** Impact studies carried out on Bank-financed rural road projects in Bangladesh (in eight districts in the country's northwest region and six districts in the Greater Dhaka area) and elsewhere, have revealed significant social and economic benefits to communities, including a reduction in transport costs, increased female participation in labor markets, diversification of the rural economy, and reduction in poverty levels.

¹ The cost to strengthen pavements to raise the maximum single axle load from 10 tons to 11.5 tons, the EU standard, will be justified by lowered truck operating costs, if the road carries more than about 200 trucks per day. On the Dhaka-Chittagong highway the average number of trucks is about 6,000 per day.

19. However, the planning and selection of investment priorities for rural roads is a key issue, since most decisions are made by headquarter-level managers with limited local knowledge. One perverse result is that investment in rural road projects generally consists of new construction, with too high standards, instead of rehabilitation and maintenance. The planning process is further distorted by political influences, as demonstrated by the fact that districts represented by the ruling party have received eight times more investment in rural development projects, of which rural roads constituted a large proportion, than districts represented by the opposition party. While part of the differences could be explained by higher population and size of the districts, and therefore more road needs, these two factors could not explain the eight times differential.

20. **Railway reform is urgently needed:** Bangladesh Railway (BR) has played a limited role in the economy, due to the limited infrastructure, poor condition of the physical assets, and low efficiency of services vis-à-vis competing transportation modes. Railway sector governance challenges and inadequate resource allocations are largely responsible for these persistent obstacles. In order to contain the adverse budgetary impact of its operations and to enhance the contribution of the railways to the economy, reform actions and investment are underway, supported by the Asian Development Bank, World Bank and the Japan Bank for International Cooperation. The restructuring of BR, including corporatization and commercialization, is being pursued as the focus of the reforms, and is critical to improving the efficiency of services. Once that is achieved, linking BR with the railways of neighboring countries through strategic partnerships is probably the best chance for BR to attain commercial viability, since Bangladesh does not have domestically the kind of heavy traffic, minerals or heavy industry that are most suitable for rail transport. Suburban and inter-city passenger traffic also has potential, given Bangladesh's large population and dense population. If the world price of oil returns to the high level reached in 2007-8, it will give the railway a special advantage for offering competitive passenger services. Whether the new emphasis will be on freight or passenger services, substantial investment in infrastructure, equipment and technical modernization is required, as is adoption of a more commercial approach to management. It is likely that in the absence of investment in railways, more costly investments would be required in the road sector to add the required capacity.

21. **Inland waterways play a limited role:** The inland waterway system is not used to its full potential, due in part to inadequate dredging and shortage of berthing facilities. While lack of resources is the main cause, the quality of sector management and services provided by the operators has also contributed to IWT's overall decline. Tariffs regulated by the Government are insufficient to generate a reasonable profit, and as a result boats are overloaded, the cause for more than half of the accidents on waterways. The private sector is more efficient in dredging, and it offers a capacity of 6.9 million cubic meters: 2.5 times the capacity of the government-owned Bangladesh Inland Water Transport Authority (BIWTA) and at lower cost. However, the Government gives priority to BIWTA, thus maintaining an inefficient system of dredging. Improved waterways have the potential to reduce transport costs for bulk cargo and provide better access to areas, such as in the North-West of Bangladesh, where road access is limited.

22. **Seaports are a bottleneck to trade:** Due to several reforms in the last few years, Chittagong Port has achieved large improvements in port efficiency (turn-around time for container ships) and in reduction of cost of doing business. Before the reforms, the low quality of port services and of the associated land transport system (road and rail connections to the port), and of the onward inland connections, mostly dominated by the trucking industry, were a major barrier to trade. The concession awarded in 2007 to a private firm to operate Chittagong's New Mooring Container Terminal is a welcome breakthrough. It is in keeping with the international 'best practice' model of a landlord port, in which the State retains responsibility for the infrastructure but private firms handle the cargo.

23. The country's other seaport, Mongla, is under-used (only 33 percent of its capacity is used). This is largely due to chronic siltation and obsolete handling equipment, but also to the lack of any bridge over the Padma River to facilitate road and rail connections to Dhaka.

24. **State airline is struggling to survive:** A major reform in air transport occurred in 2007 when the state-owned Biman Bangladesh Airlines became a public limited company. As an immediate measure aimed at cutting costs and increasing efficiency, its workforce has been reduced by 44 percent and loss-making international and domestic destinations have been closed down. However, it seems unlikely that it can be rescued or sold to private investors, since its assets are virtually exhausted. A more rewarding approach for Government efforts may be to aid the Bangladeshi private carriers to acquire Biman's route operating rights, and to negotiate royalties with foreign carriers wishing to fly into Dhaka.

25. **What is a reasonable budget for transport?** The dense land use and the flat terrain are advantages when it comes to supplying infrastructure. Countries with such advantages need to spend a smaller share of GDP to ensure connectivity to their population: 1.5-2 percent of GDP may be adequate, if well used and sustained over time. Adding in funds to clear the backlog of deferred maintenance, 2.5 percent of GDP may be a reasonable budget share, recognizing other priorities that the Government has to fund. That said, Bangladesh faces the special challenges of financing certain mega-projects of long-term significance to the structuring of the economy, which are hard to reconcile with the regular budgets: the proposed Padma Bridge, the rail-based mass transit network for Dhaka that is being debated, and radical expansion of capacity on the Dhaka-Chittagong corridor –road or rail or both.

