STRATEGIC DEVELOPMENT OUTLINE FOR ECONOMIC COOPERATION BETWEEN THE PEOPLE’S REPUBLIC OF CHINA AND MONGOLIA

(PROPERTY AREA: XINGANMENG PREFECTURE IN THE INNER MONGOLIA AUTONOMOUS REGION OF THE PRC AND THE PROVINCES OF DORNOD, HENTIY, SUHBAATAR OF MONGOLIA)

Asian Development Bank
STRATEGIC DEVELOPMENT OUTLINE FOR ECONOMIC COOPERATION BETWEEN THE PEOPLE’S REPUBLIC OF CHINA AND MONGOLIA

(PROJECT AREA: XINGANMENG PREFECTURE IN THE INNER MONGOLIA AUTONOMOUS REGION OF THE PRC AND THE PROVINCES OF DORNOD, HENTIY, SUHBAATAR OF MONGOLIA)
Message from the People’s Republic of China

In line with the open door policy, the Government of the People’s Republic of China regards promotion of economic cooperation with neighboring countries as a special means to accelerate growth and economic development of the local economy in the provinces and autonomous regions that share border with other countries. This is particularly true for those provinces and autonomous regions supported by the “Go-West” strategy of the national government including the Inner Mongolia Autonomous Region.

The People’s Republic of China and Mongolia share a common border of more than 4,600 kilometers. The two countries have great potential to achieve mutual benefits from economic cooperation. We appreciate the technical assistance provided by the Asian Development Bank in undertaking the strategic study for development options for economic cooperation in a specific project area covering Xinganmeng Prefecture of Inner Mongolia Autonomous Region and the three eastern provinces in Mongolia. As revealed by the strategic study, the two countries have good opportunity to cooperate in the project area in the sectors of agriculture, mining, tourism, transportation, and environmental protection.

Please allow me to take this opportunity to express our appreciation to the experts and staff of the Asian Development Bank for their hard work and professional contribution to the study.

I am looking forward to a timely implementation of the priority projects identified by the study, and the continued assistance from the Asian Development Bank in support of the economic cooperation between our two countries on a wider geographic basis.

Vice Chairman
State Development and Planning Commission
People’s Republic of China

 Vice
I am very pleased to see the timely publication of the study report on the Strategic Development Outline for Economic Cooperation between the People’s Republic of China (PRC) and Mongolia. The report will provide its readers with detailed information that are needed for a better understanding of the development options available to accelerate growth and development of the eastern provinces of Mongolia.

Being a landlocked country endowed with rich resources, Mongolia has adopted the national policy to promote economic integration with the world economy through economic cooperation with the neighboring countries including the People’s Republic of China. The strategic study supported by the Asian Development Bank provides valuable guidance for the planning and decision making work of all the involved organizations and agencies in ensuring sustainable development for the eastern provinces of Dornod, Hentiy and Suhbaatar. Apparently economic cooperation offers a new dimension for development strategy of the Government of Mongolia in the eastern region. I am happy with the successful conclusion of this first study on economic cooperation sponsored by the Asian Development Bank. Greater challenges are ahead of us in terms of policy study, capacity building, and project design and implementation, given the complexity involved in economic cooperation across the border.

I would like to thank the Asian Development Bank for the effort exerted in this study and look forward to continued support to further strengthen the economic integration of the Mongolian economy with the world economy through a more active involvement in regional cooperation.

Chultemiin Ulaan
Minister of Finance and Economy
Mongolia
Table of Contents

Abbreviations and Acronyms, ix
Foreword, x
Acknowledgements, xi
Executive Summary, xiii
Background, 1
Economic Profile of the Project Area, 3
  General Economy, 3
  Agriculture, 4
  Energy, 7
  Mining, 8
  Tourism, 9
  Transportation, 13
    Road and Rail Transportation, 13
    Air Transportation, 16
  Other Sectors, 18
    Water Supply, 18
    Telecommunications, 18
    Human Resource, 19
    Financial, 19
Assessment of Potential for Economic Cooperation in the Project Area, 21
  The Policy Environment, 21
  Assessment of the Potential for Economic Cooperation, 23
    General, 23
    Agricultural Sector, 24
    Energy Sector, 24
    Mining Sector, 25
    Tourism Sector, 25
    Transportation Sector, 26
    Environment Sector, 26
    Overall Sectoral Potential for Cooperation, 27
Constraints to Economic Cooperation and Development, 27
  Infrastructure and Human Resource, 27
  Finance and Capacity of the Private Sector, 27
  Institutional and Legal Framework, 28
Development Options for Economic Cooperation, 31
  Institutional Mechanism for Economic Cooperation, 31
    Overview, 31
    Institutional Policies and Strategies, 33
    Evaluation of Potential Institutional Development Projects, 34
List of Tables and Figures

Tables
2.1 Key Socioeconomic Indicators for the Project Area, 2000, 4
2.2 Road Distances in Eastern Mongolia, 15
2.3 Railway Options Considered in the Pre-feasibility Study, 16
2.4 Labor Force in the Eastern Region of Mongolia, 2000, 19
2.5 Size of Deposits and Loans in Eastern Region of Mongolia, 2000, 20
2.6 Public Finance of the Eastern Region of Mongolia, 2000, 20
3.1 Distribution of Funds for Sectoral Projects Proposed for Xinganmeng Prefecture in the Tenth Five-Year Plan, 22
3.2 Potential for Cooperation in Key Sectors in the Project Area, 26
4.1 Potential Projects for Institutional Development Cooperation, 34
4.2 Potential Projects for Agricultural Development Cooperation, 36
4.3 Potential Projects for Mining Development Cooperation, 38
4.4 Potential Projects for Tourism Development Cooperation, 42
4.5 Potential Projects for Transportation Development Cooperation, 45
4.6 Potential Projects for Energy Development Cooperation, 47
5.1 List of Environmental and Related Laws in Mongolia, 50

Figures
2.1 The Project Area, 5
2.2 The Aduunchuluun Coal Mine near Choybalsan, 9
2.3 Azalea Lake—One of Xinganmeng’s Natural Attractions, 11
2.4 Road and Rail Network in Xinganmeng Prefecture, 12
2.5 Upgrading the Road from Arxan to the Border, 13
2.6 Road Conditions in Eastern Mongolia, 14
2.7 Proposed Railway from Choybalsan to Tumen River Economic Development Area via Xinganmeng Prefecture, 16
2.8 Air Routes to/from Ulanhot of Xinganmeng Prefecture, 17
2.9 Upgrading the Passenger Terminal at Choybalsan Airport, 18
3.1 Khavirga Border Port, 29
4.1 The Locked Gate at Arxan Border Port
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>Aimag</td>
<td>Mongolian term for Province</td>
</tr>
<tr>
<td>CTEC</td>
<td>Committee on Trade and Economy Cooperation</td>
</tr>
<tr>
<td>DPRK</td>
<td>Democratic People’s Republic of Korea</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EPB</td>
<td>Environmental Protection Bureau</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>Ger</td>
<td>Traditional Mongolian tent</td>
</tr>
<tr>
<td>GMS</td>
<td>Greater Mekong Subregion</td>
</tr>
<tr>
<td>IMAR</td>
<td>Inner Mongolia Autonomous Region</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>KOR</td>
<td>The Republic of Korea</td>
</tr>
<tr>
<td>MIAT</td>
<td>Mongolian Air Transport Lines</td>
</tr>
<tr>
<td>MIT</td>
<td>Ministry of Industry and Trade</td>
</tr>
<tr>
<td>mm</td>
<td>Millimeters</td>
</tr>
<tr>
<td>MONE</td>
<td>Ministry of Nature and Environment</td>
</tr>
<tr>
<td>NEPA</td>
<td>National Environmental Protection Agency</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-government Organization</td>
</tr>
<tr>
<td>PRC</td>
<td>The People’s Republic of China</td>
</tr>
<tr>
<td>RETA</td>
<td>Regional Technical Assistance</td>
</tr>
<tr>
<td>SDPC</td>
<td>State Development Planning Commission</td>
</tr>
<tr>
<td>SEPA</td>
<td>State Environment Protection Administration</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned Enterprise</td>
</tr>
<tr>
<td>TRADP</td>
<td>Tumen River Area Development Programme</td>
</tr>
<tr>
<td>TREDAG</td>
<td>Tumen River Economic Development Area</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>

**NOTE:** In this report, “$” refers always to US dollars.
Promotion of sub-regional cooperation among its developing member countries has been among the top concerns of the Asian Development Bank (ADB) in its overall strategy for poverty reduction. Examples of ADB’s work in this area are initiatives to support cooperation among the Central Asia Republics and the People’s Republic of China (PRC), the Greater Mekong Subregion, the Indonesian-Malaysia-Thailand Growth Triangle, and the Brunei-Indonesia-Malaysia-Philippines East ASEAN Growth Area.

In 2000, the ADB has taken a new step by promoting economic cooperation between PRC and Mongolia in Northeast Asia. This was in response to requests from the governments of the two countries. On 21 December 2000, ADB approved funds for the Strategic Study on Development Options for Economic Cooperation between the People’s Republic of China (PRC) and Mongolia.

The purpose of the study was to assist the governments of the two countries to jointly examine development options available to strengthen economic cooperation between them in a specific project area. The project area, which was jointly identified by the two governments with assistance from the United Nations Development Programme, encompasses the Xinganmeng Prefecture of Inner Mongolia Autonomous Region, PRC and the three eastern provinces of Dornod, Hentiy and Suhbaatar of Mongolia.

The report in front of you summarizes the findings and recommendations of the study. It provides socioeconomic and environmental information on the project area and recommends a strategy to promote regional cooperation in a systematic and phased manner.

The most important result of the strategic study is not, however, the report itself, but the institutional contacts and coordination mechanism that have been established by the two governments during the implementation of the technical assistance project. This mechanism not only provided timely support and guidance to the study but is also expected to continue to play a role to ensure the smooth implementation of the economic cooperation initiatives outlined by the study.

Geert van der Linden
Director General
East and Central Asia Department
Asian Development Bank
Acknowledgement

This report was prepared by a team of international and domestic consultants under the direction of the staff of the Asian Development Bank (ADB) for the study under a regional technical assistance (RETA 5969), which was funded by a grant from the Japan Special Fund of ADB. Monash International Pty Ltd of Australia was engaged to provide the three international experts. In addition, domestic consultants were engaged directly by ADB from the People’s Republic of China (PRC) and Mongolia. As such, the composition of the project team is as follows:

**International Experts:**
- Study Team Leader/Development Economist/Strategic Development Planner-Dr. Paul Hooper, Associate Professor, Public Policy Programme, National University of Singapore
- Economist-Dr. Philip Chang, Tasman Economics
- Environmental Specialist-Dr. Fouad Abo, Technical Director, Environment, GEO-Eng

**Domestic Consultants:**
- Development Economists/Strategic Development Planners
  a) Prof. Liu Yi, Deputy Director-General, Institute of Geography, Chinese Academy of Sciences, PRC
  b) Mr. Bathuyag Batjaj, Gen. Mgr., Bat Daatgal Co. Ltd., Mongolia
- Domestic Economists
  a) Mr. Zhang Feng, Deputy Dean, Foreign Trade and Language Dept., Inner Mongolia Financial and Economic Institute, PRC
  b) Ms. Tungalag Tsedendamba, Economist, Mongolian Consulting Services, Mongolia
- Environmental Specialists
  a) Mr. Zhao Fuquan, Senior Engineer, Inner Mongolia Institute of Environmental Sciences and Research, PRC
  b) Dr. Mendbayar Badarch, Exec. Director, Mongolian Nature and Environment Consortium, Mongolia

The project team was mobilized on the 17 May 2001 and field work was completed on 1 August 2001. The study was conducted under the joint guidance of the governments of PRC and Mongolia. This report is, therefore, the product of the collective efforts of the project team and representatives from concerned national and local government agencies of the two countries. The study also benefited from the support provided by the Tumen Secretariat that was established by the United Nations Development Program for the Tumen River Area Development Programme.

ADB, therefore, acknowledges with gratitude the support and cooperation of the governments of PRC and Mongolia in the preparation of this report. In particular, ADB recognizes the invaluable contributions of the following officials and agencies: (1) In the PRC, Mr. Yang Chaoguang, Deputy Director General, State Development and Planning Commission (SDPC), Mr. Cheng Xuanqing, Director, SDPC, Ms. Guo Xujie, Planning Officer, SDPC; Mr. Zhang Wenhai, Director, Ministry of Finance (MOF), Mr. Zhang Nianshan, Deputy Director, MOF; the State Environment Protection Administration; the State Forestry Department; the Development and Planning Commission of the Inner Mongolia Autonomous Region (IMAR); the prefecture government of the Xinganmeng, IMAR; and the municipal government of Arxan, IMAR; and (2) In Mongolia, Dr. U. Ulaanbayar, Vice Minister of Infrastructure (MOI); Ms. Y. Dorjepagma, Senior Officer, MOI; Mr. N. Tumendemberel, the State Secretary of the Ministry of Finance and Economy (MOFE), Mr. K. Amarsaikhan, Director General, MOFE; the Ministry of Nature and Environment; the Ministry of Trade and Industry; the Ministry of Food and Agriculture; the Director of the Institute of Geo-Ecology; the Head of Water Resource Division; the provincial government of the Dornod; and the municipal government of Choybalsan.
EXECUTIVE SUMMARY

Background

The People’s Republic of China (PRC) and Mongolia share a border that is 4,676 kilometers long. Since 1989, both countries have been exploring opportunities for closer social, economic and environmental cooperation. There have been initiatives for cooperation emanating from the project area covering Xinganmeng Prefecture in the northeastern part of the Inner Mongolia Autonomous Region (IMAR), PRC and the three eastern provinces of Mongolia, namely Dornod, Subbaatar and Hentiy (refer to Figure E.1).

To some extent the interest in linking these two regions has arisen out of a proposal to construct a railway line from Choybalsan in Dornod Province, Mongolia to Arxan in Xinganmeng, IMAR, PRC. This would provide a link to an existing railway line to Hunchun, which is part of the Tumen River Economic Development Area (TREDA) under the United Nations Development Programme (UNDP) sponsored Tumen River Area Development Programme (TRADP). In broader terms, the railway line strategically provides a shorter route connecting the European railway system and the Asian railway system (running through Russia, Mongolia and the PRC). Such link would offer Mongolia a more efficient route to the sea. The idea of subregional cooperation also arises from more modest and immediate objectives to deal with common environmental and agricultural issues, and simply to have closer relations with their immediate neighbor.

Both Xinganmeng Prefecture and the eastern region of Mongolia have been isolated from the main centers of economic activity in their respective countries, and both are the targets of central government policies to alleviate poverty and to distribute the benefits of economic growth. These neighboring areas have many common features—a dependence on the primary sector, a wealth of mineral deposits, and prospects for tourism. However, they also share a fragile environment that has suffered damage in the past and may stand the risk of further degradation with development activities.

Subregional cooperation between Xinganmeng Prefecture of IMAR and the eastern provinces of Mongolia is strategically important to both countries. It is consistent with:
(i) Measures to alleviate poverty and to promote economic development in regions targeted by central governments in both countries;
(ii) Programs to foster closer economic cooperation; and
(iii) Environmental policies aimed at reversing environmental degradation and desertification.

By linking the two regions that share common geographical and historical backgrounds, the key objectives of cooperation are to:
(i) Exploit complementarities in resource endowments;
(ii) Access new markets;
(iii) Make it possible to achieve economies of scale in production;
(iv) Focus attention on the region and to attract private investments; and
(v) Manage shared resources in an environmentally sustainable manner.
Recognizing that both countries lack the capacity to undertake cross-border development studies, the Asian Development Bank (ADB) commissioned the study *Strategic Study on Development Options for Economic Cooperation between the People’s Republic of China (PRC) and Mongolia in Eastern Parts of Inner Mongolia Autonomous Region, PRC and Mongolia* as a regional technical assistance (RETA 5969) to provide essential information for key policy decisions and a foundation for a series of more detailed studies.

RETA 5969 is concerned with a more focused approach to bilateral cooperation at the subregional level of the project area. The study documents the region’s social and economic profile, its environmental profile, and formulates a strategic development outline for promoting economic cooperation.

**The Project Area’s Economies**

The key socioeconomic statistics of the project area for the year 2000 are presented in Table E.1. It is immediately apparent that the eastern region of Mongolia has vast lands and a very low population density. Gross Domestic Product (GDP) of the eastern region was recorded at $28.9 million in 2000. The country’s per capita GDP was at $390 while the eastern region realized $300 in the same period. Moreover, unemployment is found to be comparatively high in the eastern region, which is a continuing result of the economic restructuring pursued in Mongolia. The Xinganmeng Prefecture of the PRC, on the other hand, has a larger population.
Fifty-four types of minerals can be found in Xinganmeng Prefecture. Most of the 150 operating mines are small. They produce a total of 300,000 tons a year, but there are plans to exploit coal and limestone on a much larger scale. In addition, the prefecture has known deposits of zinc, silica sand and limestone. However, the mining sector in Xinganmeng is underdeveloped and the lack of technology in exploration is a constraint. One of the resources with some potential is the bottling of mineral water.

On the energy sector, Xinganmeng Prefecture required 530 million kilowatts of electricity in 2000, of which 80 percent was supplied by the PRC’s northeast power grid. Only one third of the system’s capacity is used and there is no energy constraint on future industrial development in this area. Two transmission lines carry the power to Ulanhot, from where it is distributed throughout the prefecture.

Until 1998, Xinganmeng Prefecture was closed to tourism. In a remarkably short period of three years, the number of visitors has grown to about 300,000 a year. However, the number of foreign visitors is only 400 and they mostly come from Japan and South Korea. This growth reflects the trend occurring within the PRC and it demonstrates the tourism potential of Xinganmeng. The prefecture has put tourism development as its top priority in 2001. While Ulanhot, the capital city of the prefecture, will be the focal point for tourism planning, the potential of Arxan as a “tourist city,” located at the border of the PRC and Mongolia, has been recognized. The strategy is to invest in infrastructure and marketing over the next three to five years promoting “jewelry” tourism. In other words, the plan is to promote first class

---

**Table E.1: Key Socioeconomic Indicators for the Project Area, 2000**

<table>
<thead>
<tr>
<th>Socioeconomic Indicator</th>
<th>Xinganmeng Prefecture</th>
<th>Total</th>
<th>Eastern Region of Mongolia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dornod Province</td>
</tr>
<tr>
<td>Area (square kilometers)</td>
<td>60,000</td>
<td>287,500</td>
<td>123,600</td>
</tr>
<tr>
<td>Population (thousands)</td>
<td>1,620</td>
<td>210.0</td>
<td>73.9</td>
</tr>
<tr>
<td>Population density (persons per square kilometer)</td>
<td>27.0</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>GDP (million)</td>
<td>$767.5</td>
<td>$28.9$</td>
<td>$15.8</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>$476.6</td>
<td>$300.0</td>
<td>—</td>
</tr>
<tr>
<td>Employed (thousands of person)</td>
<td>655.0</td>
<td>61.5</td>
<td>17.0</td>
</tr>
<tr>
<td>Unemployed (thousands of persons)</td>
<td>5.6</td>
<td>5.3</td>
<td>2.4</td>
</tr>
</tbody>
</table>

1 Available GDP figures for the provinces of Sukhbaatar and Hentiy were only for 1996. Hence, the study estimated their GDP for year 2000 using the actual nominal growth rate realized in Dornod province of 11.2% per annum.

Sources: State Development Planning Commission (SDPC); Dornod Aimag Economic and Social Statistics, 2000; the Mongolian Statistical Yearbook, 1999; and the National Statistical Office of Mongolia.
attractions and to attract premium tourists. One of the challenges is to develop winter sports to help overcome the highly seasonal nature of tourism demand. While the region has natural, historical and cultural attractions to attract visitors, a considerable amount of development needs to occur in the construction of hotels and other facilities, and in the improvement of human resources. The prefecture, however, will have to be careful in managing its tourism growth in accordance with ecologically sustainable principles.

Though Xinganmeng Prefecture is in a relatively remote area of the PRC, it nevertheless has a well-developed network of transport infrastructure. Ulanhot is 1,168 miles from Beijing and is well connected to the national transportation system by road, rail and air. In addition, the road from Ulanhot to Arxan is being upgraded all of the way to the border port as a paved, two-lane road. This runs parallel the main railway line within Xinganmeng Prefecture that stretches 254 kilometers between Ulanhot and Arxan, only 30 kilometers from the border of Dornod Province, Mongolia. Ulanhot’s airport has a 1,800-meter runway that normally caters to BAe146 aircraft with 86 seats. The airport has modern navigation and air traffic control facilities and is open 24 hours a day. The Tenth Five-Year Plan envisages that the airport will be improved so that it can accommodate regular operations of B737 aircraft. In addition, investigations are being carried out to establish the feasibility of a regional airport near Arxan.

**Eastern Region of Mongolia**

Mongolia has a strong tradition built around animal husbandry. There are 826,000 animals, including horses, cattle, sheep, goats and camels in the Dornod Province and the total for the eastern region is three times this number. Agriculture is not well developed, although there is a large area of fertile land available for cultivation. The main crops, including wheat and potatoes, are produced in the Halkh River area where there is fertile soil. In common with other sectors, the primary sector in eastern Mongolia needs to make further adjustments to the market economy while addressing the challenge to improve productivity. The Mongolian Government is providing soft loans and other assistance to farmers. Particular emphasis is being placed on making markets work efficiently, encouraging private sector activity, reducing risks that fall heavily on the poorest farmers, and improving agricultural research and veterinary services.

The industrial activities in the eastern region of Mongolia use inputs from the primary and mining sectors. However, the economic restructuring that occurred throughout the 1990’s led to the closure of many of the factories due to the collapse in their markets, the inability of the agricultural sector to supply necessary inputs, and the lack of capital. The flour factory in Choybalsan, the capital city of Dornod Province, for example, has a capacity to produce 9,000 tons of flour each year, plus another 6,000 tons of animal feed. In turn, the flour supplied the bakeries. Choybalsan also had factories engaged in meat processing, wool washing, and carpet production. Most of these factories have either closed down in recent years or have been operating at well under their design capacity. Though these factories were designed to meet local consumption needs, the economic linkages were important in promoting development. Some of the more promising of these businesses are now being rehabilitated. In addition, plans to open refineries for processing zinc and petroleum products are well advanced. It is important to the local economy in the eastern region that attempts to rehabilitate these industries succeed.

