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TRANSIT TRANSPORT SYSTEMS IN ASIA

Issues, actions and constraints

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## I. OVERALL FEATURES OF THE TRANSIT TRANSPORT SYSTEMS IN THE ASIAN REGION

1. The land-locked developing countries of Asia are Afghanistan, Bhutan, Lao PDR, Mongolia and Nepal. Except for Mongolia, where rail transport plays an important role in transit traffic operations, the other Asian land-locked countries depend predominantly on road transit transport services. The Trans-Asian railway project, however, provides a framework for rail transport development in the region from which the land-locked countries will benefit. The Government of India has also launched an ambitious scheme to convert all the existing metre gauge line to broad gauge by the year 2000. Rail transit transport from Calcutta and to the borders of Nepal will be significantly improved. A limited amount of transit goods is transported via the Mekong river in the Lao PDR. Limited rope-way transport facilities also exist in Bhutan and Nepal. Air freighting still plays a minor role but the Governments are making major efforts to promote it in order to cater for facilities to handle high-value low-bulk commodities such as carpets, fresh and dried fruits and skins.

2. The heavy dependence of the land-locked countries in Asia on roads has placed extra pressures on the roads and led to road deterioration. Roads are normally in poor condition. They require major upgrading and adequate maintenance. The problems are compounded by the difficult terrain, especially in Bhutan and Nepal. A number of projects for construction and upgrading of roads and reinforcement of bridges are being implemented in most of the land-locked countries with the financial assistance of the World Bank, the Asian Development Bank and bilateral donors. Similar programmes are being supported also in the transit countries. Leading examples of these initiatives are the Asian Land Transport Infrastructure Development (ALTID) project and the United Nations Transport and Communications Decade in Asia spearheaded by ESCAP. Despite the progress made with regard to the construction of new roads and the upgrading of the old ones, the share of the paved roads in the total network still remains relatively low compared to other developing countries. In 1992, this share was 15 per cent in Afghanistan, 24 per cent in Lao PDR, 19 per cent in Mongolia and 40 per cent in Nepal.

3. The poor transit transport system in the land-locked countries of Asia and in their transit neighbours has, as in other regions, contributed to the high transport costs which these countries have to bear. These costs inflate the prices of their imports and make their exports less competitive, thus significantly weakening their overall external sectors' performance. The ratio of insurance and freight paid on total exports of goods and services is more than 20 per cent for Afghanistan, 15 per cent for Lao PDR and 11 per cent for Nepal. The corresponding ratio for all developing countries and territories is estimated at around 6 per cent.

4. Transit transport operations between the land-locked countries of Asia and their transit neighbours are governed by bilateral transit and/or trade and transit agreements. Some of the land-locked and transit countries of the region are also signatories to a number of important international conventions

related to transit transport. <sup>1/</sup> As in other regions, the fundamental problem remains the poor implementation of these bilateral and international conventions. Regional transit agreements, which have been vigorously promoted in Africa and Latin America, continue to have no significance in Asia. The bilateral transit agreements, particularly between India and Nepal and Bhutan, have however provided a framework for several transit facilitation initiatives, particularly in the area of customs documentation, duty refund procedures, harmonization of axle-road weight limits and other transit procedures. Some improvements have also been made with regard to port facilities for transit cargo, particularly in the port of Calcutta and on the Mekong River in Lao PDR.

5. Despite these initiatives there are still significant weaknesses in the transit facilitation area which must continue to be addressed. The transit transport planners in Asia will also, as a matter of deliberate policy, have to embark on a more aggressive programme to upgrade operational and management skills which are still lacking. The strengthening of the institutions dealing with transit issues also needs to be accorded high priority. The creation of a transit transport authority in Nepal, as a focal point for coordinating transit policies, and the establishment of the Nepalese National Transit Warehousing Cooperation, which is responsible for forwarding and clearing operations, are among the exemplary initiatives in this direction.

## II. COUNTRY PROFILES

### A. AFGHANISTAN

#### (a) Economic background

6. Afghanistan is a land-locked country of Asia bounded on the east and south by Pakistan, on the north and north-east by Turkmenistan, Uzbekistan and Tadjikistan as well as China, and on the west by the Islamic Republic of Iran. The estimated area of Afghanistan is 250,000 square miles and the population in 1991 was estimated at 16.5 million. The largest town and capital is Kabul with a population of nearly 2 million. The principal products are agriculture, livestock and forestry.

#### (b) External trade

7. A large proportion of Afghanistan's trade passes through the newly independent States in Asia. Main imports include wheat, cotton goods, sugar, hardware, petrol and oil. Exports include spices, fresh and dried fruits, karakul skins, carpets, cotton, wool and natural gas. There is a government monopoly on imports of petroleum products and sugar, and exports of gas and cotton.

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<sup>1/</sup> Cambodia, India, Islamic Republic of Iran, Japan, Lao PDR, Nepal, Thailand, and Turkey have adhered to the Barcelona Transit Convention. However only six countries have ratified the 1965 Transit Convention, namely Afghanistan, Lao PDR, Mongolia, Nepal, Russian Federation and Turkey.