26. The state budget is small: government revenues are only 11 percent of GDP. Funding these mega-projects will require either an exceptional share of the state budget at its present level, or a big increase in the collection of tax revenues. Anti-corruption measures would have a direct benefit in stretching the taxpayer's taka. Introduction of a fuel tax would be another low-hanging fruit to enlarge the budget.

Chapter 3. Priorities for Action: Promoting Economic Growth

Facilitating Bangladesh's Trade

27. Despite recent improvements in the road sector, Bangladesh's transport system as a whole is poorly suited to promoting trade and investment. An investment climate assessment carried out by the Bank found that the lack of adequate infrastructure, including transport, "is one of the most severe obstacles facing firms"². A firm-level investment climate survey found that only 19 percent of survey respondents said transport imposed no obstacles on doing business in Bangladesh. Similarly, a 2000 study³ found that port inefficiencies and cumbersome custom processes cost the Bangladeshi economy an estimated US\$1.1 billion a year and the garment industry, the mainstay of Bangladesh's export industry, was losing about 30 percent of its business to competing countries. Reducing the overall transport costs, through strategic investment in key sub-sectors such as ports, and policy reforms to improve multimodal transportation and logistics, are therefore critical for improving Bangladesh's export competitiveness, and more generally to improve its investment and trading climate.

28. While in the current climate of international crisis, facilitating trade may not be seen as a priority, it is expected that when the crisis ends, the country's growth will be based again on the growth of its external trade. The present period provides an opportunity to implement the reforms and the investments that will improve the country's competitiveness and readiness to compete when the growth of the world economy resumes.

29. The **Dhaka–Chittagong corridor is central** to Bangladesh's economy, since it generates almost 50 percent of its GDP and handles about 85 percent of its international maritime trade. State-run institutional arrangements and the low capacity in the railway and Chittagong port --lack of private operators or even a commercially oriented state enterprise, together with strong labor unions—impose a heavy burden of inefficiency and high pricing on users. Bringing the port up to the productivity of other South Asian ports offers the potential for substantial extra value added along the supply chains.

30. Inland, most of the freight and passenger traffic plying in the corridor moves on a congested two-lane highway or on a severely constrained railway line. As a result of these constraints, fewer than one in five of the containers handled by Chittagong Port moves inland. The rest are stripped (inbound) and stuffed (outbound) at the port and the contents transported inland in break bulk (loose boxes) in overloaded, unsafe trucks. This contributes to significant delays, damages, loss and uncertainty in the delivery of shipped goods. It forfeits the main advantage of containers: secure and efficient delivery door to door. It reflects the fact that the Chittagong-Dhaka highway is too narrow and crowded, most trucks are too small to carry 40-ft containers (the internationally preferred

² "Improving the Investment Climate in Bangladesh: An investment climate assessment based on an enterprise survey carried out by the Bangladesh Enterprise Institute and the World Bank".

³ Cookson and Ahmed (2000).

size for garments) and the railway is too slow. The railway's technical standards are obsolete and an obstacle to their modernization.

31. In its current form, this corridor will not be able to cope with the increasing levels of traffic and will become a bottleneck to Bangladesh's export-led economic growth strategy. In particular, it will negatively affect its competitiveness in the garment industry, which increasingly depends on reliability of supply and order cycle times. Since the Multi-Fiber Agreement lapsed in 2005, Bangladesh's competitors have been using lead time for delivery as a means to gain competitive advantage. Bangladesh, on the other hand, suffers from long lead times for inputs of fabrics and exporting finished garments, and unreliable delivery times.

32. Some improvements to the logistics have been made through modernization of Customs clearance procedures, especially for exports and temporary imports. However, Bangladesh has failed to improve the performance of its transport system for imports and exports as rapidly as its neighbors⁴. The cargo-handling technology and method of operation of the Port of Chittagong are outdated. The benefits of multimodal transport are unrealized because of the low inland use of containers. Inland Customs facilities and storage are limited and the available facilities are not located in a way that will minimize overall delivery costs.

33. One solution that has received little attention so far is carriage of containers inland by waterway. This requires barges of intermediate size and technology between a traditional canal barge and a sea-worthy ship, since the waterway route between Chittagong and Dhaka involves some exposure to open water. Examples of such vessels are to be found in the powered container barges used on the lower Rhine to move containers inland from Rotterdam and on the Yangtze River to connect Shanghai to the Chinese interior, as well river-sea vessels of the former Soviet Union. Some facilitating initiative by the Government may be needed to break out of the vicious cycle in which would-be suppliers and would-be demanders wait for the other to make the first move. The Ministry of Ports and Shipping recently indicated interest in building a terminal at Chittagong to serve this traffic.

Intra-regional Trade and Transit: a 'Win-Win' Proposition

34. Intra-regional trade among the countries of South Asia is far smaller, relative to local GDP, than in all other regions of the world. Studies show that the benefits from intra-regional trade and transit will be large to each national economy. If the South Asian governments are persuaded of the macro benefits, experience elsewhere suggests that a carefully thought-through and negotiated strategy will be needed, that integrates policy actions in several domains: not just upgrading of infrastructure at border crossings and along the trade corridors, but also implementation of regulatory and institutional changes and a new degree of co-operation with the neighbor countries.

35. The basic essential is that vehicles (road, rail or water) must be allowed to cross borders and deliver goods from origin to destination without transshipment of their

⁴ "Bangladesh Trade and Transport Facilitation Study", World Bank, December 2004.

contents. Unloading and reloading anywhere along the route adds penalties of cost and time, as well as damage and losses, that in aggregate may be very large; they deter much potential trade today. A second-best alternative to allowing loaded trucks across borders is to allow semi-trailers to be dropped off at the border and picked up by a tractor unit from the neighbor country. A further option is to allow containers to travel from origin to destination without being opened, transferred from one truck to another at or near the border –or from road to rail somewhere along the route.