The eastern region of Mongolia also has a wide variety of minerals, but the best prospects for current and future exploitation include coal, zinc, oil, uranium, gold (in Hentiy Province), salt (for use in the chemicals industry), and construction materials. The Aduunchuluun Coal Mining Company at Choybalsan has a design capacity of 600,000 tons per annum, but is now producing only 250,000 tons per annum. The coal deposit is 400 million tons and it is relatively easy to mine. There are plans to increase production to cater to demands in the Russian Federation, particularly the Primorsky Territory. Oil exploration activities in the Tamsagbulag basin indicate that there is commercial potential in this resource, and another venture financed by a loan from the PRC is preparing to exploit zinc reserves near Baruun Urt in Subbaatar Province.

Choybalsan’s power station plays an important role in the eastern region. It has four turbines, two producing 12 megawatts each and two producing 6 megawatts each. These turbines have been rehabilitated and other steps are being taken to improve the efficiency and reliability of the power station. The plant uses one-third of the current production of the Aduunchuluun Coal Mining Company. The current demand for electricity in summer is only 6 megawatts and this rises to 13 megawatts in winter. The plant distributes power to other larger centers in Dornod Province, and a 200-kilometer transmission line carries power to Baruun Urt in Subbaatar Province. Elsewhere in the eastern region, settlements have small generators. Many of the nomads have small wind power and
battery units. The Choybalsan power plant has the capacity to deal with current plans for industrial expansion in the eastern region of Mongolia.

A comprehensive tourism master plan for Mongolia was completed in 1999 under a study commissioned by the Japan International Cooperation Agency (JICA). Given the competing demands for resources, the state of development of infrastructure and supporting services, and the interest shown in the attractions by tourists, the master plan study did not place a high priority on development of tourism in the eastern region in the short-term. Nevertheless, the region does have considerable potential particularly if access from the eastern part of IMAR is taken into consideration.

On the Mongolian side of the border, near Arxan, there are many important tourism attractions. The area has attracted war veterans and their descendants from Japan to commemorate the battles that took place here in 1939. The area near the border also has historical and natural features such as a large statue of Buddha, open grasslands, rivers and lakes. This southeastern corner of Mongolia is rich in natural life, including vast herds of migrating antelope. Hentiy Province is bounded by a mountain range to the north and is covered by forests. It also has abundant wildlife and it is believed that Genghis Khan was born and buried here. The eastern and southern parts of the province are steppes. The Gundgavirian Hild is a temple built originally in 1660. This became a very large temple housing more than 1,000 monks and was Mongolia’s first school of philosophy.

Despite these attractions, tourism is not well developed in the eastern region and fewer than 8,000 foreign visitors traveled to this part of Mongolia in 1998. It seems that the number now is substantially lower. There are only five ger (Mongolian tent) camps in the eastern provinces, three in Hentiy, two in Suhbaatar and none in Dornod. Hentiy has five licensed hotels, Suhbaatar has two and Dornod has only one. These are small establishments and much more investment is needed for the accommodation and hospitality industries in order to attract more visitors. The Tourism Development Board has prepared new itineraries for the eastern region based on a “chain” concept that links tours in each of the three provinces.

Mongolia faces considerable challenges in developing efficient transport infrastructure. It has a small population spread over a vast land and it experiences extreme natural conditions. The Mongolian Government recently revealed a long-term plan to build a Millennium Road traversing the country from east to west, connected by a system of north-south highways. The current situation is that most of the roads in Mongolia are poorly maintained gravel or earth roads. This certainly is the case in the eastern region. Dornod Province has 2,563 kilometers of road, of which 60 kilometers are paved—all of which is in and around Choybalsan. In Suhbataar, the state roads cover a distance of 535 kilometers, and in Hentiy the state road system is 639 kilometers long. Travel speeds with the prevailing road conditions are low and these distances pose considerable barriers to commerce and social interaction. There is no paved road from Tamsagbulag in Dornod Province to the border port at Arxan, IMAR, a distance of approximately 200 kilometers across mostly flat, grassland steppes.

The two most significant elements of the transport infrastructure in eastern Mongolia are the railway line running 238 kilometers between Choybalsan and the Russian Federation, and the airport at Choybalsan. The broad gauge railway line runs to Borzya in the Russian Federation from where it links with the Russian and the PRC railway system.

Choybalsan's airport has a 2,600-meter concrete runway capable of landing large aircraft, and a new passenger terminal, which was completed in 2001. This facility is utilized at only a fraction of its capacity. Baruun Urt and Ondorhaan, the two other provincial capitals in the eastern region of Mongolia are also connected to the national air transport system. Baruun Urt's grass runway is 1,900 meters long and 50 meters wide. Its passenger terminal was built in 2000 and is adequate. Ondorhaan's grass runway is 1,600 meters long. The airport also has appropriate air navigation and communication systems. Air services are provided by the Mongolian Air Transport Lines, and there are concerns about the airline's ability to replace its aging fleet. In 2000, the number of passengers passing through Choybalsan, Baruun Urt and Ondorhaan airports was 11,700, 3,400 and 1,500 respectively.

The Environmental Situation in the Project Area

Xinganmeng has 667,000 hectares of cultivated land, 100,000 hectares of arable land, and 1.3 million hectares of river valleys and meadows. In addition, it has 2.1 million hectares of grassland with 562 plant species and an annual production of 37,000 tons of forage grass. It has 1.4 million hectares of larch, white birch, white poplar and Chinese pine forests. Some areas of the forests are
rich in medicinal plants and flowers such as azalea. Volcanic activity in the past has endowed this region with great natural beauty and it has many beautiful rivers and lakes and has a number of important hot springs that are believed to have curative properties. The prefecture is also home to 30 species of wildlife and a hundred species of birds. In addition, there are 20 oil and fruit wild plant species, 30 species of fiber plants, and 10 species of herbs.

Dornod Province is mainly grassland steppes, though there are some forest areas in the north. Subbaatar Province is also mainly open grassland with some mountains. Hentiy Province is heavily forested in the north. There are approximately 160 lakes in the three provinces combined, although most of these are small. Buir Nuur in the southeast of Dornod Province is Mongolia’s largest lake, with depths of 50 meters and is surrounded by grasslands. Its northern shore borders the PRC and the lake is renowned for its fishing.

The governments of the PRC and Mongolia both have elevated environmental issues to a high level of priority, and the project area lies in a sensitive region. An important observation is that 60 percent of the total land of IMAR is desert and this area is spreading at a rate of 667,000 hectares annually. Major desert areas lie only 180 kilometers from Beijing, the national capital. Soil erosion in the middle and upper reaches of the Yellow River results in the loss of 180 million tons of sand each year, which is being deposited in the lower reaches of the river. The PRC has identified this as a major concern and has designated a 2,400-kilometer “environmental protection line” that encompasses the project area on the PRC side of the border. Rehabilitation of the environment has become the largest infrastructure sector of the country in attempts to reverse the desertification process. Among the measures for rehabilitation are the protection of the natural forests from further logging, turning cultivated land back to forest and grassland, and ecological environment management. The aim is to reverse the process of environmental degradation by 2010.

Given the common environmental conditions and challenges facing both countries, a number of bilateral cooperation initiatives have been undertaken. In particular, there was the agreement on natural environment protection signed by both countries in May 1990. The major thrusts of this agreement are:

(i) To develop bilateral cooperation in soil erosion, anti-desertification efforts, grassland protection, and establishment of common natural reserves and hunting ban zones along the borders, and coordination of survey and experimental work;

(ii) To carry out joint studies and implement techniques on control of sand storm and soil erosion;

(iii) To carry out joint studies and to implement conservation, research, breeding and rational utilization of Mongolian gazelle and other wildlife animals and vegetables along the border between China and Mongolia; and

(iv) To encourage Non-Government Organizations (NGOs) to cooperate on natural environment conservation under the support of the United Nations (UN) and its professional organizations.

Another important milestone was the memorandum of environmental protection cooperation between the then National Environmental Protection Agency (NEPA) of PRC and the Ministry of Natural and Environment (MONE) of Mongolia. Meetings of a joint commission have been held subsequently in 1995, 1996 and 2000. Direct initiatives flowing from this have been to expand a nature reserve and to increase the financial resources available for capacity building, development of human resources, and to improve the infrastructure and management of reserves.

The establishment of the Committee on Trade and Economy Cooperation (CTEC) in 2000 also provides opportunities to coordinate environmental cooperation. The PRC and Mongolia are also signatories to the Biodiversity Treaty and this offers additional scope for bilateral cooperation.

**Strategies for Development**

There is considerable economic potential for cooperation in the project area. Determined factors for cooperation point to tourism, agriculture, transportation, and environment as the sectors with highest potential for cooperation (refer to Table E.2).

The primary sector in both areas still has to adjust to the market system. It is possible to raise productivity and quality by using higher yielding varieties of crops and by adopting improved farming methods. One promising strategy is to develop a “green food” industry, capitalizing on the region’s unpolluted farmland, fertile soil, and natural farming methods. This is a niche market where the region does have some comparative advantage. By cooperating in the agriculture sector, both regions of the project area can combine their complementary resources, improve their export orientation and scale of operation, deliver benefits directly to an
impoverished farming sector, and supply higher quality inputs to local manufacturers.

The two sectors that offer potential to raise living standards to a much higher level is mining and tourism. However, the mining sector in Xinganmeng is underdeveloped, hampered by the lack of technology in exploration. Mongolia, on the other hand, is totally covered by geological maps and oil exploration now covers 20 percent of the country. The eastern region is rich in deposits of a wide variety of minerals but the biggest single constraint to the development of its mineral wealth is the lack of transport links to world markets.

Both Xinganmeng Prefecture and the eastern region of Mongolia want to develop the foreign tourist market, but so far have had very limited success. There is cause for optimism, though, because the region is rich in tourism resources, both natural and cultural. The natural resources include forests, grasslands, hot springs, and abundant wildlife. The cultural resources include sites of historical and religious significance. Again, the lack of effective transport links is a major constraint to development of the tourism industry.

On the Xinganmeng side of the border, the transport infrastructure is relatively well developed with a railway running to within 30 kilometers of Mongolia and, recently, a road was paved directly reaching the border port at Arxan. This railway and road run to Ulanhot, the capital of the prefecture, and beyond into the PRC’s transport network. This includes connections to the strategically important TRED A. Mongolia has plans to build a Millennium Road running from the extreme west of the nation to this border port in the east, combined with linkages within each major region. But at this stage the roads in the eastern region are of a low standard. In fact, there is no road for the last 200 kilometers between Tamsagbulag and the border port at Arxan. In contrast, Choybalsan does have a long concrete airport runway that is under utilized. There is potential here to open up the airport for international flights, perhaps tourist charters. This would provide a much more direct route for foreigners into the project area. There are ways in which the airport infrastructure and airline services can be developed in Xinganmeng Prefecture to play a larger role in foreign tourism.

The proposal to build a railway from Choybalsan to Arxan is a major issue in the project area. This project takes account of the complementary resources—minerals in Mongolia and the transport network in the PRC, and it uses a transport mode that is appropriate for moving large tonnage over long distances. The PRC railway system, via Xinganmeng, opens up access to world markets through the ports in TRED A. A pre-feasibility study conducted by the TRADP Secretariat indicated that this railway could be profitable, but that it will require an investment of more than $0.5 billion. This is beyond the financial capabilities of the governments in Mongolia and this is a case where the private sector will have to play a major role. Before that can be done, it will be necessary to demonstrate that the largest customers, very likely coal, oil and zinc, will be able to consign large volumes at economic freight rates.

Recommendations

Recommendations for further investigation deal with both the long-term projects that will make a very large impact on the economies in the project area and the pragmatic ideas designed to have an immediate effect. A total 29 strategic project options have been outlined for economic development cooperation in the project area. By sector, there are 3 for institutional development, 3 for agriculture, 10 for tourism, 9 for transport, 2 for energy, and 2 for

---

Table E.2: Potential for Cooperation in Key Sectors in the Project Area

<table>
<thead>
<tr>
<th>Factors for Cooperation</th>
<th>Agriculture</th>
<th>Energy</th>
<th>Mining</th>
<th>Tourism</th>
<th>Transport</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of complementary resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase scale of operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain experience in trade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve access to markets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased competitiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stronger regional identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative initiatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The number of diamonds denotes the potential level for cooperation in a sector between the two regions with three diamonds representing the highest potential for cooperation. Absence of diamond means a particular factor does not contribute to potential cooperation in that sector.
mining. There are some options that each area can pursue independently but focus has been placed on the scope to work cooperatively.

If the governments of the PRC and Mongolia want to achieve development through cooperation in these two isolated areas, it would be necessary to be flexible. Both countries can take risks in experimenting with more liberal conditions for trade and investment. If these experiments produce valuable outcomes, then it will be possible to achieve much greater benefits by extending the initiatives to a broader area.

Notwithstanding the prioritization of the outlined sectoral projects, the institutional options stand above all others as they are required to usher in and ensure continued efforts for economic cooperation. These are:
(i) The establishment of a Subregional Economic Cooperation Committee with a mandate to form action-oriented working groups to pursue the identified projects for economic cooperation; and
(ii) The early opening of Arxan border port for regular trade.

As there is need to categorize the projects for realization in a phased manner, the high priority projects identified for implementation in the short-term are as follows:
(i) Construction of the border bridge at Arxan with associated facilities crossing the Halkh River to promote cross border economic activities between the two subregions of the project area;
(ii) Formulation of an environmental protection plan for the fragile environment of the project area in view of the expected increase in development activities in the tourism, mining, and transportation sectors; and
(iii) Formulation of a cross border tourism development plan with emphasis on cross border cooperation.

Tangible benefits will flow from improvements to the productivity and quality of the agricultural sectors that dominate the local economies. Improved methods of farming and seed types will give immediate benefits to some of the poorest people. The region should capitalize on its image as an unspoiled area of the world where food can be grown under natural conditions. This is an avenue for increasing the value of production, but three key success factors require attention. The first is to protect and promote the image of a “green food” producer of world quality. The second is to attract foreign investors who are able to develop, produce, process and sell the products on world markets. The third is to ensure that these investors are supported by the infrastructure and services they require to establishing efficient supply chains. This could involve Xinganmeng’s railway infrastructure, but it is very likely to involve airfreight services if the region is successful in this area. This highlights the fact that a successful strategy for development cannot be based on independent projects undertaken in an ad hoc fashion. In terms of implementation, the agricultural projects envisioned for the project area are of the medium-term phase in view of the gestation period involved in production and market development.

With the exception of the airport at Choybalsan, the transport sector in the eastern region of Mongolia is undeveloped. This is understandable given the region’s sparse population and the distances involved, but there is an opportunity to link with the good surface transport system in Xinganmeng Prefecture. The railway project and the Millennium Road are visionary projects and they will not come to fruition quickly. Road construction can be a gradual process, and the railway will not be a realistic option until it can be established that it has committed customers and until there is a financial model capable of attracting private investors. As the transportation projects for the project area are huge, they can be realized only in the long-term. Hence, the formulation of a transport strategy would be appropriate in the medium term to properly set the implementation stage for the infrastructure projects.

The air transport services in Mongolia face severe constraints in the future. Plans to replace the domestic aircraft in Mongolia will lead to demands for upgrading the airports at Baruu Urt and Ondorhaan. Both have very low levels of traffic. In contrast, Choybalsan airport is a valuable resource that has potential for greater use. Studies have been recommended to achieve its potential because the airport can bring benefits to both countries, principally through tourism. There are also possibilities for developing air cargo operations here and this would reinforce any attempts to capitalize on the development of the animal husbandry industry and related processing industries, as well as improving the supply chain for a “green food” industry. With further development, Ulanhot airport can play a complementary role and both countries can explore, in a limited way, more liberal aviation policies.

There is no doubt that both Xinganmeng and the eastern region have both variety and quantity of mineral deposits, but the isolation from markets and the environmental constraints need to be considered carefully. However, if eastern Mongolia could establish markets for its minerals, it would be considerably easier to justify the
construction of a railway for access to the TREDA. If that comes to pass, then the major constraint to development, which is isolation, is far less of a problem. For this reason, further investigation of the market for eastern Mongolia’s minerals is needed. At the same time, it is recommended that a complementary study be carried out to look at the economic and environmental impacts of mining. It is possible that some mining activities will not be compatible with some of the other projects identified in this report and governments need to understand the trade-off.

There are many beautiful sites around the world. Indeed, even in the PRC and Mongolia alone there are many first-class attractions and the project area faces intense competition in the tourism business. However, the project area does have some comparative advantages. It is relatively close to tourism generating countries within the TREDA, including the PRC itself. Given appropriate supporting actions, there is potential to bring group tours into the area. The region is capable of supporting a unique identity as an unspoiled natural area with a rich cultural and historical background. Two ways have been considered in going about a joint tourism development study. One is to undertake a comprehensive study, and the other is to conduct series of smaller studies. Arguments for and against each approach are presented in the report but in the end, they amount to the same thing—a comprehensive tourism plan. However, it was found better to mount the series of studies (the second approach) because it has a greater chance of generating immediate benefits. In particular, there is concern that the project area could become a victim of rapid success. As noted in other parts of the PRC, domestic tourism is growing so quickly that it is not possible to provide adequate protection for the environment. The project area urgently needs guidance on some of these matters.
CHAPTER 1
Background

The People’s Republic of China (PRC) and Mongolia share a border that is 4,676 kilometers long. Diplomatic relations exist between both countries dating back 1949 and trading since 1951. As such, efforts to explore opportunities for closer social, economic and environmental cooperation are important to both countries. In 1989, for example, the two governments established a committee for economic, trade, science and technology cooperation, which convened on six occasions so far. In 1991, the two governments signed separate agreements on trade and investment. A particular landmark was the Treaty on Friendly Relations and Cooperation between the PRC and Mongolia in 1994. This established the political and legal foundation for further cooperation. The commitment to establish closer ties was reaffirmed when the President of Mongolia visited the PRC in 1998 and when the President of the PRC reciprocated with a state visit to Mongolia in 1999. Additional treaties and agreements have been signed for cultural, educational and scientific cooperation. The Committee on Trade and Economy Cooperation (CTEC) was established to coordinate the development of bilateral relationships between the government of Inner Mongolia Autonomous Region (IMAR) of the PRC and the Mongolian Ministry of Industry and Trade. The most recent bilateral discussions took place in April 2001 when the Secretary-General of IMAR led a delegation to Mongolia to meet with senior government officials to discuss a range of trade and investment issues.

This study is concerned with a more focused approach to economic cooperation in the PRC and Mongolian subregions covering the Xinganmeng Prefecture in the northeastern part of the IMAR and the eastern provinces of Mongolia, namely: Dornod, Suhbaatar and Hentiy (herein referred to as the project area). To some extent, the interest in linking these two areas stemmed from a proposal to construct a railway line from Choybalsan in Dornod to Arxan in Xinganmeng. This would provide a connection with an existing line to Hunchun in the Tumen River Economic Development Area (TREDA) under the United Nations Development Programme (UNDP) sponsored Tumen River Area Development Programme (TRADP) giving Mongolia an efficient route to the sea. Likewise, the idea of subregional cooperation developed from more modest and immediate objectives to deal with common environmental and agricultural issues.

Within the PRC, Xinganmeng Prefecture presents an opportunity to explore potential benefits from economic cooperation to accelerate poverty reduction and local development, which is one of the goals of central government. The March 2000 Session of the People’s Congress adopted a “go west” policy as aptly reflected in the priorities set forth in the Tenth Five-Year Plan. High priority is given to development in the western regions including IMAR in order to boost the area’s economy. Likewise, importance has been placed on addressing problems on environmental degradation and the encroachment of the desert to nearby areas. Already an annual economic cost of $6.5 billion has been directly attributed to desertification with the loss of some 2,460

1 As there are variations in the published spelling of the place names, the most common spelling of names in English-language documents of ADB is adopted throughout this report. In PRC subregion, these are: Xinganmeng Prefecture instead of Xingan League or Hingan Prefecture; Arxan instead of Aershan or Arshan; Hohhot instead of Huhehot or Huhehot; and Ulanhot instead of Ulan Hot or Horqin Youyi Qianqi. In the Mongolian subregion, these are: Choybalsan instead of Choibalsan; Hentiy instead of Hentii or Khentii; Suhbaatar instead of Subbaatar; Hulh River instead of Halhin Gol, Halh Gol; or Ha La Ha River; Ondorhaan instead of Underkhaan; Tamsagbulag instead of Tamsag Bulag; Ulaanbaatar instead of Ulanbaatar or Ulan Bator; and Zamyn Uud instead of Dzamin Uud.
square kilometers of fertile land each year. The problems caused by logging, grazing and cropping in environmentally fragile areas require long-term commitments and the PRC has designated a green belt, the largest of its kind in the world, as the “Great Green Wall”. The plan entails reclaiming salvageable desert land through massive forestation and grass growing, converting highly eroded cropland back to grassland or woodland, protecting the existing vegetation in the environmentally fragile western regions, and banning any illegal land reclamation.

The Mongolian economy has undergone considerable change over the past decade, moving away from a centrally planned system that was supported by a considerable amount of aid from the Soviet Union and trade within the COMECON system. In the early 1990’s, Mongolia aggressively pursued a privatization policy that resulted in major changes in the economic structure of the nation. There have been difficulties in the transition period and the eastern provinces felt the full force of the adjustment process. Despite being rich in mineral resources, these provinces lack markets for their products. The remoteness of the area and the lack of efficient transport service keep this region isolated and impoverished.

Subregional cooperation between the eastern provinces of Mongolia and Xinganmeng Prefecture is strategically important to both countries, as it is consistent with their development strategies for:

(i) Measures to alleviate poverty and to promote economic development in regions targeted by central governments in both countries;
(ii) Programs to foster closer economic cooperation; and
(iii) Environmental policies aimed at reversing environmental degradation and desertification.