(c) Organization of transport

(i) Roads

8. Several main roads are fit for motor traffic. However, as a result of the war the roads have become less usable and need upgrading.

9. Roads connecting the main cities include, Kabul-Kandahar (310 miles), Kandahar-Herat (350 miles), Mazar-I-Sharif-Kabul (380 miles), Kabul-Kharabad-Aizabad (450 miles), Herat-Maimanazar-I-Sharif (500 miles), and Kabul-Bamiyan. Roads to the frontier are Kabul-Khyber (175 miles), Kandahar-Caman (70 miles) and roads from Herat to the Iranian border and the new independent States of the former Soviet Union.

(ii) Airways

10. Ariana Afghan Airlines offers scheduled services between Kabul, New Delhi, Amritsar, Moscow, Tashkent, Prague and Dubai. International flights are erratic. Other airlines serving Afghanistan are Aeroflot and Indian Airlines. Bakhtar Afghan Airlines is the domestic national airline and serves almost all internal areas.

(d) Transit routes and agreements

11. Border crossing traffic from Kabul enters Pakistan through the Khyber Pass. The section between Afghanistan and Peshawar, including the Khyber Pass, is used only by people from Pakistan and Afghanistan. Foreigners are allowed to enter the section only in the daytime with special permission.

12. Movements of goods to and from Afghanistan is regulated by a transit trade agreement. The transit treaty between Afghanistan and Pakistan regulates the movements of transit goods to and from Afghanistan. The Afghanistan-Pakistan Treaty of 2 March 1965, preceding the New York Transit Convention of 8 July 1965, is significant for the fact that in the Asian and Pacific region it served as a bilateral model in the 1960s.

(e) Transit constraints

13. Afghanistan's transit constraints stem mainly from poor maintenance of roads and lack of railways in the country. There is a proposal to build a railway line from Kabul to Islam Qle via Kandahar and from there to Mashat in the Islamic Republic of Iran. This rail-route, when constructed, will become the life-line of the economic development of Afghanistan. The railway line would also provide the necessary link on the Asian railway network connecting Europe.

**B. BHUTAN**

(a) Economic background

14. The Kingdom of Bhutan is land-locked. The country covers an area of approximately 47,000 square kilometres and has an estimated population of 1.5 million. It is bordered to the north by China and surrounded on all sides by India. Of the total area, over 60 per cent is forest, about 10 per cent is cultivated and the remainder is wilderness. The country is very mountainous,

with narrow high-sided valleys and rushing mountain streams and rivers. This makes transportation difficult and affects the economic and social development of the country.

(b) External trade

15. The bulk of Bhutan's trade is with India. Imports include diesel oil, rice, tyres and tubes, truck chassis, petrol, iron rods, machinery parts, passenger cars, bitumen, and fabrics; exports include electricity, cement, timber, cardamom, fruit products, potatoes, oranges, alcoholic beverages, apples, blockboards.

16. Third-country exports of the same products including dolomite and gypsum go to Bangladesh, Singapore, Pakistan, Nepal, France, Japan, Germany and the Netherlands.

(c) Organization of transport

(i) Roads

17. There has been a systematic development of the road network (2,336 km in 1990) in Bhutan. A major road runs across the middle of the country from east to west; three roads oriented north/south connect Bhutan with Indian border points. All roads are subject to temporary blockage by landslides. The roads, because of the terrain, are narrow but passing places have been built. Travel on such terrain means that the average speed of transport is low and the costs high.

18. The road transport industry has been for the most part operated by the Government until recently. The decision to privatize it has been pursued enthusiastically and the industry is almost fully in private hands. A large number of small truckers have one to three lorries each. The largest transport company has about 15 lorries. As Indian drivers have been withdrawn, there was a big gap to be filled by nationals who required training.

(ii) Airways

19. The national airline Druk Air serves Bangkok, Calcutta, Dacca, Delhi and Kathmandu. There are no cargo warehousing facilities at Paro Airport. The Government has plans to build a new international airport at Geylegphug in South-Central Bhutan with finance from the Indian Government.

(d) Transit routes and agreements

20. All of Bhutan's transit gateways border on India. The principal gateway is at Phuntsholing, about 900 km by road to the port of Calcutta. There is no problem with the use of this route.

21. Trucks are of maximum 10 metric ton capacity. Generally Bhutanese trucks routed transport to the Bangladesh border - some 150 km - while Indian trucks covered transport to Calcutta, over a distance of 900 km. The State Trading Corporation has a small fleet of closed trucks which operates between Calcutta and Phuntsholing.