36. A recent study⁵ proposes six corridors for bi-lateral trade between Bangladesh and its neighbors (Northeast India, heartland India, Bhutan and Nepal), as well as for transit allowing each neighbor to shorten circuitous travel today via the ‘chicken neck’ between Northeast India and the rest of India. Such transit can go by road, rail or water. Water and rail transport have a cost advantage for bulks (i.e. most exports), whereas high-value goods (mainly imports) are likely to prefer road. The study lists physical and non-physical barriers to the development of each corridor and recommends actions and investments that will be needed in the short and medium terms to overcome these barriers.

37. **From strategy to implementation:** Defining the corridors is only the first step among many. The interested governments will need to negotiate bi-lateral agreements giving rights for cross-border travel by trucks or containers, the trucks probably involving vehicle quotas or trip quotas to balance the interests of each country involved. The roads to be used by trucks engaged in transit or bi-lateral trade --tractor-trailers are the most economic-- may be too narrow and congested or have weak pavements and bridges, and so they will need improving.

38. Cross-border exchanges of railway freight wagons also require agreement on how to keep track of the wagons while they are in ‘foreign’ territory and the relevant charges to be levied. BR wagons do not meet Indian Railways’ standards (notably their brake systems), but IR wagons can operate in Bangladesh; BR would at least earn track use charges from such traffic. The mix of track gauges also complicates things.

39. Existing transit agreements by waterway need to be put on a multi-year basis, so that operators can justify investment in improved vessels, especially for carrying containers, and in jetties/pontoons for loading.

40. Furthermore, reform of Customs procedures and simplification of documentation will need attention. Bond systems need to be put in place to protect Customs from the risk of revenue loss from transit traffic diverted into the domestic market, as well as ‘domestic transit’ whereby clearance is relocated from the border to inland destinations –another key step to facilitate trade.

41. **Mobilizing stakeholders for a ‘win-win’ transaction:** Stakeholders will only be able to create and sustain momentum for change if they are convinced that trade is a “win-win” proposition. This requires both exchange of information and trust-building

⁵ Dr. M. Rahmatullah, “Briefing Paper on Transport Integration to Enhance Trade in North Eastern Sub-region of South Asia”, World Bank, August 2008

measures. Mobilization of the trading communities can be a big help in this, since they are the biggest winners and will be motivated to stay the course in negotiating solutions to the many problems that are bound to arise. The devil is often in the detail. Parties who today benefit from the transaction costs and rent-seeking at the borders are likely to see themselves as losers. Political leaders will have to be willing to over-ride their objections or find ways for them to switch to other activities. International experience offers models for creation of **joint public/private trade and transport facilitation committees** (known in many countries as PRO committees, for ‘PROcedures’), who serve as champions of such change. The recommended objectives, membership and modus operandi for such a committee are set out in Annex 2.

42. **Pilot corridors:** This challenge needs a strategic vision on the part of national leaders to create a process that brings together all these interests. Yet at the same time it requires attention to details that sustains the momentum. Best practice elsewhere suggests that starting with pilot corridors may prove easier to manage –especially where qualified management is scarce--, encouraging the parties to work out solutions that fit local circumstances before rolling them out to all corridors. Local buy-in to improving corridors will increase if the concept of corridor is broadened to include local traffic and rural supply chain.

Implementing Transport projects

43. Any planning for transport infrastructure requires a good understanding of demand: where people and goods go or want to go (origins and destinations) and how often (traffic per day). Such traffic information as is available is inadequate.

44. Successful completion of the Jamuna Bridge in 1998 within time and budget was a major achievement. Like the Jamuna Bridge before it, the proposed Padma Bridge (likely to cost about 3 percent of one year’s GDP) and other major infrastructure, such as the proposed Dhaka metro, present huge engineering challenges that will take time and high professionalism to design and to assure financing sources that they are economically justified.

45. Financing requirements for transport infrastructure development need to be assessed and are likely to exceed public financing capacity. In the past, due to shortage of resources, insufficient funds were allocated to railways and inland waterways resulting in loss of assets and additional costs for the economy. Planning transport projects for the future will be relevant if the plans fit within the macro-economic constraints. For this purpose, the first step is to establish priorities. The second step is to develop a financing strategy that calls on both public and private participation. Private participation should cover both provision of capital financing by domestic or foreign investors as well as contribution from users. This potential contribution needs to be better explored in the road sector through the creation of road tolls but also in the inland water transport sector through the participation of road ferry users for example.

Chapter 4. Priorities for Action: Alleviating Poverty

46. Transport can contribute to poverty alleviation in many ways, but especially through: (i) improved rural accessibility by rural roads and inland water transport, both heavily used by the poor, to provide equal opportunities; (ii) reduced corruption in the provision and maintenance of transport infrastructure; (iii) safer, less polluting and more affordable public transport; (iv) support to action plans for mitigating the impacts of flooding; and (v) mitigation of social impact of transport.

Expediting Reforms in Inland Water Transport

47. Thanks to the country's geography, inland water transport continues to be an important mode of transport for both freight and passenger traffic, especially for the rural poor. The significance and resilience of IWT is evident in its modal share: passenger IWT makes up 8 percent of all surface transport modes, and freight traffic shipped by waterways comprises 30 percent of all surface transport modes. With 3,800 kilometers of navigable rivers during the dry season and 6,000 kilometers during the monsoon season, the waterway network in Bangladesh is one of the most extensive in the world. More than half of the country's land area and three quarters of commercial activities are situated within ten kilometers of navigable waterways during all seasons. Yet IWT has been facing several constraints due to the growth of road transport, inadequate budget allocations in recent years (only about 10 percent of the total expenditure on transport goes for IWT), and a poor sector governance structure.