By linking the two regions, the essential objectives of cooperation are to:

(i) Exploit complements in resource endowments;
(ii) Make it possible to achieve economies of scale in production;
(iii) Focus attention on the region and to attract private investment; and
(iv) Manage shared resources in an environmentally sustainable manner.

The Asian Development Bank (ADB) has taken an active role in promoting subregional cooperation in the Greater Mekong Subregion (GMS) and was, thus, ready to take the same initiative in the project area. Under a regional technical assistance or RETA 5969, the ADB commissioned the study on Strategic Development Outline for Economic Cooperation between Mongolia and the PRC in the Project Area. The objective of the study is to assist the governments of the PRC and Mongolia to jointly undertake a strategic study on developing options to strengthen economic cooperation between the two countries. As the first strategic study for the project area, the study would provide essential information for key policy decisions and a foundation for further studies. RETA 5969 has three components:

(i) A social and economic profile of the project area;
(ii) An environmental profile of the project area; and
(iii) A strategic development outline for promoting economic cooperation between the subregions of both countries.

The study commenced on 17 May 2001 and the first milestone was a workshop in Beijing on 22 May 2001, which was attended by officials from the governments of the PRC and Mongolia. The aim was to review the terms of reference of the study (refer to Appendix 1) and to obtain inputs to guide the consultants in the conduct of their work. Fieldwork then ensued in Xinganmeng Prefecture and in the eastern region of Mongolia. A second workshop followed on 1 August 2001 in the Parliament of Mongolia to present the study’s findings and recommendations. The highlights of both workshops are found in Appendix 2. Based on the comments received by the ADB, this final report was prepared.

The report starts with a review of the economic potential of the project area, sector by sector, in Chapter 2. Chapter 3 provides an analysis of the policy environment, an assessment of the potential for economic cooperation and the constraints to economic cooperation in the project area. Chapter 4 then offers development options for economic cooperation as well as outlines and evaluates promising projects that were developed throughout the study. Chapter 5 presents the environmental policies, concerns and challenges of the project area. It then continues identifying the potential environmental impact of the proposed projects. Finally, Chapter 6 makes recommendations for further action.
CHAPTER 2

Economic Profile of the Project Area

General Economy

The project area encompasses the Xinganmeng Prefecture of PRC, which is located northeast of Inner Mongolia Autonomous Region (IMAR), and the provinces of Dornod, Hentiy and Suhbaatar in the eastern region of Mongolia (see Figure 2.1). The total population in the project area was 1.8 million in year 2000 with 1.6 million people found in Xinganmeng and 201,012 in the eastern region of Mongolia. The Gross Domestic Product (GDP) of the entire project area is estimated to be $796.4 million in 2000, which registered a 12.5 percent increase as compared to the $708.1 million in 1999. The GDP of the Xinganmeng Prefecture was $767.5 million in year 2000 while that of the eastern region of Mongolia was estimated to be $28.9. The inflation rates of 1.0 percent and 8.1 percent were experienced in Xinganmeng and the eastern region of Mongolia in 2000, respectively.

The capital of Xinganmeng Prefecture is Ulanhot with a population of approximately 200,000 people while the Border City of Arxan has a population of approximately 100,000 people. The economy of Xinganmeng Prefecture is gradually moving away from an agricultural based economy towards a service-oriented economy. The primary sector’s share of GDP has significantly decreased from 45 percent in 1995 to 38 percent in 2000 while the secondary sector remained unchanged since 1995. The tertiary sector on the other hand posted a substantial increase from 27 to 33 percent. The major industries in Xinganmeng are iron and steel, cement, tobacco, brewery, farm equipment, rice and the special green products of Arxan (i.e., dried mushroom, mineral water and wild vegetables).

On the eastern region on Mongolia, Dornod Province is only one of two provinces in Mongolia bordering both the Russian Federation and the PRC. Its capital is Choybalsan with a population of 44,000 people and it lies 655 kilometers east of Ulaanbaatar (capital of Mongolia). The capital of Suhbaatar Province, on the other hand, is Baruu Urt. It lies 560 kilometers from Ulaanbaatar and has a population of 15,100. Lastly, the capital of Hentiy Province, Ondorhaan, has a population of 27,900 and is located 326 kilometers from Ulaanbaatar. The economy of this region is primarily agricultural-based with the major activities being farming and animal husbandry. In year 2000, the share of the primary sector to the region’s GDP was over 80 percent. The cumulative industrial output of the provinces in this region was $4.3 million with Dornod, Suhbaatar and Hentiy accounting for $1.4 million, $1.3 million and $1.6 million, respectively. Major secondary activities include food processing, mining and quarrying, construction and public utilities.

---

2 GDP figures are in current prices. Only the province of Dornod in the eastern region of Mongolia had an updated GDP for year 2000. As such, estimates for the entire eastern region were made using the latest available GDP figures of 1996 for Suhbaatar and Hentiy and the nominal growth rate experienced by the province of Dornod at 11.2 percent per annum.
Overall, the project area is underdeveloped and many of its people live in poverty. As shown in Table 2.1, there is a marked disparity in the physical scale of the two parts of the project area. The area of eastern Mongolia is 4.8 times bigger than that of Xinganmeng Prefecture while the latter’s population is 9.5 times larger than that of eastern Mongolia. Xinganmeng Prefecture has a population density of 27 persons per square kilometer compared to the national average of 131. In like manner, the eastern provinces of Mongolia have only 0.7 persons per square kilometer compared to the national figure of 1.5 persons per square kilometer. Both regions are isolated from the main centers of economic activity in their respective countries and their population densities are low by national standards.

The annual per capita income in the PRC has increased since 1978 to $780, which is slightly higher than the corresponding figure in Xinganmeng Prefecture. Partly because of the prolonged drought, 11.5 percent of the population in Xinganmeng earns no more than $62.5 per annum—the national poverty line of the PRC. On the other hand, Mongolia’s GDP per capita is approximately $390 per annum, which is approximately 30 percent higher than the income of people in the eastern region. The number of unemployed persons in this region is comparatively high, a continuing result of the economic restructuring of Mongolia. Many of the industries that were active in eastern Mongolia in the late 1980’s are not being rehabilitated and the outlook for job creation appears positive. Nevertheless, one third of the population earned less than the amount that defines the poverty line in eastern region Mongolia (approximately $198 per annum).

The UNDP Tumen River Area Development Programme (TRADP) forecasted that the GDP of the eastern region of Mongolia would grow at an annual average rate of 11.9 percent between 2000 and 2010. However, until some of the industries in this region are rehabilitated for a market oriented economy, it is realistic to assume that GDP growth will be modest.

### Agriculture

#### Xinganmeng Prefecture, PRC

In 1995, 45 percent of Xinganmeng Prefecture’s GDP was in agriculture. By 2000, the share fell to 38 percent, reflecting the changing structure of the economy with the development of the tertiary sector. There are a number of major factors contributing to this change such as (i) central government’s policies on reversing the progress of desertification in certain parts of IMAR through compensation to farmers for land to be reforested and closing down of industries that are damaging to the environment; and (ii) development of new service-oriented industries to support the new economy of the country, which came about with the liberalization of the internal markets and adoption of institutional reforms to join the World Trade Organization (WTO).

In total, the Prefecture has 667,000 hectares of land under cultivation, another million hectares of uncultivated land that is suitable for farming, and 133,000 hectares of river valleys and meadows. Almost 90 percent of the 2 million hectares of grassland are usable. Each year, the grasslands produce 37.26 tons of animal fodder. The forestland covers almost 1.4 million hectares of forest.
containing 43.3 million cubic meters of timber resources. The average rainfall is 400 to 500 millimeters per annum, most of which falls during the warm period, and there are 110 to 130 frost-free days each year.

The prefecture is well endowed with water resources with more than 200 rivers and 18 reservoirs. The total amount of surface water is 2 billion cubic meters and there is an additional 1.9 cubic meters of groundwater. The main crops in Xinganmeng are corn and soya beans, followed by a group of 10 other kinds of crops, including rice and wheat. The Prefecture also produces good quality potatoes. Total volume of livestock production is at 4.2 million, including 2.4 million sheep.

The major challenges facing the primary sector in Xinganmeng are the adjusting market economy, the generally low quality agricultural products, and environmental problems that require curtailment of cropping on steeper slopes and other marginal land. Various measures are being introduced to deal with these problems.

The economic potential of agriculture in Xinganmeng will improve with the use of more fertilizer, introduction of new varieties of crops that produce higher yields, conversion to crops with higher value, and by opening up access to broader markets.

Within the Tenth Five-Year Plan, the intention is to:
(i) Rehabilitate the corn (corn) processing plant to meet market demand.
(ii) Enter into a joint venture to produce 6,000 tons of medicinal herbs each year using 30 kinds of mountain potherb that grow naturally in the area, such as mountain apricot, fungus, brake and birch juice. The cost of the project is estimated to be $22 million, most of which is required for the purchase of machinery. It is also estimated that this will produce a gross revenue of $152 million a year and will generate $10 million a year in tax revenue for the prefecture. This project can expand the Ulanhot Chinese and Mongolian Pharmaceutical Company, one of
the four largest pharmaceutical companies producing traditional Mongolian medicine in the PRC. This project will cater to the high demand for traditional medicine in the PRC and elsewhere in Asia.

(iii) Through a joint venture, develop a poultry production and processing capability on a 30,000 square meter site with modern production-line facilities capable of producing 10 million chickens each year. This project would cost $6.1 million.

(iv) Again, through a joint venture, develop the prefecture’s capability to produce higher quality animal fodder with alfalfa and improved grass seeds. Over half of the $13.4 million for this project is required for cultivation, with the remainder going to irrigation and machinery.

(v) Another $13.4 million is budgeted for a cattle breeding project involving the purchase of 600 breeding cattle to raise 120,000 cows while developing better sources of fodder and equipment.

(vi) Sheep fattening project with an output of 2 million heads a year at a cost of $7.3 million.

(vii) Increase the quality and amount of production of rice to 50 million kilograms per annum and to develop a processing plant at a cost of $43 million.

(viii) Invest $18 million to improve the production of potatoes through improved varieties, control of disease, and cultivation.

In addition, the IMAR recognizes the potential to develop a “green food” industry and Xinganmeng Prefecture has natural endowments that give it a comparative advantage. The soil is rich and the crops are grown using natural fertilizers without exposure to pesticides and pollution. There is an increasing demand for high quality food and the prefecture can develop this market further through a joint venture with an international food processing entity. Such a company would provide necessary capital as well as transfer expertise in marketing and supply chain management.

**Eastern Region of Mongolia**

The dominant sector in the eastern region of Mongolia is agriculture with major activities in farming and animal husbandry. In the province of Dornod, the primary sector accounted for 85 percent of its GDP in 2000. The volume of livestock production in that province alone was 826,000, including horses, cattle, sheep, goats and camels while production in the entire eastern region is three times larger than this number. Agricultural land is not well developed and is concentrated in the Halkh River’ area where there is fertile soil. The main crops are wheat, potatoes and vegetables grown in 4,750 hectares, 272 hectares, 122 hectares, respectively. The land of the region is mainly steppe and mountainous with high altitudes ranging from 600 to 2000 meters above sea level. The climate is severe with four seasons and very contrasting temperatures ranging from an average of minus 24 degrees Celsius to 20 degrees Celsius. The average annual rainfall recorded in the area is 200 to 300 millimeters.

Agricultural production now in the eastern region of Mongolia or the entire country for that matter, is much lower than it was prior to 1990. This is attributed to the privatization process which, resulted in smaller land holdings with little capital for development. Moreover, Russian agricultural methods were used and these relied on farm machinery. With the collapse in the markets, it became difficult to find the resources to maintain and repair agricultural machinery. These are the general problems confronting the primary sector in Mongolia. As such, externally funded initiatives by the government placed particular emphasis on making markets work efficiently, encouraging private sector activity, reducing risks especially for the poorest farmers, and improving agricultural research and veterinary services.

In 2001, the cultivated area in the eastern region increased to 7,000 hectares. Some land has been leased to a Korean company that is growing soya beans. Work commenced in 2000 but the first season’s production was used for seed crop. Commercial production will follow in an area of 10,000 hectares with up to 200 workers employed. A Chinese venture also plans to cultivate more land and adopt sustainable farming methods.

The Government of Mongolia has implemented the following major measures to promote farming activities in the country. These are as follows:

(i) Land rent is tripled if the land is not used for agriculture;

(ii) Land use permit is cancelled if the land is not used for more than three years;

(iii) Fallow land is free from land rent for one year;

(iv) Rent for sown land is calculated at the lowest rate specified by law; and

(v) Land used to grow fruit and vegetables are exempted from the 90 percent land rent for the first three years.

In terms of the agro-industrial activities in the eastern region, lack of financial resources and raw material inputs are among the major problems experienced. The status of some of these industries is as follows:

---

3 Also known as the Halhin Gol, is the same river that winds its way to the site of the proposed border-bridge and border port of Arxan.
(i) The meat-processing factory has potential for development with improved transport service. The factory has a design capacity of 90 tons of meat and meat products daily in addition to outputs destined for secondary markets in hides and other by-products. There are 30,000 animal skins processed each year using Chinese equipment and Mongolian labor. It would be an advantage to develop the capability to process the hides in the eastern region of Mongolia or in Xinganmeng. Given the distances these products are shipped, attempts should be made to transport more value-adding goods.

(ii) Dornod Province has an agreement to export meat to a processing plant in Borzya in the Chita Province of the Russian Federation. Beginning in September 2001, 50,000 heads of livestock per annum would have been transported to Borzya with a plan to gradually increase this volume to 250,000 per annum. Part of the agreement is that 35 percent of all of the meat exported to the Russian Federation shall be prepared in the province of Dornod.

(iii) The powdered milk factory in Choybalsan is a joint venture with a Chinese company that has a production capacity of 10 tons per day. However, production stopped due to lack of capital. It was set up to export its products to the PRC.

(iv) The eastern region of Mongolia produces high quality wool. Prior its closure, the Choybalsan’s wool washing plant used to sell its output to the Russian Federation. However, there is a plan to reopen it in July 2001 in order to sell to the PRC. The carpet factory also relied on output from the wool washing factory and exported its products to the Russian Federation. Under a rehabilitation plan, the design capacity of the factory of 650,000 square meters per annum will be reduced to serve the local market. The factory building will have space for other activities.

It is important to the local economy in the eastern region of Mongolia that these attempts to rehabilitate these industries succeed. It is evident that many of the small enterprises depend on the inputs from the agricultural sector. For example, Choybalsan’s flour factory has a capacity to produce 9,000 tons of flour each year plus another 6,000 tons of animal feed. In turn, the flourmill supplied the bakeries. Choybalsan also had factories engaged in meat processing, wool washing, and carpet production. Most of these factories either have closed down in recent years or have been operating well below their design capacity. Though these factories were designed to meet local consumption needs, economic linkages were important in promoting development.

There are numerous requests from the PRC to cut the wild grass in the eastern provinces and to sell it as animal fodder. One of the objectives in doing this is to reduce the risk of fires in the summer months—a disaster that knows no national boundaries. There is scope here for joint ventures as well as the potential to grow high quality fodder in the Halkh River area for export to Japan, South Korea and the PRC. Noting that Xinganmeng Prefecture is planning such a venture, this is potentially where the two parties can cooperate to create a significant market.

The northern areas of Hentiy and Dornod provinces are rich in timber, although recent fires that started in Russia wiped out half of the forests to the north of Choybalsan. Instead of using their own timber, the construction industry in Dornod is relying on recycled materials from the buildings abandoned by the Russian military.

**Energy**

**Xinganmeng Prefecture, PRC**

Xinganmeng Prefecture required 530 million kilowatts of power in 2000, of which the northeast power grid supplied 430 kilowatts. Only one third of the system’s capacity is used and, thus no energy constraint is foreseen for future industrial development in this area. Two transmission lines carry the power to Ulanhot, from where it is distributed throughout the prefecture. The local coal-fired power generators supply 36,000 kilowatts and hydropower generators add almost 16,000 kilowatts with yet another hydropower station planned.

The prefecture’s transmission system is well developed with 778 kilometers of power lines and 32 distribution stations. System loss has been noted to be only nine percent. However, a major problem lies in the transmission line from Ulanhot to Arxan City. About 208 kilometers of the cable are old and needs to be replaced. As such, power failure is frequently experienced in Arxan City. If funding were available, it would take one year to undertake a cable replacement project. In addition, there are plans to extend the power supply beyond Arxan to tourist sites such as Azalea Lake and to the border port.

There are power projects planned or proposed for the prefecture. One is a power project included in the Tenth Five-Year Plan that entails the construction of a second heating plant in Ulanhot at a cost of
$13.5 million. Another project explores the setting up of the wind power generation facilities, taking into account the strong winds in autumn and winter blowing down from Siberia. A pre-feasibility study has already been conducted and the cost of this project is $3.9 million. The intention is to find ways to produce renewable and non-polluting sources of energy. There also is a proposal to tap geothermal sources of energy in the Arxan area to serve the growing demand for power and heating for tourists and a budget of $36.3 million has been planned.

The Holin River coal mine has 12.9 billion tons of coal reserves and currently only supplies the Tongliao power plant that produces 800,000 kilowatts and the Changchun power plant producing 100,000 kilowatts. The distances from the coal deposit to these power stations are 380 kilometers and 900 kilometers, respectively. Together, both power plants use only 5 million tons out of the mine’s capacity to produce 30 million tons a year. In order to reduce the cost of producing power, it is proposed that a new coal-fired power plant be built in Bayanshushu at a cost of $61 million to produce 5.8 billion kilowatt annually.

### Eastern Region of Mongolia

Mongolia’s power comes from coal-fired power stations. There are six in Mongolia, including one in Choybalsan. The economic region along the Trans-Mongolian Railway is connected with high-powered transmission lines (The Central Energy System) that are linked to the Buryat Energy System of the Russian Federation through a 220-kilowatt line. Towns and settlements beyond the reach of these power stations have their own small power stations or diesel generators.

Choybalsan’s power station has four turbines; two producing 12 megawatts each and two producing 6 megawatts each. These turbines have been rehabilitated and other steps are being taken to improve the efficiency and reliability of the power station. The current demand in summer is only 6 megawatts and this rises to 13 megawatts in winter. The plant distributes power to other larger centers in Dornod Province, and a 200-kilometer transmission line carries power to Baruun Urt in Suhbaatar Province. Elsewhere in the eastern region, settlements have small generators. Many of the nomads have small wind power and battery units.

There are plans to develop new industries in Choybalsan. In particular, the Choybalsan City Council is considering proposals to establish a zinc refinery and an oil refinery. The zinc works would use six megawatts of power, and the oil refinery is intended to be a small plant serving local needs. Currently, the Choybalsan power plant has the capacity to deal with industrial expansion.

The Choybalsan power plant is important to the regional economy as it uses 240,000 tons of coal from the Adaluunchun coal mine, employs 570 people, and supplies inputs to other industries and to the community. The power station made a small operating surplus in the past financial year, but this was achieved only after increasing tariffs by 14.1 percent at the end of 2000. In fact, over the past four years, the tariff has doubled. The cost of the rehabilitation was $6.6 million for the first stage carried out between 1998 and 2001 and $2.6 million for the second stage due to finish in 2002. The consumption of oil will be reduced after this work is completed.

### Mining

#### Xinganmeng Prefecture, PRC

IMAR has deposits of more than 120 different kinds of minerals with five of these being the largest reserves in the PRC. Another 65 mineral reserves fall into the top 10 in the entire PRC. Overall, IMAR ranks third in the PRC for mineral reserves. Fifty-four types of minerals are present in Xinganmeng Prefecture, and explorations have been carried out at 326 locations. A total of 150 mines are in operation, with 35 exploiting coal deposits. These are small and only produce, in aggregate, 300,000 tons a year. This falls short of the demand for one million tons a year. As such, supplies have to be imported to meet the needs of industry and households. Iron ore is also available in Xinganmeng Prefecture, but currently the 400,000 tons of ore required for the steel mill in Ulanhot is imported from Liaoning Province. Ulanhot’s cement factory consumes 200,000 tons of limestone each year. One mine in Xinganmeng Prefecture has a deposit of 20 million tons and this industry has the capacity to expand if there is sufficient demand for construction materials, particularly in the rapidly expanding cities in the south such as Baicheng.

In addition, the prefecture has known deposits of zinc, silica sand and limestone. There are deposits of 670 million tons of ore containing zinc, and 40 million tons of silica sand. However, the mining sector in Xinganmeng is underdeveloped and the lack of technology in exploration is a constraint.

One of the resources with some potential is the bottling of mineral water. There is a plant in Arxan, but
there is scope to develop this into a more substantial business with appropriate marketing and brand name development. The water is high in mineral content, has a good flavor, and comes from an unpolluted area.

**Eastern Region of Mongolia**

Over the first five months of 2001, the total value of exports from Mongolia was $132.2 million. Of this, $63.5 million came from the sale of copper from the Erdenet mine and another $6.5 million was for export of minerals such as fluorspar. Mongolia is entirely covered by geological maps, and oil exploration now covers 20 percent of the country. The eastern region is rich in deposits of a wide variety of minerals, but the best prospects for current and future exploitation include coal, zinc, oil, uranium, gold (in Hentiy Province), salt (for use in the chemicals industry), and construction materials.

The Aduunchuluun Coal Mining Company at Choybalsan commenced operations in 1954 and was privatized in October 1999. The company is wholly Mongolian-owned with two shareholders holding 90 percent of the stocks and the workers holding the rest. One third of its production of brown coal is used by the power plant, while domestic users consume two-thirds of current output. The mine has a design capacity of 600,000 tons per annum, but now is producing only 250,000 tons per annum. The deposit is 400 million tons and it is relatively easy to mine.

The management of the mine is monitoring its rival in Chita Province of Russia (Har Nuur mine). It is known that the coal is similar but reserve in the Chita mine is only good for 20 to 25 years. In practical terms, it means that the extraction of coal in Chita Province is becoming increasingly difficult. The company is negotiating to sell 500,000 tons of coal a year to the Russian Federation. In addition, the company is looking at a market in the Primorsky Territory, which is currently getting its supply of coal from Chita. Each year, Primorsky Territory consumes 3.5 million tons and the distance from Choybalsan is 3,600 kilometers. A rail connection from Choybalsan to the Primorsky Territory via Arxan would shorten the trip by 1,500 kilometers. With this scale of tonnage, the coal mine would become the largest customer of the railway from Choybalsan to Arxan.