22. In Calcutta, the Bhutan State Trading Company (STC) has a 500 metric-ton capacity bonded warehouse near the airport. Both Bhutanese and Indian customs officers are present. If documentation is in order, incoming cargoes move directly from the port to Bhutan, although seven-day free storage in the port is allowed. STC is not normally involved in export cargoes, but would offer to store goods, if a consignment arrived too early or too late for regular shipping connections. Containerized cargo is normally packed or unpacked at the Bhutan Customs Warehouse. Bhutan customs also clear air freight through Calcutta airport. The gateway for road traffic is Burimari, West Bengal. A second entry point with India, Fulberi, is also envisaged for lorries on an all-weather route, when transit roads to Burimari are sometimes flooded. Bhutan also envisages using the Bramhaputra river as a transit route to Bangladesh with the road-river interface at Gurwati.

23. The existing agreements for bilateral trade and transit through India have been extended and are reported to be satisfactory.

(e) Transit constraints

24. Bhutan's transit corridor gateways to the east of Phuntsholing are virtually closed because of the lack of security of transit through Assam. Imports and exports for most points along the Bhutanese border with Assam have to be shipped through Phuntsholing, adding enormously to their costs. The distance is great and the roads are frequently blocked with landslides. This situation has virtually put a halt to the exports of timber or mineral products from central and eastern Bhutan.

25. The following improvements to expedite transit transport may be considered:

- (i) Providing a large bonded transit complex in the Phuntsholing area for third country trade;
- (ii) Prospects for containerization should be studied and suitable infrastructure developed;
- (iii) Plans for execution for a modern airport at Geylegphug should be evolved to increase air traffic;
- (iv) The use of light cardboard cartons for packaging may be considered for lessening the cost of transport;
- (v) Storage facilities for petroleum and associated products should be developed as otherwise frequent interruptions occur in transit, due to natural causes such as floods and landslides;
- (vi) Bhutan's increasing trade with Bangladesh with transit via India (Surimari) calls for access to an alternative port in Bangladesh, instead of total dependence on Calcutta;
- (vii) An analysis of traffic, including export potential on the Bhutan-Bangladesh inland waterway transit corridor, should be studied;

(viii) A viable transit insurance scheme for export of horticultural products needs to be developed;

(ix) Training of staff in transit transport issues must be intensified.

### C. LAO PEOPLE'S DEMOCRATIC REPUBLIC

#### (a) Economic background

26. The Lao People's Democratic Republic (Lao PDR) is 236,800 square kilometres in area and has a population of over 4 million. Nearly 50 per cent of the population is settled on the lowland area bordering the Mekong River, which forms the national boundary with Thailand. About 80 per cent of the country is mountainous, which renders transportation and communication difficult and complicates economic development. Lao PDR has an eastern border with Viet Nam of 1,957 km, a western border of 1,730 km with Thailand, a southern border of 492 km with Cambodia and northern borders of 416 km with China and 230 km with Myanmar. Being a land-locked country, Lao PDR is dependent on the transport systems of neighbouring countries for access to international seaports.

#### (b) External trade

27. The Lao PDR foreign trade is still small by international standards. Exports are largely agriculture based, though there is an increasing production in garments and other consumer products suitable for containerization. Imports comprise manufactured goods, oil and food products, motor-vehicles and machine tools. Thailand is the single largest trade partner of Lao PDR accounting in 1992 for 58 per cent and 38 per cent of its total imports and exports respectively. Other major trade partners include Japan, France, Germany, United States of America, Australia and China.

28. Virtually all goods arriving in or leaving the country for destinations beyond the neighbouring countries are routed through the customs facility at Thanaleng, 19 km from Vientiane. Air freight volumes are very small.

#### (c) Organization of transport

##### (i) Roads

29. Roads and river transport are the responsibility of the Ministry of Communications, Transport, Post and Constructions (MCTPC). Lao PDR had nearly 14,000 km of roads in 1990, of which 2,450 km are hard-surfaced. Many provincial roads are only passable in the dry season. Road transport services to the frontiers of the Lao PDR are largely supplied by Thai and Vietnamese transporters. There is no shortage of Thai vehicles, but those from Viet Nam are frequently in short supply. The Laotian local trucking fleet in the 5 and 10 metric tons capacity operates largely within Lao PDR. Road conditions do not permit the use of heavier capacity vehicles. The Lao Export-Import Company operates the largest fleet for moving transit traffic between Thanaleng and Vientiane. Public sector transport companies have since been given greater autonomy and allowed to import vehicles and spare-parts. The four State-owned goods transport enterprises, having a total of over 768 trucks, are supervised by the Ministry of Communications and Transport.

30. The road system in Lao PDR requires major reconstruction and upgrading to meet present and future transport demands. The Government has placed high priority on road development and several major projects are under way. A road running from Luang Prabang in the north to the Cambodian border in the south is undergoing reconstruction and paving with the financial assistance of the World Bank and the Asian Development Bank. Completion of two lanes paved (one in each direction) to standards comparable with main highways in Thailand is scheduled for 1996.