48. As a result, inland ports have been inadequate and in poor condition, while rural landing facilities --pontoons and jetties-- are scarce compared to the needs. The private sector plays a dominant role in the country boat sector and passenger and freight services on the main river ways, but the public sector has a virtual monopoly for ferry services. There is ample scope for private sector participation in providing ferry services. In addition, the waterway infrastructure provision and maintenance is solely under the public sector. BIWTA is responsible for dredging the waterways and maintaining the inland port and landing facilities. Experience shows that these activities can easily be contracted out to the private sector, which can improve the efficiency of the system, while saving the government resources.

49. Improving the waterway infrastructure and services in Bangladesh will require fundamental changes to the institutional and financing framework governing the sub-sector. Reforms are needed to increase the role of the private sector in managing, owning, and financing waterway services and infrastructure. At the same time, reforms and capacity-building measures are required to redefine the role of the government in IWT and enable it to regulate the provision of waterway services and infrastructure. This two-pronged approach – **increasing the role of the private sector and improving the residual role of the public sector** – can establish an enabling environment for private sector competition in ways that can enhance the efficiency of the IWT system, while at the same time ensuring related social and environmental issues are adequately addressed.

50. The reforms required in **IWT services** include:

- (a) deregulating the ferry sector to allow private participation,
- (b) privatizing passenger and cargo services currently provided by the Bangladesh Inland Water Transport Corporation, and
- (c) improving the regulation and safety of the sector.

The reform in **waterway infrastructure** involves:

- (a) outsourcing waterway dredging services to the private sector,
- (b) introducing public-private partnerships in the management and financing of ports and landing facilities, and
- (c) improving cost recovery.

Sustaining Rural Accessibility

51. While expansion of the rural road network has been a priority of all governments in Bangladesh, sustainability is at risk due to the increasing amount of resources required for both expansion and maintenance, including rehabilitation and repair from flood damage. Surveys have confirmed the positive impact of rural road projects on rural population that are the poorest in Bangladesh. This impact is strengthened by the importance given to gender, environment and safety in rural road projects. In addition, rural road projects have a significant potential for alleviating the impact of the current financial crisis due to the labour intensive nature of the road works.

Strengthening Governance in Transport

52. According to Transparency International, Bangladesh's road sector suffers from many governance problems. It reports that in the selection of road works, politicians and local elites steer state-funded projects to unproductive investments to gain political constituents. Landowners influence the routing of a road, leading to repeated changes in road alignments and increase in the cost of construction. Corruption during procurement and supervision of civil works is believed to contribute to their poor quality and high cost (on top of legitimate factors that raise costs, such as shortage of good construction materials and the need for high road embankments).

53. The situation calls for a clear commitment from the highest levels of government to crack down on corruption. This could be supported and sustained if parliament were give more voice to civil society by passing a 'freedom of information' act granting the public access to many aspects of government financial management, such as the allocation of state budgets and awards of contract for public works and supply. In India the Right to Information Act, passed in 2005, has had a big impact in giving civil servants a strong incentive to be more transparent in their management of public affairs.

54. The lack of an integrated transport policy and transparent planning framework for prioritizing investments limits Bangladesh's ability to allocate resources well among competing sub-sectors, or to deliver their intended development impact. The Roads and Highways Department's Annual Development Plan has tended to spread the budget over an impractically large number of projects, so that construction takes many years, denying the intended benefits to the roads' users. Scarce resources have been allocated to Inland Water Transport focusing on maintenance of ferry channels preventing the sector to

develop its full potential. Resources have not been allocated to railways or air transport to achieve efficiency gains but mostly to cover uncontrolled deficits.

Safer, Cleaner and Affordable Public Urban Transport

55. In a country as crowded and as poor as Bangladesh, walking, animal-drawn vehicles and public transport have a central role to play in giving people access to jobs, markets and essential services such as schools and health care centers. The private sector is well able to provide bus services without requiring subsidy, but needs a minimum of regulation regarding safety. Health costs of unregulated transport would be disproportionately borne by the poor. Conditions of access to public transport need to be evaluated to ensure that transport services remain affordable to the poor, women, the elderly and disabled. Agglomeration economies also depend on a functioning urban transport system. Thus policies need to take both aspects into consideration.

56. In the cities travel is slow, unsafe and polluted because of the lack of street space and the mixing of pedestrians, non-motorized vehicles (mainly rickshaws) and motorized vehicles in the same limited space. The lack of street space is especially acute in Dhaka, where roads occupy only 8 percent of the city's area. International comparisons suggest that probably double this much is needed for reasonably uncongested flow. But expanding road space requires the clearing of occupied land and so is clearly at best a long-term solution.

57. For the medium term, policies recommended to the city governments are to give more attention to:

- (a) the needs of pedestrians for safe walkways and safe opportunities to cross streets,
- (b) separation of slow and fast-moving vehicles, and
- (c) measures to encourage cleaner vehicles, that is, ones that pollute less.

Separating motorized vehicles from pedestrians, carts and rickshaws can easily quadruple a street's capacity in terms of traffic flow. All components of this flow can benefit. Measures should be considered to strengthen incentives in favor of public transport and against use of private cars in cities, including a higher tax on fuel and regulation of parking, especially to discourage parking that blocks pedestrian footways. To reduce the number of highly polluting mini-buses, introducing licensing of bus routes ('competition *for* the market') is recommended over open access ('competition *in* the market').