Another development proposal involves a loan of $12.2 million from the PRC to mine zinc at a site located 17 kilometers from Baruu Urt. The ore would be carried by truck to the Trans Mongolian Railway for shipment to the PRC where it would be processed. However, a proposal has been submitted as well to the Choybalsan City officials to establish a zinc refinery in Choybalsan. In addition, Russian and American investors are interested to mine the uranium deposit 120 kilometers to the north of Choybalsan. This mine has a capacity to produce 2 million tons of ore and was first operated in 1989. However, only 700,000 tons were extracted from 1989 to 1995 and then the mine was closed. Processing of the ore was undertaken in the Russian Federation’s 500 kilometers away by railway. In addition, there is interest also in mining complex metals in the eastern provinces and exporting products such as wolfram to Japan, South Korea and the PRC.

Another possibility for Choybalsan is to reopen the construction materials industries to support urban redevelopment. This includes the brick factory and concrete fabrication. Initially, a survey of raw materials such as sand and gravel is needed since these materials could be traded in the PRC where economic expansion has created a strong demand in the construction industry.

**Tourism**

**Xinganmeng Prefecture, PRC**

Until 1998, Xinganmeng Prefecture was closed to tourism. In a remarkably short period of three years, the
number of visitors increased to about 300,000 a year. However, the number of foreign visitors is only 400 and mostly from Japan and South Korea. This growth reflects the trends occurring within the PRC and indicates the tourism potential in Xinganmeng.

Xinganmeng Prefecture is rich in tourism resources - both natural and cultural. The natural resources are based on forests, grasslands, hot springs and snow sports. The cultural resources include sites of historical and religious significance. There are four major tourist districts in the prefecture as follows:
(i) Ulanhot for the historical and cultural attractions;
(ii) Arxan for nature and ecology;
(iii) Zhaleiteqi County for nature resources; and
(iv) Keyouzhongqi county for wetland and rare precious birds and ancient relics.

To be more specific, there are 15 famous scenic attractions in Xinganmeng Prefecture and another 100 scenic spots of lesser significance. In order of importance, the top attractions are (i) Arxan Hot Springs, (ii) The Border Area, (iii) Rose Peak, (iv) Azalea Lake, and (v) Volcano Crater Lake.

The local government of Xinganmeng has stressed that ecological tourism development is its top priority in 2001. Ulanhot is being promoted as the focal point of the prefecture since it is the center of politics, culture and transportation. From Ulanhot, it is possible to get access to the major grassland areas of Hulunbeir and Erlianhot. Arxan is also emphasized because of its rich tourism attractions and has great potential to become a major tourism destination. Because of its location near the border, attention could be placed on Arxan for its possible future role in cooperative ventures. Arxan is famous because of its hot springs and many people come here for health reasons. There is a hospital located adjacent to the springs and the demand for its facilities indicate that there is potential in Arxan as a convalescence resort. In addition, Arxan is an excellent base for tourism to the natural attractions of Azalea Lake, Crater Lake, Rose Peak and many more, and its role has been recognized by the IMAR government as an important tourist city. There is some snow skiing on the slopes near Arxan. With some investment, this could become a much more substantial winter attraction. In 2000, more than 80,000 people visited Arxan. Many of these visitors have a fascination with the border and it demonstrates potential to generate cross-border tourism just on the existing base of domestic tourism within the PRC.

The strategy for tourism is to invest in infrastructure and marketing over the next 3 to 5 years promoting “jewel” tourism. In other words, the plan is to promote first class attractions and to attract premium tourists. Also, since tourism in Xinganmeng Prefecture is seasonal, with
most visitors arriving during the summer months, the increase in the number of visitors during the winter is possible by developing snow sports.

Xinganmeng also has several important festivals. The main festivals are on April 15 and on July 20. There is the Nadaam festival, which is celebrated several times a year and the famous festival for aged people according to the Korean tradition. The latter is of great interest in Japan, and every year there is a tour group that arrives for this festival. It is known that there are 139 different associations in Japan interested in Xinganmeng.

In terms of tourist facilities, Ulanhot has adequate accommodation capacity at present. Arxan, on the other hand, with its capacity to accommodate up to 1,000 visitors, experiences shortage of rooms during peak season. Overall, the standard of accommodation is not adequate to attract larger numbers of foreign visitors and is not consistent with the strategy of promoting the region as a first class destination. Much more investment is required in accommodation and other hospitality enterprises.

Another resource found inadequate in the tourism sector is the human resource. Managers need to have a better understanding of the service requirements of tourists and the ability to make this sector profitable in a competitive market. Hospitality staff needs training in a variety of areas from food preparation to tour guide operations.

Eastern Region of Mongolia

Similar to the Xinganmeng Prefecture, the eastern portion of Mongolia is also well endowed with natural and cultural tourism resources. In the Province of Dornod, the cultural attractions include World War II monuments of Mongolian and Russian soldiers, Bonze Victory, Russian Tanks, 90 Heroes, Border Guard and the Wall. Physical attractions include the 300-kilometer steppe covering areas of Menen, Tamsag and Myatad; the hot springs; and wild plants and animals such as wild deer and gazelle. Four-fifth of the deer population in Mongolia is found in this province. There are also the four major rivers (Herlen, Onon, Ulz and Halkh) and two lakes (Hoh and Buir), that present potentials to develop fishing, water sports and other water related activities.

In the Subbaatar Province, some of the attractions include: (I) Altan-Ovoo Mountain – worshipped since the 13th century; (ii) Shilyn Bogd Mountain – refuge for those who fought against oppression by the nobility in the medieval era and a scenic spot; (iii) Hurgyn Hundii Valley– ancient rock monuments erected in the 10th century in memory of seven young women who sacrificed their lives rather than accept forced marriages to rich old men; (iv) Steppe Cave – one of the largest caves in Mongolia with 7 chambers and shining walls reaching 193 meters from the ground; and (v) Ganga Lake– famous for bird life.

The Hentiy Province is the birthplace of Genghis Khan and, thus, has many historical attractions related to his life. It also has ancient cities and temples such as the Ih Burhant, Herlen Bars and Avarga, and Bereeven temple, which are now in ruins. The Gundgavirian Hild is a temple built originally in 1660. It became a very large temple housing more than 1,000 monks and was Mongolia’s first school of philosophy. The province can be reached by vehicle within a day’s drive from Ulaanbaatar. It is bounded by a mountain range to the north and is covered by forests, Hentiy is also home to a large amount of wildlife. The eastern and southern parts of the province are steppes.

On the Mongolian side of the border, near Arxan, there are many culturally important tourism attractions. The area has attracted war veterans and their descendants from Japan to commemorate the battles that took place here in 1939. This is along the Halkh River where numerous monuments have been constructed bearing great interest to the Japanese visitors. Another attraction is the Hamar Davaa statue, which is 50 meters high and is built in 1864. This statue marks out an image of the Buddha with stone blocks on a hillside that is visible even from the PRC side of the border. The area near the border also has natural features such as sand dunes and open grasslands. The Buir Nuur is Mongolia’s largest lake, which is up to 50 meters deep and is surrounded by grasslands. Its northern shore borders the PRC and the lake is renowned for fishing.

Moreover, this area has attractions that can be promoted as icons in the global tourism. There are 1.2 million antelope in eastern Mongolia and the large herds cover the landscape. These are the last untouched grassland steppes and they abound in wildlife. Every effort should be made to protect this environment, but there is potential to use appropriate tourism development to generate the financial resources to ensure this protection can be sustained.

Despite these attractions, tourism is not well developed in the eastern region and fewer than 8,000 foreign visitors traveled to this part of Mongolia in 1998. It seems that the number of visitors is now substantially lower.

There are only four ger camps in the eastern provinces; three in Hentiy, two in Subbaatar and none in Dornod. Hentiy has five licensed hotels, Subbaatar has two and Dornod has only one. These are small establishments and much more investment is needed in the accommodation and hospitality industries in order to
attract more visitors. The Tourism Development Board of Mongolia has prepared new itineraries for the eastern region based on a “chain” concept that links tours in each of the three provinces.

A comprehensive tourism master plan for Mongolia was completed in 1999 under a study commissioned by the Japan International Cooperation Agency (JICA). Given the competing demands for resources, the state of
development of infrastructure and supporting services, and the interest shown in the attractions by tourists, this study did not place a high priority on development of tourism in the eastern region in the short-term. This does not mean that tourism cannot be developed here, but it does illustrate an important point. It is indisputable that the eastern region has world-class attractions, but it needs to devise a plan to develop them and to tap markets in the context of regional cooperation with PRC.

Transportation

Road and Rail Transportation

Xinganmeng Prefecture, PRC

The main surface transport links in the project area are shown in Figure 2.4. Though Xinganmeng Prefecture is in a relatively remote area of the PRC, it nevertheless has a well-developed network of transport infrastructure. Ulanhot is connected by National Road Number 111 to Beijing via Changchung, a distance of 1,168 kilometers. This highway is being upgraded within the Tenth Five-Year Plan and will be able to service heavy truck traffic. The distance from Ulanhot to Tumen on National Road Number 302 is 980 kilometers.

Provincial Road Number 202 connects Ulanhot to Hailar in Heilongjiang Province. From there, it is possible to reach Manzhouli, the border port with the Russian Federation, by rail or road. This route is 535 kilometers long. The road from Ulanhot to Arxan was upgraded in 2001 all the way to the border port as a paved two-lane road (see Figure 2.5). There is also a border road running from Arxan to Hailar that mostly served the forestry industry. Under the Tenth Five-Year Plan, it is intended that this road will be upgraded at a cost of $80 million. A preliminary feasibility study to construct a bridge at the Arxan Border Port across the Halkh River estimated the total cost of the project to be approximately $600,000.

The railway network in the Xinganmeng Prefecture is relatively well developed. The railway line connecting Baicheng in Jilin Prefecture to Arxan via Ulanhot is the most important line in the prefecture. This railway line was constructed in 1934 and it is 254 kilometers between Ulanhot and Arxan and 100 kilometers between Ulanhot and Baicheng. From Baicheng, connections are made on main lines to other places in the PRC. The daily passenger train from Beijing to Ulanhot takes 30 hours. Other daily services connect Ulanhot with Harbin, the capital of the adjacent northern Heilongjiang Province, and to Changchun, capital of the adjacent southern Jilin Province.

With the addition of a new train on May 28, 2001, there are three passenger services each day running from Baicheng to Arxan in each direction. Each train has a capacity of 800 passengers but can carry up to 900 people at peak times. The trains take approximately six hours to travel between Ulanhot and Arxan with stops en route. The average daily passenger throughput at Ulanhot Railway Station is 1,900 passengers.

In addition to the passenger services, there are four freight trains each day in each direction on the Ulanhot to Baicheng section of the line. On average, these trains carry about 4,400 tons a day. The main commodities carried are timber, cement, grain, sugar, oil, iron ore, steel, coal and construction materials. On the Ulanhot to Arxan section of the line, there are two freight trains each day carrying an average load of 1,900 tons per day. The main commodities are timber and limestone.

If the border port is opened up, there is a plan to upgrade the track from third to second class. The preliminary estimate reveals that this would cost $27 million. Moreover, the addition of extra loads will require the use of a second locomotive to haul the trains to as far as the Hinggan Tunnel from Arxan. Another project proposed within the Tenth Five-Year Plan is a new railway connection north from Yirshi towards Manzhouli. The cost of said project is estimated to be $163 million.
Eastern Region of Mongolia

Mongolia’s road network totals 42,000 kilometers and it connects 21 major cities and towns and 160 smaller centers. However, only 5,400 kilometers of this network are improved, and only 1,640 kilometers are paved and these are in poor condition. Gravel roads also get little attention, but the majority of roads are “natural” earth roads (see Figure 2.6). The transport network in eastern Mongolia reflects its sparsely dispersed population. The roads connecting the main regional centers and the national capital are basic roads with a gravel surface. Roads to smaller centers are rough tracks that carry very low traffic volumes.

Dornod Province has 2,563 kilometers of road, of which 60 kilometers are paved— all of which is in and around Choybalsan. In Suhbataar, the state roads cover a distance of 535 kilometers, and in Hentiy, the state road system is 639 kilometers long. The distances between the main centers are set out in Table 2.2. Travel speeds with the prevailing road conditions are low and these distances pose considerable barriers to commerce and social interaction. There is no formal road from Tamsagbulag to the border port at Arxan, a distance of approximately 200 kilometers across mostly flat, grassland steppes.

Mongolia has prepared a Road Master Plan and Feasibility Study with ADB assistance for the period 1992-93 and 1998-99, together with studies for specific roads. The light traffic volumes on the roads in the eastern region make it difficult to establish a high priority on upgrading work.

The Government of Mongolia recently announced a long-term program to build the Millennium Road traversing the country from west to east, via Ulaanbaatar. In addition, there are plans to build “vertical links” through each of the major regions of Mongolia. In the eastern region, this link runs from Ereentsav on the border with the Russian Federation, through Choybalsan to Baruun Urt, and then to Bichigt on the border with the PRC. The planned route for the Millennium Road to the east is from Ulaanbaatar to Bagannuur, via Ondorhaan and Choybalsan, to the border area in Sumber where it would reach the Arxan Border Port.

At present, Mongolia’s main railway line is the Trans-Mongolian Line. It is a broad gauge line (1520 millimeters) running from Suhbaatar at the border with the Russian Federation, through Ulaanbaatar and on to Zamyn Uud at the border with the PRC—a distance of 1,110 kilometers. Because the PRC railway system uses standard gauge (1435 millimeters), it is necessary to have transfer stations at Zamyn Uud and at Erenhot on the PRC side of the border. A 96-kilometer
branch line carries coal from the Bagahangai mine to Baganuur, 107 kilometers south of Ulaanbaatar. The Trans-Mongolian Line links the PRC rail system with the Trans-Siberian Railway.

In addition, a 238-kilometer broad gauge line runs from Choybalsan to the border with the Russian Federation at Ereentsav, and then on for another 90 kilometers to Borzya where it links with the Trans-Manchurian Railway. In turn, a connection can be made to the Siberian Main Line 247 kilometers away. Chita City is 343 kilometers from Borzya. The Mongolian section of the track has a branch line deviating at Chingisval, 161 kilometers from Choybalsan, and goes for another 36 kilometers into the uranium mine at Mardai.

The Choybalsan to Borzya line provides a link to the TREDA via Zabaikalsk/Manzhouli, but the disadvantages of this route are that:
(i) The route is indirect,
(ii) It requires two border crossings, first from Mongolia into the Russian Federation, and second from the Russian Federation into the PRC,
(iii) Tracts are of different gauge at border crossings, and
(iv) The line from Manzhouli to Tumen River is highly congested and cannot be upgraded, according to a pre-feasibility study.

Eastern Mongolia is rich in minerals and has the potential to generate substantial volumes of freight but the lack of an efficient transport service constrains development. This is recognized widely and ways of linking the eastern provinces of Mongolia and the TREDA have been explored. A preliminary feasibility study was carried out in 1993 by the Mongolian Railways for a route connecting Choybalsan and Halhin gol (Arxan Port). The Jilin Provincial Government raised two additional routes for consideration. A fourth route has been proposed to connect Choybalsan more directly with a route to Manzhouli without going via the Russian Federation. The pre-feasibility study commissioned by the UNDP-TRADP in 1997 then specified the following alternatives:

Route A: Choybalsan–Tamsagbulag–Halkh River/Sumber–Arxan–Ulanhot–Baicheng
Route B: Baganuur–Ondorhaan–vicinity Dornod Shavar Nuur–Lamyn Hairhan Uul–Ulanhot–Baicheng
Route C: Baganuur–Ondorhaan–vicinity of Dornod Aimag/Suhbaatar Aimag border–Baicheng
Route D: Choybalsan–Manzhouli

In more detail, Option A is to construct a new line from Choybalsan to Arxan in Xinganmeng Prefecture to connect with the line running to Ulanhot and on to Baicheng. From there, trains can connect through to Changchun, Jilin and then to Tumen. While there are some constraints on capacity on the Changchun to Jilin section of the route, the PRC plans to upgrade this to dual track. This is the route studied in 1993 by Mongolian Railways.

Options B and C were raised by the PRC, with a more westerly alignment requiring construction of new track to relieve pressure on the existing Ulanhot to Arxan section. Route B was then modified to ensure that it passed as close as possible to promising mineral deposits, especially oil. The modified Route B, and a variation described as Route B1 were:

Route B: Ondorhaan–Choybalsan–Tamsagbulag–Lamyn Hairhan Uul–Ulanhot–Baicheng
Route B1: Choybalsan–Tamsagbulag–Lamyn Hairhan Uul–Ulanhot–Baicheng

Option D is the more direct route following the existing rail alignment from Choybalsan to Chingisval, and then heads eastward to Manzhouli without passing through the Russian Federation. It would make sense to construct this line in standard gauge and run this all the way to Choybalsan so that transshipment of coal and other products would not be necessary. This is the rationale for Route D that was proposed in 1996.

Some details about the evaluation of the routes are summarized in Table 2.3. Each route was planned as standard gauge, and the track costs include passing loops. In addition to the track costs, it is necessary to invest in rolling stock. That means for routes A, B, B1, C and D to

---

Table 2.2: Road Distances in Eastern Mongolia

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Distance (kilometers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ulaanbaatar</td>
<td>Ondorhaan</td>
<td>331</td>
</tr>
<tr>
<td>Ondorhaan</td>
<td>Baruun Urt</td>
<td>229</td>
</tr>
<tr>
<td>Ondorhaan</td>
<td>Choybalsan</td>
<td>324</td>
</tr>
<tr>
<td>Choybalsan</td>
<td>Baruun Urt</td>
<td>191</td>
</tr>
<tr>
<td>Choybalsan</td>
<td>Ereentsav</td>
<td>240</td>
</tr>
<tr>
<td>Choybalsan</td>
<td>Khavirga Port</td>
<td>135</td>
</tr>
<tr>
<td>Choybalsan</td>
<td>Tamsagbulag</td>
<td>200</td>
</tr>
</tbody>
</table>

Source: Local Government of Dornod and the Ministry of Infrastructure of Mongolia

---

4 Pre-Feasibility Study, Mongolia-China Railway Project, Final Report, UNDP/Tumen Secretariat Usops Contract No. C-97-0134, SweedsRail (Sweden) in association with Monconsulting (Ulaan Baatar) and Unirule Institute of Economics (Beijing), September 1998.
serve the traffic up to 2005, the amounts of $143 million, $140 million, $109 million, $108 million, and $97 million are required, respectively. Operating and maintenance costs were also included.

The revenue streams were based on forecasts of the traffic potential of each line and on assumed freight tariffs. Railways in the PRC and Mongolia are subsidized, but the pre-feasibility study used “economic” costs in the evaluation, ranging from $0.20 to $0.25 per ton-kilometer. These are 3 times the maximum rates charged in the PRC and up to 15 times greater than the lowest tariffs. The traffic volumes were changed according to the route, but do not appear to have been varied when different freight tariffs were used. By 2005, it was predicted that the railway would be able to attract 1.5 million tons of coal and another 1.5 million tons of oil each year. The next most important categories of cargo would be ore and construction materials (0.8 million tons), transit cargo (0.3 million tons), general cargo (0.26 million tons), containers (0.15 million tons) and zinc (0.07 million tons). Other significant cargoes were predicted to be iron and steel, fodder, grain and fertilizer. Furthermore, the study assumed that there would be 380,000 passengers a year travelling on the line in 2005, but this had a very small impact on the revenue of the operation. Route B was predicted to have the greatest traffic volume, but it also involved a much greater construction cost.

For Route A, the net present value falls from $1,299 million to $429 million when the freight rate is reduced from $0.25 to $0.20 per ton-kilometer. The break-even tariff at a discount rate of five percent for project A is $0.017.

The pre-feasibility study also considered environmental impacts. In particular, exhaust fumes and effects on wildlife were presented. Because of the low population density in eastern Mongolia, it was pointed out that local environmental hazards from emissions did not have to be considered. In so far as greenhouse gases are concerned, this did not have any bearing on the choice of a railway route and are only relevant to a consideration of rail versus road as the transport solution. One of the objections to a rail line is its impact on wildlife, and in particular on the effect it might have on the vast herds of gazelles. It is believed that this matter can be dealt with using level crossings, noting that the animals do not seem to be deterred in crossing vehicle tracks. However, if the railway is protected with a fence, there will be issues to resolve.

### Air Transportation

**Xinganmeng Prefecture, PRC**

Ulanhot’s new airport was opened in April 1995, replacing an obsolete facility. The airport is constructed to Class 3C standard with the runway that is 1,800 meters long.
and 36 meters wide and pavement depth between 27 and 32 millimeters. Though it is possible to land a B737 on the airport, the largest aircraft that would normally use the airport is the BAE146 with 86 seats. The other common type of aircraft to use the airport on scheduled air service is the Dornier 320. Some charter flights operate to the airport with using different aircrafts from time to time. The passenger terminal measures 2,266 square meters and has the capacity to process 600 passengers every hour. The cargo terminal handles 10,000 tons a year but the aircraft used for scheduled passenger service do not have a large cargo capacity. The airport has modern navigation and air traffic control facilities and is open 24 hours a day. The Tenth Five-Year Plan envisages that the airport will be upgraded to 4C standard with the runway being extended by another 600 meters and widened to 45 meters. This will permit regular operations of the B737 aircraft.

Since the airport is relatively new, it is still in the process of establishing its traffic base with the airport’s management actively engaged in marketing. Currently, there are six return flights between Ulanhot and Beijing and another six flights a week between Ulanhot and the capital of IMAR, Hohhot. The flight between Ulanhot and Beijing takes approximately one hour and 40 minutes to Dalian and since, is pioneering the beginning to increase of the growth of the airport and has already identified Baicheng as an important city for future connections. A site has been chosen for constructing a new airport, which is budgeted for 240 million MNT. MIAT relies on Antonov-24 for domestic services. The last of these must be phased out by 2005 for safety reasons as they are almost 30 years old with maintenance limitations due to 2005. The aircraft under consideration for replacement purposes will not be able to land at 18 of the 22 airports in Mongolia, including Baruun Urt and Ondorhaan. Upgrading work will be necessary to pave runways and to make it possible to operate more airports on a 24-hour basis to improve the utilization of aircraft.

