

**ASIAN DEVELOPMENT BANK
Operations Evaluation Department**

SECTOR ASSISTANCE PROGRAM EVALUATION

FOR

MONGOLIA

In this electronic file, the report is followed by Management's response.



Evaluation Study

Reference Number: SAP: MON 2008-26
Sector Assistance Program Evaluation
July 2008

Transport and Trade Facilitation— Potential for Better Synergies in Mongolia

Operations Evaluation Department

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 30 April 2008)

Currency Unit	–	togrog (MNT)
MNT1.00	=	\$0.00858
\$1.00	=	MNT1,165.5

ABBREVIATIONS

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
EIRR	–	economic internal rate of return
GDP	–	gross domestic product
GTZ	–	Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)
km ²	–	square kilometer
MDG	–	Millennium Development Goal
MoRTT	–	Ministry of Roads, Transport, and Tourism
MRMP	–	Medium-Term Road Master Plan
MTZ	–	Mongolian Railway
NCTTF	–	National Committee for Trade and Transport Facilitation
PRC	–	People's Republic of China
RDP	–	Roads Development Project
SAPE	–	sector assistance program evaluation
TA	–	technical assistance
TIR	–	Transport Internationaux Routiers
TRACECA	–	Transport Corridor Europe-Caucasus-Asia
UBTZ	–	Ulaanbaatar Railways
UNESCAP	–	United Nations Economic and Social Commission for Asia and the Pacific
WTO	–	World Trade Organization

NOTE

In this report, "\$" refers to US dollars.

Key Words

mongolia, adb, asian development bank, development effectiveness, roads, roads maintenance, performance evaluation, transport, infrastructure

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In accordance with the guidelines formally adopted by the Operations Evaluation Department (OED) to avoid conflict of interest in its independent evaluations, the Director General of OED was not involved in this evaluation and delegated approval to the Director of Operations Evaluation Division 2. Ochir Badamsed, Peter Darjes, Dunburee Dashdendev, and Tsengelmaa Sambuu were the consultants in the transport sector study. Zoljargal Seseer and Tsenden Yondon were the consultants in the trade facilitation study. To the knowledge of the management of OED, there were no conflicts of interest of the persons preparing, reviewing, or approving this report.

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EXECUTIVE SUMMARY

Transport and trade are key drivers of economic development in Mongolia, a landlocked country. Changes in political and economic parameters brought on by the transition to a political democracy and market-based economic system have created new pressures on the relatively small transport network in the country. The demand for infrastructure has been increasing, and lack of adequate transport infrastructure continues to constrain the growth of economic activity.

Asian Development Bank Assistance to Mongolia. The Asian Development Bank (ADB) has been a key development partner in Mongolia's transport sector since 1992. Its entry into the trade facilitation sector was an offshoot of its regional transport initiative. As of 31 December 2007, ADB had approved five loans totaling \$147.10 million and 12 technical assistance (TA) projects totaling \$6.37 million for the transport sector in Mongolia. Projects in the transport sector accounted for about 22% of ADB's total lending to Mongolia. It was the largest share among all sectors that ADB supported during the study period. Two loans, the first approved in 1993 and the second in 1995, were in the aviation subsector. The remaining three were in support of road development. Of the 12 TA projects, six were for the preparation of loan projects and six in support of capacity development, including institutional strengthening and policy support. ADB exited from the civil aviation subsector in 2000 based on recommendations of the country operational strategy. ADB's assistance for the roads subsector was retained following the Government's strong preference for ADB's support to continue in light of the needs of the country.

ADB began trade facilitation in 2000 with a regional TA for studying development options for economic cooperation between the People's Republic of China (PRC) and Mongolia in the eastern parts of the Inner Mongolia Autonomous Region, PRC, and Mongolia. Subsequently, ADB approved four more regional TA projects and one small-scale TA to expand its assistance for this sector. In 2006, ADB approved its first loan for a customs modernization project.

Sector Assistance Program Evaluation. The objective of this sector assistance program evaluation (SAPE) is to provide an independent assessment of ADB's assistance to the Mongolian transport and trade facilitation sectors and to identify areas for further improving the effectiveness of its interventions. The findings of this SAPE has provided inputs to the country assistance program evaluation being carried out by ADB Operations Evaluation Department.

In the transport sector, the SAPE covers roads, railways, and civil aviation subsectors, although the main focus is on roads since ADB exited from the civil aviation subsector in 2000 and it did not fund any project in the railways subsector. It draws on the conclusions of the recently completed Operations Evaluation Department evaluation of the Roads Development Project funded by ADB. The evaluation of the trade facilitation sector is intended to highlight the issues and constraints currently faced by the sector and suggest a direction for ADB's future assistance.

Sector Context. Mongolia faces several development challenges caused by its geographical location, its historic past from the Soviet era, and its expanding economy. The Government's strategies and plans had been formulated to address some of these issues in the transport sector; however, the need for a comprehensive transport sector policy remains crucial. The Government's Millennium Development Goals-Based Comprehensive (2007–2021) National Development Strategy provides a broad framework of strategic objectives. To support this framework, an ADB-funded TA assisted the Government in preparing a transport sector strategy. This strategy has recently been adopted by the transport sector working group of the

Government. To put this strategy into action, work is currently ongoing on developing realistic capital investment plans. While Mongolia's road network provides only limited geographical coverage and connectivity, the low traffic volumes on most of the roads impede the expanding of road capacity. While the Government is aware of the need to build lower-cost roads, there has been a tendency to build all-weather paved roads that are more costly to build and maintain. With the lower traffic levels, some of these roads have difficulties in ensuring economic viability. Trade movement is constrained by Mongolia's lack of low-cost and reliable access to seaports.

Transport sector policy had been governed by the Road and Road Transport Sector Policy Statement of 1995, which provided for a restructuring of the road subsector to separate the regulatory and commercial functions by devolving commercial activities from the Department of Roads to private companies. The 1998 Road Act provided the legislative support and enabled the establishment of a National Transport Advisory Committee and a Road Transport Board to regulate tariffs for freight and passenger traffic. These policy actions have remained on paper only, however, because these institutions have not been empowered effectively. More recently, the Government's investment plan envisions large investment outlays that could place a heavy burden on the central budget. In the absence of adequate policies and current insufficient budget allocations to maintenance, the proposed investments could raise fundamental questions on sustainability. Mongolia has been using the mechanism of road funds to earmark resources for maintenance by applying the user-pays principles. Whether the road fund is an appropriate mechanism for channeling funds into the road subsector is debatable; there remains a clear need for reforming the current structure of the road fund to improve the allocations to maintenance.

In the trade facilitation sector, Mongolia has yet to adopt an integrated trade facilitation strategy or policy statement. Trade facilitation has typically been placed under the wider trade and infrastructure development policies. In its recent efforts at modernizing its customs procedures and border facilities, Mongolia has adopted several procedures linked with the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures, as well as with the World Customs Organization. To improve its trade access, Mongolia signed bilateral agreements with the Russian Federation and the PRC in 1991 for transit trade. During the initial years, however, these agreements yielded little in terms of transit trade, although there remains substantial potential for transit trade across Mongolia. Movement of vehicles across the border with the PRC remains an issue.

The strategy for development of transport and trade is distinct for the two sectors. While there are several areas where the two sectors overlap, the coordination between the organizations could be improved to establish synergies.

Private sector participation in transport and trade facilitation has been limited. While there is some involvement of the private sector in road construction activities and provision of road transport services, the Government's role is still dominant. Although various private logistics and trading firms operate in Mongolia, the Government continues to play a key role, since it owns and manages the container handling facilities as well as a large freight forwarding company. Taking into consideration the large expenditures involved in developing and maintaining Mongolia's transport system and the constraints on government budgetary resources, ways to raise private sector financing need to be explored. For example, investment plans for the railways to link new mining developments could be integrated in the financing plans of the private sector companies promoting these developments, thus initiating public-private partnerships in the railways. Similarly, competition in the trade logistics sector needs to be encouraged to enable better efficiencies.

Implementation of ADB-Funded Projects. ADB's operational strategy in Mongolia was aimed at supporting and accelerating the transition process. ADB's country strategy and program during the 1990s identified roads as strategically important for ADB assistance in view of ADB's overarching poverty reduction concern and its mandate to foster regional cooperation. Implementation of ADB's road projects has generally proceeded satisfactorily. Limited capacity within the Government, as well as within the private sector, continues to affect the timely completion of transport projects. In trade facilitation, there has been insufficient harmonization among international aid agencies working in Mongolia. For example, although the German Agency for Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit [GTZ]) has been working on trade policy advice with the Ministry of Industry and Trade, there is little interaction with ADB, which has carried out a review of the trade policy.

ADB faces several constraints to scaling up its assistance in the transport and trade facilitation sectors in Mongolia. First, the capacity within the Government to plan and implement projects is limited because of insufficient human resources and technical expertise. Second, Mongolia is categorized by ADB as a low-income country, eligible for low-cost Asian Development Fund loans and grants. Since there is a ceiling on the amount of funding from the Asian Development Fund, ADB's ability to fund larger projects is constrained. Mongolia's debt repayment capacity also needs to be monitored. The Government needs to balance both sides—demand for larger funding and its debt repayment capacity. Finally, because of the relatively low demand for infrastructure services, projects are likely to have low economic returns initially. There is a potential for some of these projects to improve their returns in the future through growth of tourism, mining, and export industries. ADB will need to select projects carefully with a view to ensuring reasonable returns.

ADB exited the civil aviation subsector in 2000 based on recommendations of its country operational strategy, which stated that the basic infrastructure in this sector was already in place and ADB needed to focus on employment-generating activities with shorter time lags. Taking into consideration ADB's Medium-Term Strategy II 2006–2008 and the lack of in-house expertise in this sector, ADB's exit from the civil aviation subsector is seen as prudent.

Bottom-Up Assessment. The overall performance of ADB's transport sector assistance (bottom-up rating) was "successful." The assessment covered five loan projects and 12 TA projects. The loan projects included four completed projects and one ongoing project.

Taking into account the early stages of ADB's trade facilitation portfolio in Mongolia, only the relevance of the ongoing loan project can be rated. Since five TA projects have been completed, these have been rated based on their relevance, effectiveness, efficiency, sustainability, and impact. However, it is still too early to assess these factors of ADB's loan assistance in the trade facilitation sector.

Relevance. ADB's assistance to Mongolia's transport sector was assessed "relevant." Loan and TA projects have responded to critical sector needs and have addressed physical, institutional, and policy constraints. ADB's assistance was particularly relevant to the transition process of Mongolia. The coordination and complementary fit with other development partners, especially the World Bank, were adequate. The assistance to the civil aviation subsector remains relevant to the Government's development strategy. Air transport is an extremely important mode for long-distance transport in Mongolia and fundamental to opening up the economy to new markets, such as tourism.

Assistance for trade facilitation was rated “highly relevant,” taking into account the needs of the country and the Government’s development plans. The assistance was appropriately designed to respond to the main constraints. However, there is a need for a more integrated approach between transport and trade facilitation assistance. This integrated approach will ensure synergies in terms of developing border infrastructure, integrating transport and trade facilitation strategies and rolling plans, and developing transport corridors with an eye on trade potential. Harmonization among the aid agencies also needs to be strengthened.

Effectiveness. The assistance program in the transport sector was assessed “effective.” The expected outcome from the first two road projects was reduced user costs from improved pavement conditions on Mongolia’s north–south transport artery. An important outcome of ADB’s assistance has been the increased awareness of new construction techniques, as well as the use of better project management. The completed projects have witnessed a distinct growth in traffic ranging from 7% to 12% per annum, with consequences on road safety, which deteriorated immediately after project completion. Currently, the intensity of accidents (i.e., number of fatal accidents in Mongolia is among the highest on the ADB-funded project road from Ulaanbaatar to Altanbulag. In the case of the TA projects, the policy and institutional components were broadly effective in ensuring the creation of new legislation, restructuring the existing institutions, and training staff. However, the TA projects were not effective in improving the functioning of the road fund and in sustaining institutional development. In the civil aviation subsector, ADB assistance enabled an improvement in air safety and an upgrading of civil aviation practices to international standards, thereby enabling the attraction of new traffic.

The earlier trade facilitation TA projects were found to be generally useful by both the Government of Mongolia, as well as that of the PRC. However, they did not translate into subsequent projects. The recently completed TA on customs modernization achieved the targeted outcomes of improving customs systems and of improving knowledge within the customs department. Overall, the assistance program in the trade facilitation sector was rated “effective.”

Sustainability. The results and benefits derived from ADB’s sector assistance were rated as “likely to be sustainable.” Given budgetary constraints, the demand for government counterpart funds for externally-funded infrastructure projects competes with and crowds out maintenance funds. The Government has been making efforts to improve the size of the road fund, although this will require a strong commitment from the Ministry of Finance. The civil aviation projects are also likely to be sustainable, as there is market demand for both the airport services and air navigation systems.

Since the trade facilitation assistance is ongoing at present, it is premature to predict the sustainability of trade facilitation TA projects. Taking into consideration the commitment from the Government and ADB to sustain the Central Asia Regional Economic Cooperation (CAREC) program, it is expected that ADB’s assistance to trade facilitation initiatives in Mongolia is “likely to be sustainable.”

Impact. ADB assistance in the transport sector was rated “substantial.” Although completed projects contributed to the improvement in livelihoods in the impact area, it is difficult to derive impacts directly attributable to the assistance, since several other national and local factors also contributed to the changes in the impact area. However, the improved access to markets was perceived to be an important trigger for migration to the project-impact area. It has also enabled a diversification in alternative livelihoods, such as shop keeping, hospitality, livestock trading, etc., with an increased participation of women in some of these activities.

It is too early to predict the impact of trade facilitation TA projects, since the policy changes and institutional development measures have yet to crystallize. Taking into consideration the current commitment from the Government and the progress of the CAREC program, it is expected that ADB's assistance to trade facilitation initiatives in Mongolia is likely to demonstrate "modest to substantial impact" on long-term changes in development conditions in the country.

Top-Down Assessment. For both transport and trade facilitation, ADB's top-down performance is assessed to be "successful" based on the three parameters of sector positioning, contribution to development results, and ADB performance. Sector positioning was assessed using the following criteria: (i) sufficient basis for the strategy, (ii) Government's absorptive capacity and ownership, (iii) ADB's comparative advantage and relationship with other development partners, (iv) long-term continuity of policy initiatives, and (v) monitoring mechanisms, and found "satisfactory."

Contribution to development results was assessed "substantial" based on the extent to which ADB's overall sector program contributed to the achievement of the development results at a national level. There is an indirect link between the transport and trade facilitation sectors and poverty reduction. The correlation between road improvement and economic development is strong at the local level and could be expanded at the national level with better facilitation of trade. Overall, the indirect but positive contribution of ADB's sector strategy to the development results is seen as substantial.

ADB's performance in the transport sector is satisfactory based on its (i) responsiveness to sector challenges, particularly those posed by the transition process (and as to which challenges were and were not accepted); (ii) client orientation, exercising the role ADB was expected to play by the client and other stakeholders, and the cost involved for the client to interact with ADB; (iii) meeting declared objectives and policies; and (iv) portfolio performance. Although implementation of projects were delayed due to initial teething problems, ADB and the Government have made efforts in improving the portfolio performance.

ADB's portfolio in the trade facilitation sector is relatively new. Although the entry into the sector has been smooth, there appears to be limited coordination within ADB as well as with the donor community to use the experiences from the roads subsector to develop integrated trade facilitation projects. The value added by ADB's assistance could be improved with innovative approaches in capacity development, socially inclusive project components, better stakeholder participation, and specific governance activities. Although some of these approaches have been pilot-tested by recent projects, there is a need to mainstream them and add further value in the areas of environmental pollution reduction, road safety, vehicle licensing, and urban transport.

Overall Assessment. Combining the bottom-up and top-down assessments, the overall performance is rated "successful" for both the transport and trade facilitation sectors. The lack of coordination within ADB as well as within the Government between the transport and trade facilitation departments has reduced the synergies between these two linked sectors. Although overall both are rated successful, there is potential for these sectors to develop joint programs that will increase the effectiveness of ADB's assistance.

Identified Lessons. Lessons are identified at both the policy level and the project level. The transport and trade facilitation sectors have witnessed a slowdown in terms of policy development, as well as in the translation of policy into action. Policy-level lessons include (i) the need to assimilate the potential future growth in the respective strategies of the Government and ADB; (ii) the need for consistent policy dialogue to draft and implement a

transport sector policy, reliable road maintenance regime, and institutional strengthening policy; (iii) Government ownership for making and sustaining institutional changes in the country requires champions and coherent support from within the country, and (iv) political will for policy development and its associated reform agenda are requisites for which ADB assistance cannot serve as a substitute for effective aid agency coordination.

ADB has contributed to transport sector development effectively through its financial support. It could further add value by providing assistance for policy developments, strategy formulation, and innovative approaches in project design. Project-level lessons for the future include (i) continue along the lines of regional cooperation and trade assistance through initiatives such as the CAREC program, (ii) provide better value addition through innovations in project design and TA projects, and (iii) bring in international best practices and ideas for improving the road network and institutional capacity appropriate in the local context.

Recommendations for Future Assistance. ADB should continue to be involved in the transport and trade facilitation sectors in Mongolia. Following are key recommendations for future assistance formulation.

Recommendation	Responsibility	Timing
A. Recommendations for the Transport Sector		
<p>1. Provide advice on policy development in areas such as institutional strengthening. The formulation and timely adoption of a national transport policy is a major challenge for the Government and international aid agencies in the short term.</p>	East Asia Department	Work on drafting the policy to be initiated by 2009. Draft policy to be submitted for Government approval by 2010.
<p>2. Assist in strengthening of road maintenance regime. Sustainability of transport infrastructure is crucial in the Mongolian context. The Government needs to develop its road maintenance regimes based on needs, achieve a balanced distribution of public funds, identify alternative financing sources including the private sector, and improve cost recovery. ADB should support the Government in enabling these changes.</p>	East Asia Department	The implementation plan that goes with the Mongolia country partnership strategy (CPS) should identify a plan with monitoring indicators.
<p>3. Strengthen inter-agency coordination. ADB needs to work closely with the Government in identifying and implementing institutional changes to streamline operational responsibilities among the various Government departments, as well as to strengthen the in-house human resources capabilities.</p>	East Asia Department	The Mongolia CPS to address this in its implementation plan.
<p>4. Investment strategy for transport sector. The main challenge that cuts across all the above three recommendations relates to the question of what should be the level of investment, given the limited demand in terms of traffic. ADB needs to continue to work closely with the Government to adopt a stepped approach that assesses the development and economic needs of the country and balances these against the available funding from public and private sources. This stepped approach comprises developing rolling investment plans of 4–5 year durations, supported by specific feasibility studies.</p>	East Asia Department	The Mongolia CPS to address this in its implementation plan.

Recommendation	Responsibility	Timing
B. Recommendations for the Trade Facilitation Sector		
<p>5. Improve transport and trade logistics. Constraints to trade require a combination of physical and nonphysical interventions. The physical constraints that should be addressed by ADB in conjunction with the other development partners relate to rail infrastructure to facilitate trade movements, storage infrastructure, road infrastructure linking the border points with economic centers, and port infrastructure at Tianjin in the People's Republic of China.</p>	East Asia Department	The Mongolia CPS to address this in its implementation plan.
<p>6. Facilitate dialogue for customs harmonization and border formalities. Resolution of nonphysical constraints needs a broader action plan. To start with, ADB needs to facilitate dialogue between Mongolia and its neighbors, such as the People's Republic of China in the context of regional cooperation and integration initiative relating to the harmonization of the customs and product inspection standards, as well as the movement of vehicles across the border.</p>	East Asia Department	The implementation plan that goes with the Mongolia CPS should identify a plan with monitoring indicators.

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MONGOLIA TRANSPORT AND TRADE FACILITATION- POTENTIAL FOR BETTER SYNERGIES



RUSSIAN FEDERATION

PEOPLE'S REPUBLIC OF CHINA

PEOPLE'S REPUBLIC OF CHINA

0 50 100 150 200 250
Kilometers

- National Capital
- Provincial Capital
- City/Town
- Roads Development Project (Loan 1364)
- Second Roads Development Project (Loan 1700)
- Regional Roads Development Project (Loan 2087)
- Asian Highway Network (Proposed)

- Main Road
 - Provincial Road
 - Railway
 - Asian Highway Route Number
 - River
 - Provincial Boundary
 - International Boundary
- Boundaries are not necessarily authoritative.

I. INTRODUCTION

A. Background

1. Economic growth in Mongolia depends on the transport sector's development, with the main businesses and the people heavily reliant on the quality and ease of access to places within and outside the country. As a landlocked country, Mongolia relies on its neighbors for access to international trade via either sea or rail. Trade facilitation is linked closely to the development of transport routes, as well as the legal, regulatory, and institutional aspects of trade. While the need for expanding the transport sector network is becoming increasingly visible, the accompanying need for management and sustainability of the network has become even more conspicuous than before. With the changing political and economic dynamics in the 1990s, the transition to a political democracy and market-based economic system has created new pressures on the relatively small-sized transport network in the country. Although the actual demand for transport infrastructure continues to be low as compared to other Asian countries, the Mongolian economy has witnessed a rapid growth in the recent years, fueled mainly by the mining and traditional livestock sectors. Inadequate transport infrastructure and services continue to constrain the growth of economic activity in remote areas such as the western and southern regions.

2. Against this backdrop, the Asian Development Bank (ADB) supported the transport sector during the most critical period from 1992 to 2000 and thereafter. Assistance for trade facilitation began a bit later and is still at an early stage of growth. In the recent years, the country has emerged from the transition phase with an increasing focus on human development dealing with expansion of the road network, providing access to isolated communities, and fostering regional integration and trade.

3. ADB has led international donor efforts in the transport sector with a combination of policy-level and project-level interventions. Since 1993, ADB has approved five loans totaling \$147.1 million for road and aviation subsector development. In addition, ADB provided 12 technical assistance (TA) projects, of which six were for the preparation of loan projects and six in support of capacity building, including institutional strengthening and policy support for the road and aviation subsectors.

4. In the trade facilitation sector, the aid agency assistance has been dispersed with different parts of the Government dealing with various aspects of trade development and facilitation. ADB's first TA project,¹ approved in 2000, aimed to study the development options for economic cooperation between the People's Republic of China (PRC) and Mongolia. Subsequently, the scope of the TA projects focused more on customs cooperation. In November 2006, ADB approved its first loan in the trade facilitation sector for a customs modernization project.² ADB's assistance for trade facilitation is still at an early stage.

B. Scope and Purpose

5. The objective of this sector assistance program evaluation (SAPE) (the evaluation) is to provide an independent assessment of ADB's assistance to the Mongolian transport and trade facilitation sectors and to identify areas for improving the effectiveness of its interventions. The

¹ ADB. 2002. *Technical Assistance for Trade Facilitation and Customs Cooperation*. Manila (TA 6058-REG, for \$2 million, approved on 29 October).

² ADB. 2006. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Grant Administration to Mongolia for Customs Modernization Project*. Manila (Loan 2307-MON[SF], for \$5 million, approved on 29 November).

findings of this evaluation has provided inputs to the country assistance program evaluation being carried out by ADB Operations Evaluation Department.

6. The evaluation takes sector context into account and assesses the strategies and assistance in the two sectors. It evaluates the contribution of ADB to development results in Mongolia and identifies issues and lessons in the sector pertinent to the preparation of the next country partnership strategy. The evaluation also summarizes key features of Mongolia's transport system and trade patterns, taking into account historical changes in the economy and the development of the transport sector. The evaluation highlights past developments, recognizes the current situation, and identifies challenges for the future.

7. In the transport sector, the evaluation covers roads, railways, and civil aviation, although the main focus is on roads since ADB exited from the civil aviation subsector in 2000 and has yet to fund any project in the railways subsector. The purpose of including civil aviation and railways in the evaluation is to analyze the overall transport sector in light of ADB's current positioning and to suggest direction for future prioritization. The evaluation covers civil aviation projects approved from 1993 onward and road projects approved from 1995 onward. It draws on the conclusions of the recently completed Operations Evaluation Department evaluation of the Roads Development Project (RDP).³ The evaluation of the trade facilitation sector is intended to highlight the issues and constraints it currently faces and suggest a direction for ADB's future assistance. The evaluation broadly follows ADB's guidelines for a country assistance program evaluation.⁴

8. The first section of this evaluation describes the conditions of the transport and trade facilitation sectors to provide a background on the existing constraints and challenges. The second section summarizes the sector outlook and identifies the key development challenges. The third section examines ADB's program of assistance to the two sectors in terms of ADB's positioning. The fourth section evaluates performance of ADB's program using the criteria of relevance, effectiveness, efficiency, sustainability, and impact. The last section identifies lessons and recommendations for future assistance in the two sectors.

II. SECTOR CONTEXT

A. Economic Outlook

9. Mongolia is landlocked between the Russian Federation (Russia) to the north and the PRC to the east, west, and south. Its total land area is 1.6 million square kilometers (km²). Mongolia, with a population estimated at 2.6 million, is the most sparsely populated country in the world, having a population density of 1.6 persons per km². About 1 million people live in the capital city of Ulaanbaatar.

10. Traditionally, the Mongolian economy has depended on livestock as the major contributor to the national economy. Since 2004, the contribution of mineral extraction has increased substantially. The country's mineral resources include coal, copper, molybdenum, fluorite, gold, iron ore, lead, oil, phosphates, tin, uranium, and wolfram, of which the first three are the most important, accounting for a large part of industrial production. The evolution of the structure of the economy is shown in Table 1. Industry's share of gross domestic product (GDP) has increased

³ ADB. 1995. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Technical Assistance Grant to Mongolia for the Roads Development Project*. Manila (Loan 1364-MON[SF], for \$25 million, approved on 22 August).

⁴ ADB. 2006. *Guidelines for the Preparation of Country Assistance Program Evaluation Reports*. Manila.

rapidly, reflecting the rise of mineral resources revenues. This has a consequential effect on the trade and transport infrastructure required to handle the exports of these commodities.

Table 1: Structure of the Mongolian Economy
(%)

Item	Contribution to GDP				Share in Total Labor Force			
	1995	2000	2006	2007	1995	2000	2006	2007
Agriculture	38.0	29.1	19.5	20.6	46.1	48.6	38.8	37.7
Industry ^a	27.5	21.9	38.3	36.1	14.1	11.2	11.8	12.0
Services	34.5	49.0	42.2	43.3	39.8	40.1	49.5	50.3

GDP = gross domestic product.

^a Industry includes mining, manufacturing, and utilities (electricity, gas, and water), excluding construction.

Source: Asian Development Bank. 2007. *Key Indicators of Developing Asian and Pacific Countries*. Manila.

11. Economic growth over the last 3 years has been significant,⁵ fueled mainly by high world market prices for copper and gold and an increase in gold production. Nonetheless, with a per capita GDP of \$806⁶ in 2005, Mongolia is among the poorest countries in East Asia. Although Mongolia joined the World Trade Organization (WTO) in 1997 and has been seeking to expand and diversify its trade relationships, its economy continues to be heavily reliant on its two neighbors. Mongolia purchases 80% of its petroleum products and a substantial amount of electric power from Russia, leaving it vulnerable to price increases. The PRC is Mongolia's chief export partner.

1. Transport

12. **Roads.** Because of its large geographic area and low population density, Mongolia's transport system is basic, with connectivity by road, railways, and air transport limited to major towns and centers of economic activities. Only the central capital region of the country is adequately served by rail, road, and air transport services. Mongolia's road network currently consists of 49,250 kilometers (km), comprising 11,219 km of state roads (of which 1,900 km are paved) and 38,031 km of provincial and local roads. About 92% of these roads are earthen tracks. Paved and gravel roads together account for 8% (3,940 km) of the total. The road density, which is low by international comparison, is at 1 km of paved roads per 1,000 km² of land and 30 km of nonpaved roads per 1,000 km² of land.