58. Studies have also recommended development of a **rail-based mass transit system in Dhaka**, either elevated or underground in the city center. Such a system offers the greatest capacity to carry large numbers of people (up to 40,000 per hour per direction in peak hours). As such, it can serve as the central backbone of the city's public transport network, but it is unlikely to serve more than a small fraction of total trips in the urban area. Furthermore, it comes at a very high cost to build—easily \$100 million per km (\$1,000 per cm!) for underground sections. The proposed 60-km underground network

might well cost as much as \$5-7 billion⁶. It will also incur a high continuing cost to operate. No rail-based metro system anywhere in the world operates without deficit⁷. Construction will take many years (10-15), and will be very demanding as regards management capacity.

59. **Bus rapid transit (BRT)** is a hybrid solution that has proved successful in recent years in carrying flows almost as large (10,000-40,000 per hour per direction in peak hours), but at a fraction of a metro's capital cost. It was first developed in Brazil and has been adopted successfully in Bogota (Colombia), Mexico City and Toronto (Canada), among others. China has also implemented the first of several planned BRT routes in Beijing and is developing them in other cities. The infrastructure can cost one-half that of the rail option because it is standard road technology and greater use can be made of roads at grade, while the vehicles are cheaper because there is wide international competition for their supply. They can be owned and operated profitably (without subsidy) by private companies under route or area licenses awarded by the city on the basis of competitive bids.

60. The Strategic Transport Plan for Dhaka has identified three BRT corridors and three metro corridors. The BRT and metro options are not mutually exclusive in the long run. However, the higher cost and more demanding technology of a rail-based metro suggest that it can not be brought into operation in less than about 15 years. Many examples in Southeast Asia suggest it could be longer still. In contrast a BRT can be brought into operation in half that time, and indeed can serve as a transitional option, attracting new businesses and housing to a corridor later to be served by the Metro.

61. An integrated vision and the appropriate policies remain to be developed to maximize the economic and environmental efficiency of the entire transport sector. While sector policies are expected to aim at maximizing the economic and environmental efficiency of each sector, policies need to be coordinated and policy shifts may be required to ensure that the sum of the policies achieves the same objective for the whole sector. Currently, the draft *Integrated Multi-Modal Transport Policy* focuses only on improving links between transport modes to ensure provision of efficient continuous door-to-door services.

Strengthening Transport Aspects of Emergency Preparedness

62. Bangladesh has been described as “a disaster-prone country that is affected almost every year by a natural disaster of some kind. Located between the Himalayas and the Bay of Bengal and with three mighty rivers (Ganges, Brahmaputra and Meghna)

⁶ Source: “Strategic Transport Plan for Dhaka, Final Report”, Louis Berger Group/Bangladesh Consultants Ltd., December 2005

⁷ Hong Kong's metro may be the sole exception, but only thanks to skillful management of commercial real estate above and around stations –making the most of the city's exceptionally high population density and purchasing power.

converging on its territory, Bangladesh is prone to floods, torrential rains, erosion and cyclones”.⁸

63. As global warming threatens to raise the sea level in the coming decades and trigger more severe weather --storms are likely to be more frequent and more violent--, more people are at risk from flooding of their homes and destroying their livelihoods in Bangladesh than in any other country. It is estimated that a third of the population –some 40-50 million people—live on land no more than 1 meter above sea level.

64. As part of national planning for disaster preparedness, the transport sector has a role to play. As a long-term measure, relocating new urban development and economic activity to higher ground could be considered, with implications for the planning of new roads and rail links⁹. An alternative long-term measure to protect vulnerable people in place is to raise embankments (also referred to as levees, dikes or –depending on location—sea walls or river training works) and erect new ones. Since embankments can also serve as the base for roads and railway lines, the planning of the one needs to take into account planning for the other.

65. On a shorter time scale, local planning for possible evacuations during storms should monitor the state of the roads that would be used and the transport services available. This may suggest contingency arrangements for local governments to mobilize privately owned vehicles on a contractual basis, to ensure continuity of key services during emergencies.

66. The fact that waterway transport is often the only means of transport that continues to function during floods, strengthens the argument for BIWTA and local governments to allocate funds to the maintenance and renewal of pontoons and other landings used by country boats, and to the upkeep of navigational aids.

Mitigating Social Impact of Transport

67. Assessing and mitigating the social impact of transport should be an integral part of the planning or reform process. Lessons learned from the Bangladesh Rural Roads and Market project need to be scaled up to other transport investments or reforms. The project has been recognized as a good practice for gender integration, especially enhancing women’s access to labor and product markets. By integrating social considerations, in particular gender, in reform and planning, transport will go beyond its role of provider of services and infrastructure by providing better access to economic opportunities, hence more equity. Adequate lighting in stations and at bus stops improves security and discourages violence, in particular gender-based. Improving working conditions at railway stations or in workshops helps accept reforms that require increased efficiency of

⁸ World Bank, “Cyclone Sidr in Bangladesh: Damage, Loss and Needs Assessment for Disaster Recovery and Reconstruction”, April 2008

⁹ An international example is given by Belize. After its former capital, Belize City, located on the coast, was flooded and nearly destroyed by a hurricane in 1961, a new capital, Belmopan, was built 80 km inland on higher ground.

railway staff. Road safety measures limit the number of road accidents that often reduce families to poverty.