Choybalsan Airport has the required infrastructure and services. Baruun Urt’s grass runway is 1,900 meters long and 50 meters wide. Its passenger terminal was built in 2000 and is adequate. Ondorhaan’s grass runway is 1,600 meters long. The airport also has appropriate air navigation and communication systems. However, there are no funds to undertake the upgrading work to meet the requirements of the new domestic aircraft, and the total cost of paving and lighting runways at 7 of the most important regional airports amounts to $30 million. In

5 For example, state leaders were brought here in a B737 to supervise emergency efforts during the disastrous flood in 1998.
An even more serious problem for Mongolia is that the nation's gateway airport, Buyant-Ukhaa International Airport, 14 kilometers from Ulaanbaatar has a number of serious deficiencies and does not comply with International Civil Aviation Organization (ICAO) regulations. With the expected growth in traffic, the proposed solution is to construct a new international airport 36 kilometers away from the current site in an open valley beyond the town of Zuun Mod. This will be a costly project drawing heavily on the limited resources of the civil aviation sector.

At the same time, MIAT has to finance its fleet replacement. Its computer systems are poorly developed and it has complicated boarding procedures. Its reputation for punctuality and reliability is poor. The Government of Mongolia is eager to privatize MIAT and a study will be mounted to prepare MIAT for this step.

Other Sectors

Water Supply

Xinganmeng Prefecture, PRC
Xinganmeng Prefecture has 5 billion cubic meters of surface and ground water, 6 rivers, and 17 reservoirs with a capacity of 1.6 billion cubic meters. The Prefecture can supply 1.5 billion cubic meters of water each year, of which 1.1 billion is from surface water. Two big reservoirs are planned and the feasibility study report has been completed and approved by the local authority. The Prefecture wants to develop irrigation channels and to produce as much ground water as possible, while using the reservoirs to generate power and to set up fish breeding ponds. There are two water companies treating water in Ulanhot and another four in the rest of the Prefecture, one of which is in Arxan. It is planned that a Water Affairs Bureau be created in the future to control water supply.

Eastern Region of Mongolia

Mongolia’s water resources are rivers, lakes and ground water. This ground water is the main source of a protected water supply for most of the towns and settlements and herdsmen have drilled wells. Usually this water is no deeper than 60 meters. Water in the tourist camps comes from ground water and is regarded as adequate in quality and supply. Wastewater, however, from the tourist camps is discharged without treatment, which is an environmental concern to be addressed.

Ground water is the major source of water supply for agricultural activities and general consumption in eastern region of Mongolia. The total amount of ground water resource available for consumption in this region is 2.5 billion cubic meters per year. In terms of availability by province, 44 percent is found in Dornod, 24 percent in Subbaatar and 31 percent in Hentiy. Recent geological studies reveal that there is sufficient water resource in the eastern region of Mongolia to facilitate economic development. However, there may be some difficulties in extracting ground water in certain areas due to the occurrence of minerals.

Telecommunications

Xinganmeng Prefecture, PRC
The PRC's mobile telephone network coverage includes Xinganmeng Prefecture and reaches all the way to the border and steps are being taken to improve the telecommunications capacity within Xinganmeng Prefecture. Presently, the total capacity of telephone lines in the prefecture is 113,146 telephone lines with 90,000 subscribers serviced. This brings the density ratio in the prefecture to about 5.59 telephones per 100 residents. This ratio is slightly above the average telephone density ratio of 5.55 for developing countries.

The capacity of the mobile network facility is about 66,000 but the number of subscribers is only 17,800. This brings the mobile phone density ratio in the prefecture at about 1.11 per 100 residents, which is slightly below the average mobile phone density of 1.79 for developing countries.

Eastern Region of Mongolia

The telephone infrastructure in the eastern region of Mongolia is poorly developed. To wit, telephone density ratios are low with Dornod at 2.13 per 100 residents, Subbaatar at 1.34 and Hentiy at 1.68. These ratios are substantially below the national average of 4.2 per 100 residents.

The Government of Mongolia plans to implement major projects between 2001-2004, with financial assistance from foreign donors and international organizations, to improve and expand the coverage of the telecommunications services in the country. Among these is a project to modernize the telecommunication network in the eastern region of Mongolia and a project to estab-
lish information and communication service centers in the rural areas of Mongolia.

Human Resource

Xinganmeng Prefecture, PRC

In 2000, the labor force in the Xinganmeng Prefecture was 660,564, of which 655,000 were employed and 5,564 were registered unemployed. Majority of the workers was in the primary sector (62.4 percent) followed by the tertiary sector (28.5 percent) and the secondary sector (9.2 percent).

The compulsory general education standard in the PRC consists of six years in the primary school followed by three years in the junior secondary school. It is followed by another three years in the senior secondary school prior higher education in the university. In the Xinganmeng Prefecture, 46.3 percent of the population have attained nine years of the compulsory education and about 41.5 percent attended higher education than the senior secondary school. Moreover, about 6.3 percent of the adult population each year have taken various kinds of vocational training including training for about 55,000 farmers/herdsmen and laid off workers of state-owned enterprises.

In the next five years, the local government of Xinganmeng plans to improve its human resource by:
(i) increasing the number of people that have attained the nine years compulsory education to 85 percent of its population by 2005,
(ii) improving the efficiency of educational resources,
(iii) expanding senior secondary school education,
(iv) giving priority to the minority groups, and
(v) increasing financial investment in education.

Eastern Region of Mongolia

In 2000, the labor force in the eastern region of Mongolia was 66,800 people with 61,530 employed and 5,270 unemployed. The labor force by province is given in Table 2.4.

Table 2.4: Labor Force in the Eastern Region of Mongolia, 2000

<table>
<thead>
<tr>
<th>Province</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Region of Mongolia</td>
<td>61,530</td>
<td>5,270</td>
<td>66,800</td>
</tr>
<tr>
<td>Dornod</td>
<td>16,991</td>
<td>2,397</td>
<td>19,388</td>
</tr>
<tr>
<td>Suhbaatar</td>
<td>21,674</td>
<td>1,009</td>
<td>22,683</td>
</tr>
<tr>
<td>Hentiy</td>
<td>22,865</td>
<td>1,864</td>
<td>24,729</td>
</tr>
</tbody>
</table>

Source: Dornod Aimag Economic and Social Statistics (2000) and National Statistical Office of Mongolia.

The schooling system in Mongolia is based on the Russian schooling system. This means four years in the primary school, another four years in the junior secondary school, and then two years in the senior secondary school. In 2000, the population that completed their formal education in the provinces of Dornod, Suhbaatar, and Hentiy were 66.2 percent, 62.1 percent, and 64.1 percent, respectively.

Financial

Xinganmeng Prefecture, PRC

There are various financial institutions in the Xinganmeng Prefecture under the supervision of the local branch of the People’s Bank of China (the central bank). These include the branches of major state banks namely: the Industrial and Commercial Bank of China, Agriculture Bank of China, Construction Bank of China, as well as branches of other national banks (e.g., Bank of Communications and China Merchants Bank), and local urban and rural credit cooperatives. The total deposit in the prefecture was $450 million in 2000, a 20.7 percent increase from previous year. Total loan, on the other hand outpaces deposits at $900 million in the same year, posting a 6.8 percent increase from that of last year. The major breakdown of total loans is: (i) $75 million to industry, an 11.9 percent decrease from previous year; (ii) $550 million to commerce, a 3.3 percent increase from previous year; and (iii) $50 million to agriculture, a 29.3 percent increase from previous year.

The private sector in the Xinganmeng Prefecture has significantly increased its participation in the economy but they have limited access to bank finance. The private sector in the PRC reportedly only accounts for about one percent of bank lending. Moreover, the following major obstacles have been identified in accessing bank finance in the PRC:
(i) Lending practice of commercial banks. The local governments continue to encourage bank lending to state-owned enterprises (SOEs) by extending explicit or implicit guarantees, etc.;
(ii) Large proportion of non-performing loans in the state commercial banks portfolio, which affected the lending policies of the state banks;
(iii) Controls on interest rates and transaction fees;
(iv) Complicated bank procedures; and
(v) Informational problems.

On the public finance side, the local government of Xinganmeng received $65.4 million in local revenue in year

2000; a 8.2 percent increase from the previous year. The major revenue items were agricultural tax, value-added tax, business tax, personal income tax, and city construction tax. In addition, the local government received a $61.2 million transfer fund from the national government. This brings total revenue to $126.6 million for the year. On the expenditure side, the local government spent $136.5 million, which was 16.1 percent higher than last year’s expenditures. The major expenditure items were government administration, education, irrigation for agriculture and forestry, basic infrastructure construction, and agricultural support. The local government incurred a budget deficit of $9.9 million in 2000.

Eastern Region of Mongolia

The Mongol Bank (the central bank), Agricultural Bank, Trade and Development Bank, and Mongol Post Bank all have branches in the eastern region of Mongolia. Table 2.5 presents the amount of deposits and loans in the region. As shown, non-performing loans is a major problem in the banking sector with over 50 percent of the total loans noted as non-performing. Due to poor economic conditions and prospect in this region and the large proportion of non-performing loans in the banking system, most banks are reluctant to lend money to small and medium enterprises (SMEs).

Table 2.6 reveals the public financial standing of the provinces in the eastern region of Mongolia. On the whole, the local governments incurred an aggregate budget deficit of $2 million in 2000, which was financed by loans from the central government and the Health Insurance Fund. The combined local revenues and expenditures of the three provinces posted an increase from previous year’s performance of 14.2 percent and 32.1 percent, respectively. The major revenue items were income tax, value-added tax, license fees, and company tax. The major expenditure items were education, health services, and social security services.

Table 2.5: Size of Deposits and Loans in Eastern Region of Mongolia, 2000

<table>
<thead>
<tr>
<th>The Project Area</th>
<th>Deposits (US$)</th>
<th>Outstanding Loans (US$)</th>
<th>Non-Performing Loans (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Region of Mongolia</td>
<td>715,800</td>
<td>378,100</td>
<td>191,200</td>
</tr>
<tr>
<td>Dornod</td>
<td>115,800</td>
<td>295,800</td>
<td>135,200</td>
</tr>
<tr>
<td>Suhbaatar</td>
<td>210,800</td>
<td>47,700</td>
<td>45,200</td>
</tr>
<tr>
<td>Hentiy</td>
<td>389,200</td>
<td>34,600</td>
<td>10,800</td>
</tr>
</tbody>
</table>

Source: The National Statistical Office of Mongolia

Table 2.6: Public Finance of the Eastern Region Mongolia, 2000

<table>
<thead>
<tr>
<th>Item</th>
<th>Eastern Region of Mongolia</th>
<th>Dornod</th>
<th>Suhbaatar</th>
<th>Hentiy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Revenue</td>
<td></td>
<td>1.1</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Central Government Transfer</td>
<td></td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Total Revenue</td>
<td></td>
<td>3.7</td>
<td>3.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Total Government Expenditure</td>
<td></td>
<td>4.1</td>
<td>3.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Budget Surplus/Deficit *</td>
<td></td>
<td>-0.4</td>
<td>-0.7</td>
<td>-1.0</td>
</tr>
</tbody>
</table>

* Amounts may not tally due to rounding of numbers. Source: Dornod Aimag Economic and Social Statistics (2000) and the National Statistical Office of Mongolia.
CHAPTER 3

Assessment of Potential for Economic Cooperation in the Project Area

Policy Environment

Xinganmeng Prefecture, PRC

The potential of Xinganmeng Prefecture must be assessed against the general background of the economic situation of the People’s Republic of China (PRC). After years of strong growth, the country’s economy began to slow down in the fourth quarter of 1998 due to relatively weak demand for investment and corruption. The government responded by cutting interest rates and introducing a fiscal stimulus package. A central element of the government’s economic strategy is to encourage consumers to spend more. The services sector is one of the targets for achieving this and tourism is regarded as a promising area. Through the expansion of domestic tourism, it is possible to target spending in specific regions in order to deal with another government priority, rural poverty. There are signs that there is a good deal of potential to promote domestic tourism as explained later in this chapter.

Two essential challenges for the PRC are to implement effective reforms in state-owned enterprises and to improve the performance of the financial sector. All of this must be achieved quickly as the PRC needs to face the challenges arising from being a new member in the World Trade Organization. This involves commitments to cut tariffs, liberalize trade and investment, and to open up domestic sectors for foreign participation. This will cause a good deal of readjustment in some sectors to become internationally competitive. For example, steel producers in the PRC now are going through a consolidation process to achieve economies of scale and to reduce their costs of acquiring material inputs. This will make it more difficult for small steel producers such as the one in Ulanhot to survive in the long term.

This is the general environment that will shape the future development of Xinganmeng Prefecture. Its industries will need to improve their productivity and it is possible that some industries will need to be replaced by alternatives that are more competitive. Though it appears that crop production is relatively efficient in much of Xinganmeng, there is a need to consider shifting the emphasis from low yielding grain production to higher yielding outputs such as fresh vegetables, “green foods” and medicinal herbs.

Another important national policy in the PRC is the decision to make economic development of the western provinces a top national priority for the next decade. The government’s “Western Big Development” or “go west” initiative targets the 12 less developed provinces or the autonomous regions. Inner Mongolia Autonomous Region (IMAR) is included in the group. Together, these regions occupy more than half of the country’s land and have the nation’s most important reserves of oil, natural gas and minerals. Due to physical remoteness, lack of infrastructure, and weak access to markets, these regions remain relatively underdeveloped. In addition, these are environmentally sensitive areas and the problems here with desertification have implications as far away as Japan. The PRC is concerned in reversing this process of environmental degradation.

The Government of Inner Mongolia Autonomous Region (IMAR) has accepted the obligations under this policy and regards the “western development strategy” as an opportunity. Sixty percent of the total land area of IMAR is desert, which is still expanding annually. The major desert areas lie only 180 kilometers from Beijing. Soil erosion in the middle and upper reaches of the
Yellow River results in the loss of 180 million tons of sand each year and this is being deposited in the lower reaches. Yet IMAR is rich in natural resources, ranking third in the PRC in terms of mineral reserves. Moreover, IMAR produces five billion tons of grain surplus annually and it is the largest pastoral area in China. With this endowment, IMAR is looking to the western development program to focus attention on its potential and to act as a stimulus to growth. Its location along the PRC’s northern border makes it a valuable bridgehead for increased trade with Mongolia, the Russian Federation, and beyond to Europe.

The development strategy being pursued in IMAR fully embraces the Western Development Program and its central elements are the “One Line,” the “Three Areas,” the “Ten Great Projects,” and the “Three Great Goals.” By the “One Line,” the government means that it will build a “protection line of sustainable economic and social development.” Rehabilitation of the environment has become the largest infrastructure sector in attempts to reverse the desertification process. One of the three areas targeted for future development is the ecologically sustainable agriculture. This will take advantage of IMAR’s unpolluted farmlands where insecticides, artificial fertilizers, and artificial animal fodder are unknown. Another strategy is to develop the energy sector and to supply raw materials to the PRC’s industries. IMAR is rich in coal and the idea is to develop power stations close to the resource and to sell the power to Beijing and other growing cities. Still another strategy is to concentrate on scientific research, production, and application of rare earths; exploiting IMAR’s large reserves for application in metallurgy; the chemicals industry; and the manufacturing of glass, porcelain, and textiles. IMAR intends to construct a rare earth high-technology development zone.

The first of the ten projects is to protect the natural forests from further logging, turn cultivated land back to forest and grassland, and ecological environment management. The objective is to construct a 2,400-kilometer forest and grassland “protection line” for north China. Other projects deal with transport, information technology, infrastructure, and improve water resource management. IMAR plans to improve the urban environment in the large cities, designating some cities as tourist sites, and strengthening the role of border ports. IMAR will continue to reform its industries in the process of moving from a centrally planned economy to a market-based one. Furthermore, IMAR intends to play a bigger role in the development of Chinese Mongolian medicine, the production of high-class food additives and animal fodder additives. Likewise, there is the intent to invest in the technology of embryo transplant and artificial insemination and the development of improved animal breeds for animal husbandry. The goals are to reverse the process of environmental degradation by 2010, to unify the people of IMAR and achieve prosperity for all groups.

These policies are reflected in the projects included in the Tenth Five-Year Plan for Xinganmeng Prefecture. Many of these projects were mentioned in chapter 2 and Table 3.1 summarizes the distribution of project funds across the sectors. Notably, 42 percent of the budget is marked for environmental projects. The next largest sector in terms of projects is transport, followed by agriculture, energy, tourism, and water supply and sewerage.

### Eastern Region of Mongolia

The trend in Mongolia has been for the population to move from the countryside to the regional centers, and from the regions to the biggest cities (Ulaanbaatar, Darhan and Erdenet). This resulted in pressures on urban services, a rise in unemployment and poverty, and a generally adverse impact on the environment. In response to this, the Parliament passed a resolution on 14 June 2001 to develop Mongolia through a strategy of regional development. The guidelines divide Mongolia into four regions: western, khangai (mountainous forest), central and eastern regions. Ulaanbaatar is a special fifth region. These guidelines have been developed over several years and, in addition to concerns about the impacts of urbanization, the policy aims at improving the management of public finances and improving the capacity to exploit resources throughout the country. Mongolia’s small population and its large area make it difficult to support a fully

#### Table 3.1: Distribution of Funds for Sectoral Projects Proposed for Xinganmeng Prefecture in the Tenth Five-Year Plan

<table>
<thead>
<tr>
<th>Sector</th>
<th>Planned Expenditure ($ millions)</th>
<th>Share of Overall Budget (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>257</td>
<td>19.4</td>
</tr>
<tr>
<td>Energy</td>
<td>115</td>
<td>8.7</td>
</tr>
<tr>
<td>Environment</td>
<td>556</td>
<td>42.0</td>
</tr>
<tr>
<td>Tourism</td>
<td>41</td>
<td>3.1</td>
</tr>
<tr>
<td>Transport</td>
<td>335</td>
<td>25.3</td>
</tr>
<tr>
<td>Water Supply &amp; Sewerage</td>
<td>20</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,323</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Xinganmeng Prefecture Administration.
decentralized policy. The nation’s finances have been spread very thinly over 21 provinces. The development policy now will give the regions the fiscal responsibility to allocate public funds.

Mongolia is rich in natural resources and in its animal husbandry sectors. But these resources are mostly in sparsely populated areas. The regional strategy is designed to foster a capacity to exploit those resources, although no decision has been made about the designation of any particular center as the regional capitals.

The legal conditions to support regional development still need to be established, and the roles of the regional capitals will be specified. The plan will be introduced over the periods 2001-2005, 2006-2010, and 2011-2020. The Government expects that the regions will identify the main sectors they want to develop. The national government will support the initiatives taken by each of the regions through appropriate measures.

The construction of the Millennium Road to connect the regions with domestic and foreign markets is a key element of the strategy. This ambitious project will be implemented over the next decade with the plan to link the main population centers across the country, and it will be complemented by a series of “vertical” roads running from north to south within each of the designated regions.

Mongolia derives the largest share of its foreign income from mining, and there is strong central government support for initiatives to open up mines and to export to the PRC, the Russian Federation and beyond. Tourism is another priority sector with the national tourism plan allowing each region to decide how they want to develop this sector, recognizing that each area has its own characteristics.

Mongolia continues to be an economy in transition. This is reflected in the eastern region where once thriving enterprises lie idle for want of inputs, capital and markets. An important part of the strategy of the provincial governments in the eastern region is to rehabilitate the most promising factories. This will generate jobs directly in those enterprises and indirectly help the agro-industries to improve their position. At the same time, the provincial governments are encouraging domestic and foreign investors to expand mining and minerals processing.

The biggest single constraint on development for the eastern region is its isolation from markets. The distances from the mines to markets are very large and the transport infrastructure is generally very poor. The exceptions are the railway line from Choybalsan to the Russian border at Ereentsav and the high-standard runway at Choybalsan airport. Both are under-utilized and ways are being explored to increase the level of traffic. At the same time, the provincial governments are strong advocates of subregional economic cooperation. A key objective is to improve access to markets. For this, the Tumen River Economic Development Area is regarded as being strategically important. There is a great deal of support for the construction of a railway line using the standard gauge of China from Choybalsan to Arxan. As pointed out above, the PRC’s railway infrastructure runs almost to the Mongolian border at this point and the link provides the shortest route from eastern Mongolia to the ports studied under the Tumen Area Development Programme.

Dornod Province has explored in the past the idea of being designated a free trade zone. Normally, a free trade zone can be successful where there are major barriers to trade. With the PRC’s entry into the World Trade Organization and increasing economic integration in northeast Asia, the concept of a free trade zone has less attraction now. Nevertheless, the province is encouraging its local enterprises to take an outward look at trading opportunities and it can see potential for the eastern region to become more involved within the Tumen River Area. In particular, the provincial governments have been active in discussing economic cooperation on a subregional basis with Xinganmeng Prefecture. In the next section, the potential for economic cooperation will be examined.

Assessment of the Potential for Economic Cooperation

General

Common themes in development economics are to identify sectors comprising strong economic linkages and to relax constraints on development. This is not only a national but a regional concern as well. This study focuses on regional economic cooperation where the development strategies are based on the complementarity of resource endowments, expanding access to markets and on the attraction of direct foreign investment.

Some common features of Xinganmeng Prefecture and the eastern region of Mongolia are as follows:

(i) Weak financial capacity to support the development of infrastructures and industrial expansion;
(ii) Underdeveloped private sector;
(iii) Small scale of industrial enterprises;
(iv) Dominance of the agriculture sector;
(v) Strong tourism potential for future development;
(vi) Limited local market;
(vii) Underdeveloped export sector;
(viii) Low capability level of human resource in all areas; and
(ix) Strong environmental concerns.