31. Transport to neighbouring countries is currently restricted by ferry capacity across the Mekong River to Thailand, and connecting roads into Viet Nam. At present it is possible to transport 20 ft containers from Bangkok by road or rail to Nong Khai and then across the Mekong by ferry to Thanaleng. Transit time is usually less than 24 hours. Due to road conditions and height limitations of 4.4 metres on two bridges, it is difficult to transport containers from Vietnamese ports to Thanaleng or Vientiane. Transit time is rarely less than 48 hours. The Friendship Bridge built across the Mekong River from Nong Khai in Thailand to Lao PDR was completed in April 1994. This enables direct all-road transport of containers from Bangkok to Vientiane.

32. Discussions are being held between Lao PDR, Viet Nam and Thailand, on the development and construction of a road linking north-eastern Thailand to Viet Nam through Lao PDR. Various routes are being considered.

33. It is important for Lao PDR to have good access to deep-water ports served by several direct international containership services, both through Thailand and Viet Nam. At the present time Bangkok and Laem Chabang in Thailand are available, but only limited feeder services are available through Da Bang in Viet Nam. Proposals for a deep-water port in Viet Nam are being considered, and the decision will have an impact on Lao PDR transport planning. Cargo volumes to and from Lao PDR through Viet Nam will be too small for the foreseeable future to enable Lao PDR to develop and support its own port in Viet Nam. However, entering into a port development on a joint venture basis could protect long-term interests.

(ii) River transport

34. Approximately 1,500 km of the Mekong River is navigable for small river craft. In view of the prevailing road conditions, this waterway provides economical transport for domestic goods and bulk commodities, such as petroleum, fertilizers, cement and sand. Capacity is limited to 40 tonnes per boat in the rainy season, but is only 25.3 tonnes per boat in the dry season. Owing to these limitations, the systematic transport of containers by river craft is not really a feasible proposal. Smaller consignments being transported loose could use river craft to and from Thanaleng and Kengkabao, where consolidation facilities could be utilized. Such traffic could be seriously interrupted at times of low river levels, and would therefore tend to be unreliable. The upgrading of the route from Luang Prabang to the Cambodian border will provide a more feasible alternative.

(iii) Air transport

35. Wattay Airport at Vientiane is the only international airport in Lao PDR. It can accommodate the Boeing 737-400 medium series airliner and the Ilyushin with a maximum cargo capacity of 22 tonnes. There are regular services to and from Bangkok, Hanoi, Phnom Penh. Services to Chiangmai and Kunming are being planned. Aeroflot also flies twice monthly from Moscow through Bombay and Rangoon. Viet Nam Airlines also flies twice a week to Hong Kong. Lao Aviation has chartered a Boeing 737 on lease to operate freight services to Bangkok. There is an excess of air cargo space compared with the present level of traffic. As the aircraft currently in use are comparatively small and do not accommodate air cargo containers, all freight is handled on pallets or loose.

(iv) Inland container depots (ICD)

36. The only ICD in Lao PDR is located at Thanaleng, on the Mekong River opposite the Thai City of Nong Khai. All freight to destinations beyond Thailand and Viet Nam is currently handled through this facility. The facility consists of a large yard, some covered storage, a customs office, and an operator office. It is equipped with two mobile cranes of 25 tonne capacity, and two fork-lift trucks of five tonne and three tonne capacity. Neither of these small fork lifts are capable of entering a container, and there are no loading docks.

37. The facility is owned by the Lao PDR Government, but leased to a joint venture company (TL Enterprises) which is responsible for the operation and management of the cargo warehouses, ferry-port and ferry boat service across the Mekong River from Nong Khai.

(v) Railways

38. There is no railway system in Lao PDR. The New Friendship Bridge across the Mekong River completed in 1994 includes provision for an extension of the existing Thai Railway from Bangkok to Nong Khai.

(d) Transit routes and agreements

39. The two principal ports utilized by Lao PDR for international trade are Bangkok (Thailand) and Da Nang (Viet Nam). Generally, trade with former socialist countries of Eastern Europe passed through Da Nang and with other countries through Bangkok.

40. For trade with southern Thailand, centred on Savannahet, the distance to Da Nang is 491 km on route 9, of which 244 km is through Lao PDR. Rehabilitation of this paved road has recently been completed. The distance from Savannahet to Bangkok is about 700 km, all on good paved roads within Thailand. Three other transit points carry small quantities of traffic.

41. For trade with Vientiane province, the Thai gateway is Thaphai (Nong Khai), opposite the Lao Mekong River port of Thanaleng, about 20 km east of the city of Vientiane. Two vehicle ferries are operating by the Lao River Transport Company. The 660 km stretch of road from Nong Khai to Bangkok, on national route 2, is paved and is in good condition.

42. Vinh is the closest Vietnamese port to Vientiane, at a distance of 416 km, utilizing routes 13 and 8. About 75 per cent of the route lies within Lao PDR, where the condition of the unpaved roads does not permit reliable road services. Planned improvements should make this a viable transit route alternative by 1995. National route 13 between Vientiane and Luang Prabang (390 km) has also been scheduled for improvements over the next five years. It would provide access to several northern region provinces and to China. Lao PDR might become a transit country for trade between Thailand and China.