Chapter 5. Recommendations

Sustaining Economic Growth despite Global Financial Crisis

68. We recommend *focusing on the transport needs of the main export industries, chiefly along the Dhaka-Chittagong corridor and in the port; and maintaining the level of renewal and incremental improvement in all transport infrastructure.*

- (a) Review, revise as necessary and ***adopt the Integrated Multi-Modal Transport Policy*** and constituent modal policies prepared under previous governments and in line with SAARC's Regional Multi-modal Transport Study (2007). This will provide a holistic vision for the sector's future, within which the mode-specific plans and policies fit together. Its implementation will require surveys and studies to update understanding of travel demand patterns –origins and destinations and counts of passenger and freight traffic -- as a core pre-requisite for efficient planning of public investments in transport.
- (b) ***Promote public-private partnerships (PPP)*** through the establishment of a unit in the Ministry of Communication for increasing private participation in the provision of transport infrastructure, and build up its capacity.
- (c) Complete the ***conversion of Chittagong port into the landlord port model***: the public sector owning and maintaining the infrastructure, while the private sector, through concessions, owns and operates the cargo handling equipment with its own work force. This implies –*inter alia*—to (i) examine policies and procedures causing containers to remain in port too long; (ii) reform them to allow or force importers to remove their containers more quickly; and (iii) remove obstacles that may be causing shippers to strip containers in the port or nearby container depots rather than at destination, and recommend solutions.
- (d) ***Give Bangladesh Railways more managerial autonomy*** and re-organize them along lines of business (passengers and freight), on the basis of a study to compare an incremental improvement of the railway or a radical approach converting meter-gauge lines to broad gauge, heavier axle loads and other modern technical standards.
- (e) As regards ***civil aviation***, focus government efforts on negotiating operating rights for private carriers and payment of royalties by foreign airlines wanting to operate to Dhaka.
- (f) To ***improve energy efficiency in the transport sector***, put rail and bus public transport on a more equal competitive footing with private cars, introduce a tax on gasoline and diesel, so that motorists pay for roads and bridges in proportion to their use thereof, as well as the externalities they cause: congestion, air pollution and traffic accidents. Resistance from the politically influential class could be blunted if taxes on vehicle purchase and ownership (as opposed to vehicle use) are lowered at the same time. Alternatively, a net increase in taxes will help ease the shortage of fiscal revenues. (Provision should be made to exempt diesel used by country boats, the railway, and farmers.)

- (g) To *provide an adequate mechanism to maintain and rehabilitate road assets*, activate the proposed road fund, as a mechanism for greater transparency and accountability in the management of road budgets.

Mutually Beneficial Transit Co-operation with South Asia Neighbors

69. *Co-operation with neighboring countries offers benefits to Bangladeshi-owned road, water and rail transport services and port services.*

- (a) Offer North-East India states, Bhutan and Nepal rights to transit Bangladesh territory to reach Chittagong and Mongla ports or the heartland of India, in exchange for the right of Bangladesh truck and river vessel operators and Bangladesh Railways to share in this traffic without transshipment at the national borders. Extend the short-term period of validity of the Bangladesh-India Protocol Agreement governing IWT exchanges between the two countries.
- (b) Attracting more traffic to Chittagong port will facilitate attracting larger ships and more direct services to export markets, which will benefit Bangladesh's own exporters as well as those of its neighbors.
- (c) Inclusion of Indian traffic (road and rail), especially that between Kolkata and Dhaka, will help make the Padma Bridge more profitable. Analyze the business opportunity for the railway to serve this corridor.

Alleviating Poverty for Those who Live on Less than a Dollar per Day

70. We recommend *continued support of policies aimed at raising incomes, improving schools and public health services for the poorest in society*. For the transport sector this means:

- (a) In the budget for *roads*, give priority to maintenance, preferably on a performance-based approach with third-party monitoring to reduce the risk of corruption. A pilot should first be carried out for a more detailed assessment of benefits, costs and risks of this approach.
- (b) Facilitate entry of *private operators of larger waterway vessels* and give higher priority to regulation of their safety; dredge and maintain more waterways for their benefit; and ensure that bridges over waterways allow enough clearance for vessels.
- (c) Improve the *urban environment* through better public transport services, phasing out any remaining vehicles running on two-stroke engines, reducing the sulfur content of diesel fuel, and introducing disincentives to car use (such as a fuel tax and parking restrictions). More specifically, study opportunities in Dhaka for separating motorized (fast-moving) vehicles from non-motorized (slow-moving) traffic and pedestrians.
- (d) Give *Dhaka Transport Coordination Board* powers to franchise out city bus routes to private operators, or form a strong unitary authority for urban transport. Compare rigorously the costs and benefits of bus rapid transit against rail-based public transport (light or heavy rail). Even if a rail-based metro is preferred for

the longer term, BRT should be considered as an interim solution, since it is far cheaper and quicker to mobilize, and the buses can be privately financed, owned and operated, following a city franchising process for route or area licenses.

- (e) Mobilize stakeholders for effective campaigns to improve road safety.
- (f) In all programs, include measures that are specifically targeted at the poor and disadvantaged, especially women, following the example of the Bangladesh Rural Roads and Markets Program: give priority to labor based works which generate employment, in particular for women; mobilize women's organizations and saving societies; build market areas for women; separate public toilets for women and men in markets and transport stations and flood shelters.