However, there are some marked differences between the two parts of the project area. Xinganmeng has a larger population while eastern Mongolia has abundant land. Although Xinganmeng Prefecture has plans to upgrade and build new transport links, it already has good rail and road access to other parts of the PRC. The links to the Tumen River are strategically important if export markets are to be developed. Moreover, these transport links run almost to the border of Dornod Province. On the other side of the border, there is no road for another 200 kilometers across grasslands.

The almost complete absence of any serious trade between the two areas in modern history makes it difficult to assess the potential. However, the possible contributory factors to gauge potentials for cooperation include:
(i) The use of complementary resources;
(ii) Exploitation on economies of scale;
(iii) The gaining of experience in trading with a neighbor as a precursor to trading in more distant markets;
(iv) Improvement in access to more distant markets;
(v) Increase in competition leading to greater efficiency and competitiveness in world markets;
(vi) A stronger regional identity that can be used to attract investment and to market the region’s products; and
(vii) Cooperative marketing, research, development and environmental initiatives.

For Mongolia, the use of the transportation network of the PRC would be beneficial in terms of a better access to the world market including the PRC market. Xinganmeng Prefecture offers that gateway to the PRC system for the eastern provinces of Mongolia. For the PRC, on the other hand, the main incentives for the cooperation are: (i) the access to resources in the vicinity, (ii) an expansion of the tourism program to attract international tourists, and (iii) the service charge from increased volume of through-traffic. Moreover, both countries are also keen on environmental protection. In view of the foregoing benefits, the situation with each of the key sectors are considered.

### Agricultural Sector

In view of the above benefits, the situation with each of the key sectors are considered. For agriculture, traditional activity in the eastern region of Mongolia is not in farming. As such, there is very little cultivated area in this region. Moreover, the capital-intensive method of farming according to the Russian model is adopted, which takes account of the relative scarcity of labor in Mongolia. Through joint ventures or leasing agreements, Xinganmeng Prefecture may gain access to fertile farmland in Mongolia. Both regions need to convert from low value, staple crops to higher value crops for export to other regions and abroad. Joint research and marketing will prove helpful in this regard.

Mongolian culture is based very strongly on animal husbandry and it maintains very large herds on open grasslands. Animal husbandry also is an important part of the primary sector in Xinganmeng Prefecture. Both regions have some local processing of products from animal husbandry, but there is scope to improve the extent of processing and add value with meat, wool, hides and skins. There is potential to improve efficiency and quality by expanding the scale of production with the objective of serving foreign markets. In particular, the PRC is a major exporter of leather products, but the industry is under competitive pressure to improve its quality. Both Xinganmeng Prefecture and the eastern region of Mongolia can work together through joint venture to improve the processing of high quality inputs to the leather goods industry for the world market.

Because of the unpolluted and natural conditions for agriculture in the project area, there is an opportunity to establish a brand image for high quality “green food” and premium quality animal products. By opening up scope for trade, entrepreneurs will emerge to take advantage of the commercial possibilities, although the governments should play a major role in promoting the regional identity and “brand image”. There is scope to increase cooperation in a range of areas; selection of plant varieties, improved animal breeding, control of disease, methods of processing agricultural and animal products, and in marketing efforts.

### Energy Sector

In contrast, there is not much scope for cooperation in the energy sector, except in oil exploration. Xinganmeng Prefecture produces some of its own energy and heating and it has plans to increase its capabilities, including the
sale of power to other parts of the PRC. Xinganmeng Prefecture draws most of its power from the Northeast Power grid of the PRC, and only one third of the capacity in this system is being used. Similarly, the eastern region of Mongolia is self-sufficient and there is capacity to accommodate the planned expansion in industrial activity. Nevertheless, both regions are working towards greater use of "green power". Nomadic herdsmen in Mongolia are already using small wind power generators and batteries to meet basic needs, and there is growing experience with the use of solar panels. However, there is scope to develop wind power and perhaps geothermal power and both areas of the project area could work together to develop this capability. By moving to environmentally friendly sources of energy, the region would reinforce its comparative advantages in agriculture, animal husbandry and tourism as an unpolluted, unspoiled corner of the globe.

There is demand for coal in Xinganmeng coming from eastern Mongolia for use in Ulanhot's factories and for heating, but there are alternative sources of coal in the PRC. The coal mine near Choybalsan, however, is looking at more distant markets such as the Primorsky Territory and other countries in northeast Asia. Another prospect for trade raised in Xinganmeng Prefecture is to export crude oil from the Tomsk region in the PRC to Ulanhot. It is known that the PRC is investing in a small refinery in Choybalsan but the plan in the initial stages is to import crude oil from the Russian Federation. Some crude oil is being sent by truck to IMAR through the Bitchigt Border Port. There are many possibilities for joint development of the oil mining sector, but the industry is not yet in its take-off phase.

**Tourism Sector**

Domestic tourism in the PRC is booming and central government is encouraging this. Xinganmeng Prefecture is already witnessing a large increase in the number of visitors, and many of them are travelling to the border area. The area is rich in tourism attractions based on nature, health, and winter sports. The major challenge for Xinganmeng Prefecture is to decide what types of tourism it wants to develop and how to make this ecologically sustainable. On the other hand, Mongolia's tourism development plan puts its emphasis on continued development of established attractions but the priority given to the eastern region is low. However, there are possibilities to draw tourists from other northeast Asian countries. The airport infrastructure at Choybalsan is excellent for this purpose and the institutional barriers that control international civil aviation are being relaxed.

The attractions in the project area are capable of being promoted successfully, but both regions need to consider very carefully how they want to develop tourism. There is considerable potential for cooperation in planning for tourism, creating a regional identity, and joint promotion. Governments should play a major role in tourism as “guardian of the image”, providing information for investors, ensuring necessary infrastructure is provided, and in human resource development. However, this is a sector where the private sector can play a large role, and governments need to work together to attract investors and to create an appropriate commercial environment. There are many institutional barriers to break down to ensure that tourists, especially foreigners, are able to pass freely from one part of the project area to the other to establish strong itineraries. At present, the “chain” tourist itineraries under development by the Mongolian Tourism Board link Ulaanbaatar to the border area with Arxan. Inevitably, tourism is a competitive sector and there will be some element of rivalry between the two countries. The governments should allow scope for this competition to ensure that standards continually improve and that there is pressure to reduce costs. However, cooperation in tourism development in this case has considerable potential to add value to both the PRC and Mongolia. Through appropriate measures, the economic benefits of tourism also can alleviate poverty in remote areas.
Transportation Sector

The transport network of Xinganmeng Prefecture is more developed than that of the eastern region of Mongolia. The construction of a railway line to the PRC would play the key role in turning the mineral wealth of eastern Mongolia into a reality. In turn, this would allow the development and expansion of industries along the transport corridor in both the eastern region and Xinganmeng Prefecture. The ultimate aim, though, should be to trade these resources in the northeast Asian markets. By linking its proposed road and rail to Xinganmeng Prefecture, the eastern region can take advantage of the complementary surface transport resources already in existence and somewhat under utilized. In the case of air transport, the situation is reversed. It is the eastern region that has the most developed airport and this also is under utilized. It could play a role in bringing tourists to Xinganmeng Prefecture.

If the transport corridor and efficient air transport connections can be established, this will focus attention on the region and will make it more accessible to outsiders. To some extent, these transport corridors will promote competition in this sector. The World Bank study on Mongolian transport pointed out the benefits of such competition in terms of lower transport costs and improved standards of service. Should a railway be constructed, careful thought should be given to promote competition, perhaps by allowing major shippers and other parties to operate their own trains should they wish to do so. Competition can also be promoted in the trucking industry. In cross-border transport, a good deal of cooperation is necessary before the transport sector can play a major role in promoting development.

Environment Sector

It is noted that both governments attach a very high priority to the environment. The key factor to complementary resources can be mobilized for cooperation in this sector. For example, every year grass fires destroy wildlife and pastures in Mongolia and then cross over into the PRC. There is potential for both sides to cooperate in controlling these fires and to protect the wildlife. There is complementary knowledge on how best to protect the environment and joint protection of rivers that flow from one country to the other is highly desirable. Both areas can work together to raise international awareness of the problems faced here and to attract resources to assist in environmental protection.

Overall Sectoral Potential for Cooperation

Table 3.2 presents a summary of the potential for cooperation in the key sectors of the project area. The main benefits for agriculture would be to take advantage of complementary resources to attract investment in higher-yielding products, including processing activities and the production of “green food”. These should be export oriented and both areas can work together to improve access to markets. Improving the productivity of agriculture and related processing industries will achieve a great deal in raising the living standards of people in the region.

The mining and tourism sectors both have the potential of raising living standards in a significant way, but realistically any benefits are likely to take some time to materialize. There is potential for the project area to

<table>
<thead>
<tr>
<th>Factors for Cooperation</th>
<th>Agriculture</th>
<th>Energy</th>
<th>Mining</th>
<th>Tourism</th>
<th>Transport</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of complementary resources</td>
<td>★★★</td>
<td></td>
<td></td>
<td>★★★★★</td>
<td></td>
<td>★★★★★</td>
</tr>
<tr>
<td>Increase scale of operations</td>
<td>★</td>
<td></td>
<td></td>
<td>★★★★★</td>
<td></td>
<td>★★★</td>
</tr>
<tr>
<td>Gain experience in trade</td>
<td>★★★</td>
<td></td>
<td></td>
<td>★★★★★</td>
<td></td>
<td>★★★★★</td>
</tr>
<tr>
<td>Improve access to markets</td>
<td>★★★★</td>
<td></td>
<td></td>
<td>★★★★★</td>
<td></td>
<td>★</td>
</tr>
<tr>
<td>Increased competitiveness</td>
<td>★</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stronger regional identity</td>
<td>★★★★</td>
<td></td>
<td></td>
<td>★★★★★</td>
<td></td>
<td>★★★★★</td>
</tr>
<tr>
<td>Cooperative initiatives</td>
<td>★★★★★</td>
<td></td>
<td></td>
<td>★★★★★</td>
<td></td>
<td>★★★★★</td>
</tr>
</tbody>
</table>

Note: The number of diamonds denotes the potential level for cooperation in a sector between the two regions with three diamonds representing the highest potential for cooperation. Absence of diamond means a particular factor does not contribute to potential cooperation in that sector.
promote a unique identity and to tap the robust travel markets within the TRADP member countries. However, care will have to be taken to avoid the adverse environmental consequences that occur when rapid increases in the number of visitors outstrip the environmental capacity of the destination. The tourism identity of this region will depend on its image for unspoiled natural beauty. Tourism can be a profitable and sustainable business that will distribute benefits widely to people living in the project area if it is developed according to strict environmental guidelines.

This suggests potential conflicts between energy and mining and tourism. It will be necessary to evaluate the trade-off between mining and tourism where such conflicts occur. It is possible that many of the conflicts can be resolved by imposing strict environmental codes on mining and minerals processing. The energy sector in the region should also work towards greater use of “green power” to ensure compatibility with plans to develop tourism around an image of a pristine environment. By working cooperatively, Xinganmeng Prefecture and the eastern region have a greater chance of doing this.

The surface transport services in Xinganmeng Prefecture and the well-developed airport at Choybalsan are complementary resources that can be used to mutual advantage. Particularly for Mongolia, the transport system can only be developed further by increasing the scale of the infrastructure and the density of traffic. Through trade and cooperation, there are prospects for achieving this.

Constraints to Economic Cooperation and Development

The constraints on economic cooperation and development include: (I) infrastructure and human resource; (ii) finance and capacity of the private sector; and (iii) the institutional and legal framework.

Infrastructure and Human Resource

To a large extent, the infrastructure constraints have been mentioned in preceding sections of this report. The most apparent constraint is the transport situation in the eastern region of Mongolia. While there is considerable potential with mineral resources and tourism, this cannot be properly explored in any serious way unless the transport services are improved. This is an area where governments normally play a major role, but the lack of financial resources to attend to all infrastructure requirements make this difficult. Every attempt must be made to leverage the government’s limited financial resources by attracting foreign direct investment. One theme of the review of the United Nations Development Programme (UNDP) on Mongolia’s transport sector was the desirability of creating competition between the modes of transport and between the different trade routes. New routes from eastern Mongolia to Xinganmeng Prefecture and beyond to the Tumen River would be beneficial in this regard.

Regarding other areas of infrastructure, there are instances where deficiencies are constraining development. For example, the power transmission line from Ulanhot to Arxan needs to be replaced. But in general, the project area has sufficient energy resources to support economic development in the foreseeable future. Similarly, it appears that the region is well endowed with water resources and steps are being taken in Xinganmeng to manage the use of water more carefully. Likewise, sewage treatment needs greater attention along with the supply of other urban services. Although the telecommunications facilities in the eastern region of Mongolia are inadequate at present, the current project extending the fiber optic cable to Choybalsan will relieve this constraint. Likewise, measures are being implemented to improve the coverage of services within each part of the project area.

Another major deficiency in the project area is the lack of appropriate skills on the human resource side of the project area. In all areas, there is a need to develop the human resource skills. This is particularly evident in the weak private sector and the unprofitable public enterprises. Management training is a high priority and this should have a strong orientation towards business and trade. The lack of skilled people in the tourism sector also is immediately apparent, ranging from management of tourism enterprises to food preparation and customer service. A very important area is environmental resource management. While there are plans and policies to protect the environment and to reverse environmental degradation, the people tasked to implement these policies lack the skills and knowledge to undertake this effectively.

Finance and Capacity of the Private Sector

There is a severe lack of financial capacity in the project area in both the public and private sector to play its
Institutional and Legal Framework

The governments of the project area need to cooperate to create the right environment for business to thrive. Governments can provide incentives such as tax breaks and operating subsidies. These should be used only as a catalyst where necessary to attract key enterprises. In any case, private investors tend to be more interested in whether they can earn sustained profits on their investments. They are deterred if they are not able to control the businesses they invest in and often want 100 percent ownership, the freedom to make their own commercial decisions and the ability to repatriate profits. Some of the key constraints on trade and investment can only be resolved at the national level, including for example bankruptcy laws and regulations on disclosure of information to shareholders and business partners. The private sector is also deterred by the lack of transparency in dealings with government. This can be dealt with by having clear policies, appropriate regulations and the institutional strength to apply them in a transparent way. The market in the project area is small, and even with increasing wealth, it is unlikely to attract large investors unless the focus is on exports. This emphasizes the need for government to have a strong orientation towards trade. This requires efficient transport links with minimal transshipment, and streamlined trading procedures.

The local government of the Xinganmeng prefecture has prepared an investment guidebook that explains the incentives offered to enterprises wanting to do business in the area. For example, a foreign enterprise with a commitment of 10 years is exempted from corporate tax for the first five years and pays only 25 percent of the value-added tax. Under some conditions, these taxes will be returned to the enterprise. Land usage fees will be waived for investments in agriculture, aquaculture, technology, energy and communications projects. Export-oriented producers will be eligible to pay lower charges for urban services. The government says that the investments by foreign-funded enterprises will be protected by laws. Arxan City has implemented complementary incentives and guarantees.

Meanwhile, Mongolia is a signatory to multilateral treaties dealing with trade and investment. It has bilateral treaties on investment with 19 countries and taxation agreements with 26 countries including the PRC. In addition, Mongolia has national laws setting out the rights of foreign investors. In particular, the Foreign Investment Law of Mongolia provides protection against appropriation and ensures that profits can be repatriated.

In so far as trade between the PRC and Mongolia is concerned, a great deal of work has yet to be done to improve the situation at the border. Permits to trade must be obtained separately from both governments, and two completely different sets of documents must be prepared. Tariff classifications and tariff levels are different. Moreover, there are restrictions on the types of commodities traded at different border ports. The passage of people through border ports is also restricted. However, it was noted that traders do travel through Khavirga Border Port and the oil exploration workers go through Bichigt on a regular basis. There is no agreement between the two countries to allow trucks and motor vehicles to travel across borders.

That the total volume of trade between the PRC and Mongolia amounts to only $0.3 billion and two million tons illustrates the effects of these barriers to trade. Mongolian consumers buy toothpaste from South Korea, soap from Indonesia, wine from Hungary, beer from Singapore, electrical appliances from South Korea and motor vehicles from Japan. There is much scope to increase trade with the PRC.
In total, Mongolia has 42 border ports and only 10 of these are with the PRC. Of these, only Zamyn Uud/Erenhot has a railway connection, which links the most developed part of Mongolia and carries transit traffic to the railway system in the Russian Federation. Accordingly, most of the trade between the PRC and Mongolia passes through this border port. The remaining ports are small and are not open all the time. Officials travel in a group from one to the other port according to a schedule.

In the eastern region of Mongolia, there are three border ports shared with the PRC: (i) Buir-Bayanhushuu of Dornod Province; (ii) Khavirga of Dornod Province; and (iii) Bichigt of Suhbaatar Province. The more active port is Khavirga port, 135 kilometers northeast of Choybalsan. This is open for 20 days each quarter and 600 vehicles and 3,000 traders pass through it on an average day. The main commodities exchanged here are animal hides and cashmere. Consumer goods are traded from China. Having opened in 1992 with no prior experience on trade, this port has an impressive achievement and demonstrates how entrepreneurs will respond once the barrier to trade is removed. PRC traders do not require visas to trade on the Mongolian side. However, visa is required for Mongolian traders to trade on the PRC side.

The Buir-Bayanhushuu Border Port opens in February and August for brief periods and there is some trade in fish and animal skins. The Bichigt Border Port south of Baruun Urt also opens for 20 days each quarter and it serves the oil exploration and extraction trade. In addition, meat, animal hides, cashmere, and other animal products are sold from Mongolia. Construction materials are traded from China.

Arxan port is the link between eastern Mongolia and Xinganmeng Prefecture. It is classified as a “second class” port and restricted to local trade. When it opened, there were no traders who wanted to do business there. The port is frozen over in winter and traders have to wait until the river is frozen over in order to conduct trade. The authorities on both sides have been several attempts to reclassify the port and to construct the required facilities. In July 1998, Xinganmeng Prefecture and Dornod Province signed a memorandum of understanding on economic cooperation. In September of the following year, an official delegation from IMAR visited Ulaanbaatar and raised the issue of upgrading the status of Arxan Border Port. In April 2000, there was further discussion between Mongolia and the PRC in...
relation to the proposed railway from Choybalsan to Arxan. Later in the same month, the Ministers of Foreign Affairs from both countries met to discuss broader issues of economic cooperation and the issue of the Arxan Border Port was raised again. To date, the program for the construction of the bridge at the Arxan border remains to be developed.

It is clear that there is strong commitment at the national level to the broad concepts of closer economic cooperation and there is interest at the subregional level to make specific cooperation materialize. However, there is no formal process to ensure that bilateral agreements and national policies are translated into a specific action plan at the subregional level. Improving the process of communication and implementation at the subregional level is the single most important matter that should be addressed immediately upon completion this study.

To ensure there is progress, it is necessary to put mechanisms in place to implement reforms. The first steps should be to deal with key elements required for trade and investment including the border port, the bridge, and access to the border part. It should also include reforming regulations to make trade easier. Both governments should explore ways to experiment on a limited basis with more liberal trade arrangements through the Arxan Border Port. This could be a precursor to liberalizing trade on a broader basis between the PRC and Mongolia.
CHAPTER 4
Development Options for Economic Cooperation

Institutional Mechanism for Economic Cooperation

Overview

It was noted in the previous chapter that the PRC and Mongolia have signed several treaties and entered into various agreements on economic and other forms of cooperation since 1989. The results of this can be seen, first, at the macroeconomic level with the PRC becoming Mongolia’s largest single trading partner and, second, at the volume of investments of the PRC in Mongolia totaling $65 million in 2000, making it the biggest foreign investor in Mongolia. In addition, the PRC is Mongolia’s largest source of visitors travelling on business.

These treaties and exchanges of notes deal with specific matters as well as establishing a supporting framework for further progress. There has been a good deal of direct discussion between government officials in eastern Mongolia and Xinganmeng Prefecture about the possibility of trade, environmental and technical cooperation, and infrastructure. For example, there have been discussions about:
(i) Cropping grass in Mongolia for sale as animal fodder in Xinganmeng Prefecture;
(ii) Joint development of agricultural land in Mongolia;
(iii) Opening the border port to establish regular trade in goods;
(iv) Cooperation in dealing with natural disasters;
(v) Construction of a bridge across the Halkh River; and
(vi) Construction of the Choybalsan to Arxan Railway.

Based on the foregoing, there is scope to improve the process of communication at the subregional level and to strengthen efforts to implement worthwhile programs and projects. This is a situation where there is no trade occurring at present between the two regions despite the continuing efforts of dedicated officials on both sides of the border. The current constraints have yet to be overcome, and this requires attention to the physical infrastructure as well as the regulatory and institutional arrangements.

In discussing the economic potential of the project area in previous chapters, it was clear that the total volume of trade through Arxan port could become sizeable in time under the right conditions. But the first step at unlocking the border will require a very specific focus on subregional issues and problems. In fact, it is important that a structure be developed to nurture subregional economic cooperation.

It is imperative that a sound institutional framework is developed. This framework should build upon the agreements at the national level, but it should adopt a specific subregional focus. In other subregional trade groups, it is common to find several working committees dealing with trade and investment matters. In this case, it would be counter-productive to have many committees. Instead, it would be useful to have a general committee appointed to oversee the subregional economic cooperation in this specific project area. Properly constituted, it would adopt guidelines developed from the bilateral treaties and agreements and it would appoint sub-committees responsible for specific matters. The formation of these sub-committees would allow direct communications between the appropriate officials and technical experts.

The difficulty of implementing plans was discussed in the previous chapter and, as such, the sub-committees should be more action-oriented. In addition to
proposing solutions, the sub-committees would be required to present implementation plans together with well-thought out strategies for obtaining finance and resolving other problems such as the lack of human resources. The sub-committees should exist only for as long as they are required. Initially, sub-committees should be formed for the projects adopted as an outcome of this study.

Two critical challenges for the subregional committee for economic cooperation will be to coordinate specific actions and to attract direct foreign investment. Specific projects are identified here together with their expected scope. These projects are inter-related and, therefore, need to be undertaken in an integral manner. Construction of border port facilities at Arxan, for example, will have minimal impact unless a bridge is constructed at the same time. In like manner, the border port’s trade will be small unless other initiatives are taken to promote commerce. Integration and coordination will be key success factors in any package of projects.