13. While the road and rail densities, when measured per head of population, are relatively high, their spatial coverage is low compared to other countries in Asia (Table 2). The comparatively high per-capita figures vis-à-vis the low spatial indicators illustrate best the challenge posed to the transport system by a small, dispersed population and the vastness of the area to be serviced by transport.

⁵ Real GDP growth was 10.8% in 2004, 7.1% in 2005, and 8.4% in 2006. From 2002 to 2006, the economy has grown on average by 7.2% per year (ADB. 2007. *Key Indicators of Developing Asian and Pacific Countries*. Manila).

⁶ International Monetary Fund. 2007. *Mongolia: 2006 Article IV Consultation*. Washington, DC (Staff Report).

Table 2: Comparative Transport Network Indicators—2006

Item	Lao PDR	Mongolia	Tajikistan	Uzbekistan
Population Density (people/km ²)	25.0	2.0	49.0	59.0
Road Density				
km/1,000 people	5.7	19.0	3.7	6.8
km/100 km ² land	1.4	3.3	18.2	40.6
Railway Density				
Rail route km/10,000 people	—	7.0	1.3	1.5
Rail route km/100 km ² land	—	0.1	0.7	0.9

km = kilometer, km² = square kilometer, Lao PDR = Lao People's Democratic Republic.

Sources: Asian Development Bank (ADB). 2007. *Key Indicators of Developing Asian and Pacific Countries*. Manila. Available: http://www.adb.org/Documents/Books/Key_Indicators/2007/pdf/Key-Indicators-2007.pdf; ADB. 2006. *Central Asia Regional Economic Cooperation Program (CAREC): Regional Transport Sector Road Map Update*. Manila. Available: <http://www.adb.org/Documents/Reports/CAREC/Transport-Sector-Roadmap/RTSR-2005.pdf>; and ADB. 2006. *Greater Mekong Subregion Transport Sector Strategy Study Final Report*. Manila.

14. While Mongolia's road network provides only limited geographical coverage and connectivity, the low traffic volumes on most of the roads prove an impediment to expanding road capacity. Although traffic has been growing in recent years, only 5% of the state roads carried daily traffic volumes of more than 1,000 vehicles in 2004 (Table 3). Ninety-five percent of the unpaved roads did not have the level of traffic required to render a double-lane paved road economically viable. Traffic congestion that would indicate transport demand in excess of supply only exists in urban areas, notably in Ulaanbaatar. But even here, capacity could be freed up by adequate traffic management and transport pricing. Appendix 1 provides the trend analysis of the traffic over the last 5 years for all modes of transport.

Table 3: Annual Average Daily Traffic

AADT (vehicles/day)	% of Total Network of State Roads
<50	11
51–100	14
101–150	27
151–250	27
251–500	13
501–1,000	3
>1,000	5

AADT = annual average daily traffic.

Source: Ministry of Roads, Transport, and Tourism, Government of Mongolia. 2007. *National Transport Strategy for Mongolia*. Ulaanbaatar.

15. The cost of road construction in Mongolia is relatively high. While the Government is aware of the need to build lower-cost roads, there has been a tendency to build all-weather paved roads that are more costly to build and maintain. With the lower traffic levels, some of these roads have difficulties in ensuring economic viability (para. 79). The Government's Economic Growth Support and Poverty Reduction Strategy Paper⁷ drafted in 2003 states that "efforts and attention of individuals will be mobilized toward construction of low cost roads, especially rehabilitation and maintenance of roads and bridges involving the poor and increasing their income." Although this has been attempted by constructing gravel roads, the general tendency has been to construct more expensive paved roads; for example, the

⁷ Government of Mongolia. 2003. *Economic Growth Support and Poverty Reduction Strategy*. Ulaanbaatar.

Millennium Road is to be made of bitumen and asphalt concrete sections, although the traffic on the road is low.⁸

16. **Rail.** Mongolia's railway system is spread across 1,810 km connecting the PRC rail system in the south with the Russian Trans-Siberian line in the north. The line, which passes through Ulaanbaatar, is important for transporting coal, minerals, timber, petroleum, and animal products within Mongolia and to Russia and the PRC. It is also an important mode of transport for Mongolian citizens and foreign tourists traveling to and from Mongolia. Distinct from the main line, is another branch line in north eastern part of Mongolia. However, there is no physical connection between the main line and the branch line.

17. The current track utilization of the Mongolian railway institution Mongolian Tumor Zam (MTZ) is about 20 pairs of trains per day, which is below the maximum capacity. A high percentage of empty running wagons points to inefficient freight planning and capacity wastage. In the face of rising traffic, particularly transit traffic, MTZ is exploring options to increase capacity, including track electrification and construction of an additional track. The proposal for a double track, coupled with electrification of the trunk line, needs to be supported by sound analysis of the existing capacity. Available operational indicators of MTZ suggest that there is scope to use existing capacity—both track and fleet—more efficiently.

18. **Civil Aviation.** Because of the vast distances and lack of adequate road network, Mongolia depends on air transport to connect with its major towns. Ulaanbaatar, with a passenger turnover of about 120,000⁹ per year, serves as a hub to about 45 small airports spread all over the country; only 12 of them have paved runways. Seven of the local airports had more than 10,000 passengers in 2005. The largest of these was Muron, with an annual turnover of about 26,000 passenger arrivals and departures, and the smallest were Bulgan (120 passengers) and Mandalgov (750 passengers). Air transport is an important mode of domestic travel for the majority of tourist and business travelers, although Mongolian Airlines (MIAT), the national airline, and private aviation companies face difficulties in operating domestic air services. It has regular flights to international destinations in Russia, PRC, Japan, Germany, and Republic of Korea.

19. **Waterways.** While Mongolia has 445 km of navigable waterways, they carry little traffic. Lakes and rivers freeze in winter and are open to traffic from May to September. Lake Hovsgol, which is located in the central northern part of Mongolia, stretches 135 km from north to south and played a significant role until 1990. Since then, the quantum of freight carried across the lake has reduced to an average of less than 2,000 tons per year.¹⁰ Passengers carried on the waterways are currently mostly tourists, with the transport services operated by the private sector.

20. Mongolia's geographical location means that the external transport links provided by the two neighboring countries are crucial for the country's international trade. Mongolia currently uses the PRC port of Tianjin for most of its overseas imports and exports. There is also some

⁸ The Millennium road, which will be 2,000 km long when completed, will be the shortest international route in Mongolia and in the region connecting Europe and Northeast Asia. Based on secondary data collected by Operations Evaluation Department consultants, the approximate average traffic in July 2006 was less than 200 vehicles per day on 50% of the Millennium Road; between 200 and 500 vehicles per day on 10% of the road, between 500 and 1,000 vehicles on 13% of the road, and more than 1,000 vehicles on 7% of the road. About 20% of the road was not covered by the traffic survey.

⁹ European Bank for Reconstruction and Development and Pacific Consultants International. 2003. *Mongolia Civil Aviation Master Plan*. Ulaanbaatar (Vol. I). Traffic volumes at Ulaanbaatar were at about 800,000 passengers per year prior to the collapse of the communist system in 1991.

¹⁰ Selenge River (270 km) and Orhon River (175 km) are navigable, but carry little traffic.

small movement by rail to and from Europe through Russia, and via Russian Pacific ports for freight traffic to and from North America.

2. Trade Facilitation

21. As a sparsely populated, landlocked country, Mongolia faces several unique problems in terms of trade and economic relations with the rest of the world. Economic literature indicates that, typically, landlocked countries witness a slower economic growth than the others.¹¹ Traditionally, Russia has been Mongolia's closest trading partner. With the growth in the PRC's economy, Mongolia has gradually expanded its trade relations, making the PRC its largest trading partner.

22. The share of the PRC within the major destinations of exports (2002–2006) has been increasing steadily, indicating the growing importance of the PRC in Mongolia's trade. Copper concentrate, gold and other minerals, cashmere and cashmere products, and textiles accounted for 90% of Mongolia's exports in 2006. The growth in exports resulted in their share of GDP increasing from 21% in 1990 to 57.3% in 2006. Appendix 2 provides more details on trade facilitation in Mongolia.

23. Although Russia continues to dominate Mongolia's imports, the PRC's share has been increasing steadily (although not at the cost of reducing Russia's share). Being a landlocked country, Mongolia depends on imports of a variety of commodities—petroleum, machinery, foodstuffs, vegetable products, etc. While Russia supplies a majority of petroleum products, the PRC supplies the majority of foodstuffs and consumer goods.

24. Although Russia and the PRC remain the dominating partners of Mongolia's trade, other countries provide a significant part of overall trade. This requires Mongolia to not only facilitate trade with its neighbors, but also to develop better transit arrangements for trade with other countries. Mongolia became a member of WTO and has been working to develop its multilateral trading system. The growth in the national economy, combined with the increasing accession to WTO guidelines, has had an impact on its trade turnover, which increased by more than three times in 9 years from \$919.8 million in 1997 to \$3,028.4 million in 2006. With the increase in mining exports, the trade surplus has improved over the last few years. Recent steps toward reducing trade costs have focused more on customs regulations, that is, reducing delays on the international border by using better screening equipment and reducing bureaucracy. It remains to be seen how these steps have helped to increase the efficiency of trade and what more is required to reduce trade costs.

B. Development Challenges

25. Mongolia's geographic characteristics and the country's transition to a market economy are the key challenges to transport policy and strategy formulation. The Mongolian economy was run based on the centrally planned Soviet model until early-1990s, and the transition to a market economy has proved to be difficult. Reform measures, especially in price liberalization, small-scale privatization, and institutional and legal framework establishment, have made progress; but structural adjustments have been less successful. The transition from a centrally planned to a market economy resulted in a contraction of all sectors of the economy, a real loss in GDP, and a declining role of Government. State revenues fell from 51% of GDP in 1990 to

¹¹ Faye, Michael, John W. McArthur, Jeffrey D. Sachs, and Thomas Snow. 2004. The Challenges Facing Landlocked Developing Countries. *Journal of Human Development*, Vol. 5, No. 1.

23% in 1992, while the share of Government expenditure and lending recorded a similar slump. Government resources were inadequate to finance recurrent expenditures for basic social and economic services. This situation lasted until 1995, when a gradual improvement set in.

26. Policy formulation and planning in the transport sector were typical for centrally planned economies. They were supply-driven using rigid engineering norms and input–output relationships. There was no national transport policy to address resource allocation problems efficiently and to mobilize financing for the development of infrastructure. Being a landlocked country with a relatively small and poor population dispersed over a vast area, Mongolia has to overcome obstacles posed by the country’s distance from international markets and the isolation among its regions and population centers. These conditions continue to give rise to high transport costs, to leave many communities isolated, and to render internal and external trade highly dependent on the performance of the transport sector. Accessibility has been a major problem for a significant portion of the rural population. The shortage of funding compared to the needs is the most pressing transport infrastructure issue.

27. Duplications and overlaps within public sector transport agencies administering the sector create confusion, inefficiencies, and ineffective regulation and enforcement, with consequential poor overall performance. In Mongolia, different entities are responsible for various activities such as road construction, maintenance, transport services, urban transport, railways, and road safety. These entities have overlapping functions and responsibilities within the Government. Overall, there is a need for a clearer definition of roles and responsibilities for the public sector transport agencies, together with good coordination of agency activities focused on developing an efficient, integrated transport system with quantifiable, performance-based targets.

28. New challenges for the transport sector have emerged over the past decade. They are a result of globalization, increasing urbanization, and the rising aspirations of the people for a better quality of life. Global and regional trade have posed the challenge of integrating the national transport logistics within the changing national economy and value chain that are relevant for Mongolia’s import and export goods. Increasing urbanization has created challenges for urban transport and traffic engineering to reduce congestion, improve traffic safety, provide mobility at affordable and sustainable levels, and to stem the rural–urban drift by providing better access to remote rural communities. The air quality in Ulaanbaatar has emerged as a growing problem, due not only to emissions from a rapidly growing number of vehicles, but also to industrial and commercial factors. The increased complexity of issues requires the adoption of transport policies and strategies that are sustainable economically and financially, as well as environmentally and socially.

29. Mongolia has a road traffic safety problem that needs to be addressed in parallel to the expanding transport network. While the total number of recorded traffic accidents peaked in 2000 and appear to have fallen since then, the rates of traffic fatalities and personal injury accidents are significant in relation to international data.¹² From 1996 to 2004, the fatality rate for Mongolia has remained consistently at about 25 deaths per 10,000 vehicles each year, while the rate for Ulaanbaatar, although showing some reduction since 2000, continues to be above 20 deaths per 10,000 vehicles per year.¹³

¹² High international fatality rates include PRC 26, Kazakhstan 20, India 20, and Russia 14. Source: Jacobs, G., A. Aeron-Thomas, and A. Astrop. 2000. *Estimating Global Road Fatalities*. Global Road Safety Partnership Paper – TR445. London: Transport Research Laboratory.

¹³ Traffic data from Ulaanbaatar Traffic Police.

30. In the trade sector, accessing markets other than Russia and the PRC has been constrained by (i) dependence on the Russian and PRC railways; (ii) customs regulations and lack of harmonization with neighbors; (iii) restrictions on carriage of goods such as animal products, which have been Mongolia's largest export commodity; and (iv) restrictions on movement of vehicles. These constraints have increased the trade costs for Mongolia, and it remains to be seen how these costs can be reduced.

31. **Trade Costs.** Appendix 2 highlights the constraints faced by Mongolia's traders and freight forwarders in terms of increasing trade costs. In addition to a rise in the actual cost of transport, there has been an increase in border crossing charges as well as the demurrage costs. Box 1 provides examples of the rising trade costs. These costs can be reduced by improving customs procedures and trade infrastructure (border transshipment facilities and rail and road services).

Box 1: Examples of Rising Trade Costs in Mongolia

- (i) Poor quality of road between Ulaanbaatar and Zamyn Uud on the Mongolia–People's Republic of China (PRC) border has caused an increase in transport cost, higher than the neighboring PRC areas.
- (ii) An analysis of 36% of the total imports in 2007 indicated that transport costs form about 10% of the trade value. A similar analysis covering 70% of the total exports in 2007 showed that transport costs form about 18% of the trade value.
- (iii) Border crossing charges on the Mongolia–PRC border form about 30% of the total transport cost, higher than most other Central Asian republics.
- (iv) Rail transport tariffs within Mongolia for importing food items have increased by an annual average rate of 10% in the last 5 years. The tariffs for exporting wool and cashmere increased at an average annual rate of 86% between 2003 and 2006.
- (v) Figures from a sample of freight forwarders indicated that average demurrage costs, typically associated with goods kept in storage mainly because of delays in transshipment and in obtaining onward transport, increased by 41% in 2007 compared with 2006.

Source: Asian Development Bank Operations Evaluation Department consultants' estimates based on data obtained from the Customs General Administration of Mongolia and from various freight forwarders.

C. Government Plans

1. Transition to Market Economy

32. The transition processes required Government officials to become familiar with a market-oriented economy quickly, while reforming Mongolia's administrative systems. Daily crisis situations had to be tackled at the same time as new capacities were built. During the second half of the 1990s, external factors such as the Asian and Russian financial crises and adverse weather conditions created new challenges.

33. Between 1990 and 1993, the foundation was laid for a democratic organization of the state, codified in a new Constitution that was adopted in 1992 and that separated centrally-held powers to vest them in the executive, legislative, and judicial branches of government. From 1994 to 1996, the public administration was reformed to embody new principles of a professional rather than party-appointed civil service. The reform involved adopting the Law on Government Service of December 1994. This was followed by a phase of devolution documented in the Mongolian State Policy on Reforming Government Processes and the General System of Structure of 1996.

Among its nine priorities were the development of management capacities and the reform of the public administration and civil service, including the devolution of powers to local levels.

34. In the transport sector, the Government issued a Road and Road Transport Sector Policy Statement in 1995, which provided for a restructuring of the road subsector to separate the regulatory and commercial functions by devolving commercial activities from the Department of Roads to private companies. Road hauling and parts of the urban bus services were privatized. Donor-funded projects were subjected to investment decision criteria similar to those used by the private sector. A Road Act was enacted by the Parliament in 1998, based on which the National Transport Advisory Committee was established in the same year and reorganized in 1999.¹⁴ The Road Transport Board and the Passenger Service Center were combined to form the Road Transport Agency to regulate tariffs for freight and passenger traffic. However, these policy actions have remained on paper only since these institutions have not been effectively empowered. The Ministry of Roads, Transport, and Tourism (MoRTT) continues to retain the main policy role. With TA from ADB, institutions and the regulatory framework in the road, road transportation and civil aviation subsectors were reformed.¹⁵

35. Mongolia has yet to adopt an integrated trade facilitation strategy or policy statement. Trade facilitation has typically been housed under the wider trade policy and infrastructure development policy of Mongolia. Trade facilitation strategy in Mongolia has evolved as a result of (i) medium-term policy documents—Development Concept of Mongolia (1996), Concept of Regional Development 2001–2020, Government Action Program 2004–2008, and sectoral master plans; and (ii) longer-term development policy documents: Millennium Development Goals (MDG)-based Comprehensive National Development Strategy (NDS) (2007).¹⁶

2. Strategies and Plans

36. **Transport Sector.** In 1999, with assistance from the World Bank, the first comprehensive attempt was made to formulate a national transport strategy.¹⁷ The recommendations were implemented selectively (see Appendix 3 Table A3.1 for the status of implementation). However, the core of the strategy, which is its policy framework, has yet to be internalized in the transport sector strategy formulation and decision-making. While the recommendations of the World Bank strategy continue to remain valid, the Government has since made a number of strategic announcements for the transport sector. The Government Action Plan for the Transport Sector (2004–2008) expresses the need for a comprehensive sector strategy and proposes a number of priority actions for the various subsectors. Appendix 3 Table A3.2 provides the details of this action plan. ADB has been leading the efforts to develop a strategic framework for the transport sector Mongolia.

¹⁴ The National Transport Advisory Committee was established with representation from DOR, Road Transport Board, State Control Board, Road Transport Agency, Traffic Police Department, Urban Transport Department, Road Workers Trade Union, Neft Import Concern, Road Company ASBI, Trade Union for Transport Workers and Communication and Petroleum, and Transport Company (Mongol Taakh).

¹⁵ ADB. 1993. *Technical Assistance to Mongolia for the Institutional Strengthening of the Civil Aviation Subsector and National Air Safety Master Plan*. Manila (TA 1963-MON, for \$850,000, approved on 12 October); ADB. 1995. *Technical Assistance to Mongolia for the Institutional Strengthening of the Road Sector*. Manila (TA 2380-MON, for \$920,000, approved on 22 August); and ADB. 1995. *Technical Assistance to Mongolia for the Institutional Strengthening of the Civil Aviation Subsector (Phase II)*. Manila (TA 2391-MON, for \$592,000, approved on 5 September).

¹⁶ Government of Mongolia, 2007. *Millennium Development Goals-Based Comprehensive National Development Strategy of Mongolia*. Ulaanbaatar (draft).

¹⁷ World Bank. 1999. *Mongolia—Taming the Tyrannies of Distance and Isolation: A Transport Strategy for Mongolia*. Washington, DC (Report 18242-MOG).

37. There have been three recent initiatives toward formulation of a transport strategy.
- (i) The first one resulted from the preparation of the MDG-based Comprehensive National Development Strategy covering the period 2007–2021 (footnote 16). It is aimed at promoting the welfare of the Mongolian people and to this end combines macroeconomic and sector strategies with crosscutting concerns, including governance, human development, environmental protection, research and development, and knowledge management.¹⁸ The National Development Strategy was drafted under the auspices of the Ministry of Finance, which invited aid agencies to participate actively in the process of strategy formulation. It was approved by the Parliament in February 2008. ADB is the co-chair of the transport sector working group¹⁹ along with MoRTT.
 - (ii) The second initiative was supported by a TA from ADB in 2005 for the preparation of a national transport strategy and an action plan for 2007–2015. The TA was completed in mid-2006 and updated in March 2007.²⁰
 - (iii) MoRTT has prepared a 15-year investment plan that to a limited extent is drawing on the strategy prepared under the ADB TA (footnote 19).

38. The National Development Strategy provides a broad framework of strategic objectives that the Government plans to achieve in the next 14 years. These objectives include both policy-level changes and road network expansion. This broad policy will be used by the Government in preparing specific sector strategies. The ADB-financed National Transport Strategy provides the guiding principles for transport sector development. It identifies various strategies for each subsector based on specific issues and outlines an action plan. Although both the National Development Strategy and the National Transport Strategy focus on increasing the size of the transport network, they do not tackle the issue of sustainability. Although the National Transport Strategy identifies it as an issue, there needs to be a clear strategy and action plan to increase the allocation of funds to ensure sustainability of the expanding network. Appendix 3 analyzes the efficacy of the new strategy.

39. The MoRTT investment plan is a list of projects that the Government intends to implement over a 15-year period. The investment plan requires about \$11 billion for the transport sector alone. It envisions annualized investment outlays that could comprise 34% of GDP and could thus significantly exceed Mongolia's current overall capital investment ratio (covering all sectors) of about 25%. The investment could also exceed Mongolia's current general Government budget, including the recurrent and capital budgets, and assumes an unrealistic growth in the economy.²¹ This could affect a range of economic fundamentals including borrowings and debt sustainability. Exacerbating the affordability concerns, the envisioned investments would entail sizeable recurrent costs to maintain the new assets. Given the absence of adequate policies and current insufficient budget allocations to maintenance, the proposed investments could raise fundamental

¹⁸ Government of Mongolia. 2007. *Report on Needs Assessment for Millennium Development Goals Achievement in Mongolia. Summary*. Ulaanbaatar.

¹⁹ Progress on the National Development Strategy is reviewed twice a year by technical partner meetings, to which all major aid agencies and nongovernment organizations are invited. Sector working groups formed for the purpose of supporting National Development Strategy formulation are called upon to report to the technical partner meetings on the status of their work.

²⁰ MoRTT, Government of Mongolia. 2007. *National Transport Strategy for Mongolia*. Ulaanbaatar. Preparation of the strategy was financed by ADB. 2004. *Technical Assistance in Formulating a Transport Strategy (2005–2015)*. Manila (TA 4471-MON, for \$300,000, approved on 13 December).

²¹ The promise that the development of new mines in the Gobi region may hold for Mongolia's economy have apparently inspired forecasts of economic growth of above 10% over a sustained period. The average growth rate assumed by National Development Strategy for the 15-year period is 17.7% per annum (Source: Government of Mongolia. 2007. *Task Force to Develop a Comprehensive National Development Strategy. MDG-Based NDS for Mongolia*. Ulaanbaatar [p. 119]).

questions on sustainability. In addition, the resource constraints within the MoRTT to implement and manage new projects need to be addressed.

40. Notwithstanding the above criticism, a long-term vision for transport development is necessary and laudable. The vision needs to achieve the right balance of projects that are financially, fiscally, and economically viable, and those that are development-oriented. Adequate data collection and analysis to support this balance is crucial.

41. **Trade Facilitation.** In addition to the ongoing efforts at modernizing its customs procedures and border facilities, Mongolia has adopted several procedures linked with the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures, as well as with the World Customs Organization. It is a signatory of Transport Internationaux Routiers (TIR), an international customs transit system implemented in the Central Asian Region facilitating cross-border movements by providing a single procedure from the point of departure to the point of destination, with an international guarantee chain. Until recently, the TIR system had limited use for Mongolia since the PRC had not acceded to the TIR convention. To reduce its problems as a landlocked country, Mongolia signed the 1965 treaty of the Convention on Transit Trade of Landlocked States in New York. This convention has limited benefits to Mongolia, however, since the PRC has not acceded to it yet.

42. To improve its trade access, Mongolia signed bilateral agreements with Russia and the PRC in 1991 for transit trade. During the initial years, however, these agreements did not yield much in terms of transit trade. In addition to the transit agreements, Mongolia signed a road transport agreement with the PRC in 1991 for vehicle movement; however, this agreement restricts Mongolian trucks from entering into the PRC, but enables Chinese trucks to drive up to the border town transshipment terminal. On the other hand, Mongolia's road transport agreement with Russia signed in 1996 enables both countries to ply their vehicles across the border. Mongolia is currently in the process of negotiating a trilateral agreement with the PRC and Russia to provide a legal framework for transit systems across the border to enable transport movements and to harmonize customs and administrative requirements.

43. The strategy for development of transport and trade is distinct for the two sectors. While there are several areas where the two overlap, there is a need for coordination between the organizations to ensure synergies. For example, the Government's Millennium Road project intends to connect the eastern end of the country with the western end as part of its transport program; however, there is yet to be any complementary intervention for trade facilitation at the two ends. Similarly, although the trade facilitation program includes modernizing customs procedures at the border crossings, there needs to be a complementary intervention for providing adequate cross-border transport facilities.

3. Policy Agenda

44. **Transport.** Transportation in Mongolia has over the past decade evolved from a state-owned and -operated system to one that in many areas reflects market-oriented systems. While reforms were most effective in relation to the institutions, the regulatory and legislative framework, and private sector involvement in the provision of transport services, more needs to be done in the policy area to ensure efficiency and sustainability of transport infrastructure and operations. The Government's national vision is to improve the welfare of its people and reduce poverty by accelerating sustained and equitable economic growth. The Government has yet to adopt clear policy principles to do so. This is essential for guiding future investment decisions and institutional changes to underpin such investments. For example, the Road Transport Board and the Passenger Service Center were combined to form the Road Transport Agency to regulate tariff for

freight and passenger traffic. These policy actions remain on paper only since these institutions have not been effectively empowered. MoRTT continues to retain the main policy role.

45. The Government's recent National Development Strategy drafted in 2007 to achieve the MDGs aims to expand its network of paved roads and railways in a major way (footnote 16). To achieve this, the Government needs to carry out several policy and regulatory changes to enhance its ability to implement and sustain the expansion of this infrastructure.

46. For transport policy and institutions to contribute effectively to economic development and social welfare, they should ensure that transport services are provided at minimum cost. Specific conditions to meet this overall requirement include (i) existence of rational planning and decision-making processes; (ii) efficient delivery of services by demarcating government responsibilities from those of the private sector; (iii) resource allocation based on economic efficiency and performance; (iv) maintenance of the existing asset base and expansion of capacity in step with demand; and (v) a cost-recovery or user-pays mechanism that favors traffic allocation to least-cost transportation modes and routes, and encourages competition within and between modes. These principles are important contextually for assessing the performance of Mongolia's transport sector, identifying reform requirements, and finding ways to move forward. Box 2 identifies the key questions that need to be addressed at this stage.

Box 2: Key Policy Questions to be Addressed

1. How can the policy and planning frameworks be strengthened to improve resource allocation efficiency?
2. How can financial sustainability be achieved for the transport sector considering all available financing avenues and user charges, as well as the fiscal impact of investment and maintenance?
3. How can regulatory frameworks for road safety, transport services, and other transport areas be developed to address operational efficiency better?
4. How can institutional and human capacity be developed to meet the sector's needs?

Source: Operations Evaluation Mission.

47. An appropriate ceiling for sector investments needs to be set in accordance with Government priorities for all sectors and macroeconomic considerations related to debt service and other parameters. There is a need to establish priorities among sectors and allocate resources accordingly. Priorities should be based on a ranking of economic returns expected to be generated by the investments. The recurrent costs ensuing from the investments should be estimated and their affordability examined based on realistic scenarios for Government budgets.

48. The prevailing policy and resource environment in the transport sector could be improved to promote efficiency in investment and operations. For example, there needs to be a consistent strategy to connect isolated communities by road or civil aviation. A rural road model needs to be designed that is based on least cost and maximum social benefits, and research into construction of alternative low-cost roads should be promoted. Traffic volumes and loads could be the guiding principle in determining road designs. Road construction standards could be differentiated according to current and anticipated traffic loads, rather than applying one design across the board.

49. **Trade Facilitation.** Until recently, Mongolia had not defined a specific action program for promoting trade, since it was in a state of transition. In 2004, it formulated an action program for 2004–2008 to support economic growth through an active trade policy; promote the industrial, agricultural, and services sectors; and increase exports. The action program also aims to change

Mongolia's export structure by diversifying export products and improving their competitiveness; and to work to establish a free trade agreement with Russia, the PRC, and the United States. Several actions on this program have yet to be implemented.