43. The section of route 13 connecting the southern province of Champassack to Savannakhet (270 km) is being repaired. Although the province's exports of forestry products and coffee could reach Bangkok by road, the distance would be excessive. The alternative river route south to Cambodia is not navigable. Roads transitting through Cambodia are in poor condition and insecure. Therefore, a vehicle ferry and new port facilities are needed to provide direct accessibility to and from Thailand near Pakse.

44. The ferry service linking Tanaleng and Nong Khai would become obsolete once the Australia-financed bridge across the Mekong becomes popular. Feasibility studies on bridging the Mekong River in the vicinity of Savannakhet, with finance provided by the Asian Development Bank, are under way.

45. Transit transport between Lao PDR and Thailand is governed by the Transit Transport Agreement signed between the two countries in 1978. This Agreement provides for forwarding and transport to be carried out by authorized and certified operators. For all transit cargo consigned to Lao PDR regardless of the point of exit from Thailand, the goods must be delivered to a transit warehouse adjacent to the port of Bangkok (Klong Toey). This entails considerable delay and substantial storage charges. For cargo which is consigned to the port of Laem Chabang, to any of the five private ports located in the river within metropolitan Bangkok (via Laem Chabang), the cargo must be moved under customs escort to the transit warehouse, with the cost of escort borne by the consignee.

46. There are five special designated crossing points along the border between Thailand and Lao PDR. The major crossing in terms of both freight and passengers is in Nong Khai - Thanaleng. Warehouse facilities at almost all the other points are negligible and all cargo must be transferred truck-to-truck, under the supervision of customs. Privately-operated ferries connect the two posts at all four river crossings as the fifth crossing is a land border. The ferry crossing at Nong Khai - Thanaleng may eventually be abandoned, as a result of the construction of the Friendship Bridge which officially opened in April 1994. Construction of customs and immigration facilities on the Thai side have just begun. The ferry operates only during daylight hours.

47. While activities relating to transit traffic is controlled by TL Enterprises, trade with Thailand is controlled by Transimex. Thai regulations deny operation of vehicles registered in the Lao PDR except within the prefecture of Nong Khai. Lao regulations deny operation of

Thai-registered vehicles on Lao roads, with some exceptions. Tankers are allowed to move between Thanleng and the nearby tank farms of the oil companies. Individual loads which because of weight or size cannot be transferred on to a Lao-registered vehicle are permitted to proceed to destination.

48. Lao PDR has adopted the Convention on Transit Trade of Landlocked States, New York, 1965 (The New York Transit Convention). The Barcelona Convention should also be adopted and both Conventions used as a basis from which to negotiate new transit right agreements with Thailand, Viet Nam and other neighbouring countries.

(e) Transit constraints

49. In order to overcome the transit constraints of Lao PDR, consideration should be given to: (i) improvements of roads, in particular roads linking Bangkok, Phnom Penh, Ho Chi Minh City and Vung Tau; (ii) development of a Thai-Lao-Viet Nam East-West Corridor involving routes 8, 9 and 12, including associated ports and bridges; (iii) development of a road link between Chiang Rai and Kunming via Lao PDR; and (iv) development of a road link between Chiang Rai and Kunming via Myanmar, and upgrading of the Junming - Lachio (Myanmar) road system.

50. With regard to railways, the extension of the railway from Nong Khai across the Friendship Bridge to Vientiane could bring substantial improvement in service to Lao PDR from Thai ports. Full containers could move directly to or from Bangkok or Laem Chabang without any intermediate handling.

51. As trade volumes grow, ICDs should be considered for major centres such as Pakse and Savannakhet. These facilities require full customs security and services, as well as adequate container and cargo-handling equipment and storage. Moreover, physical and legislative infrastructure to promote containerization should be planned.

52. The Customs department should join the Customs Cooperative Council (CCC) and Lao PDR should adopt the following conventions:

- (i) The International Convention on the Simplification of Customs Procedures (the Kyoto Convention);
- (ii) Customs Conventions on the International Transport of Goods under cover of TIR carnets;
- (iii) Customs Convention on Containers.

53. With regard to air freighting, the National Airport Authority (NAA) started its activities in October 1989. Currently, their aircraft are under-utilized. There is no IATA agency in operation and the IATA agency system of air-freight forwarders should be promoted and only air-freight forwarders should deal with airlines and handling at the warehouse.

54. Extensive training of staff is required in all aspects of transport and international business.

#### D. MONGOLIA

##### (a) Economic background

55. Mongolia is a land-locked country, covering an area of approximately 1,565,000 square kilometres and with a population of nearly 2.3 million (1992), of which 40 per cent is engaged in agriculture, mainly animal husbandry. Mongolia extends 2,405 km from west to east and 1,259 km from north to south. It is bordered in the north by the Russian Federation and in the south by China. The average elevation is 1,580 metres above sea level.

56. The main export items are coal, fluorspar copper, timber, wood, livestock, cereals and food. Imports include oil, iron and metals, fertilizers, coke, timber, cereals and raw food.