The subregional committee should also play a role in focusing attention on the outside world of the eastern provinces of Mongolia and on Xinganmeng Prefecture. It should seek to create a well-recognized identity and it should prepare and disseminate materials that will demonstrate the economic potential of the region. It should actively seek out private investors and promote entrepreneurship amongst its own business community. The concept of a subregional committee for economic cooperation is then a necessary precondition for the success of other specific projects.

In the previous chapter, attention was also drawn to the underdeveloped private sector in the project area. The promotion of a strong private sector should be prioritized. The subregional committee for economic cooperation could address matters that restrict the scope for private sector activity in the region. Though governments may need to take some of the first steps to rehabilitate factories and to promote tourism, the subregional committee could quickly develop guidelines that specify the appropriate demarcation between the private and public sectors. More and more activities that are potentially profitable should be seen as private sector areas and the government’s role should be to ensure that supporting infrastructure and needed social services are provided. The government has an important part to play in protecting the environment and in setting up general conditions for trade and investment to flourish.

Given the low scale of development of the private sector in the project area, it is necessary to improve this situation. Fortunately, there are organizations, which have a good deal of experience in fostering entrepreneurship and helping business people acquire skills and learn from the experiences of others. In the Greater Mekong Subregion, for example, one of the projects was to form a subregional chamber of commerce. It is too early to recommend this in the case of the project area of RETA 5969, but initial steps should be taken. For example, the Mongolian Chamber of Commerce and Industry (MCCI) is already well established and its 600 members produce more than 80 percent of Mongolia’s GDP. Its objective is to promote trade, industry and to protect common interests of its members.

Evidently, the MCCI will be able to play an increasing role in promoting the private sector as it was elected to the World Chamber of Commerce and Industry in a Congress held in June 8 to 10, 2001 in Seoul. An important policy decision taken at that Congress was for the chambers of commerce to become more actively involved in the process of globalization. The Congress also supported the idea that more study tours should be undertaken by national chambers of commerce to provide for exchange of experience among similar entities in different countries.

Information on the activities of the MCCI is provided in Appendix 3. Among others, MCCI is able to conduct relevant courses, provide a valuable network, and facilitate trade and investment. Moreover, it recognizes the importance of cross-border relationships and it stands ready to assist the business community to develop in the project area. A counterpart organization also exists in the PRC. Every effort should be made to draw upon these resources to improve the management of businesses in the project area.

The most revealing image of an obstacle to trade between the eastern provinces of Mongolia and Xinganmeng Prefecture is the lack of facilities at the Arxan Border Port. The road on the PRC side of the border is undergoing improvement and will connect with a paved road all the way to Ulanhot and beyond to the PRC’s national highway network. However, the road at the border is blocked by a locked gate. Beyond the gate, there are no facilities and no bridge over the river. Moreover, there is no road on the Mongolian side of the border. At its current state, this port is intended only for local trade on an infrequent basis.

The Arxan Border Port lies on the corridor identified by Mongolia as its route to the Tumen River Economic Development Area (TREDA) and is regarded as extremely important in gaining access to markets in
that area and beyond. Mongolia’s Millennium Road traversing the country from east to west, which will be implemented all the way to the border port, is

port and identify problems that arise because of inappropriate or conflicting classifications of commodities. The working group can evolve as the volume of trade increases and trade facilitation

Institutional Policies and Strategies

Xinganmeng Prefecture and the eastern provinces of Mongolia share much more than proximity. Both regions have significant development potential in several sectors, but they lack capital to fund infrastructure. In addition, the private sector is not well developed and the potential of the region is not widely appreciated by outsiders. There is very limited external trade let alone subregional trade.

both areas in the project area possess resources that could very well be linked in a forward or backward chain of economic activities once regional integration is achieved through good infrastructure. As incomes rise in the region, consumers will then begin to demand more from local producers. These linkages are important to get the most out of investments and to spread the benefits of development within the community.

The two areas of the project area also share common goals. They both are looking for access to markets, and for ways to tie themselves more closely to the TREDA.
Another common concern is with the environment. The PRC and IMAR are placing a great deal of emphasis on environmental restoration and have taken the difficult economic step of stopping or curtailing activities of some industries. These measures have fallen particularly hard on some areas in Xinganmeng Prefecture, especially on the forestry industry around Arxan. This has added to the problem of poverty in what was already an underdeveloped area. It is important to find ecologically sustainable activities to replace jobs. Mongolia also values its environment highly and recognizes the need for effective environmental policies.

Another common feature is that the central governments are targeting regional development. In the PRC, the government is actively pursuing ways to promote economic development in its western regions. The IMAR is included in the scope of this initiative, and Xinganmeng Prefecture, as an isolated part of IMAR, is a priority area for development. The Government of Mongolia has adopted a regional development strategy and the eastern region is one of only five regions in Mongolia. Because of its location, there is a presumption that the eastern region should endeavor to improve its link to the TREDA and that its economic development strategy should be built around economic cooperation with neighboring countries.

The underlying proposition in subregional economic cooperation is that the member countries can take advantage of complementarities in resources as well as expand their access to markets. Ultimately, the goal is to achieve free trade. Some intermediate steps can be taken toward achieving this. For some regional trading groups, the aim is to liberalize trade and investment first and to prepare the economies for reform that is more extensive in later periods. However, in the present case it should be a high priority to facilitate trade and investment—to move the economies from isolation to a more active trading position.

Subregional economic cooperation for the project area should focus on this basic trade and investment facilitation with the idea of later moving on to more liberalized trading arrangements, perhaps within the multilateral context of TRADP. In this situation, it is highly appropriate that the public sector maintain a commitment to provide the basic economic infrastructure.

The biggest challenge arises with financing the transport links, but this will be made easier if it can be demonstrated that there are opportunities to develop trade. In this case, it is important to make progress in the dialogue no matter how modest the achievements would be in the first stage. The emphasis should be on pragmatic solutions and on implementation. The strategy must be built upon the principle that each party should derive some benefit.

The governments should also take the lead role to foster the development of the private sector and to encourage its involvement in trade. Trading between neighbors should be seen as a valuable learning experience that will equip exporters to compete outside the region. Investing in infrastructure will give the private sector the confidence in the region. Fiscal incentive such as tax breaks and subsidies could help.

Bearing in mind the need to propose pragmatic solutions that take into account the resources in the project area and the stage of development, three projects are identified to promote economic cooperation. The projects and their corresponding scope are given in the table below while their profiles are presented in Appendix 4.

### Evaluation of Potential Institutional Development Projects

As a strategic study, the key output was expected to be a set of promising options for further detailed investigation. Against this background, criteria were

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project title</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Formation of a Subregional Economic Cooperation Committee</td>
<td>Form an action-oriented committee to implement economic and environmental cooperation initiatives. This committee forms working groups to develop specific projects and improves flow of communication at subregional level.</td>
</tr>
<tr>
<td>2</td>
<td>Formation of a Subregional Chamber of Commerce</td>
<td>Support development of private sector in the project area by drawing on resources of national chambers of commerce with the aim of developing a subregional forum for business.</td>
</tr>
<tr>
<td>3</td>
<td>Open Arxan as a Permanent Border</td>
<td>This project is to open the port as early as possible to remove the key institutional impediments to trade within the project area.</td>
</tr>
</tbody>
</table>

### Table 4.1: Potential Projects for Institutional Development Cooperation
proposed at the First Workshop in Beijing and these have been used in evaluating the various development options. The following were considered in formulating the development options:

(i) Do the options make good economic sense?
(ii) Are the options ecologically sustainable?
(iii) Can they be implemented?
(iv) Do the regions in both countries benefit?
(v) Are the options consistent with government policies at the national, local and bilateral levels?
(vi) How do the options contribute to the long-term goals of providing shorter and more efficient routes across continental Europe and Asia by integrating the transport systems of the two countries?

The project on the formation of a Subregional Economic Cooperation Committee (or Project Number 1) is the most important one to arise out of this study. Both nations are strongly supportive of economic cooperation and they want to see development occur in the project area. Yet, both Xinganmeng Prefecture and the eastern region of Mongolia remain isolated. Although the regional governments have held a number of discussions about the possibility of opening up trade, improving infrastructure, and about cooperating more generally, no specific action has been realized.

It is vital to establish a mechanism to translate national policies and bilateral agreements on cooperation to the subregional level. This mechanism must be action-oriented. It must provide a way for the technical experts to work directly with each other and to be able to submit their recommendations and action plans to a body that has a specific responsibility for the subregion.

It has been possible to form separate working groups in trade, investment, customs procedures and other relevant area. However, it is more practical here to form a single working group to set the agenda for detailed projects. These detailed projects can be undertaken directly by the appropriate experts and the working groups would be required only on an as-required basis. This is consistent with the level of resources available in the project area. The committee would work according to guidelines derived from national policies and existing bilateral agreements. Both countries will gain from this closer dialogue at the subregional level, and specific actions can be taken to alleviate poverty in these isolated areas.

Elsewhere, the private sector has played a major role in promoting subregional development through economic cooperation. Foreign direct investment will address the severe financial constraints and it will seek export opportunities, thereby overcoming the limitations of the local markets. However, this investment has to occur in an area where the private sector is not well established. As a consequence, there are few entrepreneurs, orientation towards external trade is weak, and there is a general lack of business skills. Hence, it is important to strengthen efforts to upgrade the capacity of the private sector. The project on establishing a subregional chamber of commerce (or Project Number 2) can accomplish this by drawing upon established private sector networks of the national chambers of commerce.

These two projects provide a foundation, but no tangible progress can be made until the border port is open for regular trade (see Project Number 3). It is clear that the current status of the port makes it almost impossible for trade to occur. An indicative traffic to be realized at this port could be based on the experience of the Khairga Port. The project investment is planned to occur at some time in the future. Hence, this project raises issues of the timing of investment rather than whether the investment should occur. The immediate beneficiaries will be the people who live in the project area who will be able to explore trading opportunities and to engage in social and cultural interaction with their immediate neighbors.

Agriculture

Overview

The agriculture sector accounts for 38 percent of the GDP in Xinganmeng Prefecture. The principal crops here are corn, soya beans and a variety of other grains. The methods of farming are labor-intensive and arable land suitable for farming is becoming scarcer because of prohibitions on farming for environmental reasons. The sector has yet to adjust to the conditions in a market economy and the quality of agricultural output is low. A major issue is how to convert from staples to higher-yielding crops and the government has identified “green food” as a priority along with medicinal herbs and higher quality animal fodder. There is some scope to trade agricultural output with Mongolia, but the major gains from cooperation will be to attract investment for these promising new activities.

Farming, on the other hand, is not a traditional industry in Mongolia and it was only developed in the 1980’s and has not prospered under the economic reforms of the 1990’s. Most of the eastern region of Mongolia’s open land is more suited to animal husbandry rather than farming. There is, however, some very fertile
land in the Halkh River area. Less than 5,000 hectares were under cultivation in 2000 and the main crop is wheat. This was mostly sent to Choybalsan. Nevertheless, there is still a lack of a supply of wheat, which has negative impacts on the flourmill and bakeries in Choybalsan.

The local government of Arxan signed an agreement with Dornod Province in 1996 to farm 270,000 hectares on the latter’s land in the Sumber area. The produce was intended for shipment to Arxan and other areas of the PRC with additional freight traffic to be generated for fertilizers, agricultural machinery and seeds. This project did not come to fruition, but it provides confidence that both sides are looking positively for opportunities to cooperate.

The eastern region of Mongolia is rich in livestock, which provided necessary inputs to factories in Choybalsan. However, most of these factories closed for a combination of reasons, including the limited market, a lack of finance, and shortage of necessary inputs. Economic cooperation with Xinganmeng Prefecture could help to address some of these constraints through joint ventures with Chinese investors in rehabilitating and reviving these factories.

One of the matters raised frequently in Xinganmeng Prefecture was the possibility of buying animal fodder from Mongolia. This has occurred in the past and many would like to see it continue into the future. There are vast grasslands in Dornod Province near the border, which often goes to waste due to grass fires. What is more, these grass fires are a threat to wildlife and can spread across the border into environmentally fragile areas. By establishing a regular trade in cut grass for animal fodder, Mongolians would generate additional income and, in turn, this would stimulate more trade.

### Agricultural Policies and Strategies

A major policy issue that is common in both areas is to ensure that agriculture have ecologically sustainable activities. The issue is more serious in Xinganmeng Prefecture and steps are being taken to curtail environmentally risky activities such as forestry, cropping on steeper slopes and other marginal land, and to restrict grazing in certain areas. The government of IMAR is significantly supporting efforts to improve the productivity of agriculture in the prefecture.

Xinganmeng has a much more extensive agriculture sector and it is able to draw upon a larger pool of technical resources. Mongolia is endowed with vast land and has accumulated a wealth of experience in animal husbandry. The approaches to farming are different but there is scope for technical cooperation on issues of grain types, water resource planning and use, animal breeds and control of disease. Both areas need to improve the productivity of the primary sector, raise the quality of production, improve competitiveness in external markets, and develop more effective supply chains. In this light, the three development options for cooperation are placed forth in Table 4.2.

### Evaluation of Potential Agricultural Development Projects

To some extent, the first project in this sector is occurring on a broader scale between the PRC and Mongolia. However, this is a practical initiative to link the technical experts in adjacent regions who share common problems and who have complementary resources. This will help

---

**Table 4.2: Potential Projects for Agricultural Development Cooperation**

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technical Cooperation on Agriculture</td>
<td>The project is geared toward the improvement in the productivity of this sector and moving to higher valued products as a sound path to alleviating poverty. It involves cooperation on choice of crop and seed types and farming methods. It deals with practical ways to give financial assistance to farmers and held the sector develop better supply chains and marketing channels.</td>
</tr>
<tr>
<td>2</td>
<td>Market Study on “Green Food”</td>
<td>The study examines the requirements of developing this industry to take advantage of the project area’s farming conditions. That is, rich soil, unpolluted conditions and natural farming methods.</td>
</tr>
<tr>
<td>3</td>
<td>Market Study for Cut Grass (Animal Fodder) from Mongolia to Xinganmeng Prefecture</td>
<td>This study seeks to make cut grass from Mongolia a regular trade commodity to the PRC and also looks at ways both regions can grow high quality fodder for export to other countries.</td>
</tr>
</tbody>
</table>
impoverished farmers in a direct way and can work some way towards improving the quality of products so that they can be exported. A key consideration here is that farmers and herders will adopt improved methods that will be ecologically sustainable.

Both regions need to increase their production of higher valued crops destined for external markets. It seems that the region does enjoy a comparative advantage in the production of “green food” and that this has a great deal of potential for commercial exploitation. This is a field where direct foreign investment from international food processing companies is possible. The governments need to ensure that the environmental conditions that give rise to this advantage are protected and that a regional identity is developed. The potential for cross-border cooperation is very high and the benefits will flow directly to farmers as well as to the respective governments.

Agriculture Project Number 3 was raised on many occasions, particularly in Xinganmeng Prefecture. The benefits are clear. Mongolia would receive an income for a resource that goes to waste. Furthermore, dry grass at the end of summer is a fire hazard that does harm to both countries. The fodder would assist the animal husbandry sector in Xinganmeng during winter periods. However, it is not clear whether this fodder is needed every year, or just in severe winters and in drought periods. As such, a study is needed to establish the viability of fodder production as well as addressing related issues like the control of diseases. Moreover, it would be worthwhile for both Xinganmeng and the eastern region of Mongolia to think in terms of producing high quality animal fodder for export to third countries. Again, the comparative advantage is the unpolluted environment and natural farming methods.

Mining

Overview

Xinganmeng Prefecture has deposits of silver, lead, zinc, limestone, copper, coal, rare earth, iron and about 50 other kinds of minerals. But only 150 mines are in production and 35 of these produce coal. Their combined output is only 300,000 tons of coal a year, and it is necessary to import another 700,000 tons each year. Although there are iron deposits in the prefecture, all of the iron for the steel mill in Ulanhot has to be imported from Liaoning Province, PRC. In total, this amounts to 400,000 tons a year. The current capacity of limestone is enough to supply the cement factory. The demand is for 200,000 tons of limestone each year and one mine alone has a deposit of 20 million tons. The major impediment to the mining sector of Xinganmeng Prefecture is the lack of technology in exploration.

Mongolia, on the other hand, is totally covered by geological maps, and oil exploration now covers 20 percent of the country. The eastern region is rich in deposits of a wide variety of minerals but the best prospects for current and future exploitation include coal, zinc, oil, uranium, gold, salt (for use in the chemicals industry), and construction materials.

The Aduunchuluun Coal Mining Company in the eastern region of Mongolia has a capacity of 600,000 tons per annum and a deposit of 400 million tons. One-third of its production of brown coal is used by the power plant, while domestic users consume two-thirds of current output. At its current production level of 250,000 tons per annum, the mine is just breaking even. Injection of capital to expand production is needed. There are other market prospects in the Primorsky Territory available but these would require a rail connection via Arxan.

Another important commodity would be oil from the Tamsagbulag basin. This oil could be transported in crude form to Ulanhot for refining. This remains a possibility for at least some of the production. However, there is already a proposal to transport the crude oil back to Choybalsan for refining into fuel for motor vehicles, heavy oils for industrial and agricultural purposes and for bitumen. This bitumen will be a valuable input to road construction.

Two development proposals have been submitted to the Choybalsan City officials for zinc refineries. In addition, Russian and American investors are interested to mine uranium from the deposit located north of Choybalsan. There is interest also in mining complex metals in the eastern provinces and exporting products such as wolfram to Japan, South Korea and the PRC.

Policies and Strategies in the Mining Sector

The mining sector has great potential in the eastern region of Mongolia and some of the minerals can be processed at least in part in Xinganmeng Prefecture where factories, technology, and personnel exist. More important to both regions is the fact that exploitation of these mineral resources on a large scale will help
considerably in justifying the railway project, and this in turn will stimulate development in both areas.

A good deal of work is being carried out to turn this potential into reality, but it will take time. A major impediment to progress, however, is that developers cannot take it for granted that there will be anything like an efficient transport system linking to world markets. In the discussion about the railway project in the transport sector section, the issue of timing of implementation is noted. Can the railway be developed first and the trade will follow, or must the trade be guaranteed before any decision is made about the railway? The pragmatic answer is that it takes a bit of both.

Minimizing the commercial risk of key parties is necessary to attract investors to both the railway and the mining sector. This could be achieved by reaching the stage where the major mining ventures are prepared to sign serious statements of intent to ship specified volumes at economic freight rates. When plans have reached this stage, it will be considerably easier to find investors to underwrite the railway, and in turn a firm proposal to build the railway will help to get contractual commitments from the major customers. The government might have to assume some of the remaining market risk, but it would be able to leverage its limited finances in this way. Accordingly, two studies are recommended for the mining sector as shown in Table 4.3.

### Table 4.3: Potential Projects for Mining Development Cooperation

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Market Study on Demand for Mongolian Minerals</td>
<td>This study examines the market potential for the key mineral products. It involves independent surveys of reserves and expert analyses of what it takes to be competitive in world markets with these products.</td>
</tr>
<tr>
<td>2</td>
<td>Environmental and Economic Impacts of Mining in Mongolia</td>
<td>The study aims to provide necessary information to decide how best to develop the mining and minerals processing sector with a clear understanding of the trade-off involved in environmental and economic terms.</td>
</tr>
</tbody>
</table>

Evaluation of Potential Mining Development Projects

The first project addresses the market for minerals in the eastern region of Mongolia and is of strategic value to economic cooperation in this subregion. The key constraint to development in the eastern region and its economic integration with Xinganmeng Prefecture is the lack of transport infrastructure. This is not an easy constraint to overcome because of the sparse population and the length in distances involved. It is difficult to justify costly investments in roads and railways under these conditions and to be able to afford to maintain them. However, circumstances would be different if trade can be developed in bulk products, high value products, or in tourism.

Mining Project Number 1 also sets out to establish, for the three to four major mineral bulk products, whether eastern Mongolia’s mining industry is competitive in the external markets. This is essential information before any detailed investigation of the railway proposal should proceed. If there is indeed serious commercial potential and if the tonnage is significant, it should be much easier to attract private sector financing to a railway project. Both regions stand to gain since the freight would be shipped through Xinganmeng and opportunities for processing mineral products can be pursued. Both regions would be drawn further into external trade, particularly through integration with the Tumen River Development Area.

It is important, though, that the environmental impacts of mining and processing of minerals is evaluated. Notwithstanding the mineral wealth in the project area, its exploitation should be carried out in an environmentally responsible way. The tourism sector and the “green food” industry will derive their comparative advantage from the unpolluted environment and natural features of the project area. There is a potential conflict between the sectors, and it is necessary to understand the environmental and economic implications of mining. Mining and related industrial activities in one part of the project area will have impacts for the other sectors such as tourism, and this project should be considered alongside the study into the environmental and economic impacts of tourism.
Tourism

Overview

Chapter 2 explained that very few tourists are travelling to the eastern provinces of Mongolia at present and there is a general lack of facilities and human resource capabilities in this sector. Nevertheless, there is private sector interest in developing this capability. In Xinganmeng Prefecture, the same is true as far as foreign visitors are concerned.

The attractions in the project area can be promoted in world markets. Mongolia fills a niche market of adventure and special interest tourists who are prepared to accept lower standards than they would expect in more popular tourist destinations. Over time, the standards of service and the infrastructure can be improved and the market will grow accordingly.

The plan for developing tourism in Mongolia places a low priority on the eastern provinces and aims to concentrate scarce resources on other regions in the short-term. The PRC abounds with tourist attractions and even though it is attracting a very large number of foreign visitors each year, Xinganmeng Prefecture has a great deal of work to do to make an impact in this market.

Japan, Europe and North America are the target markets for Mongolia. Inasmuch as Mongolia is relatively close to Japan, it is regarded a long-haul destination and consequently can tap only a narrow, special interest niche in the Japanese market. For the Europeans, Mongolia is regarded as a mixed experience with nature and culture, although there are some niches for hunting and fossil digging.