50. The Ministry of Industry and Trade is the policy-making and regulatory body within the Government. It houses the Foreign Investment and Foreign Trade Agency, which is the main body facilitating trade in the country. Other regulatory bodies—the National Center of Standardization and Meteorology and the State Specialized Inspection Agency—monitor the quality of commodities. More specifically, in relation to trade and transport facilitation, the Government of Mongolia has established the National Committee for Trade and Transport Facilitation (NCTTF), consisting of representatives from respective ministries and agencies, as well as nongovernment organizations, to develop and implement a national trade and transport policy. The NCTTF has proposed a combined trade and transport policy document entitled “Transit Mongolia” as an integrated policy to ensure synergies between the two sectors. This initiative is still in an early stage of development.

51. There is a need to provide a link between the transport and trade facilitation policies. Currently, there is little coordination between the MoRTT and the Ministry of Industry and Trade. With the setting up of the NCTTF, this is likely to change for the better; however there needs to be a strong commitment on the part of the Government to support the NCTTF, develop a clear framework for implementation, and enforce it. The “Transit Mongolia” is a step in the right direction. This needs to be sustained.

4. Government and Private Sector Roles

52. **Transport.** The Government continues to be involved in transport operations, which reduces efficiency and competition, especially in urban bus transport, civil aviation, and rail transport. The Government's role needs to focus more on policy and strategy formulation; overall sector planning; safety and environmental regulation; research and development; and management, supervision, and monitoring operations, rather than as direct provider of services. Taking into account the slow development of the private sector in Mongolia, it falls on the Government to ensure provision of infrastructure, although there is potential for public–private partnerships.

53. While there is some involvement of the private sector in road construction activities and provision of road transport services, the Government's role is still dominant. The railway subsector has no private sector involvement. Given the vast expenditures required to develop Mongolia's transport system and the constraints on government's budgetary resources, ways to raise private sector financing need to be explored. MTZ's investment plans for linking new mining developments could be integrated in the financing plans for those developments, thus initiating public–private partnerships in the railways. Box 3 identifies broad initiatives for ADB and the Government to implement in the near future. Similar partnerships could also be encouraged in civil aviation.

Box 3: Suggested Public–Private Partnership Initiatives for Mongolia

1. Assess appetite of private sector public–private partnership projects.
2. Identify specific public–private partnership structures for road and rail projects appropriate for Mongolia.
3. Assess the legal changes required to implement these structures and secure parliamentary ratification for them.
4. Prioritize and implement public–private partnership projects based on demand analysis.

Source: Operations Evaluation Mission.

54. **Trade Facilitation.** This sector has various logistics and trading firms that enable trade movements. Currently, the Government owns and manages the container handling facilities at the dry ports. It also owns the International Freight Forwarding Centre, which operates train services between Mongolia and the PRC. There is a need for the Government to introduce private sector participation in this sector gradually to reduce the public sector burden, as well as to bring in efficiencies. The private sector comprises about 65 freight forwarders in Mongolia, out of which only about 14 are active. The lack of competition among the freight forwarders and the dependence on the public sector for infrastructure provision results in an increase in freight transport prices.²²

5. Cost Recovery or User Charges

55. **Roads.** Policy dialogue among ADB, other development partners, and the Government has revolved around resources available for the road subsector in general, and more specifically, to the level of cost recovery and the pricing policy that the Government wanted to pursue. The introduction of user-pays principles and the Act for Taxation on Gasoline and Diesel have been the initial steps in this direction. The Act clarified the obligation of the Ministry of Finance for levying road user charges for financing of the road funds (local and national) and earmarking the proceeds for the use of the Department of Roads. Whether the road fund is an appropriate mechanism for channeling funds into the road subsector is debatable (Box 4). However, there remains a clear need for reforming the current structure of the road fund to improve the allocations to maintenance.

Box 4: Global Debate on Road Funds

Currently, the use of road funds is a subject of global debate. The World Bank contends that experience with other road funds indicates that many rarely achieve their objectives, and the conditions that might make such an achievement possible are difficult to bring about.^a The main objections to the road fund relating to the fiscal arrangements include (i) earmarked taxes are bad, (ii) excessive revenues to a road fund can lead to gold-plated investments, (iii) road funds are an inefficient use of public funds, and (iv) independent road fund takes fiscal control away from the Ministry of Finance.^b

A recent World Bank evaluation^c of road funds all over the world shows that there is no right or wrong approach to road maintenance finance, and that the road funds appear to work and be effective under some conditions, but not under others. The World Bank evaluation noted that the road funds do provide a better guarantee that funding will be assigned to road maintenance as a priority as long as the road fund design has appropriate prioritization. Overall, there is no clear argument against the road funds or in their favor.

^a World Bank. 2007. *Foundation for Sustainable Development: Rethinking the Delivery of Infrastructure Services in Mongolia*. Washington, DC.

^b Carruthers, Robin. 2005. *Why and When Road Funds are a Good Idea*. Paper presented at the World Bank's Transport Forum 2005. Washington, DC: World Bank.

^c World Bank. 2007. *Evaluation of Bank Support for Road Funds*. Washington, DC.

Source: Operations Evaluation Mission.

²² There are limited rail services from Zamyn Uud to Ulaanbaatar. During the peak season of March–October 2007, an estimated 590 trucks were waiting for more than 10 days in Zamyn Uud's transshipment area. During the off-peak season, this number is about 180 trucks. This increases the demurrage costs of the traders and freight forwarders. Another instance in late August 2007 related to a temporary moratorium by the PRC railways on shipments to and from Mongolia. This resulted in an estimated increase in price of cement by 32% within 1 week.

56. The existing national road fund in Mongolia relies on three main sources of income: tax on fuel, vehicle import duties, and vehicle license fees, which were allotted to the national road fund. The local road funds relied on the local authorities' levy at entries to towns and villages and at improved road sections.²³ The road funds were designed to bring focus on allocating sufficient funds for routine and periodic maintenance. Over time, increasing amounts were used to finance counterpart funding for externally-financed road projects, thus weakening the maintenance objective of the funds (Table 4). The current system is a hybrid between a traditional funding system through government budgets with its concomitant disadvantage of being subjected to fluctuations and a semi-independent fund that provides earmarked financing for road construction and maintenance.

Table 4: Road Fund

Item	2002	2003	2004	2005	2006
Inputs to Road Fund					
Road user payments (with VAT) (MNT million)	63,530	102,577	142,443	157,020	196,477
% of passed to road fund	22.5	19.4	12.3	14.1	14.2
Outputs of Road Fund					
To roads and bridges maintenance (as % of road fund)	15.7	11.7	24.8	25.8	19.5

MNT = togrog, VAT = value-added tax.

Source: Asian Development Bank TA 4785-MON consultants from Department of Roads data and from Road Supervision and Research Center data.

57. Overall, there needs to be better balance between expenditures for asset preservation and asset investments. With adequate funding being a constraint even for the existing basic network, the envisioned expansion should be based on rigorous investment analysis that can demonstrate that the proposed investments are economically viable. There is scope to mobilize resources and to better manage them. The use of private sector participation in maintenance could bring in better efficiencies and cost effectiveness.

58. **Rail.** Passenger fares and freight rates need to reflect the cost of providing transport services and to generate an economic return commensurate with the opportunity cost of capital. The current accounting system of the MTZ allows inclusion of capital expenditures in the income statement, resulting in an overstating of the railway cost. Cross-subsidies exist in the fixing of the fares. MTZ's freight charges on transit traffic subsidize below-cost tariffs for domestic freight and passengers. This pricing strategy may work as long as transit through Mongolia has limited alternatives. Subsidies on local traffic limit the funds needed for asset investments and maintenance, however.

59. To further analyze the potential impact of transport costs on the economy, a sample of commodities was chosen based on importance and value imported in 2007, representing about 36% of total imports. The analysis indicated that about 10% of the trade value comprises transport costs. This implies that an improvement in the efficiency of transport could produce macroeconomic benefits. The impact of transport costs on exports is even higher. An analysis of about 70% of the total exports in 2007 shows that about 18% of the trade value is attributable to transport costs. Appendix 2 provides more details of this analysis.

²³ These levies are not structured uniformly across the country.

6. International Aid Agency Initiatives

60. In parallel to the Government's activities and in some ways complementing them, multilateral organizations have initiated various regional cooperation programs. The three main ones are given below. Appendix 2 provides more details:

- (i) ADB's Central Asia Regional Economic Cooperation (CAREC) program covering eight countries focuses on infrastructure projects, especially transport and trade facilitation.
- (ii) The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) initiated the development of an Asian Highway Network to focus on land transport linkages and services to promote development of international road transport across 28 countries covering 140,000 km of highways in Asia.
- (iii) The European Commission's Transport Corridor Europe-Caucasus-Asia (TRACECA) initiative was started in 1993 with the aim to develop a new transport corridor from the Asia-Pacific region to destinations in Central Asia, the Caucasus, and Europe.

61. It is noted that all three initiatives mentioned above have broadly similar goals. Different organizations have been driving these initiatives, however. There have been interactions between the respective secretariats of ADB, UNESCAP, and TRACECA, as well as among the countries. Workshops and seminars funded by the driving organizations have been taking place frequently. There are common areas and themes of TA funded by the separate initiatives. All three initiatives have a combination of physical infrastructure development and trade facilitation. In several cases, the separate initiatives have identified the same roads under different corridors; for example, in Mongolia, the north-south road figures prominently in the CAREC program as Corridor 4b and under the Asian Highway Network as AH3. This overlap has been constructive to date, and the active dialogue between ADB and UNESCAP has created appropriate synergies for the Government. This needs to be continued in a manner that does not result in an additional burden for the Government in future.

III. SECTOR STRATEGY AND PROGRAM OF THE ASIAN DEVELOPMENT BANK

A. Sector Strategy

62. ADB's strategy in Mongolia focused more on the transport segment during the 1990s, with trade facilitation emerging later as a new segment because of the regional initiatives. Appendix 4 analyzes the evolution of ADB's strategies in the transport and trade facilitation sectors. Figure 1 summarizes the achievement of outcomes identified in 2005 by ADB's transport sector strategy in Mongolia. ADB has yet to identify a specific sector framework for trade facilitation.

Figure 1: ADB's Transport Sector Framework for Mongolia

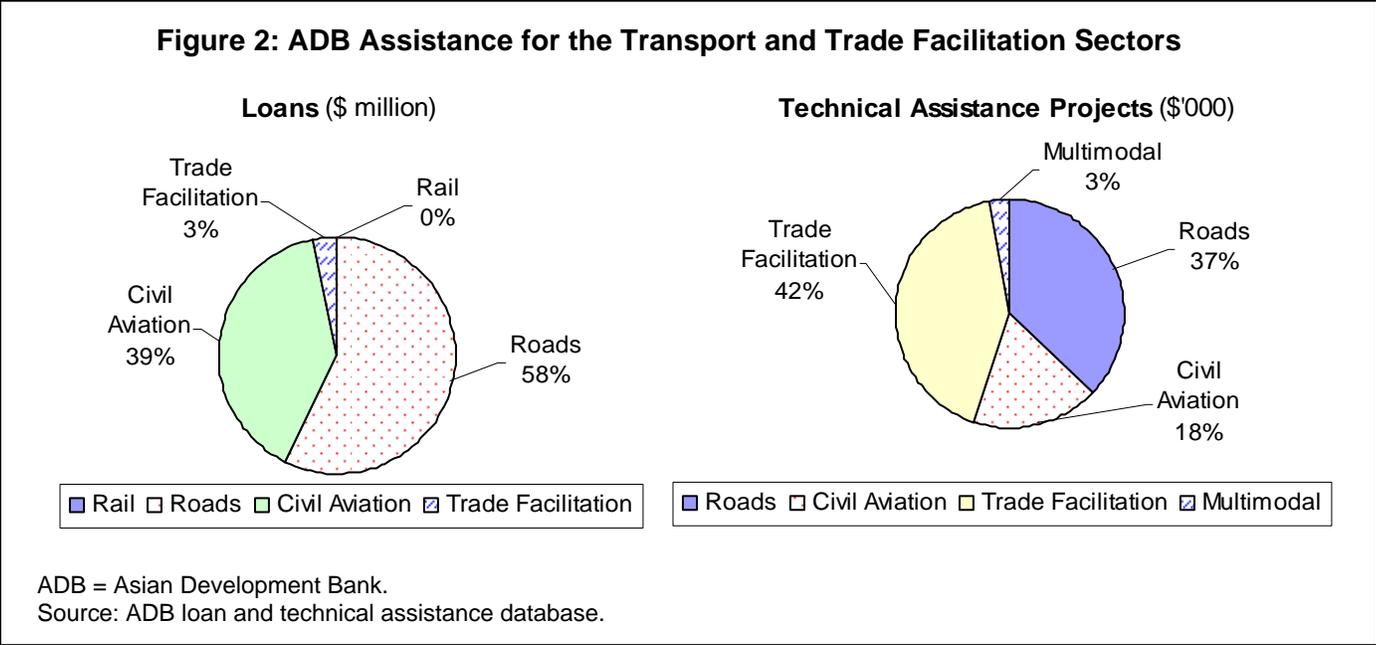
	Interventions	Sector Outputs	Sector Outcomes	CSP Outcomes
As planned in 2005 for the CSP 2006–2008	Transport Sector Strategy (ongoing) Regional Altai Western Corridor Project (2007) Regional Transport Project (2008)	Improved transport strategy	Improved capacity of regional and domestic transport networks	Domestic and regional market integration that opens economic opportunities in remote and rural areas, increases the potential for exports, and facilitates service delivery
		Improved capital and maintenance financing	Better regional cooperation and integration in transport	
		Larger road network; more vehicles	Transport sector management	
		Cross-border arrangements		
Actual achievement until March 2008	Transport Sector Strategy after a 2-year delay Western Regional Road Project approved and implemented	The Government and the international donors have yet to reach a consensus on the nature and content of the transport sector investment plan	Capacity of transport networks is improving	Specific results on market integration have yet to be realized
		Allocation for maintenance improving although falling short of the requirements	Progress on regional cooperation in transport is slow and specific results are not yet visible. However, it is noted that this requires more time.	
		All-weather road network expanding. Traffic has been increasing on the improved roads, in line with economic development	Framework for management of the transport sector has yet to be established. Synergies between transport and trade facilitation need to be improved.	
		Cross-border arrangements under negotiations. Movement of vehicles across the border continues to be restricted. Transshipment facilities at the border are inadequate		

ADB = Asian Development Bank, CSP = country strategy and program.

Source: ADB. 2005. *Country Strategy and Program: Mongolia 2006–2008*. Manila.

B. Sector Program

63. **Transport.** ADB has been involved in Mongolia's transport sector since 1992. It entered the trade facilitation sector in 2000. As of 31 December 2007, ADB had approved five loans totaling \$147.10 million and 12 TA projects totaling \$6.37 million for the transport sector.²⁴ Two loans, the first approved in 1993 and the second in 1995, were in the aviation subsector. The remaining three loan projects were in support of road development. Of the 12 TA projects, six were for the preparation of loan projects and six in support of capacity building, including institutional strengthening and policy support. A description of the portfolio of loan and TA projects is in Appendix 5. Figure 2 summarizes the size of ADB's assistance for various subsectors within the transport sector and for the trade facilitation sector.



64. ADB exited from the civil aviation subsector in 2000 based on recommendations of the country operational strategy, which stated that the basic infrastructure in this sector was already in place and ADB needed to focus on employment-generating activities with shorter time lags. Taking into consideration ADB's Medium-Term Strategy II 2006–2008²⁵ and the lack of in-house expertise in this sector, ADB's exit from the civil aviation subsector is seen as prudent. ADB's assistance for the roads subsector was retained following the Government's strong preference for ADB's support to continue in light of the needs of the country. This is also in line with ADB's Medium-Term Strategy II.

65. **Trade Facilitation.** ADB's entry into the trade facilitation sector began in 2000 with a regional TA for studying the development options for economic cooperation between the PRC and Mongolia in eastern parts of the Inner Mongolia Autonomous Region, PRC, and Mongolia. Subsequently, ADB approved four more regional TA projects and one small-scale TA to expand

²⁴ Projects in the transport sector accounted for 22% of ADB's total lending to Mongolia (21.8%). It was the largest share among all sectors that ADB supported during the study period.

²⁵ ADB. 2006. *Medium-Term Strategy II 2006–2008*. Manila. The strategy states that subsectors in group III (that includes civil aviation) may at best have limited demand for ADB services, and ADB's performance has been patchy in these subsectors. The strategy proposed that operations in these subsectors be gradually concluded.

its assistance for this sector. In 2006, ADB approved its first loan for a customs modernization project. Appendix 5 provides details of the current portfolio.

66. Trends in the Sector Lending Program. Transport sector development has been considered crucial to all operational strategies since ADB commenced operations in Mongolia. Up to 1995, the interventions were aimed at supporting and accelerating the transition process—subsequent loan projects had a broader focus on economic growth, poverty reduction, and regional integration. ADB's country strategy and program after 1995 identified roads as strategically important for ADB assistance, in view of ADB's overarching poverty reduction concern and its mandate to foster regional cooperation. The underlying rationale was Mongolia's landlocked geography, its reliance on Russia and the PRC for access to larger markets, and the need for domestic market integration. Consequently, ADB's support was to be directed primarily to operations that had demonstrable links to regional integration and agriculture and rural development. An added consideration was Mongolia's participation in the CAREC program, with its focus on trade and investment and transit trade issues. Issues of trade development were, therefore, to receive greater attention than basic transport infrastructure development. Appendix 4 provides an analysis of the change in promotion of trade facilitation within ADB's evolving strategies.

67. Trends in Technical Assistance. In the transport sector, policy and institutional reform have been a consistent focus of the six advisory TA projects, even after the first phase of the transition period. Project preparatory TA projects addressed Mongolia's internal and external isolation. In the civil aviation subsector during the initial years of the first phase, project preparatory TA projects focused on restoring basic connectivity. In the subsequent years, the focus was on projects that were expected to enhance trade with neighboring countries and to promote regional integration.

68. In the trade facilitation sector, the earlier TA projects provided a foundation for entry into the sector. This was further strengthened with the focus on customs procedures. TA 6058 was effective in providing several useful recommendations mainly aimed at improving customs clearances. It had limited outputs for trade facilitation, which is admittedly a wider subject. ADB attempted to review the trade policy through a small-scale TA,²⁶ which has had limited success.

C. Factors Affecting Implementation

69. Implementation of ADB's road projects has generally proceeded satisfactorily. Two factors stand out as common across the projects. First, although the two completed projects were delayed to some extent, it could be attributed to the fact that the road subsector received assistance only from the former Soviet Union, and so international contractors from ADB developing member countries had no experience of Mongolian conditions. This made ADB's first intervention in the road subsector challenging. Timely mobilization of equipment and supply of construction materials from ADB developing member countries was a major source of difficulty for the civil works contractor; and extreme winter conditions, limiting the construction season to only 6 months, made even a minor delay in the contractor's mobilization schedule critical. Second, although the projects were completed without any cost overruns, they have been affected by the capacity and knowledge constraints faced by the public sector in implementing the project and the lack of adequate private sector participation.

70. In the trade facilitation sector, various multilateral organizations (ADB, UNESCAP, and TRACECA) have initiated separate programs. While there is an overlap in the nature of the TA

²⁶ ADB. 2002. *Technical Assistance to Mongolia on Trade Policy Review*. Manila (TA 3934-MON, for \$150,000, approved on 30 September).

initiated by the separate activities, there is a risk of increasing the administrative load on the governments to manage these initiatives. It is crucial for the driving organizations to harmonize their efforts to reduce the administrative costs, as well as to ensure that these initiatives produce complementary outputs. Second, there has been insufficient harmonization among international aid agencies working in the trade facilitation sector in Mongolia. For example, although the German Agency for Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit [GTZ]) has been working on trade policy advice with the Ministry of Industry and Trade, there is little interaction with ADB, which has carried out a review of the trade policy.

D. Constraints to Scaling-Up the Assistance

71. Across the sector, ADB's assistance and its objective to spur future growth face three main hurdles. First, the capacity within the Government to plan and implement projects is limited because of insufficient human resources and technical expertise. Although consultants have been used to bridge the gap, the knowledge has not been retained in the institution. Second, Mongolia is categorized by ADB as a low-income country, eligible for Asian Development Fund loans and grants. Since there is a ceiling on the amount of funding from the Asian Development Fund, ADB's ability to fund larger projects is constrained. Average funding by ADB for transport sector projects has been less than \$30 million for a project loan. With the increase in the size of the network, the funding requirements are increasing. Also, Mongolia's debt repayment capacity also needs to be monitored. ADB needs to balance both sides—demand for larger funding and debt repayment capacity. Finally, because of the low demand for infrastructure services, projects are likely to have low economic returns initially. There is a potential for some of these projects to improve their returns in the future—with growth of tourism, mining, and export industries. ADB will need to select projects carefully with a view to ensuring reasonable returns. Box 5 highlights the above three points. In the past, entry into the railways subsector was constrained by the fact that MTZ is 50% owned by the Government of Russia, which is a non-ADB member country. The recent change in the legislative framework²⁷ could open up new funding opportunities for ADB.

Box 5: Constraints to ADB's Assistance in Mongolia

1. Institutional constraints—capacity within the Government to implement projects and sustain them, including overlapping responsibilities within the public sector.
2. ADB categorization of Mongolia as a low-income country and limited ADB resources.
3. Likelihood for low economic returns given low domestic demand.

ADB = Asian Development Bank.
Source: Operations Evaluation Mission.

IV. EVALUATION OF THE ASIAN DEVELOPMENT BANK ASSISTANCE

A. Assessment of the Asian Development Bank's Sector Assistance Program (Bottom-Up Assessment)

72. **Transport.** The overall rating of ADB's program in the transport sector of Mongolia was "successful." The program was considered relevant, effective, and efficient, and its sustainability likely. The assessment was based on the sector strategies and the way the strategies were implemented through loan and TA projects. The assessment covered five loan and 12 TA projects (see Appendix 5 for a description of the portfolio). The loan projects included four

²⁷ In July 2007, the Government endorsed the Railway Law and is now in the process of establishing a 100% state-owned MTZ Company. The new company will be responsible for (i) administration of railway infrastructure investment including foreign-funded projects, (ii) railway transportation, and (iii) leasing of assets to MTZ.

completed projects and one ongoing project. The ongoing project was evaluated based on quality-at-entry indicators culled from reports and recommendations of the President and available project administration indicators. The assessment of the ongoing project is tentative. A summary assessment of the portfolio is presented in Table 5. Appendix 6 provides the evaluation matrix on which these ratings are based.

Table 5: Performance Rating of ADB Assistance to the Transport Sector

Item	Aggregate Amount (\$ million)	Weight (% of total)	Relevance (scale of 0–3)	Effectiveness (scale of 0–6)	Efficiency (scale of 0–3)	Sustainability (scale of 0–6)	Impact (scale of 0–6)	Overall Rating	Description
Loan	147	67	3	4	3	5	4	19	Successful
TA	6	33	3	5	3	4	4	19	Successful
Overall Bottom-Up Sector Rating			3	5	3	5	4	19	Successful

ADB = Asian Development Bank, TA = technical assistance.

Source: ADB. 2006. *Guidelines for the Preparation of Country Assistance Program Evaluation Reports*. Manila. Available: <http://www.adb.org/Documents/Guidelines/Country-Assistance-Program/default.asp>

73. **Trade Facilitation.** Taking into account the early stages of ADB's portfolio in Mongolia, only the relevance of the ongoing loan project can be rated. Since five TA projects have been completed, these have been rated based on their relevance, effectiveness, efficiency, sustainability, and impact. It is still too early to assess ADB's loan assistance; this should be carried out at the next SAPE exercise. The overall rating of ADB's program in the trade facilitation sector was "successful."

1. Relevance of ADB's Operations

74. **Transport.** Relevance was assessed based on consistency with the needs of the country and the Government's development plans, and on the harmonization with other development partners. ADB's assistance to Mongolia's transport sector was assessed "relevant," bordering on "highly relevant." Loan and TA projects have responded to critical sector needs and have addressed physical, institutional, and policy constraints. ADB's choices were particularly relevant to the transition process of Mongolia. The preparation of a road master plan TA²⁸ provided ADB with a platform for aid agency coordination and for entry into the roads subsector. Because the focus was more on the development of the roads subsector and not so much on the sustainability, the road master plan did not provide sufficient direction for maintenance priorities. Sustainability issues have revolved around the construction of low-cost roads and on the need to achieve an appropriate balance between resource allocations for road maintenance and construction.²⁹ On the other hand, ADB's assistance for improvement of the Ulaanbaatar–Altanbulag road was justified since it established an efficient road network linking the key economic centers of Ulaanbaatar, Darhan, and Erdenet, and further to Altanbulag on the Russian border.

75. The assistance to the civil aviation subsector remains relevant to the Government's development strategy. Air transport is an extremely important mode for long-distance transport in Mongolia and fundamental to opening up the economy to new markets, such as tourism.

²⁸ ADB. 1992. *Technical Assistance to Mongolia for Road Master Plan and Feasibility Study*. Manila (TA 1820-MON, for \$600,000, approved on 23 December).

²⁹ The World Bank observed that the master plan "did not address routine maintenance, did not adopt an incremental approach to investment, and overlooked low-cost solutions" (see footnote 15 for source).

76. The coordination and complementary fit with other development partners, especially the World Bank, were adequate. In addition to policy initiatives, the World Bank had provided assistance in rehabilitating the country's transport fleet and routine road maintenance, which complemented the RDP. Correspondingly, the Japanese aid in the early 1990s included TA for exploring alternative road construction technologies and supply of construction equipment. Synergies continue along these lines with ADB, World Bank, and the Japanese Government adopting geographical distribution of their areas of operation within Mongolia.

77. **Trade Facilitation.** Taking into account the needs of the country and the Government's development plans, ADB's assistance for the trade facilitation sector is highly relevant. The loans and TA projects have been designed appropriately to respond to the main constraint relating to customs clearances. There is a need for a more integrated approach between transport and trade facilitation assistance, however, to ensure synergies can be achieved in developing border infrastructure, integrating transport and trade facilitation strategies and rolling plans, developing transport corridors with an eye on trade potential, etc. Harmonization among the aid agencies needs to be strengthened. The presence of competing trade corridor development initiatives should not increase the administrative costs in an environment where capacity is a major constraint. Overall, the sector is rated "highly relevant," taking into consideration the needs of the country and the potential for ADB to add value.

2. Effectiveness in Achieving Outcomes

78. **Transport.** Effectiveness was assessed based on how successful the sector assistance program has been in contributing to the achievement of the intended outcomes in support of the developing member country's sector development goals and objectives. The assistance program in the transport sector was assessed "effective."³⁰ The expected outcome in the first two road projects was reduction in user costs by improving the pavement conditions on Mongolia's north-south transport artery. Subsequent road projects were aimed more broadly at improved accessibility and regional connectivity, as well as social and economic benefits to the poor. The two completed loan projects have been broadly effective individually in delivering the expected outcomes. The RDP (footnote 3) was effective in reducing travel times, improving travel comfort levels, and reducing vehicle operating costs. The Second Roads Development Project provided similar benefits. Appendix 5 summarizes the main outputs and outcomes of ADB-funded projects.

79. ADB's assistance has been effective in terms of creating awareness of the new construction techniques and the use of better project management. The completed projects have witnessed a distinct growth in the traffic, and current estimates indicate a rate of growth in traffic higher than that estimated at appraisal on the first RDP. The Second Roads Development Project had a lower-than-expected growth in traffic and the forecast had to be lowered (Table 6).

³⁰ Effectiveness refers to how successful the strategy and assistance programs have been in contributing to the achievement of outputs and outcomes in support of the developing member country's development goals and objectives at the macroeconomic sector and thematic levels (see footnote 4 for sources).