Strengthening Governance

71. A broad approach is recommended which covers project risks while taking into account sector risks. Addressing the latter risks helps set up a framework for better governance in projects reducing the need to define ad-hoc action plans for projects. This also increases the sustainability of measures that may otherwise have a time-limited impact if applied only at project level. In particular an institutional assessment and institutional reforms complement fiduciary reforms. Creation of a Road Fund for example is a way to address risks in financial management of road maintenance resources. Use of contracts is also a more efficient way to finance works based on results than by using force account. Improved planning process and more transparency at all level of Government involvement by supporting demand-side accountability through increased engagement with civil society, local beneficiaries and other interested parties, are also key to better governance and increased efficiency in the use of limited resources.

72. Good governance includes the capacity to identify the need for reforms and implement the reforms. This requires a good knowledge of the political economy of the sector. Weaknesses of the transport sector's representation in the policy process and resistance by some stakeholders to beneficial reform are important in many cases. Bank support to reforms should include advice on improving communication on reforms as well as on mobilizing stakeholders that champion reforms.

Adapting to the Impacts of Climate Change: Coping with Disastrous Annual Floods and Preparing for Worse in the Future

73. The Bank supports *strengthened emergency preparedness planning, since annual flooding is likely to worsen as global warming raises the sea level and causes more extreme weather.*

- (a) Strengthen emergency preparedness plans, to mitigate the risk of floods and to help those who are displaced to find temporary shelter and minimize their loss of livelihood. A US\$109 million IDA credit to support long-term disaster risk reduction became effective in December 2008.
- (b) Review land use plans with a view to shifting new urban development to higher ground.

- (c) Analyze implications for where to build dikes (river training works) that can also serve as road and railway embankments.
- (d) Review how to ensure continuity of essential services, including government mandates for mobilizing private transport providers in times of disaster.
- (e) Planning for post-flood measures may imply allocating more funds for inland water transport, and giving it higher priority for institutional reform.
- (f) Increase local participation in planning, including women, and increase measures to address the needs of the more vulnerable, in particular women.

Annex 1: Organization of the Transport Sector

1. The organization and management of Bangladesh's transport sector reflects three main facts: a high level of centralization notably as regards investment decisions; sectoral fragmentation relating to land, water or air transport; and having government departments rather than financially-autonomous parastatals provide transport services and manage infrastructure.

2. Similarly to other sectors of the economy and to other countries in the region, the Planning Commission is responsible for coordinating investment planning and main sectoral policies. Several transport-related ministries implement the investment plans and carry out the policies: (a) the Ministry of Communications (MoC), which is responsible for roads, rail and urban transport; (b) the Ministry of Ports and Shipping, which is responsible for ports, maritime transport and inland water transport; and (c) the Ministry of Local Government, which is responsible for rural infrastructure.

3. **Roads and road transport:** The Roads and Highway Department manages the first three tiers of Bangladesh's six-tier road network: national highways, regional highways and Zila roads, totaling over 21 thousand kilometers. The Bangladesh Road Transport Authority (BRTA) regulates road transport and collects fees from road users. The Local Government Engineering Department is responsible for developing and managing the classified local road network (Upazila roads, Union roads and Village roads) totaling over 250 thousand kilometers. Inter-city road transport services, for both freight and passengers, are provided by private operators and regulated by BRTA.

4. So far, the organization for **road safety** has proved ineffective. Multiple agencies are involved with road safety. These include the National Road Safety Council, which draws up National Road Safety Strategic Action Plans. The Council and the Road Safety Cell prepare national policies on road safety, and the Accident Research Center at Bangladesh University of Engineering and Technology identifies the causes of accidents and develops solutions.

5. **Bangladesh Railway (BR)** is a government department under the MoC. As an agency of the government rather than an independent state-owned enterprise, BR's revenues go into the Treasury, and BR's operating and investment budget is provided by the central government. Several public and private institutions are involved with the provision and regulation of **inland water transport**. Bangladesh Inland Water Transport Authority is the main agency responsible for regulating IWT services, which are provided mainly by private operators on the main routes, and by the government company Bangladesh Inland Water Transport Corporation on secondary routes. Bangladesh's **airports** are managed and regulated by the Civil Aviation Authority of Bangladesh. When Biman Bangladesh Airlines became a public limited company in 2007, the government initially retained 100 percent of ownership, with the intention to gradually offload up to 49 percent.

Annex 2: National Trade and Transport Facilitation Committee

What is it for? Who should be a member?

(a) **Introduction:** The goals of trade facilitation are:

- *Simplification of formalities, processes and procedures related to the flow of trade across national borders;*
- *Harmonization or alignment, among trading partner countries, of national border crossing formalities, processes and procedures with international conventions, standards and practices; and*
- *Standardization or the process of developing internationally agreed formats for practices, procedures, documentation and information.*

Governments establish and support national trade facilitation bodies with balanced private and public sector participation, in order to:

- *Improve dialogue between different bodies involved in trade and international transport;*
- *Define solutions to remove impediments to trade and transport at operational level;*
- *Identify issues affecting the cost and efficiency of their country's trade;*
- *Develop measures to reduce the cost and improve the efficiency of trade;*
- *Assist in the implementation of those measures;*
- *Provide a national focal point for the collection and dissemination of information on best practices in trade facilitation; and*
- *Participate in international efforts to improve trade facilitation and efficiency.*

National trade facilitation bodies can serve as forums which allow private sector managers, public sector administrators and policy makers to work together towards the effective implementation of jointly agreed facilitation measures.