##### (b) External trade

57. In the past, more than 95 per cent of Mongolia's trade was with Eastern Europe. At present, however, Mongolia is trading with some 50 countries. Its major trading partners are the Russian Federation, China, Kazakhstan and Japan. Main exports include coal, copper, wool, cashmere and imports include mainly petroleum and manufactures.

##### (c) Organization of transport

###### (i) Roads

58. Roads are approximately 4,500 km, of which about 1,500 km are paved in and around Ulanbaatar. Roads also exist between Ulanbaatar to Darham, at points on the frontier with the Russian Federation and towards the south. Truck services run where there are no surfaced roads.

###### (ii) Railways

59. Mongolian Railways (MR) is one of the main transport arteries that connects this country with the outside world. It plays a key role in Mongolia's economy, carrying all of the exports and imports as well as the transit cargo through Mongolia, and holds a leading position in domestic freight transport and international passenger services. Mongolia as a land-locked country has the shortest outlet by rail to the sea through its southern border in China to the port of Tianjin. However, since Chinese Railways (gauge 1,435 mm) and MR have a difference in gauge, the same rolling stock cannot be used in the two countries. The total length of MR is 1,815 km of 1,524 mm gauge (i.e. the same as Russian Railways). The MR through the Northern Asian Railway Network connects with China, Kazakhstan, Mongolia, the Russian Federation and the People's Republic of Korea. The lines are of single track with a capacity of 12 trains in each direction per day. Some of this capacity has been taken by the passenger services, including the international express train running between Moscow and Beijing.

(iii) Airways

60. The National Airline MIAT flies some 80 planes with 47 aircraft from the former Soviet Union between domestic points. MIAT has flights to Beijing and to Moscow. Aeroflot also operates between Moscow and Ulanbaatar.

(d) Transit routes and agreements

61. The vast majority of Mongolia's transit cargo is moved by rail, with air freight taking a small but growing tonnage. Roads scarcely play any part. The route mainly used is the rail service through the Russian Federation. Cargo goes through Ulan-Ude where it joins the Trans-Siberian line. Goods are either moved eastwards to the port of Nakhodha, a total distance of 4,650 km, or westwards to the port of Leningrad - a total distance of 6,450 km. The cargo to the countries of Eastern Europe is moved all the way by rail without interchange. For goods destined to Western Europe, wagons have to be converted from the broad gauge of Eastern European countries to the metre gauge for Western Europe. Failing this, the goods must be transhipped via Leningrad.

62. The other rail line runs through China. The closest port is Tianjin via Beijing, a total distance of nearly 1,600 km. An alternative route to Hong Kong also exists (distance of 4,030 km) but this is not used. The border-crossing procedures and direct cooperation between border stations of Mongolia and its adjoining countries are regulated by bilateral, multilateral and international agreements. They include bilateral agreement for joint working by the frontier Railways of Mongolia and Russian Federation and Mongolia and China; the Agreement on International Passenger Communication; and the Agreement on International Freight Communication.

(e) Transit constraints

63. With the increasing use of containerized cargo, the facilities at the Ulanbaatar station for handling containers are insufficient. Until recently, 40 ft containers could not be handled. The present capacity of the container handling facilities at Zamyn - Uud break of gauge station is also insufficient. These facilities are expected to be built by 1995. The break of gauge between China and Mongolia is a major obstacle for the smooth flow of international trade which is increasing year by year. Passenger trains have been designed in such a way that in China the bogies get changed. All the freight wagons have to be emptied by hand and the contents transhipped from one gauge to another. These time-consuming operations increase the cost of transport. The multiple handling also results in damages.

64. The several constraints on the transit corridor between Mongolia (Ulanbaatar) and the China port of Tianjin have been identified and remedial action initiated.

## E. NEPAL

### (a) Economic background

65. Nepal is a land-locked country, situated in the lower Himalayan region. It covers an area of approximately 147,181 square kilometres and has a population of 18.49 million (1991 census). Bordered by China in the north and India on all other sides, Nepal is 885 km from east to west with a mean distance of 193 km from north to south. Owing to its largely hilly terrain, agro-forestry and agronomical background, remoteness from the sea and an inadequate transport infrastructure, the country has not developed to its full potential. Again, owing to an inadequate industrial base, the country has to import much of its requirements from India and other countries. Healthy signs of increase are, however, noticeable in Nepalese exports in respect of carpets, leather and leather products, handicrafts, garments and lentils.

### (b) External trade

66. Nepal's external trade has two distinct elements; bilateral trade between India and Nepal and transit of Nepal's third-country trade through the Indian territory. The major trade partners of Nepal are Germany, United States of America, India, Singapore, Japan and China.

67. Nepal's bilateral trade with India is governed by the Treaty of Trade signed between the two countries in 1991 and the Protocol to the Treaty of Trade. With respect to trade preferences, the India-Nepal trade and transit treaty contains provisions which refer to the exemption from customs duties with respect to a range of primary products and manufactured goods, and to the refund of Indian excise duty to Nepal under the duty refund procedure for goods exported to Nepal. There are also bilateral arrangements for the importation of crude oil and petroleum products by India on behalf of Nepal.