Table 6: Traffic Growth on the Completed Projects

Project	Appraisal	Project Completion	Operations Evaluation
Roads Development Project (Loan 1364)	During the 1995 appraisal, traffic was forecast to grow at 5.6% per annum for heavy vehicles and 6.6% per annum for light vehicles.	During the 2001 PCR review, the actual traffic volume during 1997–2000 showed growth of 12–14% per annum. Traffic was forecast to grow at 7.1% for the first 10 years, and at 5.5% in the following period.	In the 2007 PPER, the traffic was found to have grown at 12.8% over the last 7 years and is forecast to grow by on average 8.7% over the rest of the investment period.
Second Roads Development Project (Loan 1700)	During the 1999 appraisal, traffic was forecast to grow at 18.1% per annum from 2004 and 11.3% per annum from 2014.	During the 2007 PCR review, the actual traffic in 2004 grew by 7.6% per annum. Traffic was forecast to grow at a lower rate of 6.6% from 2014.	Since the PCR was done in 2007, there was no separate evaluation report prepared for this project.

PCR = project completion report, PPER = project performance evaluation report.

Source: Operations Evaluation Mission based on data from the Asian Development Bank management information system.

80. The increase in traffic has had consequences on road safety, which deteriorated immediately after project completion. Currently, the intensity of accidents in terms of fatalities in Mongolia is among the highest on the RDP road.

81. TA performance in the roads subsector has been a mixed. While the policy components were broadly effective in ensuring the creation of new legislation, the cost recovery component was less effective in improving the functioning of the road fund. The TA projects assisted MoRTT in drafting the Road Act, Road Fund Law, and Road Transport Act, in addition to preparing (i) a program of network level traffic surveys, (ii) guidelines to the economic analysis of engineering projects, and (iii) a human resource development plan. The institutional components were effective in restructuring the Department of Roads and in training the staff, but this was not sustained because of the changes in the structure of MoRTT and staff turnover. Two TA projects for institutional and policy support to the road subsector³¹ have fallen short of delivering expected outcomes effectively. Strengthening of the road fund was envisioned as a means of generating adequate resources for meeting the needs of the road subsector, including ensuring adequate outlays for road maintenance. However, the road fund expenditures do not match the revenues—the allocation for maintenance is much less as compared to the funds collected from road users. Effectiveness of the road fund continues to remain a key issue. Overall, the impact of the TA projects on maintenance funding has been low. The recent TA for the preparation of a national transport strategy³² has yet to deliver a satisfactory outcome. The TA completion report rated it “partly successful” since it could not deliver the results efficiently and economically. This is validated by the SAPE. In this regard, better progress in the strategic process could have been achieved if the strategy development exercise had been completed as scheduled and had been more effective in finalizing the strategy document.

³¹ TA 2380 (footnote 15); and ADB. 1999. *Technical Assistance to Mongolia for the Policy Support in the Road Sector*. Manila (TA 3268-MON, for \$670,000, approved on 30 September).

³² TA 4471-MON (footnote 20).

82. In the civil aviation subsector, ADB assistance enabled an improvement in the air safety and an upgrading of the civil aviation practices to international standards, thereby setting the enabling environment for attracting new traffic. Physical developments expected from the projects were all achieved, as were intangible outcomes of organizational improvement and attitudinal change in the aviation subsector. The institutional strengthening components of both projects and the attached TA projects brought about a stronger service provision and safety regulatory capacity within the sector.

83. **Trade Facilitation.** The TA projects in this sector were found to be generally useful by both the Government of Mongolia and that of the PRC. The earlier TA projects provided realistic and independent studies on the developing regional economic cooperation; however, they did not translate into subsequent projects. One particular TA (footnote 26) was found to be ineffective, since it did not add any value to the ongoing assistance program. The completed TA on customs modernization was effective in achieving the targeted outcomes, in addition to setting up a foundation for subsequent project assistance. Overall, ADB assistance in the trade facilitation sector was rated “effective.”

3. Efficiency

84. **Transport.** Efficiency was assessed by the extent to which ADB's resources have been used optimally. This includes the degree to which the direct net economic benefits of ADB's assistance have reached the targeted beneficiaries. Efficiency is measured using the economic internal rate of return (EIRR) of each project and aggregating them across the sector. Overall, the transport sector assistance program was assessed "highly efficient." The first road project rehabilitated an existing road (footnote 3), while the second one involved constructing a new road.³³ Notwithstanding relatively low traffic volumes, the projects' EIRRs, the key indicator for project efficiency, were close to 18% and were thus bordering on a highly efficient rating. The satisfactory economic viability was confirmed by reevaluations through two project completion reports and one project performance evaluation report.³⁴ Although the actual cost savings expected in terms of vehicle operating costs were less than those forecast at appraisal, the higher-than-expected actual traffic provided the offset to ensure high EIRRs.

85. While the efficiency of the first two projects was not in doubt, the efficiency of the third road project³⁵ depends on the level of traffic that can build up. This project focused on regional integration and trade improvement involving substantial new construction. The traffic on the third road project between Choir and Zamyn Uud depends to a large extent on Mongolia's ability to develop cross-border agreements with the PRC for trade movements, as well as tripartite transit agreement with the PRC and Russia for transit movement. Given the uncertainty surrounding these agreements, the traffic on the Choir–Zamyn Uud road could be slow to increase. However, it is expected that the improved road could divert traffic from the railways subsector, thus enabling better economic returns for the third road project.

³³ ADB. 1999. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Technical Assistance Grant to Mongolia for the Second Roads Development Project*. Manila (Loan 1700-MON[SF], for \$25 million, approved on 30 September).

³⁴ ADB. 2001. *Project Completion Report on the Roads Development Project in Mongolia*. Manila; ADB. 2007. *Project Completion Report on the Second Roads Development Project in Mongolia*. Manila; and ADB. 2007. *Project Performance Evaluation Report on the Roads Development Project in Mongolia*. Manila. The results of the project performance evaluation report for this project indicate a higher EIRR because of higher-than-forecast traffic growth on the project road.

³⁵ ADB. 2004. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Technical Assistance Grant to Mongolia for the Regional Road Development Project*. Manila (Loan 2087-MON[SF], for \$37.1 million, approved on 22 July).

86. In civil aviation, ADB's projects³⁶ met the economic efficiency criteria, with EIRRs above 12%, in addition to being financially viable. Processing and implementation were generally efficient in respect of the performance of ADB, the executing agency, and the consultants. All civil works were completed satisfactorily.

87. **Trade Facilitation.** The trade facilitation TA projects were generally completed on time and within the available budget. TA 6058 for Trade Facilitation and Customs Cooperation Program, however, was extended by almost 3 years because of delays in completing the activities associated with a broadened trade facilitation program.³⁷ Despite this, the TA managed to lay a good foundation for Mongolia's entry into the CAREC program. Overall, the sector assistance was rated "efficient."

4. Sustainability

88. **Transport.** Sustainability is assessed based on the likelihood that the results and benefits of ADB assistance will be sustained in the future—a reflection of the adequacy of the fiscal, political-economy, and environmental dimensions. The SAPE rating covers sustainability of financial, institutional, and operation and maintenance parameters. Overall, the sustainability of the outcomes derived from ADB's sector assistance is considered "likely." Risks and future challenges lie in reliable funding for maintenance, maintenance management, and skills and institutional capacity. In Mongolia, a road fund has been in existence since 1991. A methodology for setting road user charges for different vehicle types commensurate with the costs they impose on the road network was developed under the ADB road subsector TA (footnote 15). However, this approach has not yet been accepted. Changes were made as to sources of revenue in 1995 with an additional fuel tax introduced. Since then, there have been major increases in the overall funding of the road subsector from other sources. Allocations from the government budget, through an account separate from the road fund but considered part of the road fund, have increased significantly in recent years. In addition, foreign loans and grants have been provided to Mongolia for capital works. Nonetheless, adequate maintenance funding for roads remains an issue. In 2006, the Government's allocation from its central budget funded less than 50% of the maintenance requirement.

89. Given budgetary constraints, the demand for government counterpart funds for externally-funded infrastructure projects competes with and crowds out maintenance funds. Externally-funded projects may exacerbate funding scarcity for maintenance, when funds are diverted for construction of new roads. Another risk is the inadequate institutional capacity for carrying out maintenance of lower level roads by local authorities. Given the long-term nature of capacity development, TA sequencing and duration must be harmonized with the requisites for change, management of change, reform processes, and follow-up actions. TA projects would have had more lasting effects if they had been more focused and sequenced with longer implementation schedules. Several TA initiatives had not made much progress beyond their analyses and recommendations.

³⁶ ADB. 2002. *Project Performance Audit Report on Ulaanbaatar Airport and National Air Navigation Development Projects*. Manila.

³⁷ ADB. 2002. *Report and Recommendation of the President to the Board of Directors on Proposed Loans and Technical Assistance Grants to Kyrgyz Republic and Republic of Tajikistan and a Regional Technical Assistance Grant for the Regional Trade Facilitation and Customs Cooperation Program*. Manila (Loans 1926-KGZ[SF] and 1927-TAJ[SF], for \$15 million and \$10 million, respectively, approved on 29 October).

90. Aside from the above issues, the evaluation noted that the MoRTT is making efforts to improve the size of the road fund, although this will require stronger ownership and commitment from the Government, especially the Ministry of Finance. ADB's first road project linking Ulaanbaatar with Altanbulag was found to be in fair condition. With 7 years of operations after project completion, a reasonably long period has elapsed and the current condition of the road is seen in a long-term perspective to be sustainable. However, there remains a concern relating to the adequacy of policies and regulatory conditions; and this rating of sustainability could deteriorate if there is a slowdown or reversal in the current process.

91. The civil aviation projects are also likely to be sustainable, as there is market demand for both the airport services and air navigation systems. The Civil Aviation Authority of Mongolia has developed technical and management capability to adequately maintain the infrastructure and services to reasonable standards. The Government's commitment to the projects has been strong. The projects can achieve basic cost recovery, and in the case of the air navigation project, can generate significant net earnings.

92. **Trade Facilitation.** It would be early to predict the sustainability of trade facilitation TA projects, since the projects are currently ongoing, and the outputs and outcomes are increasingly part of the broader CAREC program. Taking into consideration the commitment from the Government and ADB to sustain this program, it is expected that ADB's assistance to trade facilitation initiatives in Mongolia is "likely to be sustainable."

5. Impact

93. **Transport.** Impact is assessed based on the degree of contribution to long-term changes in development conditions. It covers both the socioeconomic impact at the ground level and the institutional and reforms changes at the sector level. The contribution of ADB's assistance was "substantial" based on a four-category scale of high, substantial, modest, and negligible. ADB assistance helped develop the country's primary north-south road corridor between Russia and the PRC, facilitate sector policy reforms, strengthen the institutional capacity of sector agencies, and prepare the road master plan. The 2002 country assistance program evaluation concluded that ADB's road projects helped increase traffic counts and expand economic activities in the project areas.³⁸ The first road project (footnote 3) for rehabilitating a section (Ulaanbaatar-Altanbulag) of the north-south road corridor was completed in 2001 and is rated successful (footnote 34). This project contributed to the improvement in livelihoods in the impact area, but was insufficient to enable the development of the free trade zone in Altanbulag. It would be difficult to derive impacts directly attributable to the RDP, since there are several other national and local factors that have also contributed to the changes in the road influence area. However, the improved access to markets was perceived to be an important trigger for migration to the project-impact area. It has also enabled a diversification in alternative livelihoods such as shop keeping, hospitality, livestock trading, etc., with an increased participation of women in some of these activities. The second road project rehabilitated the Nalayh-Choyr section of the north-south corridor and contributed to the development of mines in the Gobi desert and other parts of southern Mongolia. Other local impacts were similar to those seen in the first project. Both the completed projects showed no negative impact on the environment. Since the RDP entailed broadly using the existing road alignment, there was no significant resettlement arising.

94. Although the outcomes of the advisory TA projects in terms of policy changes and institutional development were clearly visible, the actual development impacts are yet to be

³⁸ ADB. 2002. *Country Assistance Program Evaluation in Mongolia*. Manila.

seen. These actions require longer periods to manifest and to bear results. The impacts on the institutions have been generally positive in terms of creating awareness of the new construction techniques, as well as better project management.

95. Overall, the impact of ADB's assistance has been positive. To assess the actual value addition by ADB, the project performance evaluation report for the RDP (footnote 3) analyzed the hypothesis of what could have happened in the event that ADB had not provided funds for the sector. Assuming funding constraints within the Government, the access to rural areas could have been difficult and in extreme weather conditions impossible. Using a control area, a random sampling survey indicated that in the absence of an all-weather road, the typical problems faced by people in those areas that have not been connected by ADB, Government, or other aid agency funding are (i) absence of shops and variety of consumer products, (ii) relatively lower household incomes, (iii) inability to sell farm products, (iv) low farm gate prices, (v) unreliable and infrequent transport services, and (vi) insufficient employment opportunities.

96. **Trade Facilitation.** It would be early to predict the impact of trade facilitation TA projects, since the policy changes and institution development measures have yet to crystallize. Similar to the transport sector, these activities require longer periods to bear results and depend heavily on the commitment and ownership of the Government as well as the success of its dialogue with other countries. Taking into consideration the current commitment from the Government and the progress of the CAREC program, it is expected that ADB's assistance to trade facilitation initiatives in Mongolia is likely to demonstrate "modest to substantial impact" on long-term changes in development conditions in the country.

B. Assessment of Strategic Performance (Top-Down Assessment)

97. **Transport.** Appendix 4 provides a summary of the evolution of ADB's strategy for the transport sector. ADB's top-down performance is assessed to be "successful" based on the three parameters of sector positioning, contribution to development results, and ADB performance (Table 7).

Table 7: Summary Rating of Strategic Performance—Transport
(scale of 0–8)

Item	Score	Rating
Sector Positioning	6	Substantial
Contribution to Development Results	6	Substantial
Asian Development Bank's Performance	6	Substantial
Total Score	18	Successful

Source: Operations Evaluation Mission.

98. **Trade Facilitation.** Appendix 4 provides a summary of the evolution of ADB's strategy for trade facilitation. ADB's top-down performance is assessed to be successful based on the three parameters of sector positioning, contribution to development results, and ADB performance (Table 8).

Table 8: Summary Rating of Strategic Performance—Trade Facilitation
(scale of 0–8)

Item	Score	Rating
Sector Positioning	6	Substantial
Contribution to Development Results	6	Substantial
Asian Development Bank's Performance	6	Substantial
Total Score	18	Successful

Source: Operations Evaluation Mission.

1. Sector Positioning

99. **Transport.** This section analyzes whether ADB's choice of transport sector initiatives was appropriate, given the evolving country requirements and priorities. Positioning was assessed using the following criteria: (i) sufficient basis for the strategy, (ii) Government's absorptive capacity and ownership, (iii) ADB's comparative advantage and relationship with other development partners, (iv) long-term continuity of policy initiatives, and (v) monitoring mechanisms.

100. The positioning of ADB's program in the transport sector of Mongolia is rated "satisfactory." For the purpose of this assessment, the evaluation period was divided into two phases, the first one from 1991 to 2000, which was governed by the 1991 interim country operational strategy and the 1995 country operational strategy. This was the core transition period marked by crisis management, macroeconomic stabilization, selected structural reforms, and building of market-oriented capacities. While there are still pending reform issues in the transport sector, the second period has been one of gradual normalization, during which a development agenda had to be addressed that included network expansion, regional integration, and other transport-related issues, such as traffic safety. Since 1993, ADB has approved five loans for road and aviation subsector development with an overall amount of \$147.1 million. In addition, ADB provided 12 TA projects, of which six were for the preparation of loan projects and six in support of capacity building, including institutional strengthening and policy support for the road and aviation subsectors. The elements that make up the positioning assessment are discussed below.

101. **Sufficient Basis for ADB's Sector Strategies.** This was rated "satisfactory," bordering on "highly satisfactory." Throughout the evaluation period, ADB has been the lead external agency in the transport sector, providing it with the critical mass to influence the direction of sector development. Among the early TA projects was support to the preparation of the Medium-Term Road Master Plan, which was used by the Government as a platform to coordinate external assistance to the sector. ADB TA projects covered all strategic areas for policy dialogue and capacity building during the critical first phase of the evaluation period. This position was only slightly weakened during the second phase, when the World Bank assumed a stronger role in the infrastructure sector in general and in the road subsector in particular.³⁹

102. **Government's Absorptive Capacity and Ownership.** This was rated "satisfactory." During the first phase of the period under study, the Government's absorptive capacity was limited because experience with market-oriented principles and procedures had yet to be acquired. Nonetheless, the expected outcomes of loan and TA projects were achieved largely on time. Policy-related TA projects, notably the policy support to the road subsector TA (footnotes 15 and 31) and the TA for

³⁹ The World Bank formulated an overall strategy for infrastructure that included a strategy for transport. The Government also requested the World Bank to assist in the preparation of a new road master plan.

the preparation of a national transport strategy (footnote 20) could have benefited from a greater sense of ownership from the Government. In the first case, the cost recovery policy, crucial for the sustainability of roads, was not fully implemented. In the second case, the Government did not endorse the strategy study prepared by consultants, although it had been updated several times after its first submission in 2005. While this reflects the performance of the consultants to carry out appropriate consultations as part of the TA implementation, it also reflects the poor quality of TA design.

103. ADB's Comparative Advantage and Relationship with Other Aid Agencies. This was rated "satisfactory." ADB has been the biggest contributor among the development partners active in Mongolia's transport sector. This has given prominence to ADB in the overall assistance program to the sector. ADB has been coordinating closely with other development partners and has played an active role in coordinating the activities of the development partners.⁴⁰ While ADB was the lead agency in the sector, a number of factors undermined its ability to play this role effectively. The lead role was exercised only sporadically, initially because of the lack of a permanent presence until 2001. Even after the creation of the resident mission, there has been a general reliance on sector knowledge from ADB staff based in Manila since the resident mission did not have any technical expertise. The existence of a resident mission did provide ADB a greater potential for exercising the role of lead agency in terms of effective coordination and cooperation, notably in the civil aviation subsector.⁴¹

104. Focus, Selectivity, and Synergies. This is rated "highly satisfactory." The sector strategies had a focus on the chosen objectives and the selection of loan projects. TA projects were responsive to the needs and there were adequate complementarities among the projects for capacity development in the sector.

105. Long-Term Continuity. This was rated satisfactory. ADB's interventions in the transport sector have been change agents and have laid the foundation for a more stable economic and social environment. There are a number of policy issues that need to be addressed to ensure sustainability of transport infrastructure. In view of ADB's continuing policy dialogue, the issues are being addressed and the outlook for long-term continuity is largely positive. The sustainability of institutional resources has been affected by staff turnover and changes in institutional structure. With its low population, Mongolia faces several difficulties in obtaining suitably qualified people to work in the MoRTT. The existing experienced staff is more familiar with the procedures of a planned economy, and the relatively younger staff tend to gain experience and move on to the private sector. The Government has recognized this and is making efforts to offer incentives such as overseas training and better remuneration to retain and attract staff. There is a need to ensure that staff training on international best practices. Assistance from ADB and other aid agencies has been effective in this respect, but it needs to be continued and scaled up.

106. Monitoring Mechanisms. This was rated "satisfactory." Under the conditions of the transition process, assessing risks and making assumptions about the achievement of expected outcomes was difficult. Also, during the study period, ADB's project performance monitoring system was evolving. Nonetheless, project and TA management responded constructively to emerging risks. The portfolio faced potential problems from disbursement delays because of insufficient capacity in project management offices. A quarterly portfolio review mechanism implemented by the Mongolia Resident Mission has proven effective in taking timely actions to address implementation

⁴⁰ Major development partners in Mongolia's road subsector included PRC, Germany, Japan, Republic of Korea, Kuwait, and World Bank.

⁴¹ Cooperation with the European Bank for Reconstruction and Development is a case in point.

problems. The portfolio performance indicators for transport sector projects were generally positive, with one project rated “at risk.” At the institutional level, lack of adequate planning for capital investment, as well as maintenance, remains a weak area within the current institutional structure. Centralized planning for network expansion and maintenance, controlled by the Ministry of Finance, continues and shows no signs of change. Thus, while ADB’s assistance has had a favorable impact at the project-execution level, there is room for improvement at the policy level, that is, in terms of decentralization of capital investment and maintenance planning of roads.

107. **Trade Facilitation.** This section analyzes whether ADB’s choice of trade facilitation sector initiatives was appropriate, given the evolving country requirements and priorities. Positioning was assessed using the following criteria: (i) sufficient basis for the strategy, (ii) Government’s absorptive capacity and ownership, and (iii) ADB’s comparative advantage and relationship with other development partners. Since the portfolio is in early stage of implementation, it is not possible to evaluate the long-term continuity of policy initiatives and the monitoring mechanisms, both of which are in the process of being established in the trade facilitation sector.

108. **Sufficient Basis for ADB’s Sector Strategies.** This was rated satisfactory, taking into account the needs of the country. As a landlocked country, Mongolia must develop trade in a sustained manner. ADB’s assistance has been targeted appropriately, but needs to be expanded to include other areas of trade facilitation. The focus on customs modernization is appropriate, but needs to be complemented by assistance for physical infrastructure (border infrastructure, transshipment facilities, warehouses, etc.), institutional development (regulatory structures and capacity development, and cross-border agreements).

109. **Government’s Absorptive Capacity and Ownership.** This was rated “satisfactory.” The Government’s capacity continues to be limited because of the lack of resources available in the country. However, it is envisioned that the recent programs will strengthen the institutions. Being part of initiatives such as CAREC could contribute to the building of this capacity.

110. **ADB’s Comparative Advantage and Relationship with Other Development Partners.** This was rated “less satisfactory.” ADB has contributed to developing cooperation between the PRC and Mongolia. However, ADB has limitations in terms of promoting regional cooperation and trade facilitation with Russia. This limits the overall strength of ADB’s assistance to Mongolia. Moreover, there is insufficient harmonization among international aid agencies working in Mongolia. For example, although the German GTZ has been working on trade policy advice with the Ministry of Industry and Trade, there is little interaction with ADB, which has carried out a review of the trade policy. This needs to be addressed by both the Government and by the international aid agencies.

2. Contribution to Development Results

111. **Transport.** Contribution to development results is assessed based on the extent to which ADB’s overall sector program contributed to the achievement of the development results at a national level. There is an indirect link between development of transport infrastructure and poverty reduction. ADB’s strategy in the transport sector in Mongolia has focused on developing the roads and civil aviation subsectors. This was sound in terms of developing the enabling environment for economic development in local and regional contexts. Several studies, including the socioeconomic study conducted as part of this SAPE, show that better transport

infrastructure is positively correlated with pro-poor growth and development.⁴² ADB's contributions have been significant in institutional strengthening, enabling the development of the private sector, increased awareness of international best practices, and addressing related issues. In the roads subsector, the correlation between road improvement and economic development is stronger at the local level and could be expanded at the national level with better facilitation of trade. Overall, the indirect but positive contribution of ADB's transport sector strategy to the development results is seen as "substantial."

112. The 2003 Economic Growth Support and Poverty Reduction Strategy Paper (footnote 7) had stated that road rehabilitation and maintenance activities will contribute to poverty reduction by providing employment to local people. In addition, the paper expected that improvement in road and transportation services will bring herders closer to the market and deliver social and public services to the population. The socioeconomic studies carried out for the two completed road projects funded by ADB indicated that they did contribute to improvement in livelihoods in the impact area. However, improved access to markets was perceived as an important trigger for migration to the project impact area. It has also enabled diversification in alternative livelihoods (such as shop keeping, hospitality, livestock trading, etc.), with increased participation of women in some of these activities. Similarly, the completed World Bank-funded project roads witnessed improved accessibility of social services and markets to the rural poor in the outlying regions.⁴³

113. **Trade Facilitation.** The evidence from Mongolia suggests that trade facilitation or the lack of it affects prices of tradable goods. The need for efficient trade movement is crucial to restrict increase in prices of essential commodities, especially in a landlocked country. Other factors affected by trade include incentives for investment and the economy's vulnerability to external shocks. While there is no direct evidence linking these factors with poverty and other development indicators, the indirect linkage remains strong. Overall, the indirect but positive contribution of ADB's trade facilitation initiatives to the development results is seen as "substantial."

3. ADB's Performance in the Sector

114. **Transport.** ADB's performance in the transport sector is "satisfactory" based on its (i) responsiveness to sector challenges, particularly those posed by the transition process and as to which challenges were and were not accepted; (ii) client orientation, exercising the role ADB was expected to play by the client and other stakeholders, and the cost involved for the client to interact with ADB; (iii) meeting declared objectives and policies; and (iv) portfolio performance. Overall, ADB has responded well to evolving challenges and priority needs of the transport sector. Specifically,

- (i) ADB's focus on roads, the aviation subsector, and the major themes underlying the operational programs was responsive. ADB is much appreciated for its role during the early crisis years when assistance was provided in a timely fashion. This has earned ADB a reputation as a reliable development partner.
- (ii) ADB has been sensitive to perceived needs of the client. This meant striking a balance between ADB's own policies and the priorities of the client. This has, at

⁴² Various literature—Cook, C., T. Duncan, S. Jitsuchon, A. Sharma, and W. Guobao. 2005. *Assessing the Impact of Transport and Energy Infrastructure on Poverty Reduction*. Manila: ADB. Another publication that discusses the positive correlation between incremental government expenditure and poverty is Fan, S., P. Hazell, and S. Thorat. 1999. *Linkages between Government Spending, Growth, and Poverty in Rural India*. Research Report 110. Washington, D.C. Available: <http://www.ifpri.org>

⁴³ World Bank. 2002. *Implementation Completion Report (IDA 26150) on a credit in the amount of \$30 million equivalent to the Mongolia for a Transport Rehabilitation Project*. Washington, DC.

times, been at the expense of ADB's own sector policies. Policy dialogue with the client on critical issues should have persevered, with the help of capacity building combined with conditions. This would have reduced the agenda of pending reform items.

- (iii) ADB could have used its early dominant role in the transport sector more effectively. There remains room to improve the quality and effectiveness of the policy dialogue with the Government on the coordination among aid agencies. Maintaining a consistent policy dialogue and assuming and playing a lead role require continuous interaction with the client and professional authority. The use of the Mongolia Resident Mission could be improved by raising the quality of communication and interaction with the Government. Its delayed preparation of a national transport strategy and the continued impasse over the content of the capital investment plans indicate the areas where ADB could improve its performance.
- (iv) The overall performance of ADB's portfolio in the civil aviation subsector has been "satisfactory," bordering on "highly satisfactory." The roads subsector performance has been "satisfactory" with room for improvement in terms of value addition beyond mere project financing. Although implementation of the projects had been delayed due to initial teething problems, ADB and the Government made efforts in improving the performance of the portfolio.

115. ADB's assistance in the roads subsector has been heavily focused on preparing draft policies with capacity development outcomes as a side item. This was appropriate in the 1990s, given the need for assisting the transition process toward a market-oriented economy. Ongoing projects have built-in components on trade facilitation, road safety, and community development. While these are correct additions to project designs, ADB needs to fine-tune its approach by bringing in more focus on the capacity development elements.

116. Recent discussions with ADB staff and the Government indicate that there is a greater need for ADB to add value to its products rather than limiting itself to the provision of funds. ADB's performance could be improved with innovative approaches in capacity development, socially inclusive project components, better stakeholder participation, and specific governance activities. Taking into account the difficulties faced in constructing roads in the Mongolian climate, ADB could explore alternative technology solutions. ADB could transfer lessons from other countries where the road fund is managed in a more transparent and efficient manner. The high cost of road construction (para. 15) could be addressed more proactively by ADB bringing in best practices from other countries. Other areas where ADB could add value are:

- (i) reduction in environmental pollution caused by leaded fuel used by vehicles in Mongolia;
- (ii) improvement in road safety;
- (iii) improvement in vehicle importation, registration, and licensing regulations; and
- (iv) low-cost, less polluting urban transport services.