(b) **Underlying concepts:** Ideally an NTTFC brings together the three key players in this task:

- **Government agencies** responsible for regulating international trade and transport (mostly ministries of commerce, transport, and finance, including Customs);
- **Trade and transport service providers** (such as carriers, freight forwarders, multimodal transport operators, Customs brokers, commercial banks, and insurance companies), supplying services to the trading community; and
- **Traders** (i.e. exporters and importers) who stand to benefit from an improved trading environment created by institutional reforms and greater efficiency in service provision, and who will increase their trade volumes to take advantage of these improved conditions and reduced transaction costs.

The second and third of these groups comprise mainly organizations from the private sector, although among the transport operators or carriers, and among the other trade service providers, there are often parastatal organizations, such as the railways and state-owned trading banks,

insurance companies and freight forwarding companies. Thus the essential partnership between the three main entities is usually one which crosses the public/private sector divide.

An NTTFC is fundamentally a consultative mechanism serving as national forum to propose, discuss, consult and seek consensus among these three essential parties on facilitation measures. As with most committees, NTTFCs may have no executive authority. Rather, they are advisory bodies which should reach consensus on actions to be taken voluntarily by those of their members with the executive authority to implement facilitation measures.

(c) Purpose and objectives: The aim of an NTTFC is to *encourage the modernization of trade and transport practices in support of the nation's foreign trade*. Four specific objectives are:

- To provide a national forum for the facilitation of formalities, procedures and documentation used in international transport and trade (***Facilitation objectives***);
- To propose, for government approval, draft transport and trade related regulations and practices (***Regulatory objectives***);
- To make policy recommendations on future trade and transport-related investments (***Development policy objectives***); and
- To increase awareness of the methods and benefits of transport and trade facilitation (***Training objectives***).

(d) Composition and limits of authority: An NTTFC should comprise representatives of all organizations concerned with trade and transport issues in the country, including:

- Transport regulatory authorities (most often, ministries of transport);
- Other government regulatory or planning authorities (e.g. Customs departments or ministries of finance, ministries of planning, the central bank, etc);
- The trading banks and insurance companies;
- Transport users (e.g. importers, exporters, freight forwarders, trade associations and chambers of commerce, etc)
- Transport operators (shipping companies, airlines, multimodal transport operators, road haulage companies, railways, inland waterway transport operators); and
- Port authorities and transport terminal operators (e.g. operators of inland container depots).

In all some 20-40 public and private sector representatives would constitute the committee. A nominated government agency should accept overall responsibility for the NTTFC's activities and provide a chairperson. Ministries of transport, trade or finance (being responsible for Customs) are suitable lead agencies for this purpose, since they can also provide secretariat services to the committee. The chairperson would ideally be appointed from the highest levels of the designated agency – preferably at the level of Minister, Vice-Minister or Permanent Secretary.

Given the likelihood that the membership of the committee would be too large to allow it to consider proposals in detail, a permanent commission of about 10 members should be established from among the committee membership to follow-up on decisions by the committee and to provide support for its work program. The task of the permanent commission would therefore be to prepare documentation for the committee, to assist the decision-making process. The

permanent commission could organize its work in ad-hoc working groups which would be constituted on the basis of the specific requests or references from the committee.

Both the committee and the permanent commission would be assisted by a technical secretariat, to be responsible for the daily running of the committee and the permanent commission.

Normally the committee should meet every three months, while the permanent commission may choose to meet twice per month.

The committee's recommendations would be made in the form of proposals to the relevant member institutions with the authority to act upon them, as well as to the executive branch of government, and at the request of the committee would be transmitted by the chairperson.

(e) **Funding:** Funding support for the committee's secretariat should be provided jointly by all of its member institutions. Funding should be provided on a rolling basis for periods of not less than three years. This support could comprise the following contributions:

- Contributions "in-kind" from government institutions, such as the provision of office space, furniture and equipment;
- Grants from government, from its own budget or from international loans;
- Financial contributions from the private sector institutions represented on the committee, e.g. each private sector institution could contribute annually the equivalent of one-month's salary of its representative on the committee; and
- Additional funding provided for "one-off" projects or special needs (as might be the case for projects sponsored by the World Bank or the ADB).

Source: Condensed from UNCTAD, "Creating an Efficient Environment for Trade and Transport", paper presented to Sixth Session of UN/CEFACT, 27-30 March 2000, quoted in UN-ESCAP, "Study on National Coordination Mechanisms for Trade and Transport Facilitation in the UN-ESCAP Region", 2007

Annex 3. The World Bank's Involvement

In the period up to 2003 IDA provided several large credits to support improvement and maintenance of highways and rural roads, as well as the Jamuna Bridge. Since 2003 it has made only two credits for transport: for rural transport and for railway reform. A project under preparation has a component to help Dhaka upgrade its public transport services, traffic management, and air quality controls, and to develop its institutional capacity for these purposes.

Project name (approved since 1994)	Approved	Completed	IDA Credit (\$m)
Clean Air & Sustainable Environment	Not yet		32
Emergency 2007 Cyclone Recovery	11/2008	No	109
Rural Transport Improv't (flood component)	1/2008	No	20
Railway Reform Programmatic Dev't Policy	2006	01/2008	40
Rural Transport Improvement	2003	No	190
Road Rehab & Maintenance (supplemental)	1999	12/2005	80
Rural Roads & Markets Improvmt (supplmt)	1999	03/2005	20
Third Inland Water Transport (supplement)	1999	06/2000	6.25
Dhaka Urban Transport	1999	06/2005	177
Road Rehabilitation Maintenance	1998	12/2005	273
Second Rural Roads & Markets Improvment	1996	03/2003	133
Second Road Rehab & Maintenance	1994	12/2000	146.8
Jamuna Bridge	1994	12/1999	200

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