### (c) Organization of transport

#### (i) Roads

68. Nepal has a total length of 8,328 km of road of which 3,083 km are black-topped and 2,181 km gravelled. The road network is in a poor state of repair, which greatly increases the cost of transport. The terrain makes it difficult and expensive to build and maintain roads. A main east-west road runs along the Terai. It traverses over 1,000 km along the southern border. Roads run between Pokhara and Kathmandu and to this spine road. There are also roads linking Kathmandu with the Chinese border at Kodari about 130 km away. Many mountainous areas in the east and west of the country are not served by roads at all.

69. The import and export of goods are handled by the National Transit and Warehousing Corporation (NTWC) which acts as forwarding and clearing agent. The transport of goods is done by the National Transport Corporation (NTC), the only Nepalese organization allowed to transport goods through India. Both corporations are government-owned. Goods are transported from Calcutta to a

gateway either in NTC vehicles or, more often, Indian-owned ones. The main lorry fleets are in private hands, badly managed and poorly maintained. The combination of poor roads, lack of proper maintenance and aged vehicles result in high transport costs.

(ii) Railways

70. In view of its remoteness from the sea and lack of direct connection, except by road, with the port of entry, Nepal has traditionally been bearing a heavy cost on transport of its goods. This has also contributed to a severe strain in the overall economy of the country. For this reason, the Government of Nepal has for quite some time been examining the possibility of establishing convenient rail links with India. However, a number of studies conducted in the past could not be translated into action due to their limited utility in view of gauge variation in the region adjoining Nepal and India. Two very short lines existed - one for passengers in the Janakpur area and another - a narrow gauge from Raxaul (India) to Amlekhgang (Nepal) - for freight.

71. The Indian Railways' recent decision to work towards achieving a unigauge rail network, combined with their decision to convert the Muzzafarpur - Raxaul rail route (via Segauli) from metre-gauge to broad gauge, has opened new possibilities for Nepal. With this development, the broad gauge rail network will reach up to the doorstep of Nepal. Taking note of this fact, the Government of Nepal, has, with the assistance of the World Bank, formulated the Nepal Multimodal Transit and Trade Facilitation Project which envisages the extension of the railway line from Raxaul to Birgung in Nepal and the setting up of an Inland Container Depot (ICD) at Birgung.

(iii) Airways

72. Tribhuvan International Airport (TIA) at Kathmandu is the focal point for air-freight development in Nepal. The volume of air freight moving through Kathmandu airport is increasing rapidly, but no modern cargo/passenger terminal is available. Requirements have far outgrown the existing facilities and, with the financial assistance of the Asian Development Bank, upgrading work is in progress.

73. The present state of affairs in cargo handling at TIA leaves much to be done. Bulk-handling is always a problem incurring lengthy periods and cumbersome procedures. It is a common feeling of cargo agents that what is gained by air transportation of Nepalese commodities is lost due to extensive ground time. The ensuing delays prompt the consignees at the destination to lodge complaints and make claims, which is not really conducive to the growth of air cargo traffic.

74. Cargo space at TIA is to be planned to meet the increase in freight forwarding trade of the country, with storage facilities for shippers or their agents at the airport itself. A customs team is to be attached to the storage complex in order to expedite the clearance of goods. Documentation also needs to be simplified.

75. Packing of goods air freighted from Kathmandu does not meet international standards. The material used and the method of packing varies widely, which again is another aspect hindering cargo business. This area has to be looked into more seriously if Nepal is to go into export of perishable goods in a big way.

76. Cargoes air freighted from Kathmandu are subject to IATA regulations and they are automatically covered by Airway Bill terms. Where loss of, or damage to, cargoes is reported, claims are lodged with the airlines (carriers) as in the case of passenger carriers. To further consolidate the cargoes air freighted from Kathmandu Airport, the parties concerned hold meetings and suggest practical solutions to air cargo, insurance and other associated problems.

77. Most often, delay in shipment is caused by lengthy documentation procedures: in preparing the required documentation, a lot of time and energy are required. To improve the situation a system should be devised to clear promptly genuine cargoes scheduled for airlifting by the first outgoing plane.

78. In addition to the practical drawbacks outlined above, other obstacles for air freight include limited infrastructure and lack of trained manpower; inadequate warehousing facilities and transportation vehicles; lack of coordinated and integrated approach; absence of cargo terminal, and relatively high freight rates.

(d) Transit routes and agreements

79. Under the terms of the India-Nepal Treaty of Trade, there are 22 land border points specified as agreed routes for mutual trade between India and Nepal. Under the Treaty of Transit and the Protocol to the Treaty of Transit, the Calcutta/Haldia Port complex has been specified as the port of entry for Nepal's third-country trade by sea. Fifteen land-border points have, however, been specified for the passage of Nepal's third-country trade.