117. **Trade Facilitation.** ADB's portfolio in the trade facilitation sector is relatively new. The entry into the sector has been smooth. The CAREC initiative is an appropriate forum for further initiatives in this sector. However, ADB could have improved its presence in the sector further by taking advantage of its experience in the transport sector. There appears to be limited coordination within ADB (para. 77), as well as with the donor community to use the experiences from the roads subsector to develop an integrated project. On the Government side, ADB needs to enable better coordination between the various ministries. The NCTTF is a step in the right direction, but it needs to be supported by ADB in a sustained manner. Overall, the initial

performance of ADB has been satisfactory, but there is a long way to go before ADB can demonstrate the distinct impact of its assistance.

C. Overall Assessment

118. **Transport.** Combining the bottom-up and top-down assessment, ADB's overall performance in the transport sector is rated "successful" (Table 9).⁴⁴

Table 9: Overall Rating of Performance Assessment at the Transport Sector Level

Item	Score	Rating
ADB Assistance	18	Successful
Strategic Performance	18	Successful
Total Score	36	Successful

ADB = Asian Development Bank.

Notes:

1. Aggregate top-down sector performance is considered highly successful if the total score is equal to or greater than 20; successful if the total score is between 16 and 19; partly successful if the total score is between 11 and 15; and unsuccessful if the total score is 10 or less.
2. Overall performance assessment is considered highly successful if the total score is equal to or greater than 40; successful if the total score is between 30 and 39; partly successful if the total score is between 20 and 29; and unsuccessful if the total score is 10 or less.

Source: Operations Evaluation Mission.

119. **Trade Facilitation.** The overall trade facilitation sector was rated successful. This rating will need to be revised after the completion of the ongoing project and TA projects and when the outputs of the assistance are more clearly visible.

120. The lack of coordination within ADB as well as within the Government between the transport and trade facilitation departments has reduced the synergies between these two linked sectors. Although overall both the sectors are rated successful, there is potential for them to develop joint programs that will increase the effectiveness of ADB's assistance. For example, assistance for development of cross-border facilities at Zamyn Uud could be designed in a manner that brings together cross-border clearances as well as physical infrastructure in the form of transshipment facilities and transport.

V. LESSONS AND CHALLENGES FOR FUTURE ASSISTANCE

A. Identified Lessons

121. Lessons are identified at both the policy and project levels. The transport and trade facilitation sectors have witnessed a slowdown in terms of policy development, as well as translation of policy into action. Policy-level lessons that emanate from this observation are given below:

- (i) Mongolia has gone through a major period of transition. The economy has changed significantly in the last 3 years fueled by mining production (paras. 10–11). Although the actual demand in terms of road traffic is low, the high growth in the mining subsector is likely to create fresh demands on transport infrastructure.

⁴⁴ Sector performance (overall) is assessed as highly successful if the score is equal to or greater than 40, successful if the score is between 30 and 39, partly successful if the score is between 20 and 29, and unsuccessful if the score is 19 or less.

In other words, although there could be lessons learned from the past that imply low demand levels and hence low investment levels, the Government and ADB need to incorporate the upsides relating to potential future economic growth in their respective strategies.

- (ii) Experience from transport projects suggests the need for consistent policy dialogue to draft and implement a transport sector policy, reliable road maintenance regime, and institutional strengthening policy. Policy initiatives can take a long time to come to fruition, and such initiatives require sustained support and long-term assistance.
- (iii) The Government ownership for making and sustaining institutional changes in the country requires champions and coherent support from within the country. An important lesson for ADB is that assuming a lead coordinating role in the sector requires adequate underpinning by resources, both financial and human, to ensure strategic direction and efficient reform process.
- (iv) Political will for policy development and its associated reform agenda are requisites for which ADB assistance cannot serve as a substitute for effective aid agency coordination. With the increasing donor activity, the Government needs to develop an in-house capacity to ensure better coordination among aid agencies working in Mongolia, as well as among the aid agencies and Government departments. Regular workshops and meetings need to be organized by a centrally located department within the Government.

122. ADB has contributed to transport sector development effectively through its financial support. It could further add value by providing assistance for policy developments, strategy formulation, and innovative approaches in project design. Project-level lessons include:

- (i) **Regional cooperation.** From a strategic perspective, ADB had appropriately chosen the north–south corridor for improvement, taking into account the benefits of regional cooperation and trade with Russia and the PRC. ADB needs to continue along these lines and expand its project selection criteria to include regional benefits in addition to the national benefits. Trade facilitation efforts need to include not only the development of bilateral trade but also the increase in international trade. Initiatives such as the CAREC are a positive step in this direction.
- (ii) **Value addition through innovations in project design and TA projects.** Funding of road projects has been ADB’s comparative assistance advantage in the past. However, there is need for ADB to add better value for Mongolia by bringing in innovative practices and ideas for improving the road network and institutional capacity. As highlighted in para. 116, innovative approaches could be adopted in several areas, and lessons from other countries could be used with appropriate cognizance to the local context.

B. Recommendations for Future Assistance

123. **Transport.** ADB should continue to be involved in the transport and trade facilitation sectors. The scope and degree of that involvement will be determined by the priorities of the Government and the results of the country partnership strategy process. In the transport sector, the future challenges revolve around three nuclei—policy development, financial sustainability, and institutional development.

124. Facing development challenges can offer opportunities for efficiency gains. In the case of Mongolia, they would accrue primarily from consistent policies that keep overall economic and

social concerns in view. Efficiency in the operations of transport providers and users and in the movement of traffic on the infrastructure will be the key to achieving the Government's ambitious goals for the transport sector. A coherent set of policies that provide the mechanism for an optimal allocation of scarce resources is still missing. The formulation and timely adoption of a national transport policy is, therefore, the most critical challenge to decision makers in the transport sector. ADB needs to work closely with the Government in finalizing this policy, ensuring adequate consultation, especially in areas such as institutional strengthening.

125. There is no denying the fact that sustainability of transport infrastructure is crucial in the Mongolian context. The Government has recognized the need for improving the sustainability of transport infrastructure. However, there is a long way to go in terms of developing maintenance regimes based on needs, achieving a balanced distribution of public funds, identifying alternative financing sources including the private sector, and improving cost recovery. These are the opportunities and areas where development partners can add value in terms of policy dialogue and transfer of knowledge from other countries. ADB needs to work closely with the Government in enabling these changes and encourage harmonization and partnership with the other development partners.

126. To cope with the challenges ahead, Mongolia's transport sector requires increased institutional capacities on a sustainable basis. The efforts by ADB at capacity development have had short-term results that have not always been sustainable. This issue does not have a clear solution. It requires a dialogue between the Government and its development partners to evolve a long-term solution. ADB needs to work closely with the Government in identifying and implementing institutional changes to streamline operational responsibilities among the various Government departments, as well as to strengthen the in-house human resources capabilities.

127. The main challenge that cuts across all the above three issues relates to the question of what should be the level of investment given the limited demand in terms of traffic. ADB needs to continue to work closely with the Government to adopt a stepped approach that assesses the development and economic needs of the country and balances these against the available funding from public and private sources. This stepped approach comprises developing rolling investment plans of 4–5 year durations. Investment projects included in these plans will need to be supported by specific feasibility studies that predict the potential development and economic impacts and build a case for their funding.

128. **Trade Facilitation.** Constraints to trade require a combination of physical and nonphysical interventions. The physical constraints could be addressed through incremental funding from ADB and other development partners. Resolution of nonphysical constraints will require a broader action plan. Appendix 2 identifies a set of constraints that ADB needs to address as part of its trade facilitation efforts. It is noted that the Government has been making efforts to improve these conditions, and there remains sufficient room for ADB to provide value addition. These constraints are:

(i) **Physical infrastructure constraints**

- (a) **Rail infrastructure.** Lack of refurbishment and replacement of the rolling stock has resulted in a serious shortage of locomotives and wagons to ply between Zamyn Uud and Ulaanbaatar. In addition, the rail infrastructure at the dry port in Zamyn Uud needs to be rehabilitated to ensure efficiency in transshipment.
- (b) **Storage infrastructure.** Zamyn Uud has no warehousing facilities. The trucks cannot offload their freight. This causes delays in terms of truck availability and high costs in terms of demurrages.

- (c) **Road infrastructure.** Currently, there is no paved road from Choir to Zamyn Uud, making it impossible for heavy trucks to ply from Ulaanbaatar to Zamyn Uud. It is expected that the ADB-funded Regional Road Development Project will provide this link by 2009.
- (d) **Port infrastructure at Tianjin in the PRC.** The growing congestion in the port and the inordinately long customs clearances from the PRC authorities required for Mongolian goods has been causing long delays.
- (ii) **Nonphysical constraints.** There are several constraints as identified in this document. To start with, there needs to be a harmonization of customs and vehicle movements between the PRC and Mongolia. ADB needs to facilitate better bilateral dialogue between the PRC and Mongolia. Along these lines, product inspection standards is another area that could benefit from ADB's role as a catalyst to initiate discussion among the two countries.

129. ADB should continue to be involved in the transport and trade facilitation sectors in Mongolia. Following are key recommendations for future assistance formulation.

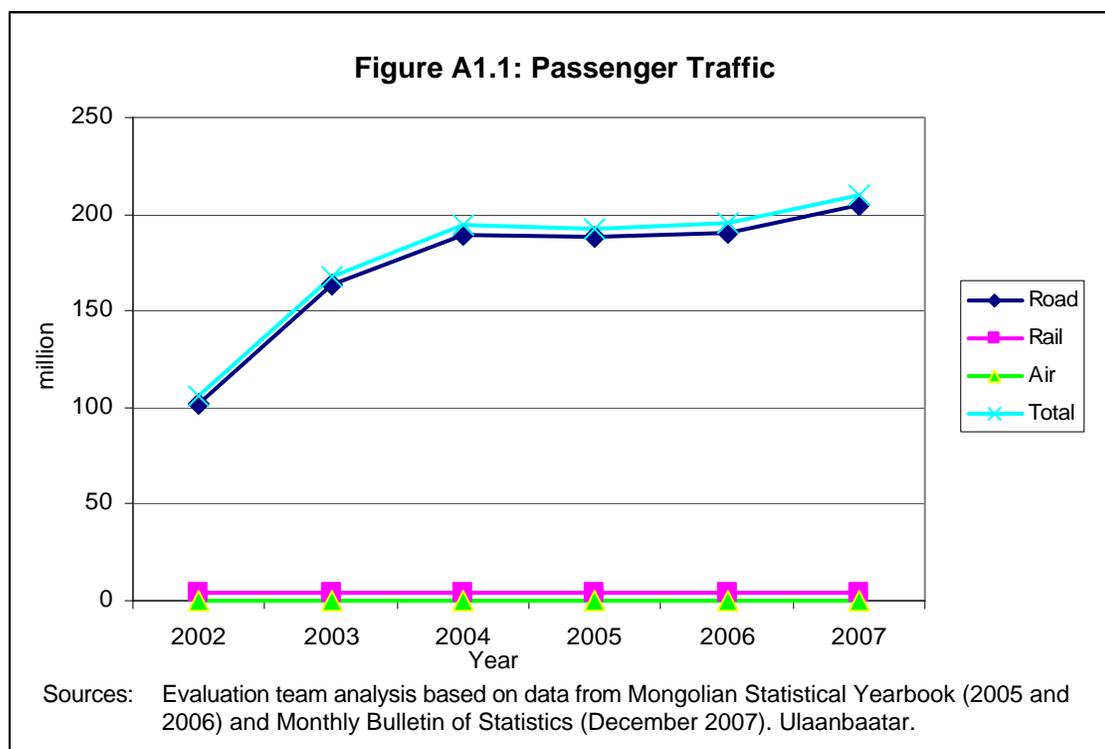
Recommendation	Responsibility	Timing
A. Recommendations for the Transport Sector		
<p>1. Provide advice on policy development in areas such as institutional strengthening. The formulation and timely adoption of a national transport policy is a major challenge for the Government and international aid agencies in the short term.</p>	East Asia Department	Work on drafting the policy to be initiated by 2009. Draft policy to be submitted for Government approval by 2010.
<p>2. Assist in strengthening of road maintenance regime. Sustainability of transport infrastructure is crucial in the Mongolian context. The Government needs to develop its road maintenance regimes based on needs, achieve a balanced distribution of public funds, identify alternative financing sources including the private sector, and improve cost recovery. ADB should support the Government in enabling these changes.</p>	East Asia Department	The implementation plan that goes with the Mongolia country partnership strategy (CPS) should identify a plan with monitoring indicators.
<p>3. Strengthen inter-agency coordination. ADB needs to work closely with the Government in identifying and implementing institutional changes to streamline operational responsibilities among the various Government departments, as well as to strengthen the in-house human resources capabilities.</p>	East Asia Department	The Mongolia CPS to address this in its implementation plan.
<p>4. Investment strategy for transport sector. The main challenge that cuts across all the above three recommendations relates to the question of what should be the level of investment, given the limited demand in terms of traffic. ADB needs to continue to work closely with the Government to adopt a stepped approach that assesses the development and economic needs of the country and balances these against the available funding from public and private sources. This stepped approach comprises developing rolling investment plans of 4–5 year durations, supported by specific feasibility studies.</p>	East Asia Department	The Mongolia CPS to address this in its implementation plan.

Recommendation	Responsibility	Timing
B. Recommendations for the Trade Facilitation Sector		
<p>5. Improve transport and trade logistics. Constraints to trade require a combination of physical and nonphysical interventions. The physical constraints that should be addressed by ADB in conjunction with the other development partners relate to rail infrastructure to facilitate trade movements, storage infrastructure, road infrastructure linking the border points with economic centers, and port infrastructure at Tianjin in the People's Republic of China.</p>	East Asia Department	The Mongolia CPS to address this in its implementation plan.
<p>6. Facilitate dialogue for customs harmonization and border formalities. Resolution of nonphysical constraints needs a broader action plan. To start with, ADB needs to facilitate dialogue between Mongolia and its neighbors, such as the People's Republic of China in the context of regional cooperation and integration initiative relating to the harmonization of the customs and product inspection standards, as well as the movement of vehicles across the border.</p>	East Asia Department	The implementation plan that goes with the Mongolia CPS should identify a plan with monitoring indicators.

TRANSPORT TRAFFIC

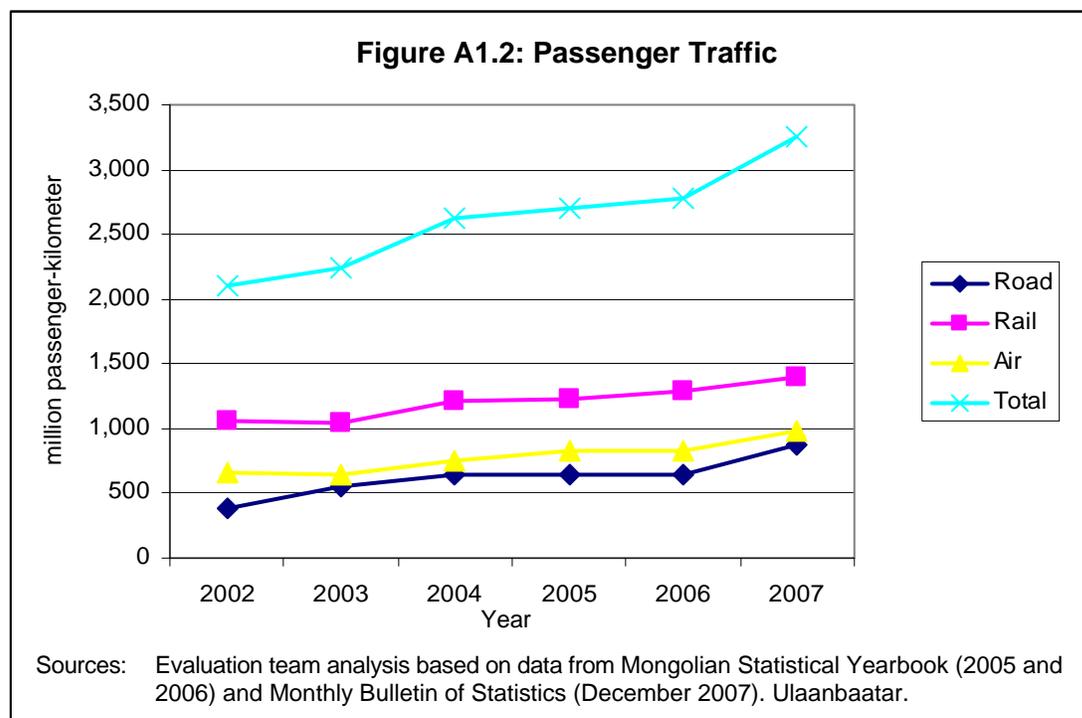
1. Road transport dominated the transport sector in Mongolia during the period prior to the 1990s—it carried about 98% of passengers and 71% of freight tons. In 2005, although the passenger share remains the same, roads have lost out to rail in terms of freight handled, which has decreased to 32%. The process of transition to a market economy in Mongolia has increased the demand for transport infrastructure and services. Although roads are a significant mode of transport in Mongolia, they have not taken away the railways' share of the market. This is contrary to developments in other countries, where road haulage has over time captured most of the traditional railway freight traffic. The reason for the reverse development in Mongolia lies in the type of freight, which is largely bulk carried over long distance, for which railways have a significant cost advantage. In addition, the inadequate road network coverage in the country has not enabled the growth of freight traffic by road.

2. **Passenger Traffic.** Total passenger traffic almost doubled over the last 5 years, with the highest growth rates achieved from 2002 to 2004. The volume of passenger traffic is currently slightly below 200 million passengers per year. The high growth resulted from increases in the number of passengers traveling on roads, whereas the number of passengers using the railway or air transport stagnated at 4 million and 0.3 million, respectively (Figure A1.1).



3. Figure A1.2 shows the shares of the transport modes in total passenger traffic, when traffic is measured in terms of passenger kilometers. Rail passenger traffic accounts for almost half of the total traffic output, followed by air and road transport. The main determinant for traffic output is, in addition to the numbers of passengers, the average distance traveled by them. With regard to roads, the average distance was stable over time at 3.4 km, reflecting the predominance of urban motorized passenger traffic. Railway passengers traveled on average slightly below 300 km, while the average distance traveled by air passengers was about

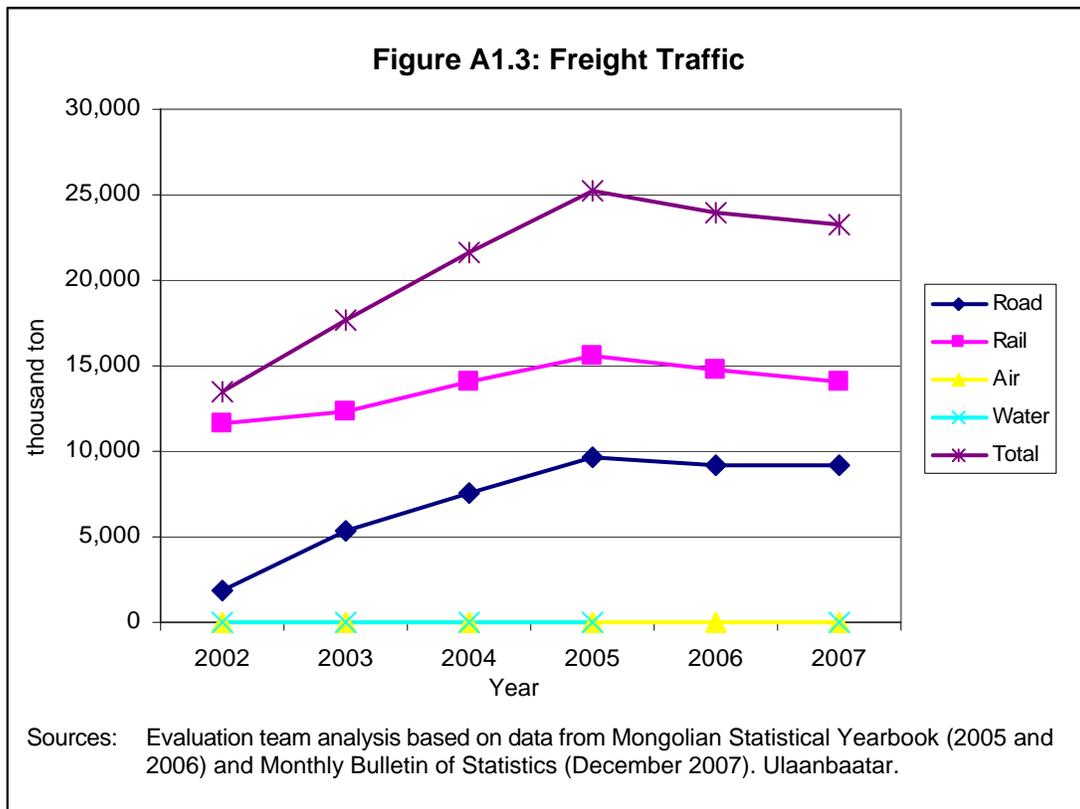
2,600 km.¹ Overall, the modal split of passenger traffic is consistent with the comparative advantages of the modes. This applies in particular to railway traffic. As in several other countries, Mongolia witnessed short-distance passenger traffic as a major factor contributing to financial losses of the railways.



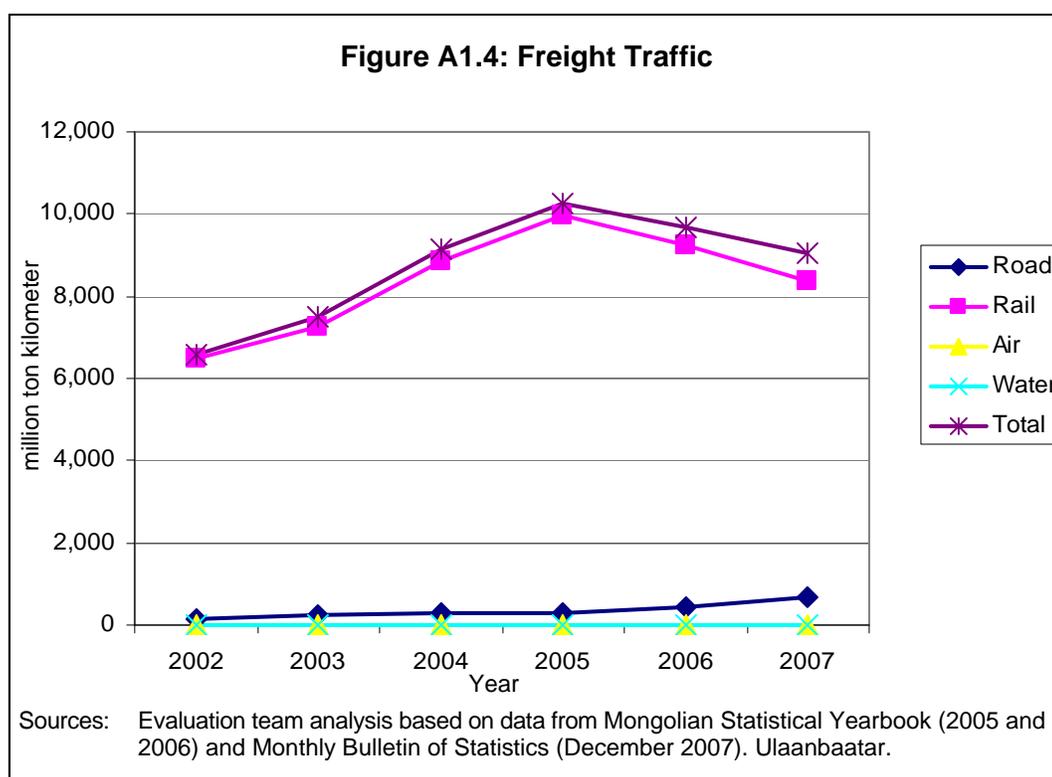
4. **Freight Traffic.** From 2002 to 2005, freight traffic almost doubled, rising from 13.5 million tons to 25.2 million tons. Traffic consists of bulk commodities, mainly coal and copper carried by the railways, and increasingly general freight forwarded on trucks. In terms of freight volume (tons), rail transport is the dominant mode, although its share in total tonnage (ton-km) carried has gradually gone down from 86% in 2002 to 62% in 2005 (Figure A1.3).² The rise of the share of road transport could be attributed to a growth of imports of consumer goods from both the Russian Federation (Russia) and the People's Republic of China (PRC) that are carried mainly by road haulers. However, new mining developments in the Gobi desert have also contributed to increased road freight traffic. The zinc ore mine at Tumurtiin Ovoo, near Baruun Urt in southeast Mongolia, is a case in point. Zinc ore is transshipped by road to the rail head at Sainshand, from where it is exported by rail to the PRC. Inland water transport and domestic aviation do not play a significant role in freight transport. Figure A1.3 shows the development of freight volumes from 2002 to 2007.

¹ The average lead of air passengers includes international air travel, which explains the relatively long average distance.

² Although the rail transport has been losing its share nationally, trade with Russia continues to be mainly by rail. While the quantum of trade has grown since the improvement of the road linking Ulaanbaatar with the Russian border, the share of trade by road vis-à-vis rail has remained constant. This could be attributed to the fact that the trade with Russia is mainly in the form of bulk cargo that can be carried more efficiently and economically by rail rather than road.



5. In terms of total freight traffic output (tons), freight transport by rail is dominant, having a share above 90%. Figure A1.4 indicates that this share has been stable over the last 5 years. The dominant market share of the railway is a result of long-distance transit traffic between Russia and the PRC that uses the Mongolian railway system. The main commodities include crude petroleum, which is carried by rail through Mongolia from Russia to refineries in north-central PRC. There is also an increasing volume of timber transshipped from Russia to the PRC via Mongolia. Transit traffic accounts for about 60% of the total traffic output generated by the Mongolian railway. Crude oil and timber alone account for 90% of the transit traffic, the balance being made up of machinery and general goods shipped from the PRC to Russia. Because transit shipments use the full length of the Mongolian railway line (1,810 km), the average distance of freight traffic is relatively long at 640 km, compared to road haulage of 40 km.



6. The Mongolian Railway (MTZ) is operating container block trains³ between Brest in Belarus and Ulaanbaatar. The service runs every 2 weeks, carrying some 50 containers a month to Mongolia. In March 2005, a trial was made of a container service between Hohhot, the PRC, and Frankfurt via MTZ. The congestion at the PRC ports and the shortage of wagons of the PRC railways have favored the introduction of block trains to Europe. It remains to be seen whether MTZ will be able to sustain operations between the PRC and Europe. There are several constraints that could, in the long run, adversely affect the competitiveness of MTZ in relation to seaports and ocean shipping. The latter has cost advantage, as well as physical advantage over railway, despite longer routes and slower operating speeds. The constraints faced by the railway include the differences in the gauge of rail track along the route, which exists between the PRC and the Mongolian rail systems, and other cross-border restrictions along the Eurasian transport corridor.

7. Overall, railway is likely to remain the dominant mode of freight traffic within Mongolia. The share of roads in the overall transport sector could increase, especially for shorter distances, carrying break-bulk cargo, and carrying passengers. With the increase in economic activity, especially in mining, the role of railway will continue to remain crucial for longer distances carrying bulk cargo.

³ Under the block train system, container flows, instead of piecemeal booking of containers, are consolidated into one train serving one destination. The system ensures timely and cost-efficient delivery. It requires, however, assured availability of sizeable cargo volumes.

TRADE FACILITATION IN MONGOLIA

A. Background

1. Mongolia is a landlocked country, with the Russian Federation (Russia) to the north and surrounded by the People's Republic of China (PRC) on all the other sides. In addition, Mongolia is a sparsely populated country. These two factors present several development constraints for the country in terms of trade and economic relations with the rest of the world. Economic literature indicates that, typically, landlocked countries witness slower economic growth than others.¹ Traditionally, Russia has been Mongolia's closest trading partner. With the growth in the PRC's economy, Mongolia has gradually expanded its trade relations, making the PRC its largest trading partner.

2. Access to markets other than Russia and the PRC has been constrained by (i) dependence on the PRC railways; (ii) customs regulations and lack of harmonization with the neighbors; (iii) restrictions on carriage of goods such as animal products, which has been Mongolia's largest export commodity; and (iv) restrictions on movement of vehicles. These constraints have increased the trade costs for Mongolia, and it remains to be seen how these costs can be reduced.

3. Table A2.1 shows the main destinations of Mongolia's exports. The share of the PRC within the major destinations of exports has been increasing steadily, indicating the growing importance of the PRC in Mongolia's trade. Copper concentrate, gold and other minerals, cashmere and cashmere products, and textiles account for 90% of Mongolia's exports.² The growth in exports resulted in their share of gross domestic product increasing from 21% in 1990 to 57.3% in 2006.

Table A2.1: Destination of Mongolia's Exports
(\$ million)

Country	2000	%	2002	%	2004	%	2006	%
People's Republic of China	274.3	51.2	220.5	42.1	413.9	47.6	1,046.5	68.4
United States	130.2	24.3	165.7	31.6	156.3	18.0	119.0	7.8
Canada			0.6	0.0	14.7	1.7	171.2	11.2
United Kingdom	17.5	3.3	17.5	3.3	137.4	15.8	38.6	2.5
Republic of Korea	12.2	2.3	22.5	4.3	9.7	1.1	21.4	1.4
Russian Federation	45.1	8.4	48.0	9.2	20.6	2.4	45.1	3.0
Italy	14.5	2.7	8.6	1.6	17.3	2.0	40.4	2.6
Australia	12.5	2.3	17.7	3.4	0.1	0.0	0.4	0.0
Japan	8.1	1.5	6.3	1.2	33.4	3.8	7.1	0.5
Others	21.4	4.0	16.6	3.2	66.3	7.6	39.1	2.6
Total	535.8	100.0	524.0	100.0	869.7	100.0	1,528.8	100.0

Sources: National Statistics Office of Mongolia (2007) and Customs General Administration of Mongolia (2007).

4. Table A2.2 shows the main sources of Mongolia's imports. Although Russia continues to dominate Mongolia's imports, the PRC's share has been increasing steadily, although not at the cost of reducing Russia's share. Being a landlocked country, Mongolia depends on imports of a variety of commodities—petroleum, machinery, foodstuffs, vegetable products, etc. While

¹ Faye, Michael, John W. McArthur, Jeffrey D. Sachs, and Thomas Snow. 2004. The Challenges Facing Landlocked Developing Countries. *Journal of Human Development*, Vol. 5, No. 1.

² OED consultant's estimates based on data provided by the customs General Administration of Mongolia.

Russia supplies the majority of petroleum products, the PRC supplies a majority of foodstuffs and consumer goods.

Table A2.2: Main Sources of Mongolia's Imports
(\$ million)

Country	2000	%	2002	%	2004	%	2006	%
Russia	206.2	33.6	237.6	34.4	341.9	33.5	547.8	36.9
People's Republic of China	109.5	17.8	139.5	20.2	257.2	25.2	415.0	27.9
Japan	73.3	11.9	42.8	6.2	75.0	7.3	97.6	6.6
Republic of Korea,	55.6	9.1	86.3	12.5	61.2	6.0	82.5	5.5
Kazakstan	6.8	1.1	7.2	1.0	26.3	2.6	49.8	3.3
United States	28.4	4.6	23.4	3.4	46.5	4.5	44.1	3.0
Germany	29.7	4.8	30.4	4.4	33.5	3.3	43.0	2.9
Ukraine	1.1	0.2	3.4	0.5	14.8	1.4	22.8	1.5
Singapore	10.6	1.7	11.2	1.6	15.0	1.5	20.7	1.4
Others	93.3	15.2	108.9	15.8	149.7	14.7	162.3	10.9
Total	614.5	100.0	690.7	100.0	1,021.1	100.0	1,485.6	100.0

Source: Customs General Administration of Mongolia (2007).

5. Tables A2.1 and A2.2 indicate that Russia and the PRC remain the dominating partners of Mongolia's trade. Although trade with other countries has remained unchanged, it forms a significant part of the overall trade. This requires Mongolia to not only facilitate trade with its neighbors, but also to develop better transit arrangements for trade with other countries.

6. Mongolia became a member of the World Trade Organization in January 1997 and has been working to develop its multilateral trading system. The growth in the national economy combined with the increasing accession to World Trade Organization guidelines has had an impact on its trade turnover, which increased by more than three times in 9 years from \$919.8 million in 1997 to \$3,028.4 million in 2006 (Table A2.3). With the increase in mining exports, the trade surplus has improved over the last few years.

Table A2.3: Total Trade Turnover Dynamics
(\$ million)

Item	1997	2000	2001	2002	2003	2004	2005	2006
Total trade turnover	919.8	1,080.6	1,159.2	1,214.7	1,416.9	1,890.8	2,249.2	3,028.4
Merchandise exports	451.5	466.1	521.5	524.0	615.9	869.7	1,064.9	1,542.8
Merchandise imports	468.3	614.5	637.7	690.7	801.0	1,021.1	1,184.3	1,485.6
Balance	(16.8)	(148.4)	(116.2)	(166.7)	(185.1)	(151.4)	(119.4)	57.1

Sources: National Statistics Office of Mongolia (2007) and Customs General Administration of Mongolia (2007).

7. Recent steps toward reducing trade costs have focused more on customs regulations, that is, reducing delays on the international border by using better screening equipment and reducing bureaucracy. However, it remains to be seen how these steps have helped in increasing the efficiency of trade and what more is required to reduce trade costs.

8. Mongolia is part of the Central Asia Regional Economic Cooperation (CAREC), which has been undertaking a dialogue to (i) harmonize and simplify cross-border transport procedures and documentation, (ii) harmonize transport regulations, (iii) develop and improve regional and international transport corridors, (iv) restructure and modernize railways, and (v) improve transport sector funding and management. The link between transport improvement

and trade facilitation is strong, and this has been recognized by the CAREC members during their dialogue. In Mongolia, regional cooperation efforts in the transport sector have been in two main areas—the development of the north–south corridor and the development of the Western Regional Road Corridor. The first initiative was designed more as a national project, although trade facilitation was one of its long-term objectives.

9. Currently, there are several initiatives planned and ongoing in customs cooperation. The absence of specific cross-border agreements with Russia and the PRC for facilitating trade, however, continues to hamper the movement of goods across the border, in addition to creating a major constraint for Mongolian exports via the seaports of the PRC. Moreover, transit trade between Russia and the PRC across Mongolia is constrained by the lack of such bilateral and tripartite agreements.

B. Policy Setting

10. Mongolia has yet to adopt an integrated trade facilitation strategy or policy statement. Trade facilitation has typically been domiciled under the wider trade policy and infrastructure development policy of Mongolia. Trade facilitation strategy in Mongolia has evolved as a result of (i) medium-term policy documents—Development Concept of Mongolia (1996), Concept of Regional Development 2001–2020, Government Action Program 2004–2008 and sectoral master plans; and (ii) longer-term development policy documents: Millennium Development Goals Based National Development Strategy (2007).³

11. Mongolia's overall trade policy objectives, as formulated in the Action Program of the Government of Mongolia for 2004–2008, are to support economic growth through an active trade policy; promote the industrial, agricultural, and services sectors; and increase exports. The Action Program also aims to change Mongolia's export structure by diversifying export products and improving their competitiveness, and to work toward the establishment of free trade agreement with Russia, PRC, and United States.

12. The Ministry of Industry and Trade is the policy-making and regulatory body within the Government. It houses the Foreign Investment and Foreign Trade Agency, which is the main body facilitating trade in the country. Other regulatory bodies—the National Center of Standardization and Meteorology and the State Specialized Inspection Agency—monitor the quality of commodities. More specifically, in relation to trade and transport facilitation, the Government of Mongolia has established the National Committee for Trade and Transport Facilitation (NCTTF), consisting of representatives from respective ministries and agencies, as well as nongovernment organizations to develop and implement a national trade and transport policy. The NCTTF has proposed a combined trade and transport policy document named "Transit Mongolia" to develop an integrated policy to ensure synergies between the two sectors.

13. **International Conventions.** Mongolia has adopted several procedures linked with the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures as well as with the World Customs Organization. It is a signatory of Transport Internationalaux Routiers (TIR), an international customs transit system implemented in the Central Asian region facilitating cross-border movements by providing a single procedure from the point of departure to the point of destination, with an international guarantee chain. This system is being used by 55 countries in addition to Mongolia. Using a system of carnets (merchandise passports), it

³ Government of Mongolia, 2007. *Millennium Development Goals-Based Comprehensive National Development Strategy of Mongolia*. Ulaanbaatar (draft).

ensures (i) controlled access to the system for the international and national issuing and guaranteeing organizations, as well as the customs and national transport operators qualifying for the TIR procedures; and (ii) effectiveness of the guarantee system to protect revenue collection in the event of noncompliance to the customs procedures.⁴ Mongolia is currently at the initial stages of using this system, but the use of carnets is expected to increase with the PRC's accession to the TIR Convention and completion of the central north–south corridor road linking the PRC with Russia across Mongolia. Until recently, the TIR system had limited use for Mongolia since the PRC had not acceded to the TIR convention. To reduce its problems as a landlocked country, Mongolia signed the 1965 Treaty of the Convention on Transit Trade of Landlocked States in New York. However, this convention has limited benefits to Mongolia since the PRC has not acceded to it yet.

14. **Bilateral Agreements.** Mongolia signed bilateral agreements with Russia and with the PRC in 1991 for transit trade; however, during the initial years, these agreements did not yield much in terms of transit trade. In 1998, transit trade was limited to about 1 rail wagon (55–60 tons) in a year. By 2005, this had increased to about 350,000–500,000 tons every year. In addition to the transit agreements, Mongolia signed a road transport agreement with the PRC in 1991 for vehicle movement. This agreement restricts Mongolian trucks from entering into the PRC, but enables Chinese trucks to drive up to the border town transshipment terminal. On the other hand, Mongolia's road transport agreement with Russia signed in 1996 enables both countries to ply their vehicles across the border. Mongolia is currently in the process of negotiating a trilateral agreement with the PRC and Russia to provide a legal framework for transit systems across the border to enable transport movements and to harmonize customs and administrative requirements.

C. International Initiatives for Regional Cooperation

1. Central Asia Regional Economic Cooperation

15. The CAREC program was initiated by the Asian Development Bank (ADB) in 1997 and currently includes eight countries in the Central Asian region—Afghanistan, Azerbaijan, PRC, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan. It has focused on infrastructure projects, especially transport and trade facilitation. The main criteria for identification of CAREC corridors have been (i) high current traffic volumes, (ii) prospect for economic and trade growth, (iii) capacity to increase connectivity between major population and economic centers, (iv) potential to mitigate delays, and (v) economic and financial sustainability in investing in corridor improvements.

16. More recently, under the CAREC program in Mongolia, ADB financed the project preparatory technical assistance for the Western Regional Road between the border of Xinjiang (Yarantai) and the Russian border (Ulaanbaishint). Other projects include road projects along various CAREC transport corridors. Although the CAREC initiative has gathered momentum in the other Central Asian republics, the impetus in terms of trade facilitation in Mongolia has been slow. The current customs and trade facilitation programs are targeted toward achieving a bilateral agreement with the PRC.

⁴ ADB. 2006. *TIR Customs Transit System Experiences and Initiatives of CAREC Participating Countries*. Manila.

2. Asian Highway Network

17. The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) initiated regional cooperation efforts focused on land transport linkages and services to promote development of international road transport. The intergovernmental agreement has been signed by 28 countries. The network intends to cover 140,000 kilometers (km) of highways in Asia. A total of \$26 billion has already been invested in the improvement and upgrading of the Asian Highway Network. The main criteria for identification of routes have been (i) capital to capital links; (ii) industrial and agricultural centers; (iii) sea, river, and air ports; (iv) container terminals and depots; and (v) tourism attractions.

18. Mongolia was included in the Asian Highway Network in 2001 when routes in northeast Asia were identified. The main routes cutting across Mongolia are the north–south road linking the PRC with Russia and the east–west road linking the eastern border with the western border.

3. Transport Corridor Europe-Caucasus-Asia

19. The European Commission's Transport Corridor Europe-Caucasus-Asia (TRACECA) initiative was started in 1993 with the aim of developing a new transport corridor from the Asia-Pacific region to destinations in Central Asia, the Caucasus, and Europe.⁵ Basically, it has been assisting the modernization of the physical and regulatory framework for transit along this modern version of the "Silk Route." In its expanded version, the TRACECA initiative aims to open and to enlarge markets of TRACECA countries and to connect them to the trans-European networks. Currently, new roads and railways are being built along the whole length of the TRACECA corridor. New bridges, ports, and other transport infrastructure are being constructed, accompanied by simultaneous rehabilitation of the existing roads and railways, as well as bridges and ports. Corresponding unified regulatory basis and tariff rules are being developed. Mongolia is currently on the periphery of the TRACECA network and has yet to be fully included in its transport routes.

20. It is noted that all three initiatives mentioned above have broadly similar goals. However, different organizations have been driving these initiatives. There have been interactions between the respective secretariats of ADB, UNESCAP, and TRACECA, as well as among the countries. Workshops and seminars funded by the driving organizations have been taking place frequently. There are common areas and themes of technical assistance funded by the separate initiatives. All three initiatives combine physical infrastructure development and trade facilitation. In several cases, the separate initiatives have identified the same roads under different corridors—for example, in Mongolia, the north–south road figures prominently in the CAREC program as Corridor 4b and under the Asian Highway Network as the AH3. This overlap has been constructive until date, and the active dialogue between ADB and UNESCAP has created appropriate synergies for the Government. However, this needs to be continued in a manner that does not result in additional burden for the Government in future.

D. Trade Corridors for Mongolia

21. Mongolia currently uses the Tianjin port in the PRC for access to the sea, as designated by the 1991 transport agreement between Mongolia and the PRC. However, the port is increasingly congested because of the increase in the PRC trade. Mongolian goods use a combination of rail and road–rail to access Tianjin. The distance from Ulaanbaatar to Tianjin is

⁵ TRACECA secretariat website (Available: <http://www.traceca-org.org>).

estimated at 1,700 km. In addition to the congestion in Tianjin, there are two main bottlenecks. First, Zamyn Uud on the PRC–Mongolia border has inadequate transshipment facilities. The current transshipment infrastructure has been designed for rail to rail transshipment only. However, there has been an increasing quantity of freight being sent from Tianjin and other parts of the PRC by road. This requires transshipment from road to rail in Zamyn Uud, since there is no direct road connection from Zamyn Uud to Ulaanbaatar. In the absence of adequate infrastructure at the border crossing, there are the inevitable delays causing demurrage costs. Second, the rail services in Mongolia have been facing severe shortages of rolling stock. As a result, there are limited rail services from Zamyn Uud to Ulaanbaatar. During the peak season of March–October 2007, an estimated 590 trucks were waiting for more than 10 days in Zamyn Uud’s transshipment area. During the off-peak season, this number is about 180 trucks. This increases the demurrage costs of the traders and freight forwarders. Another instance in late August 2007 related to a temporary moratorium by the PRC railways on shipments to and from Mongolia. This resulted in an estimated increase in price of cement by 32% within 1 week.⁶

22. Mongolia can use other ports in the region in Russia—Vladivostok, Nahodka, Vanino, and Vostochny, all on the Sea of Japan; Saint Petersburg on the Baltic Sea; and Novorossiysk on the Black Sea. However, Mongolian traders prefer to use Tianjin to reduce costs associated with demurrages, customs clearances, and transport.

23. Being a landlocked country, Mongolia is in the process of developing alternative routes for trade with Europe. Private sector firms have initiated railway services between Mongolia and Europe to develop an alternative to the sea route. Tuushin Company,⁷ a Mongolian freight forwarding firm, initiated the “Mongolian Vector” in conjunction with six organizations⁸ linking Hohhot in the PRC and Ulaanbaatar in Mongolia with Frankfurt in Germany. The “Friendship” service launched by the International Freight Forwarding Center of Mongolian Railways (MTZ) plies between Ulaanbaatar and Xinjiang in the PRC. However, there is an increasing need for developing multimodal transport routes to ensure faster and more efficient freight movement.

E. Trade Costs

24. **Transport Tariffs.** These tariffs are based on the distance and type of goods. Road transport tariffs are not yet systematized because of an absence of an all-weather road between Ulaanbaatar and Zamyn Uud. Freight forwarders typically negotiate a fare on a case-to-case basis. In 2007, the fare for transporting 60 tons of cement from Zamyn Uud to Ulaanbaatar, a distance of 708 km, was about \$700.⁹ This works out to a fare price of about \$1 per km. In comparison, a truck on the Korog–Osh road in Tajikistan–Kyrgyz Republic will charge a fare price of about \$0.27 per km.¹⁰ In the case of the PRC, the estimated fare price on the Tianjin to Erenhot route is about \$0.66 per km. The higher fare price on the Zamyn Uud to Ulaanbaatar route could be attributed to the poor quality of the road as well as the lack of adequate demand.

⁶ Operations Evaluation Department (OED) consultants’ estimate.

⁷ Tuushin initiated operations in March 2002 as a result of discussions during the Crete Conference for Euro-Asia transport corridors in 1994.

⁸ Railway authorities from Russia (Rikon), Belorussia (Belintrans), Hohhot, Poland, Czechoslovakia, and Germany participate in providing this service.

⁹ OED consultants’ estimate.

¹⁰ United Nations Special Program for Economies of Central Asia (UNSPECA.) 2007. Presentation on *Selection of Major Routes within the SPECA Region for Analysis Using the UNESCAP Time/Cost-Distance Methodology*. Tajikistan. Available: [http://www.unece.org/speca/pdf/ppt12/time cost.pdf](http://www.unece.org/speca/pdf/ppt12/time%20cost.pdf)

25. Rail tariffs have been systematized in Mongolia. The Ulaanbaatar Railways (UBTZ), a member of the Organization for Cooperation of Railways (OSJD),¹¹ uses two basic tariffs: ETT¹² and MTT¹³ to estimate the transportation costs. The members of the OSJD negotiate the tariffs annually based on projected volumes and types of freight expected to be carried by the respective rail system. The projects' volumes and types of freight are revised at the semiannual meetings, as well as on a case-to-case basis. According to the current classification in Mongolia, there are 16 types of goods, and selected transport tariffs for respective goods are available from UBTZ. Table A2.4 provides rail tariffs for selected goods. Although there had been a dip in the transport tariffs in 2003, the general trend has been rising prices.

Table A2.4: Transport Tariffs for Selected Import and Export Goods

Freight	2000		2003		2006	
	Volume Carried ('000 ton)	Tariff \$ per Wagon ^a	Volume Carried ('000 ton)	Tariff \$ per Wagon	Volume Carried ('000 ton)	Tariff \$ per Wagon
Export						
5th category: Copper	480	750	566	705	595	945
7th category: Flourspar and coking coal	196	331	264	373	350	786
9th category: Wool and cashmere	17	157	1	147	0 ^b	945
Total	693		831		945	
Import						
6th category: Petroleum	399	324	522	305	454	341
8th category: Machinery	32	143	56	141	80	199
10th category: Food	83	179	107	168	283	226
Total	514		685		817	

^a Wagon is a carrier used railway transport installed on the wheel and designed for transporting 60 tons of freight. There are two types of wagons used in Mongolia: closed and semi-open. Closed wagons are used for transportation of all types of products, and semi-open is used for transportation of coal and similar material.

^b Equivalent to 0.3 thousand tons.

Source: Operations Evaluation Department consultants' estimate based on data provided by the Ulaanbaatar Railways.

26. Based on a combination of perception survey and review of freight forwarders' records, Table A2.5 summarizes the transport costs for various destinations. Although the costs vary with distance, the cost by sea route is less expensive than by rail route from Ulaanbaatar to Bonn, Germany. However, for destinations within Russia, the transport costs are lower.¹⁴ This could be attributed to the delays and border clearances across Russia and Eastern Europe associated with transit traffic.

¹¹ *Organizatsii Sotrudnichsetva Jelejnix Dorog*. The OSJD organizes annual international conferences for a wide circle of professionals connected with transport logistics based on railway transport. It carries out conferences for the purpose of exchange of ideas, experience, and enhancement of efficiency of the railway transport activity, their interaction with freight forwarding companies that render quality transport services to client.

¹² *Edinii* Transport Tariff, which is translated as "Integrated Transport Tariff."

¹³ *Mejdunarodnii* Transport Tariff, which is translated as "International Transport Tariff."

¹⁴ Ulaanbaatar to Moscow is a distance of 6,266 km and costs \$1,165 (Table A2.5), about \$0.18 per km to transport a twenty foot equivalent unit of railway wagon load. However, Ulaanbaatar to Beijing is a distance of 1,561 km and costs \$1,050, about \$0.67 per km. Similarly, Ulaanbaatar to Bonn, Germany is an approximate distance of 6,451 km. This costs about \$0.64 per km.

Table A2.5: Transport Cost per Ton Equivalent Unit Container from Ulaanbaatar (\$)

Region	Destination	Time (days)		Transport Cost (\$ per TEU)		
		Minimum	Maximum	2000	2003	2006
Asia	Beijing by rail	7	11	920	1,000	1,050
	Erlan by rail	3	5	540	650	780
	Tianjin by rail	4	6	900	1,050	1,100
	Hong Kong by rail and sea	12	17	2,100	2,100	2,150
	Singapore by rail and sea	16	27	1,650	1,720	1,790
	Pusan (Korea) by rail and sea	10	18	1,050	1,150	1,150
	Yokohama (Japan) by rail and sea	12	21	1,550	1,600	1,640
	Penang (Malaysia) by rail and sea	15	31	1,950	1,950	1,950
Russian Federation	Moscow by rail	15	24	980	1,050	1,165
	Irkutsk by rail	9	14	680	750	870
	Ulaan-Ude by rail	7	7	480	550	650
European Union	Bonn, Germany, (via Tianjin) by rail and sea	40	58	3,000	3,080	3,100
	Bonn, Germany, (via Brest) by rail	25	34	3,850	4,000	4,100
	Sofia, Bulgaria, (via Tianjin) by rail and sea	40	51	2,980	3,150	3,150
	Varshava, Poland, (via Tianjin) by rail and sea	25	41	2,450	2,500	2,610
	Rotterdam, Holland, by rail and sea	30	45	2,798	2,857	2,930
	Genoa, Italy, by rail and sea	32	45	2,945	2,945	3,063
United States	Seattle by rail and sea	30	42	2,900	2,900	2,950
	Baltimore by rail and sea	35	55	3,100	3,200	3,350

TEU = twenty-foot equivalent unit.

Source: Operations Evaluation Department consultants' estimate based on data provided by freight forwarders in Ulaanbaatar.

27. To further analyze the potential impact of the transport costs on the Mongolian economy, a sample of commodities was chosen based on importance and value. Table A2.6 provides details of the commodities imported in 2007, forming about 36% of total imports. It provides the overall transport cost (or trade cost) for Mongolia. The figures indicate that about 10% of the trade value consists of transport costs. This implies an improvement in the efficiency of transport could produce macroeconomic benefits.

Table A2.6: Transport Cost of Selected Import Products

Item	Quantity ('000 ton)	Value (\$ million)	Transport Cost per Ton (\$)	Total Transport Cost (\$'000)
Product: Petroleum				
Russia	582.2	378.0	43.5	25,325.7
Kazakhstan	47.9	29.7	91.3	4,373.3
People's Republic of China	15.1	9.4	52.5	792.8
Product: Flour and Rice				
People's Republic of China	32.1	7.8	39.0	1,251.9
Russia	70.2	14.1	57.5	4,036.5
Kazakhstan	21.8	4.5	100.0	2,180.0
Product: Sugar				
China, People's Republic of	10.6	3.2	52.5	556.5
Korea, Republic of	1.7	0.6	57.5	97.8
France (EUR)	0.4	1.5	100.0	40.0

Item	Quantity (‘000 ton)	Value (\$ million)	Transport Cost per Ton (\$)	Total Transport Cost (\$’000)
Product: Motor Cars (pieces)				
Korea, Republic of	2,869.0	5.7	543.0	1,557.9
Japan	17,551.0	61.8	870.0	15,269.4
Grand total of selected products		516.3		55,481.8
Share of selected products in total import		36%		
Share of transport costs in selected products imports				11%

Source: Operations Evaluation Department consultants’ estimates based on data obtained from General Customs Administration of Mongolia (2007).

28. The impact of transport costs on exports is even higher, as shown in Table A2.7. An analysis of about 70% of the total exports in 2007 shows that about 18% of the trade value is attributable to transport costs.

Table A2.7: Transport Cost of Selected Export Products

Item	Quantity (000 ton)	Value (\$ million)	Transport Cost per Ton (\$)	Total Transport Cost (\$’000)
Product: Flourspar Concentrate				
Russia	180.7	18.7	80.0	14,456.0
United States	45.7	6.6	185.0	8,454.5
People’s Republic of China	37.6	2.4	70.0	2,632.0
Product: Combed Cashmere				
Italy	448.8	28.7	237.5	106,590.0
People’s Republic of China	701.3	36.8	73.4	51,475.4
Japan	57.8	3.7	102.5	5,924.5
Product: Copper Concentrate				
People’s Republic of China	599.5	635.3	87.5	52,456.3
Grand total of selected products		732.2		241,988.7
Share of selected products in total exports		70%		
Share of transport costs in selected products imports				33%

Source: Operations Evaluation Department consultants’ estimates based on data obtained from General Customs Administration of Mongolia (2007).

29. **Freight Handling Costs.** Given below is an estimate of the freight handling costs in a typical facility such as the Zamyn Uud dry port. Overall, there has been minimal change in the unit costs since there have been no improvements to the dry port infrastructure.

Table A2.8: Freight Handling Costs

Type of Service	Unit	2004	2006	Comments
Crane lifting	Ton	1.50	1.90	One time
Storing in open space	Ton	0.50	0.60	Per day
Assembling expenses	Wagon	25.00	27.00	Material expense added
Transport documentation	Upon receipt	4.00	4.50	
Various fee receipt	Upon receipt	0.15	0.20	
Rail use fee	Wagon	40.00	45.00	
Pork lifting and unloading	Wagon	23.00	28.00	Material expenses added
Wagon order	Wagon	4.00	6.00	
Pull and push	Locomotive use	3.00	4.00	
	1–3 days	0.90	0.90	
Wagon use—internal park	4–7 days	1.60	1.60	
	More than 8 days	2.10	2.10	
Wagon weighing	Wagon	23.00	23.00	One time
Car entry to the field	Car	0.50	0.50	One time
Wagon dispatching	Wagon	0.60	0.60	One dispatch

Source: Operations Evaluation Department consultants' estimates based on data from freight forwarders (2007).

30. **Demurrage Costs.** Given in Table A2.9 is an estimate of the demurrage fees paid by select freight forwarders in Mongolia. These costs are typically associated with goods kept in storage mainly because of delays in transshipment and in obtaining onward transport. It shows that on average, the demurrage costs increased by 41% in 2007 compared to 2006. This has a direct impact on the overall trade costs and an indirect impact on the commodity prices.

Table A2.9: Estimated Demurrage Fees Paid by Freight Forwarders in Mongolia

Freight Forwarder	(\$)		
	2006	2007	% Change Year on Year
Progress Trans	10,000	40,000	300.0
MTT	100,000	150,000	50.0
Material Impex	39,591	130,000	228.4
SB Logistics	250,000	600,000	140.0
Tuushin	67,000	225,000	235.8
Erin International	53,000	104,000	96.2
Total	519,591	1,249,000	140.4

Source: Operations Evaluation Department consultants' estimates based on data from freight forwarders (2007).

31. **Border Crossing Charges.** Government sources estimated that these charges accounted for about 30% of the total transport cost.¹⁵ These charges include physical border crossing charges, document, and transit charges. Comparing these charges with those of other countries, such as at the border between Tajikistan and Kyrgyz Republic on the Khorog–Osh road, a study by the United Nations Special Program for Economies of Central Asia (UNSPECAs) found the cross-border charges to be 21% of total transport cost.¹⁶ In other words, the cross-border charges on the Mongolia–PRC border are higher than those on other comparable borders.