80. Most of the trucking between Calcutta Port and Nepal is handled by Indian transporters. They have ample capacity and are allowed to pick up back-hauls of freight within India. Some loads are deposited by Indian vehicles at storage areas in Nepal, adjacent to the border, especially if goods were delayed by problems at Nepalese Custom points. Little use has been made of Indian railways because on both the Calcutta/Raxaul and Jogbari routes, goods have to be transhipped en route between broad and narrow-gauge rail systems, with attendant delays, pilferage and increased costs.

81. Nepal's northern gateway to China at Kodari is used for a relatively small amount of bilateral trade.

82. The transit facilities provided by India to Nepal under the Treaty of Trade and Treaty of Transit include: (i) India allows freedom of transit for Nepalese third-country trade across its territories through routes mutually agreed upon; (ii) permission for the movement of Nepalese trucks to and from the nearest railway stations to pick up the export and transit cargo to Nepal; (iii) traffic in transit is exempted from customs duty and from all transit

duties or other charges, except charges for transportation and service charges; and (iv) facilities are provided for warehousing and for storage of goods in transit awaiting customs clearances before inward transportation to Nepal, through Indian territory.

83. Other features in favour of Nepal include: (i) provision of free time of seven days, which helps to reduce port demurrage charges and landing risks and expenses; (ii) port clearing and forwarding by Nepalese companies registered in India; (iii) provision of land in the port of Haldia on long-term lease for construction of storage facilities; (iv) ownership of trucks and barges in the port area for assistance in storage operations; (v) assignment of berths on a preferential basis for vessels carrying Nepalese cargo and relaxed control procedures for their goods; and (vi) permission for inter-modal traffic to combine air with ship transport through Calcutta air and sea ports (i.e. import of liquor, beer, cigarettes).

84. The other transit treaty of Nepal is the one with Bangladesh signed in 1976. This treaty is almost on the same lines as that with India, and permits access to the port of Chittagong and other territories for transit cargo.

(e) Transit constraints

85. A major transit bottleneck is the under-capacity of the facilities for storage and handling of cargoes at the major border posts of Nepal. There is a need to strengthen, consolidate and facilitate the customs check posts in Nepal in a bid to make them better equipped and more efficient in handling Nepal's transit cargo in the future. Virtually all customs facilities require rehabilitation and improvement. The re-allocation of the customs area closer to the border is recommended. The customs ground used by vehicles should be paved and a platform for goods checking should be provided as well as enough handcarts. The customs facilities at Birgung and Biratnagar should be upgraded.

86. Another constraint is the high cost of moving cargoes owing to the poor condition of the vehicle fleet and the poor state of road and bridge maintenance. Road maintenance should be given very high priority in the allocation of financial and human resources. Eighteen bridges being built in the Terai region of the far western part of Nepal under the India-Nepal Corporation would open a shorter and an all-weather road route between New Delhi and Kathmandu.

87. There is a need to improve the customs infrastructure and services near the customs point at Kodari, where trade between Nepal and China takes place.

88. The Nepal-India Transit Treaty could be further improved with the following modifications in the provisions:

- (i) The provision of duty insurance, i.e. whereby the consignee is required to take out insurance to pay duty if the goods are lost in transit. The duty is on market value (and not the c.i.f. value) of

the goods. Nepal argues that the liability should be borne by the transporters and that duty insurance should be on c.i.f. basis, as market value of these goods can be nine or ten times the c.i.f. value.

- (ii) A Protocol and a Memorandum need to be developed to incorporate suitable facilities and procedures for containerized cargo.
- (iii) India should agree to Nepal's request for access through the port of Bombay to reduce its cost of transit to the West Asian markets.
- (iv) Provision could be made for "national treatment" for ships flying the flag of Nepal, similar to the existing provision for inland carriers.
- (v) Provision needs to be made for facilitation of through bills of lading, so that exporters can cash their letters of credit expeditiously (upon "shipment" from a point in Nepal rather than from the Port of Calcutta itself). Such a facility would help alleviate problems of working capital and liquidity among exporters.
- (vi) Methods need to be identified to avoid opening and closing containers in transit at various points of entry, transshipment and exit.
- (vii) A comprehensive agreement on trucking transport for trade between India and Nepal could enhance the development of the trucking industry and improve its ability to carry transit cargo.
- (viii) Liability for income tax by the Nepalese companies registered in India entails double taxation. Since their activities are restricted to servicing traffic in transit only, Nepal believes that they should be free from Indian labour laws and taxes.

89. It is believed that the following suggested measures would ease the difficulties of transit transport between Nepal and India:

- (i) Providing sufficient warehouse space for transit cargo at customs border points and at the airport terminal of Kathmandu;
- (ii) Vehicle repair facilities should be built with all spares, especially for the NTC vehicles at Birgung. Adequately trained and skilled staff should be enlisted;
- (iii) Improving the utilization of the rope-way between Kathmandu and Hetauda - for cement and other bulk goods. The rope-way is, at present, underutilized.
- (iv) Documents in use for transit trade should be minimized and brought up to international standards;
- (v) The use of computers in the Customs department would save considerable time, reduce costs and facilitate trade.

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