¹⁵ B. Altangerel. 2005. *United Nations Conference on Trade and Development Expert Meeting on Trade Facilitation as an Engine for Development. National Experience: Mongolia*. Geneva.

¹⁶ UNSPECA. 2007. Presentation on *Selection of Major Routes within the SPECA Region for Analysis Using the UNESCAP Time/Cost-Distance Methodology*. Tajikistan. Available: http://www.unece.org/speca/pdf/ppt12/time_cost.pdf

F. Key Constraints to Trade Facilitation in Mongolia

1. Physical Infrastructure Constraints

32. **Rail Infrastructure.** As shown in Appendix 1, a majority of trade is carried out by rail. Most of the rail assets are owned by a Mongolian–Russian joint stock company UBTZ. A lack of refurbishment and replacement of the rolling stock has resulted in a serious shortage of locomotives and wagons to ply between Zamyn Uud and Ulaanbaatar. A second constraint within the rail infrastructure relates to the dry port facilities in Zamyn Uud. These facilities were designed for rail to rail transshipment. Over the years, although the freight sent by road from the PRC has grown rapidly, the loading infrastructure has not been expanded. This has resulted in a major bottleneck at Zamyn Uud.

33. **Storage Infrastructure.** Currently, Zamyn Uud has no warehousing facilities. The trucks from the PRC bringing in goods have to wait for several days before they can load their freight onto rail wagons. The shortage of rail wagons delays their availability. Since there is no warehouse available, the trucks cannot offload their freight. This causes delays in terms of truck availability and high costs in terms of demurrages.

34. **Road Infrastructure.** Currently, there is no paved road from Choir to Zamyn Uud, making it impossible for heavy trucks to ply from Ulaanbaatar to Zamyn Uud. It is expected that the ADB-funded Regional Road Development Project will provide this link by 2009. However, the project is intended to be 7-meters wide. This width will be insufficient to handle the heavy trucks coming from the PRC.

35. **Port Infrastructure at Tianjin in the PRC.** Currently, Mongolian traders use Tianjin port since it has the most direct access via Zamyn Uud. However, the growing congestion in the port and the inordinately long customs clearances from the PRC authorities required for Mongolian goods has been causing long delays.

2. Customs Clearances

36. There needs to be better bilateral dialogue between the PRC and Mongolia relating to the harmonization of the customs and product inspection standards. The current delays associated with customs clearances in the PRC could be reduced with such harmonization. For example, the PRC does not permit trade of animal products without a special certification; such certification could be standardized for products destined for Mongolia. The trade harmonization between the PRC and Mongolia also needs to include vehicle movements across the border.

3. Harmonization among International Aid Agencies

37. There is insufficient harmonization among international donors working in Mongolia. For example, although the German Agency for Technical Cooperation has been working on trade policy advice with the Ministry of Industry and Trade, there is little interaction with ADB, which has carried out a review of the trade policy. This needs to be addressed by both the Government and by the international aid agencies.

EVOLUTION OF GOVERNMENT STRATEGY

Table A3.1: Transport Strategy^a for Mongolia 1999—Key Recommendations and Implementation Status

Component	Recommendations of 1999 Strategy	Current Status	Recommendations of 2007 Strategy
1. Policy framework	<ul style="list-style-type: none"> • Competition for the market should be provided by low-cost, efficient transport services on a concession basis and regulated by a multi-agency body. • Prices for transport services should be market-based, with users paying the full cost of maintenance and contributing to the cost of new infrastructure. • Regulation should be used to limit the excesses of competition. • Public investment in infrastructure should follow the same principles as used by private investors. • Government roles and responsibilities for transport should be clarified and the institutional structure strengthened. 	<ul style="list-style-type: none"> • Inter-urban transport services provided on a competitive basis with limited regulation. City services not fully privatized. • Government sets tariff and subsidy rates, which are based on affordability and social objectives. • Only limited regulation of transport competition to achieve market conditions. • Public investment not always made on economic principles. • Overlapping responsibilities among Government departments is one of the major issues within the transport sector. Further clarification and strengthening is needed. 	<ul style="list-style-type: none"> • Competition within modes and between modes to be encouraged. This is a change from the earlier strategy of providing low-cost services. • Transport tariffs will be related to the real costs of providing services, which cover the cost of operation and maintenance of facilities. Subsidies to be minimized. • Government to appoint an independent regulator for safety, economic, and environmental parameters. • Investment decisions to be based on thorough technical, economic, financial, and environmental analyses. • Role of Government ministries to be clearly defined. Separation of regulatory and executive activities to be carried out.
2. Sector issues	<ul style="list-style-type: none"> • All sector issues should be addressed within the above policy framework. 	<ul style="list-style-type: none"> • Policy framework for transport does not exist. 	<ul style="list-style-type: none"> • The transport sector strategy continues to use a broad policy statement to guide it. With the recently finalized National Development Strategy, there is a fresh impetus to develop a national transport policy.
2.1 International trade corridors	<ul style="list-style-type: none"> • Two export (road and rail) corridors could be promoted, one to Tianjin in the People's Republic of China (PRC), and the other to Vostochny in the Russian Federation (Russia). • Negotiations should be expedited to provide a duty-free zone for Mongolia in the Port of Vostochny. • A transport service development strategy of the road from Ulaanbaatar to the PRC border should be established before any further commitment is made to build the road. 	<ul style="list-style-type: none"> • Tianjin rail corridor remains the main trade outlet for Mongolia. • No negotiations conducted with Vostochny. • Road construction is under way with limited transport development strategy. 	<ul style="list-style-type: none"> • No specific project recommendations. Rolling investment plans are being developed to support the strategy. • Although the strategy paper identifies several options to resolve the constraints on cross-border movement, no specific action plan was identified.

Component	Recommendations of 1999 Strategy	Current Status	Recommendations of 2007 Strategy
	<ul style="list-style-type: none"> Regulations allowing operation of Chinese, Mongolian, and Russian trucks in each other's territory is required to maximize the benefits of competition from the transport improvements close to the borders. The strategy for Mongolia should include negotiations with PRC to allow the operation of each other's trucks in the two countries' territories. 	<ul style="list-style-type: none"> Negotiations on multicountry truck operations commenced in November 2005, with United Nations Conference on Trade and Development assistance. Operating regulations are still required. 	<ul style="list-style-type: none">
2.2 Internal integration	<ul style="list-style-type: none"> High priority should be given to completing a low-cost gravel road from Arvaikheer to Khovd and Ulaangom, along the southern route. All domestic air services should be provided on a concession basis, with payments for commercially viable routes being used to cross-subsidize those to <i>aimag</i> (province) centers that are more than 1 day's bus travel from Ulaanbaatar. The road from Ulaanbaatar to Choibalsan should be upgraded to all-weather status, with a lower priority to upgrading the road east of Choibalsan. Funding should be made available to local communities for the improvement of <i>aimag</i> and <i>soum</i> (village) roads. 	<ul style="list-style-type: none"> Arvaikheer to Khovd road under construction (only partial gravel) with World Bank funding. Domestic air services operated on a commercial basis for foreigners, with Government-regulated tariffs for Mongolian users. Feasibility studies completed (2002). Ulaanbaatar to Choibalsan road improvements under way. Local road funds provide for local road maintenance. 	<ul style="list-style-type: none"> No specific project recommendations. Rolling investment plans are being developed to support the strategy. No specific project recommendations. Rolling investment plans are being developed to support the strategy.
2.3 Transit traffic between Russia and the PRC	<ul style="list-style-type: none"> A new all-weather gravel road should be developed in western Mongolia for transit traffic, using part of the Arvaikheer–Ulaangom Road. Mongolia should maintain participation in the Tumen River Economic Development Area Project. 	<ul style="list-style-type: none"> The Asian Development Bank (ADB) currently preparing the Western Regional Road Development Project. Mongolia actively participating with respect to the potential for road and rail connections to the PRC. 	<ul style="list-style-type: none"> No specific project recommendations. Rolling investment plans are being developed to support the strategy.
2.4 Railway services	<ul style="list-style-type: none"> The present joint-ownership arrangement between Russia and Mongolia should be revised to give Mongolia a controlling interest. Within the Mongolian Railway (MTZ), responsibility for infrastructure investment and maintenance should be separated from operations, and joint venture services with private operators should be permitted and encouraged. 	<ul style="list-style-type: none"> MTZ continues to be jointly owned 50:50 by Mongolia and Russia. A new railway authority is established under MoRTT for implementation of railway development policy. 	<ul style="list-style-type: none"> The current ownership arrangement of MTZ is unlikely to change. The strategy advocates development of a more commercial focus within MTZ.

Component	Recommendations of 1999 Strategy	Current Status	Recommendations of 2007 Strategy
2.5 Urban transport	<ul style="list-style-type: none"> Urban bus services in Ulaanbaatar should be privatized on a concession basis. Detailed study should be made of the trolley bus company to assess its financial and social feasibility. In the short-term, existing buses should be transferred to a leasing company with this company privatized once the buses are phased out of service. Roads within <i>ger</i> (urban and community) areas should be improved to all-weather standards to permit better water, waste, and public transport services. A self-financing scheme to test vehicle emissions and technical standards should be implemented within the next 5 years. 	<ul style="list-style-type: none"> Private bus services are in operation on a contractual basis, two state-owned bus companies are privatized. Study has been made of the trolley bus company, which is in the preparation stage for privatization. One bus company has been transferred to a leasing company under private management. <i>Ger</i> areas continue to require improved services, including transport. ADB is preparing the Urban Development and Housing Project, which includes access roads to <i>ger</i> areas in Ulaanbaatar. Vehicle testing stations are established in Ulaanbaatar and all <i>aimags</i>. 	<ul style="list-style-type: none"> Institutional responsibilities for <i>ger</i> transport to be rationalized and improved along the lines of efficiency, transparency, and accountability. Private sector participation in urban transport to be encouraged. Social and environmental parameters to be included as part of the regulatory functions.
2.6 Sector finance	<ul style="list-style-type: none"> Investment in transport should be increased to the maximum affordable level, estimated at about 2.5% of gross domestic product (GDP) per year. Various schemes of private-public funding need to be developed to advance the transport sector. Consideration should be given to the creation of a Transport Investment Fund, with priorities in order being investments in routine maintenance, deferred maintenance, infrastructure improvement, and new construction. 	<ul style="list-style-type: none"> Investments in transport from 1999 to 2003 were 1.5% of GDP per annum; for 2004 it was 2.2% of GDP. Only limited private finance has been invested to date. Transport Investment Fund has not been implemented, and priority has been given more to new infrastructure development ahead of maintenance. Implementation of the Road Fund for the same purpose was tabled because of International Monetary Fund (IMF) objections. 	<ul style="list-style-type: none"> Public spending on transport sector to be benchmarked against an upper limit taking into consideration IMF requirements and the needs of other sectors. However, annual shortfall in funding predicted to range from 24% to 48% during the period 2008 to 2015. Incentive schemes to promote private sector involvement to be identified.

Aimag = province; ADB = Asian Development Bank; PRC = People's Republic of China; *ger* = urban and community; GDP = gross domestic product; IMF = International Monetary Fund; MoRTT = Ministry of Roads, Transport, and Tourism; MTZ = Mongolian Railway.

^a World Bank. 1999. *Taming the Tyrannies of Distance and Isolation: A Transport Strategy for Mongolia*. Washington, DC.

Source: ADB. 2007. *Technical Assistance to Mongolia for Formulating a Transport Strategy*. Manila (TA 4471-MON, for \$300,000, approved on 13 December).

Table A3.2: Government Action Plan for the Transport Sector (2004–2008)

Transport Mode	Envisioned Actions
Sector-wide	Develop and implement a strategy for transportation sector development; seek a solution to develop infrastructure to exploit Tavan Tolgoi, Oyu Tolgoi, Tsagaan Suvarga, and other large mineral deposits; conduct feasibility studies to construct roads, railways, and airports; and intensify related negotiations and activities to attract new investment.
Roads	Continue implementation of programs to develop unified networks for energy, roads, communications, and information; build roads and bridges; place signs at tourist destinations; reduce remoteness of rural areas by improving conditions of roads and bridges; continue building of the “Millennium Road” and intensify works to build bridges and level hills alongside the road; improve the legal environment targeted at increasing resources for the “Road Fund”; promote and encourage investment for building and repairing roads and bridges; and construct or continue building paved roads and sections of gravel roads.
Road Safety	Develop improvement projects aimed at death prevention caused by accidents; establish and enforce safety standards in road building and landscaping in urban areas; establish “tele-camera controls” for road traffic and increase citizens’ participation in road traffic safety; and take measures to fight excessive drinking and alcoholism.
Urban Transport	Develop and implement urban planning policies for timely delivery of ambulance services; create jogging pathways, bicycle lanes, open spaces, and parks; develop urban planning to international levels; turn Kharhorin into a model town for development; develop administrative reforms and investment policies in accordance with population density and infrastructure needs; improve traffic management in Ulaanbaatar, including a “perimeter road network” and one-way streets; and introduce parking areas for vehicles and facilities for disabled people.
Rail	Extend the rail network, increase its capacity and its competitiveness in international transport services; conduct studies into dual track operations and on system electrification; conduct feasibility studies to construct international rail links; and intensify negotiations and activities to attract new investment in the railway.
Civil Aviation	Promote the number of over-flights using Mongolian air-space; support the construction of a new international airport; conduct studies for the development of additional air transport services; expand air services in rural areas; equip domestic airports (as required) to accommodate modern, efficient, cost-effective small aircraft; increase international and private-sector participation in fleet renewal for domestic air services; conduct feasibility studies for the development of the international and domestic airports; and intensify negotiations and activities to attract new investment in civil aviation.
Waterways	The Action Plan contains no elements that relate to the development of the waterways in Mongolia or the challenges being faced in this subsector.

Source: Annex to Resolution 24 (2004) of the State Great Hural. Ulaanbaatar, Mongolia as reproduced in Ministry of Roads, Transport, and Tourism, Government of Mongolia. 2007. *National Transport Strategy for Mongolia*. Ulaanbaatar (with technical assistance from the Asian Development Bank).

ASIAN DEVELOPMENT BANK'S EVOLVING SECTOR STRATEGY

A. Transport

1. This section analyzes the responsiveness of the Asian Development Bank's (ADB) engagement in the transport sector in Mongolia to assess whether the strategic focus was appropriate to the changing circumstances. Mongolia underwent an economic and political transformation in the early 1990s. When Mongolia joined ADB in 1991, the country was going through a transition to a market economy and political democracy. This transition required an overhaul of institutions and policies and a restructuring of the economy, including liberalization of basic food prices and increased energy tariffs and school fees. Against this backdrop, ADB prepared its first country operational strategy in 1991.¹ For ADB, Mongolia was one of the first developing member countries undergoing radical transformation from a planned economy to a market-oriented economy.² In view of the fluid situation that prevailed during the early transition years, ADB's first country operational strategy was an interim strategy. Its objective was to support the ongoing process of economic transition to a market-driven economy.³ Sector assistance was to strengthen institutions and to support sector reforms. Priority was to be given to the (i) cost-effective use of existing infrastructure including rehabilitation, increased cost recovery and self-financing, and better operation and maintenance practices; (ii) enhancing efficiency by institutional strengthening, human resource development, and development of regulatory and legal frameworks; (iii) restructuring and commercializing management and operations of state-owned enterprises; and (iv) upgrading sector planning to ensure rational sector development.

2. Within this context, the strategic focus of ADB's early interventions in the transport sector from 1992 to 1995 was on (i) assisting with policy, regulatory, and institutional reforms; (ii) restructuring and commercializing of state-owned enterprises; (iii) assisting in the removal of subsidy-induced distortions in pricing of transport services; (iv) enhancing cost recovery by introducing a road-user cost recovery mechanism; (v) promoting competition in the provision of services and facilitating greater private sector participation in road infrastructure development; (vi) strengthening sector institutions, particularly in the areas of planning and budgeting, regulation, human resource development and training, and safety and environmental standards; and (vii) developing a legal framework for the road and road transport sector. Taking into account the country needs, these interventions are found to be appropriate. Although these initiatives have shown positive outcomes, there is a long way to go in terms of private sector development and policy strengthening.

3. The 2000–2005 country operational strategy recommended ADB exit from the transport sector. The prevailing perception was that infrastructure investments had generated non-inclusive growth. However, the 2001–2003 country assistance plan altered this approach to include selective and limited assistance for infrastructure development based on the limited resources available to ADB. The Government's preference for stronger ADB support for the roads subsector was highlighted in this plan.

4. ADB expanded its program with the 2005 country strategy and program placing emphasis on road safety, environment management, and transport sector management.

¹ Between 1991 and 2001, three country operational strategies were formulated.

² Experiences in other developing member countries did not provide examples for easy application. Developing member countries in Central Asia joined ADB starting 1994; but in 1991, there was limited experience to develop assistance programs in support of transition. Experience of ADB in the People's Republic of China and Viet Nam was useful, but Mongolia provided different challenges in the post-Soviet period.

³ ADB. 2002. *Country Assistance Program Evaluation in Mongolia*. Manila.

Specifically, ADB assistance to the road subsector was to (i) enhance Mongolia's transport links to neighboring countries and promote regional cooperation and integration, (ii) promote and develop a sound sector policy and regulatory framework, (iii) ensure adequate fund allocations through the government budget to the road subsector, (iv) improve road safety, and (v) strengthen the institutional and human capacity in the sector. The strategy was to benefit from synergies between transport, agriculture, and financial sector projects in the poorer regions of Mongolia.⁴ The 2005 country strategy and program appropriately focused on issues of regional cooperation and market integration and advocated better integration of the transport program with that of the agriculture sector to promote rural development and widen the base of exports.⁵ Despite the focus on road safety in the country strategy and program, there is a room for improvement in the actual program in terms of including it in the project designs in a comprehensive manner.

B. Trade Facilitation

5. ADB's country operational strategy in 1994 was focused mainly on rebuilding the country and facilitating the transition to a market-based economy. Within this broad strategic thrust, ADB had targeted trade promotion as one of the objectives. However, no specific assistance materialized in the trade sector. Neither the 2000–2005 country operational strategy nor the 2001–2003 country assistance plan have any particular reference to trade facilitation. Table A4 shows the subsequent evolution of trade facilitation within ADB's strategies and the actual assistance.

⁴ The proposed North–South Altai Western Corridor road is located in the poorest part of Mongolia. Together with assistance in the agriculture and finance sectors, the road would foster economic growth with benefits for the poorest sections of the Mongolian population.

⁵ ADB. 2005. *Country Strategy and Program 2006–2008 Mongolia*. Manila.

Table A4: Evolution of ADB's Strategy for Trade Facilitation

2000–2001	2002	2003	2004	2005	2006
CSPU 2002–2004	CSPU 2003–2005	CSPU 2004–2006	CSPU 2005–2006	CSPU 2006–2008	CSPU 2007–2009
A. Areas of activity targeted by country strategy and program (CSP) and country strategy and program update (CSPU)					
<p>Given its location, Mongolia has great potential to accelerate economic growth by enhancing economic cooperation with its neighboring countries. Initiatives taken to encourage promotion of subregional economic cooperation in Central and East Asia include:</p> <ul style="list-style-type: none"> • Under an ongoing regional TA, Mongolia is exploring development options for economic cooperation with the Peoples Republic of China (PRC) in eastern Mongolia along the transportation corridor proposed under the Tumen River Area Development Program of the UNDP. • Government requested a follow-on TA to explore the potential for economic cooperation with the PRC on a wider geographic basis, particularly along the ADB-financed vertical trunk road linking the road systems of Asia and Europe through the PRC and Russian Federation (Russia). • Strong Government interest in participating in ADB-sponsored regional cooperation among DMCs 	<p>Starting with a moderate technical assistance (TA), ADB helped Mongolia and the PRC establish an effective institutional framework to promote and coordinate economic cooperation between the two countries. With ADB support, the two governments have identified cooperation in transportation, trade, investment, and environmental management as their common priorities. Continued assistance will be provided to strengthen this cooperation.</p> <p>Priority will be given to complete the north–south trunk road that will link the road systems of the PRC and Russia through the main Mongolian economic centers, including Ulaanbaatar. Along with road construction, TA will help Mongolia build up its capacity to operate the international transport corridor and manage cross-border traffic.</p> <p>TA will also help Mongolia analyze the challenges and opportunities presented by the PRC's recent accession to the World Trade Organization and Russia's future accession.</p> <p>In March 2002, Mongolia was accepted, together with Azerbaijan, as a full member of the ADB-supported Central Asia</p>	<p>Given the geographical features of the country, support for Mongolia to participate in regional cooperation has two general dimensions: (i) subregional cooperation initiatives in northeast Asia; and (ii) subregional cooperation in Central Asia, both involving one of its two neighbors—the PRC.</p> <p>It has been agreed between the PRC and Mongolia that transport, environment, and trade and investment should be the three common priority areas for ADB-supported regional cooperation initiatives.</p> <p>Continued priority is attached to completing a north–south trunk road under the proposed regional road development project in 2004, and to link road systems between Russia and the PRC through the major economic centers in Mongolia.</p> <p>Mongolia has also been actively involved in an ADB-supported regional cooperation initiative to establish a regional cooperation mechanism for prevention and control of the dust and sandstorms in</p>	<p>Mongolia's landlocked status and remoteness from major markets clearly constrain its economic development. Long-term economic development and living standards are very much dependent on how well the country can take advantage of emerging opportunities and integrate its economy with those of its immediate neighbors. Economic recovery in Russia and continued strong economic growth in the PRC offer the prospect of intensifying economic links in a range of areas.</p> <p>To link the road systems between Russia and the PRC through major Mongolian economic centers, priority has been given to the completion of the north–south trunk road under the Regional Road Development Project. TA also will be provided to assess the viability of a newly proposed corridor between Xinjiang province in the PRC</p>	<p>Mongolia's landlocked status and remoteness from major markets constrain economic development. Long-term growth and living standards are dependent on how well the country can take advantage of emerging opportunities and integrate its economy with economies of its immediate neighbors. Adequate transport, trade, and communication facilities are vital, and efficient access to seaports or gateways is key to increasing trade competitiveness. Mongolia spends about 15% of its export earnings to pay for transport.</p> <p>In addition to minimizing transit barriers, the joint formulation of transit routes with neighboring countries is key for improved access to and from Mongolia. Economic recovery in Russia and continued strong economic growth in the PRC offer the prospect of intensifying economic links. Economic integration</p>	<p>Overall CSP directions are in line with the Medium-Term Strategy II strategic priorities of strengthening inclusiveness and promoting regional cooperation and integration. Regional cooperation and integration will benefit from the central corridor highway, supported by project loans for the second and regional roads projects; a RETA project on HIV prevention; and greater regional cooperation in the preparation of the Western Regional Road Development Project.</p> <p>Regional cooperation and integration receives renewed attention in the CSPU. The Western Regional Road Development Project in 2007 has been recast to seek cost-sharing commitments from the PRC and Russia. The Regional Transport Project in 2008 assumes that the transport sector strategy being developed by the Government will increase the potential</p>

2000–2001	2002	2003	2004	2005	2006
CSPU 2002–2004	CSPU 2003–2005	CSPU 2004–2006	CSPU 2005–2006	CSPU 2006–2008	CSPU 2007–2009
in Central Asia has led it to request ADB support for economic cooperation in the Altai region.	Regional Economic Cooperation (CAREC). This subregional cooperation will provide Mongolia with a new means to participate in geographically wider regional cooperation.	northeast Asia. A TA has been provided to help the Government undertake a review of its trade policy. In the general context of subregional cooperation in Central Asia, a new regional TA is in preparation in cooperation with the United Nations Economic and Social Commission for Asia and the Pacific to assess the viability of a newly proposed trunk road corridor between Xinjiang Uygur Autonomous Region, PRC, and Russia through western Mongolia.	and Russia through western Mongolia. Inclusion of Mongolia in the CAREC Forum was a major step forward in 2002, but the scope for joint projects is likely to be limited. A more comprehensive approach to subregional cooperation with a focus on Mongolia will be explored.	with the PRC is particularly important given Mongolia's vast mineral resources and the strong outlook for raw material demand in the PRC. Economic cooperation between Mongolia and its neighbors can be based on developed market principles and use models of subregional cooperation in energy, transport, trade facilitation, and similar sectors that have been developed by ADB in other subregions.	for regional cooperation, integration, and harmonization. New planned activities, including the proposed second phase of the RETA for Prevention and Control of Dust and Sandstorms in Northeast Asia, prevention of transboundary pollution, activities under the CAREC program, and a proposed RETA to develop new regional cooperation opportunities in East Asia, all are expected to contribute.
B. Key themes for TAs identified by CSPs/CSPUs					
	<ul style="list-style-type: none"> • Capacity Building in Priority Areas of Regional Cooperation • Support for Promoting Cross-Border Trade • Payment Facility for the Poor and Small Traders at PRC–Mongolia Border 	<ul style="list-style-type: none"> • Trade Facilitation and Customs Cooperation Program, Phase II • Trade Facilitation and Customs Cooperation Program, Phase III 	<ul style="list-style-type: none"> • Capacity Building for Trade Facilitation 		
C. TA projects actually implemented					
RETA 5969: Strategic Study on Development Options for Economic Cooperation between the PRC and Mongolia in Eastern Parts of Inner Mongolia Autonomous Region, PRC, and Mongolia approved on 21 December 2000	SSTA 3934 on Trade Policy Review approved on 30 September 2002 RETA 6058 (Study): Trade Facilitation and Customs Cooperation Program, Phase II approved on 29 October 2002		RETA 6203 (Training): Trade Facilitation and Customs Cooperation Program, Phase II approved on 2 December 2004	RETA 6370: Development of Regional Cooperation Programs for Mongolia and the People's Republic of China approved on 18 December 2006	

2000–2001	2002	2003	2004	2005	2006
CSPU 2002–2004	CSPU 2003–2005	CSPU 2004–2006	CSPU 2005–2006	CSPU 2006–2008	CSPU 2007–2009
RETA 6015: Facilitating Economic Cooperation in Eastern Parts of Inner Mongolia Autonomous Region approved on 19 December 2001					

ADB = Asian Development Bank, CAREC = Central Asia Regional Economic Cooperation, CSP = country strategy and program, CSPU= country strategy and program update, DMC = developing member country, MON = Mongolia, PRC = People's Republic of China, RETA = regional technical assistance, SSTA = small-scale technical assistance, TA = technical assistance, UNDP = United Nations Development Programme.

Source: Asian Development Bank.

**ASIAN DEVELOPMENT BANK ASSISTANCE TO
TRANSPORT AND TRADE FACILITATION SECTORS IN MONGOLIA**

A. Loans

Table A5.1: Transport Sector

Year of Approval	Project Title	Loan No.	Amount (\$ million)	Outputs Achieved for Completed Projects or Intended Objectives for Ongoing Projects
1993	Ulaanbaatar Airport	1256	36.0	Completed. Civil aviation is the least-cost mode of long-distance transport within Mongolia and between Mongolia and other countries, and its development was to enhance the country's access to domestic and international markets. Several policy and institutional reforms were needed to improve the sector's safety record, strengthen its human resource base, and improve its financial performance and self-financing capacity. The project supported reliable and safe all-weather operations to standards of the International Civil Aviation Organization (ICAO) at Ulaanbaatar Airport, and helped remove infrastructure constraints to the development of international and domestic air services. The Project supported sector reforms, human resource development, and institutional strengthening.
1995	Roads Development	1364	25.0	Completed. The Project rehabilitated selected sections of the road network in conformity with the priorities established in the Medium-Term Road Master Plan, and enhanced the Government's capability to plan, administer, and implement policies, programs, and projects focusing on the development of the road subsector. This contributed to improved domestic and international trade through the provision of reliable and efficient road transport services.
1995	National Air Navigation Development	1370	24.0	Completed. The Project improved the air traffic control and air traffic management system. It upgraded the air traffic control and airspace management systems of Mongolia to ICAO standards and internationally accepted norms, thus supporting Mongolia's efforts to participate in the economic mainstream. The Project also supported ongoing and new policy and institutional reforms, and human resource development in the aviation subsector.
1999	Second Roads Development	1700	25.0	Completed. The Project (i) supported road subsector policy and institutional reforms by enhancing capacity to respond to market demands, (ii) upgraded priority sections of the state road network consistent with the Medium-Term Road Master Plan, and (iii) helped develop domestic capacity in road construction and maintenance. The improved section of the north-south corridor improved the movement of high-value goods such as cashmere and semi-processed copper and gold, as well as in the distribution of goods over shorter distances. Policy dialogue focused on (i) improving the policy and regulatory framework, (ii) continuing institutional strengthening of the Department of Roads (DOR), (iii) improving road funding and cost recovery, (iv) facilitating privatization and private sector participation in road maintenance and development, and (v) implementing the new design and construction standards.
2004	Regional Road Development	2087	37.1	Ongoing. The Project intends to strengthen Mongolia's transport links to the People's Republic of China and the Russian Federation by completing the last link of the north-south corridor. The Project intends to facilitate sustainable economic growth in the <i>aimags</i> (provinces) of Dornogovi and Govisumber in southern Mongolia by improving local communities' access to markets, job and business opportunities, and social services.
Total			147.1	

ICAO = International Civil Aviation Organization.
Source: Asian Development Bank.

Table A5.2: Trade Facilitation Sector

Year of Approval	Project Title	Loan No.	Amount (\$ million)	Outputs Achieved for Completed Projects or Intended Objectives for Ongoing Projects
2006	Customs Modernization Project	2307	5.0	The project aims to upgrade the automated systems, basic infrastructure, and institutional capacity of the Mongolia Customs General Administration. The project is still in an early stage of implementation.

Source: Asian Development Bank.

B. Technical Assistance Projects

Table A5.3: Transport Sector

Year of Approval	Amount (\$'000)	Name	Outputs Achieved for Completed TA or Intended Objectives for Ongoing TA
1992	600 (TASF)	Ulaanbaatar Airport Feasibility Study (PPTA) TA 1648-MON	Completed. Feasibility study reviewed the Government's investment plans and designed the Asian Development Bank's (ADB) first airport project for Ulaanbaatar.
1992	600 (JSF)	Preparing a Road Master Plan (PPTA) TA 1820-MON	Completed. The project preparatory technical assistance (PPTA) (i) developed a road transport sector profile; (ii) prepared the Medium-Term Road Master Plan (MRMP) for the major national routes to provide a prioritized plan to develop the road network for the next 10 years; and (iii) undertook a feasibility study for upgrading priority road links on three sections (Nalayh–Sainshand, Darhan–Erdenet, and Nalayh–Baganuur. However, the subsequent project loan ^a did not include these routes for improvement. The PPTA also included preliminary engineering designs and environmental assessment of those priority road sections. The feasibility study for the section that was funded by loan 1364 was considered inadequate.
1993	490 (JSF)	Institutional Strengthening in the Civil Aviation subsector TA 1963-MON	Completed. The advisory technical assistance assisted in (i) strengthening the legal and institutional framework of civil aviation through improved legal, financial, and managerial capabilities of the Civil Aviation Authority (CAA) and Mongolian Airlines (MIAT); (ii) implementing cost recovery practices based on ICAO standards; (iii) improving air traffic control; and (iv) developing a national air safety master plan. A comprehensive institutional strengthening program for improving the organization, internal operations, and productivity of CAA and MIAT was formulated and its implementation initiated under the TA. The CAA institutional strengthening program, including human resource development, was completed under Loan 1370. A computer-aided commercial accounting system was introduced and is now fully operational. Cost recovery systems including tariffs and a charge manual were introduced. Changes to the Mongolian Airspace Law were recommended, and the amended law approved in January 1999 enhances the autonomy of CAA by specifying its duties and responsibilities as the sector regulator and a provider of services. The Civil Aviation Regulations were drafted to provide mechanisms to implement the Air Space Law, and the regulations are being developed further by CAA. The development of the regulatory and legal frameworks contributed significantly to the opening of Mongolian airspace to international traffic. The National Air Safety Master Plan prepared under the TA is being implemented under the National Air Navigation Development Project financed by Loan 1370.
1995	920 (JSF)	Institutional Strengthening of the Road Sector TA 2380-MON	Completed. The TA achieved its main objectives of (i) assisting in developing a legal framework for the road and road transport sector; (ii) assisting in improving the operation and management of the selected state-owned road transport enterprises; (iii) developing a more broad-based approach to cost recovery from various classes of road users, and determining the impact of various cost-inducing factors; (iv) refining the organization structure and define

Year of Approval	Amount (\$'000)	Name	Outputs Achieved for Completed TA or Intended Objectives for Ongoing TA
			the roles of the Department of Roads (DOR) and establish initial operational systems for it (this was only partially achieved and not sustained); (v) strengthen the financial and planning capabilities of DOR and the new road construction companies (this was only partly achieved and not sustained); and (vi) develop human resources for the road subsector (this was only partially achieved and not sustained). While the policy components of the TA were broadly effective in ensuring the creation of new legislation, the cost recovery component was less effective in improving the functioning of the road fund. The institutional components were effective in restructuring DOR and in training the staff, but this was not sustained because of the changes in the structure of the Ministry of Roads, Transport, and Tourism and staff turnover.
1996	592 (JSF)	Institutional Strengthening in the Civil Aviation subsector Phase II TA 2391-MON	Completed. The TA assisted in (i) completing the introduction of a commercial accounting system, (ii) providing advice and guidance to CAA management to complete the restructuring of CAA and facilitate the introduction of regulations and legislative changes, and (iii) improving the efficiency and effectiveness of Mongolia's visa and immigration control procedures. The TA activities complemented the policy reforms and infrastructure improvements under the main project loan 1256 for Ulaanbaatar Airport Project.
1999	670 (JSF)	Policy Support in the Road Sector TA 3268-MON	Completed. The TA provided recommendations for (i) strengthening DOR's financial management system; (ii) encouraging privatization and private sector participation in road maintenance, improvement, and construction; and (iii) improving management of the Road Fund. However, only part of these recommendations was implemented by the Government. There was insufficient time given for the TA, and it did not develop adequate ownership within the Government.
1997	500 (JSF)	Preparing the Second Roads Development (PPTA) TA 2827-MON	Completed. The objectives of the TA were to assist the Government in the development of the road subsector through capacity development and policy reform, and by evaluating investment priorities, and preparing a Second Roads Development Project suitable for external financing. The TA was to be undertaken in two phases. Phase I would consist of preparing a profile for capacity development and policy reform and updating the priorities of the sections of roads identified by the MRMP considering current traffic figures. Phase II was to examine the technical and economic feasibility of improving the selected road sections, and to undertake an initial environmental examination and, if necessary, a full environmental impact assessment. Phase 1 was partially successful since the updating of the MRMP was not completed. Phase II resulted in the Second Roads Development Project.
2002	300 (TASF)	Civil Aviation Policy Development TA 3938-MON	Completed. The TA was designed to assist the Government in developing a long-term vision for the civil aviation subsector and its role in the economy. Also, it was to assist in preparing forward-looking aviation subsector policies and a regulatory framework that will support private sector participation in air transport service and infrastructure. Key outputs included (i) assessment of potential for private participation in civil aviation, including air transport, air traffic services, ground handling, airports, and other infrastructure; (ii) draft policy for the development of and private sector participation in civil aviation; (iii) strategic reform plan for addressing constraints to sector development, including capacity building, legal and regulatory reform, tariff and subsidy policy, and competition policy; and (iv) a series of workshops to discuss project findings and proposals and to refine the draft policy and strategic plan. Overall, the TA achieved its objectives. It has developed a civil aviation subsector policy document and recommended a strategy to increase contribution of the sector to economic growth and to support private sector participation in air transport services and infrastructure. However, the Government did not adopt all of the recommendations.

Year of Approval	Amount (\$'000)	Name	Outputs Achieved for Completed TA or Intended Objectives for Ongoing TA
2002	600 (JSF)	Preparing the Third Roads Development Project (PPTA) TA 3990-MON	Completed. Apart from the feasibility study for the improvement of the road from Choir to the People's Republic of China (PRC) border, the TA was designed to (i) identify procedures and facilities needed to expedite the flow of people and goods across the international border with the PRC; (ii) develop a framework for institutional and policy reform aimed at enhancing efficiency of road transport and logistical services; (iii) assess opportunities for modal integration to support seamless freight and passenger transport; and (iv) evaluate overall social impact of road investment, particularly on poverty and traffic safety. The resulting Regional Road Development Project (Loan 2087) did include some of these components relating to social impact. However, the flow of people across the international border has been held up by the absence of a cross-border agreement with the PRC permitting vehicles to operate in each other's territory. The other components have yet to yield any clear outcome.
2004	300 (TASF)	Formulating a Transport Strategy TA 4471-MON	Completed. A transport strategy for Mongolia was considered crucial for optimizing the sector's contribution to sustainable economic growth. The previous strategy was formulated in 1999 with World Bank assistance. Subsequent development included (i) approval of the Economic Growth Support and Poverty Reduction Strategy (prepared by the Government in 2003 and implemented by the newly-established Government in 2004); (ii) private sector replaced the Government as the main engine of growth; (iii) Mongolia, together with 26 other Asian countries, signed an agreement on Asian Highway Network Development in April 2004; (iv) rural to urban migration accelerated after 2000, caused in part by consecutive harsh winters and droughts; and (v) the Government's master plans for railways, civil aviation, and Ulaanbaatar urban transport needed to be updated. The TA was to formulate a new transport strategy that would (i) support the Government's poverty reduction efforts, (ii) promote greater private sector involvement in transport, (iii) reflect Mongolia's commitment to regional transport cooperation, (iv) reassess future transport demand, and (v) ensure effective integration of various transport modes and improve competitiveness of the transport system in the country. The national transport strategy document has yet to be completed to the satisfaction of the Government. The TA completion report rated it partly successfully since it could not deliver the results efficiently and economically.
2005	150 (TASF)	Pre-feasibility of the Western Regional Road Corridor (ADTA) SSTA 4643-MON	Completed. The impact of the advisory TA was expected to be the facilitation of regional cooperation and socioeconomic development in west Mongolia. The outcome of the TA was to be an assessment of the viability of a proposed north-south corridor to link the PRC and the Russian Federation via west Mongolia.
2006	650 (TASF)	Preparing the Western Regional Road Development Project (PPTA) TA 4785-MON	Ongoing. This TA comprised mainly a feasibility study, which is likely to culminate into a new loan for the Western Regional Road Development Project.
Total 6,372			

ADB = Asian Development Bank, ADTA = advisory technical assistance, CAA = Civil Aviation Authority, DOR = Department of Roads, ICAO = International Civil Aviation Organization, JSF = Japan Special Fund, MIAT = Mongolian Airlines, MRMP = Medium-Term Road Master Plan, PRC = the Peoples Republic of China, PPTA = project preparatory technical assistance, SSTA = small-scale technical assistance, TA = technical assistance, TASF = technical assistance special fund.

^a ADB. 1995. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Technical Assistance Grant to Mongolia for the Roads Development Project*. Manila (Loan-1364-MON[SF], for \$25 million, approved on 22 August).

Sources: Asian Development Bank's loan, TA, grant, and equity approvals database.

Total Number of TA	12 (five project preparatory TA projects and seven advisory TA projects)
Total Advisory TA	\$3,422,000
Total Project Preparatory TA	\$2,950,000

Table A5.4: Trade Facilitation Sector

Year of Approval	Amount (\$'000)	Name	Outputs Achieved for Completed TA or Intended Objectives for Ongoing TA
2000	250 (JSF)	Strategic Study on Development Options for Economic Cooperation between the PRC and Mongolia in Eastern Parts of Inner Mongolia Autonomous Region, PRC, and Mongolia (Study) TA 5969-REG	The technical assistance (TA) focused on developing the eastern part of Mongolia bordering the eastern part of the People's Republic of China (PRC). It involved (i) compiling a social and economic profile of the project area, (ii) compiling an environmental profile of the project area, and (iii) formulating a strategic development outline for promoting economic cooperation between the two countries in the project area. The consultants' reports were found to be useful by the governments of Mongolia and PRC. Based on the governments' request to the Asian Development Bank (ADB) to provide follow-on assistance, the TA 6015 was formulated and implemented. The TA 5969 is rated "successful" based on its outputs and effectiveness in sustaining the focus on the project area.
2001	500	Facilitating Economic Cooperation in Eastern Parts of Inner Mongolia Autonomous Region (Study) TA 6015-REG	Based on the recommendations of the earlier TA 5969, the new TA 6015 included the following items: (i) formulating a construction plan for a cross-border bridge, which should be supported with an appropriate feasibility study; (ii) preparing a joint environment protection plan for the project area; (iii) jointly reviewing the market potential of the mineral resources, including petroleum resources, in eastern Mongolia; and (iv) based on the findings of the review of market potential of mineral resources in eastern Mongolia, preparing a strategy paper for transportation infrastructure development in the project area. In the absence of consensus on the nature of recommendations of this TA, there has been no subsequent work done on the eastern part of Mongolia. The TA was useful in providing an independent and realistic study on the potentials and constraints of the project area. It is rated "successful."
2002	150	Trade Policy Review (ADTA) SSTA 3934	The TA output was basically a report on the assessment of the policy, legal, and institutional constraints impeding trade creation, facilitation, and diversification. It was a statement of the prevailing situation and did not provide any specific recommendations. Although it was relevant, it did not add any particular value to the ongoing assistance program or to the country. The TA is rated "unsuccessful."
2002	2,000	Trade Facilitation and Customs Cooperation Program (Study) TA 6058-REG	Formulated under the umbrella of the CAREC program, the scope of the TA included (i) simplification and harmonization of customs procedures and documentation, (ii) development of border posts and facilities, (iii) development of simplified transit systems, (iv) data consolidation and information sharing and ICT development for customs operations, (v) development of risk

Year of Approval	Amount (\$'000)	Name	Outputs Achieved for Completed TA or Intended Objectives for Ongoing TA
			management and post-entry audit, (vi) development of a regional intelligence system, and (vii) capacity development for regional customs organizations. Although the TA was delayed by 2 years, it resulted in a new project loan. The TA is rated "highly successful."
2004	900 (TASF)	Trade Facilitation and Customs Cooperation Program, Phase II (Training) TA 6203-REG	This TA is ongoing.
2006	800 (TASF)	Development of Regional Cooperation Programs for Mongolia and the People's Republic of China (Study) TA 6370-REG	This TA is ongoing.

ADB = Asian Development Bank, ADTA = advisory technical assistance, CAREC = Central Asia Regional Economic Cooperation ICT = information and communication technology, JSF = Japan Special Fund, PRC = People's Republic of China, SSTA = small-scale technical assistance, TA = technical assistance, TASF = technical assistance special fund.

Sources: Asian Development Bank's loan, technical assistance, grant, and equity approvals database.

EVALUATION MATRIX

Table A6.1: Overall Bottom-Up Rating – Transport

Item	Aggregate Amount (\$ million)	Weightage (% of total)	Relevance (scale of 0–3)	Effectiveness (scale of 0–6)	Efficiency (scale of 0–3)	Sustainability (scale of 0–6)	Impact (scale of 0–6)	Overall Rating	Description
Loans	147	67	3	4	3	5	4	19	Successful
TAs	6	33	3	5	3	4	4	19	Successful
Overall Bottom-Up Sector Rating			3	5	3	5	4	19	Successful

TA = technical assistance.

Source: Asian Development Bank.

Table A6.2: Overall Bottom-Up Rating – Trade Facilitation

Item	Aggregate Amount (\$ million)	Weightage (% of total)	Relevance (scale of 0–3)	Effectiveness (scale of 0–6)	Efficiency (scale of 0–3)	Sustainability (scale of 0–6)	Impact (scale of 0–6)	Overall Rating	Description
Loans	5	67	3	NR	NR	NR	NR	3	Successful pending reevaluation
TAs	5	33	3	4	2	4	3	16	Successful
Overall Bottom-Up Sector Rating			3	4	2	4	3	16	Successful

NR = not rated, TA = technical assistance.

Source: Asian Development Bank.

Table A6.3: Project Loan Ratings – Transport

Loan No.	Project	Year of Approval	Amount (\$ million)	Status	Relevance (scale of 0–3)	Effectiveness (scale of 0–6)	Efficiency (scale of 0–3)	Sustainability (scale of 0–6)	Impact (scale of 0–6)	Overall Rating
A. Civil Aviation Sector										
1256	Ulaanbaatar Airport	1993	36	Completed	2	4	2	6	4	18
1370	National Air Navigation Development	1995	24	Completed	2	6	3	6	4	21
B. Roads Sector										
1364	Roads Development Project	1995	25	Completed	3	4	2	4	4	17
1700	Second Roads Development Project	2000	25	Completed	3	5	3	4	5	20
2087	Regional Roads Development Project	2004	37	Ongoing	3	4	3	4	4	18
Total			147		3	4	3	5	4	19

Source: Asian Development Bank.

Table A6.4: Comparison of Ratings – Transport

Loan No.	Project	PCR Rating	PPER Rating	SAPE Rating
A. Civil Aviation Sector				
1256	Ulaanbaatar Airport	Generally Successful	Successful	Successful
1370	National Air Navigation Development	Highly Successful	Highly Successful	Highly Successful
B. Roads Sector				
1364	Roads Development Project	Highly Successful	Successful	Successful
1700	Second Roads Development Project	Highly Successful	Not available	Highly Successful
2087	Regional Roads Development Project	Not available	Not available	Successful Pending Reevaluation
Overall Transport Sector				Successful

PCR = project completion report, PPER = project performance evaluation report, SAPE = sector assistance program evaluation.
Source: Asian Development Bank.

Table A6.5: TA Ratings – Transport

TA No.	TA Name	Year of Approval	Amount (\$ '000)	Status	Relevance (scale of 0–3)	Effectiveness (scale of 0–6)	Efficiency (scale of 0–3)	Sustainability (scale of 0–6)	Impact (scale of 0–6)	Overall Rating
A. Civil Aviation Sector										
1648	Ulaanbaatar Airport Feasibility Study	1992	600	Completed	3	6	3	6	5	23
1963	Institutional Strengthening in Civil Aviation Sector	1993	490	Completed	3	6	3	6	5	23
2391	Institutional Strengthening in Civil Aviation Sector Phase II	1996	592	Completed	3	6	3	6	5	23
3938	Civil Aviation Policy Development	2002	300	Completed	3	4	2	4	4	17
B. Roads Sector										
1820	Preparing Road Master Plan	1992	600	Completed	3	4	2	4	4	17
2380	Institutional Strengthening of Road Sector	1995	920	Completed	3	4	2	3	3	15
3268	Policy Support in the Road Sector	1999	670	Completed	3	4	2	3	3	15
2827	Preparing the Second Roads Development	1997	500	Completed	3	6	2	3	3	17
3990	Preparing Third Roads Development Project	2002	600	Completed	3	4	3	4	4	18
4471	Formulating Transport Strategy	2004	300	Completed	3	3	2	4	4	16
4643	Prefeasibility of the Western Regional Road Corridor	2005	150	Completed	3	6	3	4	4	20
4785	Preparing Western Regional Road Development Project	2006	650	Ongoing	3	6	3	4	4	20
Total			6,372		3	5	3	4	4	19

TA = technical assistance.

Source: Asian Development Bank.

Table A6.6: Comparison of Ratings – Transport

TA No.	TA Name	TCR Rating	SAPE Rating
A. Civil Aviation Sector			
1648	Ulaanbaatar Airport Feasibility Study	No TCR	Highly Successful
1963	Institutional Strengthening in Civil Aviation Sector	No TCR	Highly Successful
2391	Institutional Strengthening in Civil Aviation Sector Phase II	No TCR	Highly Successful
3938	Civil Aviation Policy Development	Successful	Successful
B. Roads Sector			
1820	Preparing Road Master Plan	No TCR	Successful
2380	Institutional Strengthening of Road Sector	No TCR Successful (from TPAR)	Partly Successful
3268	Policy Support in the Road Sector	Partly Successful Successful (from TPAR)	Partly Successful
2827	Preparing the Second Roads Development	No TCR	Successful
3990	Preparing the Third Roads Development	No TCR	Successful
4471	Formulating Transport Strategy	Partly Successful	Partly Successful
4643	Prefeasibility of the Western Regional Road Corridor	No TCR	Highly Successful
4785	Preparing Western Regional Road Development Project	No TCR	Highly Successful

SAPE = sector assistance program evaluation, TA = technical assistance, TCR = technical assistance completion report.

Source: Asian Development Bank.

Table A6.7: Project Loan Ratings – Trade Facilitation

Loan No.	Project	Year of Approval	Amount (\$ million)	Status	Relevance (scale of 0–3)	Effectiveness (scale of 0–6)	Efficiency (scale of 0–3)	Sustainability (scale of 0–6)	Impact (scale of 0–6)	Overall Rating
2307	Customs Modernization Project ^a	2006	5	Ongoing	3	NR	NR	NR	NR	3

NR = not rated.

^a The Customs Modernization Project is ongoing and in an early stage of implementation. In view of this, it is not possible to evaluate its effectiveness, efficiency, sustainability, and impact.

Source: Asian Development Bank.

Table A6.8: TA Ratings – Trade Facilitation

TA No.	TA Name	Year of Approval	Amount (\$'000)	Status	Relevance (scale of 0–3)	Effectiveness (scale of 0–6)	Efficiency (scale of 0–3)	Sustainability (scale of 0–6)	Impact (scale of 0–6)	Overall Rating
5969	Strategic Study on Development Options for Economic Cooperation between Mongolia and the People's Republic of China (PRC) in the Eastern Parts of Inner Mongolia Autonomous Region, PRC, and Mongolia	2000	250	Completed	3	5	2	4	3	17
6015	Facilitating Economic Cooperation in Eastern Parts of Inner Mongolia Autonomous Region, PRC, and Mongolia	2001	500	Completed	3	4	3	4	3	17
3934	Trade Policy Review	2002	150	Completed	2	1	2	1	1	7
6058	Trade Facilitation and Customs Cooperation Program (Study)	2002	2,000	Completed	3	6	2	6	6	23
6203	Trade Facilitation and Customs Cooperation Program, Phase II (Training)	2004	900	Ongoing	NR	NR	NR	NR	NR	NC
6370	Development of Regional Cooperation Programs for Mongolia and the People's Republic of China	2006	800	Ongoing	NR	NR	NR	NR	NR	NC
Total			4,600		3	4	2	4	3	16

NC = not calculated, NR = not rated, TA = technical assistance.

Source: Asian Development Bank.

Table A6.9: Comparison of Ratings – Trade Facilitation

TA No.	TA Name	TCR Rating	SAPE Rating
5969	Strategic Study on Development Options for Economic Cooperation between Mongolia and the People's Republic of China (PRC) in the Eastern Parts of Inner Mongolia Autonomous Region, PRC, and Mongolia	Successful	Successful
6015	Facilitating Economic Cooperation in Eastern Parts of Inner Mongolia Autonomous Region, PRC, and Mongolia	Satisfactory	Successful
3934	Trade Policy Review	No rating	Unsuccessful
6058	Trade Facilitation and Customs Cooperation Program (Study)	Successful	Highly Successful
6203	Trade Facilitation and Customs Cooperation Program, Phase II (Training)	Ongoing	Not rated
6370	Development of Regional Cooperation Programs for Mongolia and the People's Republic of China	Ongoing	Not rated

SAPE = sector assistance program evaluation, TA = technical assistance, TCR = technical assistance completion report.

Source: Asian Development Bank.

MANAGEMENT RESPONSE TO THE SECTOR ASSISTANCE PROGRAM EVALUATION FOR THE TRANSPORT AND TRADE FACILITATION— POTENTIAL FOR BETTER SYNERGIES IN MONGOLIA

On 14 August 2008, the Director General, Operations Evaluation Department, received the following response from the Managing Director General on behalf of Management:

I. General Comments

1. We appreciate OED's Sector Assistance Program Evaluation (SAPE) for the Transport and Trade Facilitation in Mongolia. We find it comprehensive and well-analyzed. The SAPE will provide valuable insights for the new Country Partnership Strategy for Mongolia, which is currently under preparation.
2. We note that the SAPE rated both transport sector and trade facilitation sector assistances to Mongolia as successful overall. The SAPE also assessed the overall impact of ADB's transport sector assistance as substantial in comparison to the overall needs of the country. We agree in general with the SAPE assessment.
3. ADB's performance is rated as satisfactory. On the impact of ADB's assistance, given the early stage of development the country is in, and the scale of the country's developmental needs and undertakings, it is important that ADB's contribution to the country's developmental process is maintained at a high level. ADB will ensure that its current satisfactory performance rating will be maintained in its future work.

II. Comments on Specific Recommendations and Follow-Up Action

4. **Provide Advice on Policy Development.** We agree with the SAPE suggestion that the formulation and timely adoption of a national transport policy is a necessity. To this effect, ADB has been providing necessary technical and policy support to the transport sector in Mongolia by co-chairing the transport sector working group. Assistance has already been provided to formulate a transport sector strategy. ADB will continue to support the transport sector through the sector working group and assist Mongolia in developing its transport sector policies by extending its assistance by way of necessary advisory technical assistance (TA).
5. **Assist in Strengthening of Road Maintenance Regime.** We agree with the SAPE suggestion that the Government needs to develop its road maintenance regime. There is a need to address this issue both at the project and the national levels. The Government and ADB have already taken action to address this issue at the project level and included establishment of maintenance centers along the recently approved Western Regional Road Corridor Development Project—Phase I. ADB will continue to work in this direction in its future road projects and will support the Government to adopt a suitable national policy on road maintenance when implementing the proposed TA on policy development referred to in para. 4.

6. **Strengthen Interagency Coordination.** We agree with the SAPE suggestion that ADB needs to work closely with the Government in identifying and implementing institutional changes to streamline operational responsibilities among various government departments, as well as strengthen the in-house human resources capabilities. ADB has already taken the initiative to improve human resources capabilities of Ministry of Roads, Transport, and Tourism (MoRTT). The recently approved Western Regional Road Corridor Development Project—Phase I included a component for capacity development of MoRTT. With regards to overlapping responsibilities of various government institutions, it is proposed to address the issue in the context of formulation of a national policy for transport sector.

7. **Investment Strategy for Transport Sector.** We agree with the SAPE suggestion that ADB needs to work closely with the Government to adopt a stepped approach that assesses the development needs of the country and that a medium-term rolling investment plan needs to be developed as part of such approach. ADB has already identified the need of such a medium-term investment plan to match the country's needs, taking into account its available resources and has provided assistance to MoRTT to develop such a plan. The draft rolling investment plan was discussed by MoRTT and the external development partners at the Transport Sector Working Group meeting held in June 2008. The final rolling plan will be considered for adoption at the next sector working group meeting.

8. **Improve Transport and Trade Logistics.** We agree with the SAPE suggestion that trade facilitation could be improved by overcoming the physical constraints relating to rail infrastructure to facilitate trade movements, storage infrastructure, and road infrastructure linking border points with economic centers and port at Tianjin in the People's Republic of China (PRC). ADB has already identified this issue and is in the process of developing a project to facilitate transport logistics at the main border crossing point at Zamyn Uud. The project is expected to be considered by ADB Board in 2009.

9. In addition to directly investing in transport (road and railway) sector, ADB is also helping Mongolia mitigate nonphysical constraints related to transport and trade logistics. An ongoing TA (RETA 6370) is supporting efforts to promote transport cooperation between Mongolia and PRC and improve trade logistics in the two countries.

10. **Facilitate Dialogue for Customs Harmonization and Border Formalities.** We agree with the SAPE suggestions for customs harmonization and border formalities. Customs cooperation is an area poised to deliver high return with relatively little investment. ADB is supporting Mongolia-PRC customs cooperation under the frameworks of both CAREC and Mongolia-PRC cooperation.