There is potential for the eastern provinces to focus more on the TREDAR and its member countries. First, there is the issue of proximity. There is potential for direct flights from Japan, the Russian Federation, and South Korea to land in either Choybalsan or Ulanhot (assuming its airport is upgraded to at least B737 standard). In fact, Mongolia recently signed air services agreements with Japan and South Korea that allow airlines to choose whether they want to land in Ulaanbaatar or Choybalsan. Until there is some supporting infrastructure and services for tourism, direct flights into the eastern provinces are unlikely to occur. Nevertheless, there is a market generating tourists, there are attractions of interest to those markets, and the airports are in place and are being upgraded. Furthermore, Mongolia’s largest tourist company already has prepared a business proposal to develop a tourist camp in Suhbaatar Province and now is working on other proposals for Dornod and Hentiy Provinces.

The situation in Xinganmeng Prefecture differs in one important aspect – it already is enjoying a boom in domestic tourism. This was a closed area prior to 1998, and now the number of domestic tourists each year has reached about 300,000 with 90,000 travelling to Arxan. These visitors express a great deal of interest in crossing the border. Three trains per day travel in each direction between Baicheng and Arxan, and each one is capable of carrying almost 900 passengers. Clearly, not all of the people using the train are visitors but this is a considerable capacity to deliver tourists almost to the border.

Very clearly, the main role of the Arxan Border Port initially could be the facilitation of cross-border tourism. However, there are many issues that need to be addressed and in-depth research is required before taking any steps to tap this market. In particular, this region is environmentally sensitive and development should not occur until sustainable development options are identified and evaluated.

There is no possibility of cross-border tourism until the port is upgraded. People from the PRC and Mongolia are allowed to pass through Khavirga Port, so there seems no binding administrative constraint to creating a cross-border tourism market if Arxan Port is upgraded to at least the same status. There are significant attractions close to the border and even one-day passes would permit some tourism development to occur without investing in accommodation infrastructure on the Mongolian side.

Policies and Strategies in the Tourism Sector

The central government of PRC has shown its support for development of tourism infrastructure in IMAR with $158 million investment in roads, power supply, and other tourism related projects.

It is a central plan in the State Council’s economic strategy to encourage consumers to spend more of their income and it has targeted tourism as a good way to do this. Not only does this help the national economy, it channels spending into some of the more remote or economically backward areas. If managed properly, tourism can support the government’s commitment to improve the environment. However, there is a danger of rapid development. This emphasizes the need for careful planning.

Xinganmeng Prefecture faces the prospects of a growing visitor market – the improvement in the transport
services will guarantee that. What is needed urgently is a study to guide policy and strategy. The lessons being learned in other areas of the PRC and throughout the world need to be examined. Protection of the environment and the development of Xinganmeng Prefecture as an ecotourism destination should be high on the agenda. A tourism development study can address basic market research issues such as the types of tourists Xinganmeng Prefecture can attract, the types of tourists that can generate the largest economic benefits without damaging the environment, and the facilities needed to serve these tourists. A tourism development study should also pay careful attention to human resources and strategies to upgrade capabilities. This should include the training of managers and support staff in accommodation and tour services. It should also include training local staff in sound environmental management practices. Well-trained environmental specialists can add value to the tourism experience through educational tours.

The Master Plan for the development of tourism in Mongolia prepared by the Japan International Cooperation Agency (JICA) Study Team in 1999 recommended for development to be done in stages. For the period till 2005, resources were to be concentrated on the existing tourism centers of Ulaanbaatar, Harhorin and Omnogovi. In addition, selected sites in Hovsgol, Hentiy and Olgii were identified as priority areas. The eastern provinces were included as the “secondary core” and did not figure in the development strategy until the medium term period to 2015. An important recommendation placed forth by the study was for the government to offer incentives to attract foreign firms to invest in the area and the development of the transport infrastructure to allow the flow of tourists. The particular incentives raised in the study included a tax holiday for three years and a 50 percent tax relief for the succeeding three years provided that income from foreign revenues account for more than 50 percent of total income.

The Tumen River Area Development Programme already has proposed a “Development of Tourism in Eastern Mongolia Study” to be conducted over a two-year period. The aim is to produce a strategy for integrated and sustainable tourism development in eastern Mongolia, including an action program and a financial plan to implement national tourism guidelines in the area. In more detail, the aim of the proposed project is to strengthen the capacity for tourism management, operation, promotion, and marketing. It would involve establishment of protected areas and improved environmental management, establishment and analysis of a comprehensive tourism data and information base, and development of new tourism products in eastern Mongolia. The estimated cost is $300,000 and would be implemented by a group of international and local consultants under the supervision of the Mongolian Ministry of Infrastructure.

However, there is potential for joint promotion of a tourism product and there are common issues to be explored. The tourism resources are complementary and the combination of the two sets of attractions in Xinganmeng Prefecture and Dornod, Hentiy and Subbatara Provinces could make this into a very strong product. Both regions lack infrastructure and services for foreign visitors and much is needed to be done to develop the human resources and to attract investment. In addition, protection of the environment is a vital issue in both cases. It is proposed here that the tourism development study be extended as a subregional project incorporating Xinganmeng Prefecture. This matter has been discussed between Mongolia and the PRC previously and is on the agenda for action.

There is strong interest amongst Chinese visitors to take a trip across the border into Dornod Province, and an expectation that some Mongolians want to come to some of the sites in Xinganmeng Prefecture. For example, the hot springs in Arxan have special significance to Mongolians. In that case, a first step should be to open the border port for the passage of Chinese and Mongolian sightseers. Within the tourism development plan, an important issue to address is how to facilitate the flow of foreign visitors. To a large extent, this will depend on how these visitors plan their travel itineraries. For example, if Choybalsan were to be opened up for international charter flights, taking advantage of its good runway, the flow of visitors would be from north to south. This type of detailed information will be useful in making progress on expanding the role of the Arxan Border Port as an international entry point to both countries.

Opening the Arxan Border Port for tourism will help the case for making this a permanent port. The volume of trade at present is negligible and it is difficult to assess its potential in the short-term. In the longer term, if mineral development in Mongolia occurs and the rail link is constructed, the situation would change considerably. But for the present, the passage of people appears to be the most compelling argument for reclassifying the port.

However, this is indicative of a more general trend with rapid growth in tourism in border areas with Korea,
Russia and Vietnam. A lesson that should be heeded was the subject of the TRADP study on “Environmentally Sound Tourism Development for Mount Paekdusan/Changbaishan” (Korean/Chinese names). This study was completed in May 1999. The mountain is located in the border area between China and the Democratic People’s Republic of Korea (DPRK). It is claimed to be one of the most promising tourist attractions in the Tumen Region and has been designated a Biosphere Reserve by the United Nations Educational, Scientific and Cultural Organization (UNESCO) Man and Biosphere Programme. The Chinese side of the mountain has been a National Natural Reserve since 1960.

The mountain has great spiritual value for Koreans and, each year, more than 100,000 people from ROK visit the Chinese side of the mountain, and approximately half a million people from DPRK visit their side. It is estimated that one million Chinese visit Jilin Province each year and there is potential to include Mt. Changbaishan in tours. However, the number of visitors is so great on the northern side that facilities are unable to cope. The TRADP sets out to ensure that tourism development is environmentally sustainable and provides tangible benefits to local residents. Guidelines explain how to achieve a successful balance between the conflicting goals of development and conservation.

Among other findings, the study identifies commercial opportunities for investors and provides opportunities for local participation. It recommends a total investment package of $550 million to provide transport and accommodation infrastructure, together with recreational tourism based on hot springs and health centers, winter sports, golf courses, an amusement park, and a cable car.

One of the challenges that should be addressed in market research as part of a development plan study is to find an identity for the region. One model to consider is the way that the declaration of the Samarkand Declaration on Silk Road Tourism in 1994 united 19 participating countries extending from Japan to Europe, international organizations and the private sector with a common and distinctive theme. The World Tourism Organization assisted in the development of tourism in some of the regions with less experience in tourism.

The JICA Tourism Development Plan for Mongolia is a valuable resource document that explores market potential and identifies appropriate strategies. It also pays considerable attention to the establishment of industry standards, safety of tourists, environmental protection and to human resource development issues in Mongolia. There is no need to repeat this work and the study proposed here should focus directly on the eastern provinces of Mongolia and Xinganmeng Prefecture. It should pay particular attention to the way cross-border tourism can improve the competitiveness of both areas. Furthermore, the potential to exploit the growing demands for travel within Northeast Asia ought to be explored carefully.

There are two ways to address these matters. The first is to carry out a comprehensive tourism master planning study for the two regions. The second is to undertake a series of more focused studies that deal with specific issues. Though the second approach is, in reality, a more detailed description of the tasks that would be carried out in a comprehensive development plan, it is worth considering whether there is merit in dealing with the issues separately. These projects are described in Table 4.4 and the two different approaches are evaluated.

**Evaluation of Potential Tourism Development Projects**

The advantage of the first approach is that it integrates the various components and it may be more efficient to manage a single study than to commission a series of independent projects. The benefits of the second approach are that it targets specific issues and that actions can begin to occur as and when the projects are completed. Whatever decision, the list of specific projects can be used as a guide to important issues.

The quality of the natural and historical attractions in the project area is impressive and can generate tangible economic benefits. These benefits can alleviate pockets of poverty and can be achieved in an environmentally sustainable way. Both governments are targeting the tourism sector but one issue is whether tourism is best promoted independently by Mongolia and the PRC. It is inevitable that there is competition between destinations and that this competition can be very healthy and in the interests of both countries. However, at the subregional level, both sides can gain strength by working together.

Xinganmeng Prefecture is popular with domestic tourists already, but foreign visitors are not being drawn to the project area on either side of the border. In the case of Mongolia, much higher priority is attached to development of the established tourism attractions in the central, Gobi and western regions. In the PRC, the competition between regions is very strong and Xinganmeng
### Table 4.4: Potential Projects for Tourism Development Cooperation

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Option Approach to Tourism Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Comprehensive Tourism Development Study for Eastern Mongolia and Xinganmeng Prefecture</td>
<td>The project is to be conducted in two years in the preparation for a comprehensive tourism development plan for the project area as a whole.</td>
</tr>
<tr>
<td><strong>Second Option Approach to Tourism Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Market Potential Study for Tourism in Eastern Mongolia and Xinganmeng Prefecture with Particular Emphasis on Cross-Border Tourism</td>
<td>This study brings a credible tourist professional to the project area to provide an assessment of potential. This assessment is intended to influence tour operators, airlines and tourism property developers. Concepts are to be identified that will sell in the key Tumen River Development Area markets.</td>
</tr>
<tr>
<td>1.2</td>
<td>Identification of Concepts and Requirements for Environmentally Sustainable Tourism</td>
<td>This study follows from the previous one and involves a detailed assessment of the environmental impact of the concepts for tourism development. This study should develop guidelines for tourism development and it should identify the human resource requirements to implement and effective ecotourism strategy.</td>
</tr>
<tr>
<td>1.3</td>
<td>Identification of Accommodation, Restaurant and Other Support Services for Tourism Development</td>
<td>The current accommodation and supporting facilities and service in the project area are sub-standard or non-existent. This project identifies the minimum requirements to take the sector through the initial stages of the destination life cycle.</td>
</tr>
<tr>
<td>1.4</td>
<td>Pre-Feasibility Study for Selected Accommodation Projects to Demonstrate Commercial Potential and Ways to Share Benefits with Local Residents</td>
<td>This project considers case studies that illustrate appropriate concepts and prepares feasibility studies to demonstrate how profits can be made in hotels and tourist camps, restaurants and tourist shops. The study should also show how local residents share in the economic benefits of tourism.</td>
</tr>
<tr>
<td>1.5</td>
<td>Identification of Incentives Required to Attract Private Investors</td>
<td>This study should identify the requirements to achieve self-sustaining growth in this sector.</td>
</tr>
<tr>
<td>1.6</td>
<td>Air Service Arrangements Required to Support Tourism Development</td>
<td>See Transport Sector Project Number 9.</td>
</tr>
<tr>
<td>1.7</td>
<td>Improving Road Transport for Tourism</td>
<td>See Transport Sector Project Number 3.</td>
</tr>
<tr>
<td>1.8</td>
<td>Role of Railway Transport in Tourism</td>
<td>See Transport Sector Project Number 6.</td>
</tr>
<tr>
<td>1.9</td>
<td>Facilitating Cross-Border Tourism</td>
<td>This project has a more specific focus on the subregional cooperation and has greater potential for success. The aims are to open up the border port for the passage of tourists and to make it possible for foreign tourists to enter the PRC or Mongolia through either Choybalsan or Ulanhot airports.</td>
</tr>
<tr>
<td>1.10</td>
<td>Human Resources Development for Tourism</td>
<td>This project will develop a comprehensive program on human resource development, including estimation of the financial requirements and an action plan.</td>
</tr>
<tr>
<td>1.11</td>
<td>Study Into Economic Benefits from Tourism Sector</td>
<td>This project aims to give policy makers a sound understanding of the value of different types of tourism and how they generate direct benefits for local people.</td>
</tr>
<tr>
<td>1.12</td>
<td>Integrated Tourism Development and Promotion Plan for Cross-Border Tourism</td>
<td>This project integrates the separate studies listed above and summarizes it in a comprehensive tourism development action plan.</td>
</tr>
<tr>
<td>1.13</td>
<td>Trade and Investment Forum to Promote Region to Private Investors and Travel Industry</td>
<td>With the completion of all of the tourism sector studies, it is appropriate to communicate the findings to a trade and investment forum. The objective is to get firm commitments to invest in the project area.</td>
</tr>
</tbody>
</table>

has a considerable amount of work to do to create awareness and to make itself competitive. In this situation, both parts of the project area can work together to create awareness of their attractions. Through cooperation, the governments can combine their limited resources to develop a world-class image. They can share resources and knowledge and work together to attract foreign investors. The projects are designed to be very practical and commercially focused with a strong commitment to environmental protection.
Transportation

Overview

The transport sector in Xinganmeng Prefecture is well developed for its current level of traffic. Ulanhot is connected by national roads to Beijing via Changchun and to the Tumen River Area.\(^9\) The provincial road from Ulanhot to Arxan is currently undergoing major upgrading works, which is due for completion by the end of 2001. This road is being developed as a two-lane highway suitable for light traffic all the way to the border port. The provincial road continues beyond Arxan to Hailar in Heilongjiang Province. Currently, the traffic volumes are light and there is a good deal of capacity to handle an increase in traffic volumes.

The traffic authorities of PRC has undertaken a feasibility study of the proposed bridge at the Arxan Border Port across the Halkh River. This project was one of the matters listed for discussion in a communication from the PRC Ministry of Foreign Affairs to its Mongolian counterpart. The cost of the project is estimated to be $600,000. There is no allocation of funds for the project and discussions will need to be held with the Mongolian Government about cost-sharing. TRADP also lists this as a project and has indicated that the cost for the Mongolian portion of the bridge would be in the range of $150,000 to $200,000. TRADP also reports that Xinganmeng Prefecture has agreed to fund its portion of the project cost.

Mongolia faces considerable difficulties in developing a high-quality road transport system. The distances between centers are very large while the population is very small. As a consequence, there is little traffic on the roads and congestion is unknown. The major problem for Mongolia is to find sufficient finance to develop and maintain a network to connect the major centers while also improving the links to the PRC and the Russian Federation. The roads in the eastern provinces are of a very low standard and are little more than formalized tracks. The current volume of traffic is light. There is a designated road running from Choybalsan to Tamsagbulag, but beyond that point it is necessary for vehicles to navigate their way across the grasslands for approximately 200 kilometers to the border. The population density in this part of Mongolia is very low.

For the railway sector, Xinganmeng Prefecture again has good basic infrastructure for its level of traffic. The railway from Baicheng in Jilin Province runs through Ulanhot and all the way to Arxan, only 30 kilometers from the border port with Mongolia. The railway carries freight and passengers and provides an important means of transport within the prefecture. Currently, the line carries two freight trains and three passenger trains in each direction between Ulanhot and Arxan each day. Four freight trains run from Ulanhot to Baicheng each day. The main commodities carried are timber, cement, grain, sugar, oil, iron ore, steel, coal and construction materials. The passenger trains serve a major role in linking the remote areas close to the border with the regional capital and play an increasing role in tourism.

If the border port is opened up, there is a plan to upgrade the track from third to second class. The preliminary estimate places the cost at $27 million. Moreover, the increase in loads will require the use of a second locomotive to haul the trains as far as the Hinggan Tunnel from Arxan.

Baicheng has railway connections to Beijing and to the TREDA. The Changchun to Jilin section of the line has almost reached its capacity, but from Jilin to Tumen the line is only operating at between 45 percent to 70 percent of its capacity. From Baicheng to Arxan, only 50 percent of its capacity is utilized. The Shenyang Railway Administration and the Changchun Railway Sub-administration plan to upgrade the Changchun to Jilin section to double track.

The proposal to construct a new railway from Choybalsan to Arxan is designed to take advantage of the route to the TREDA. Choybalsan has a rail connection to the Russian Federation at Borzya, from where it joins the Trans-Manchurian Railway and provides a route to the TREDA via Manzhouli and Harbin. The railway track is Russian broad gauge and any freight shipped from Mongolia going to the PRC must be transferred to the Chinese standard gauge at Manzhouli. In addition, the Trans-Manchurian line within the PRC is nearing its capacity and is heavily congested.

Ulanhot’s airport was opened in 1995. It is designed to handle regular operations of regional jet aircraft carrying up to 90 passengers. Since the airport is relatively new, it is still in the process of establishing its traffic base. The frequency of flights is low and service is unreliable (delayed and cancelled flights are common).

Choybalsan’s airport has the luxury of a concrete runway capable of handling large aircraft. With a new

---

\(^9\) The distance from Ulanhot to Beijing by road is 1,168 kilometers, and from Ulanhot to Tumen it is 980 kilometers.
passenger terminal in place, there is considerable potential to make greater use of this airport for international flights. The runways in Suhbaatar and Hentiy Provinces are unpaved and the passenger terminals are sub-standard. Air services within Mongolia are infrequent and unreliable.

Policies and Strategies in the Transportation Sector

The PRC’s strategy for development of its transport infrastructure is given expression in its Tenth Five-Year Plan. Some of the important elements of the transport network are already being upgraded in so far as economic cooperation in this subregion are concerned. Attention has been drawn to the improvement of the road between Ulanhot and Arxan and from Arxan to the border port. There is also a plan to commit funds to the construction of a bridge across the Halkh River.

The Government intends to upgrade congested sections of the track between Baicheng and the TREDA and will consider the possibility of upgrading the track between Ulanhot and Arxan if the Choybalsan to Arxan line is constructed. In addition, the Tenth Five-Year Plan included upgrading the road to second class from Changchun to Ulanhot capable of servicing heavier truck traffic. An additional project in the Tenth Five-Year Plan is the upgrading of Ulanhot’s airport to cater for regular operations of Boeing 737 aircraft.

The road transport strategy in Mongolia is encapsulated in the Millennium Road Project and related vertical connections. This project has been approved by the Mongolian Government and will connect the western and eastern provinces of the country to Ulaanbaatar with north-south links to other provinces. It will provide corridors to both the Russian Federation and the PRC. The project is an ambitious one and the government intends to construct it in stages until year 2010. The total length of the road from Ulaanbaatar to the border port at Arxan is estimated to be 960 kilometers, out of a total road length of 2,249 kilometers of the Millennium Road (not including the north-south links). The “vertical” link planned for the eastern region runs from the border with the Russian Federation at Ereentsav, through Choybalsan to Baruun Urt and on to the border with the PRC at Bichigt. The roads in the eastern provinces, however, are scheduled for upgrading towards the latter part of the construction period.

The proposal to construct a new railway linking the eastern provinces of Mongolia with the TREDA is a major strategic initiative. Several routes have been considered, but the pre-feasibility study completed for TRADP recommended the alignment from Choybalsan to Arxan. The total cost would exceed $0.5 billion on the Mongolian side of the border and $30 million on the PRC side to connect to the railhead at Arxan. The TRADP Secretariat recommended that the detailed railway feasibility study be carried out at a cost of $350,000, which would include the forecast of transport demand, describe alternative methods of construction, recommend traffic organization, and undertake a comprehensive cost-benefit analysis.

It cannot be emphasized enough that railway technology is costly to install, but it can become an economical way to transport bulk commodities mentioned in the mining sector over long distances. The economic strategies of the governments in the region will be more successful if they can develop trade in these bulk commodities, and especially when that trade expands to the third countries. The bulk commodities will make it possible to finance the major elements of the transport infrastructure and this will ensure there is a good transport service for those commodities that are shipped in smaller volumes. The pre-feasibility study envisaged that the amount of freight on the railway would exceed 5 million tons per annum by 2005. This is a substantial volume within the context of the mining and the transport sectors.

There is a strong belief in both the eastern provinces of Mongolia and Xinganmeng Prefecture that the construction of the Choybalsan to Arxan Railway is justified and that it will promote economic development and social interaction in both regions. The estimated construction and rolling stock costs of more than $0.5 billion are considerable. The pre-feasibility study did not foresee major construction challenges and viewed the railway as profitable. In that case, there is potential to attract private investors. However, before that avenue of financing can be pursued it is necessary to carry out further research on the commercial aspects of the project – especially its cash flow profile and the risks that would have to borne by investors.

For the air transport sector, MIAT Mongolian Airlines uses Russian-built Antonov 24 aircrafts for its domestic services. These aircraft have to be phased out by 2005 at the very latest and detailed consideration is being given to suitable replacement aircraft. Very likely,
regional jets such as the Dash-8 will be used. It does appear that this decision will give rise to demands to upgrade airport infrastructure throughout Mongolia, particularly the standard of runways. Choybalsan Airport is fortunate in having good infrastructure. A small investment to pave over the concrete runway should be considered. Further investments will be required in Subbaatar and Hentiy Provinces.

Based on the foregoing, 10 projects have been identified for the transport sector for further investigation. These projects are outlined in Table 4.5 and their profiles are given in Appendix 4.

Table 4.5: Potential Projects for Transportation Development Cooperation

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construct a Bridge Across the Halkh River</td>
<td>The project will investigate into one of the most important strategic investments to begin the process of economic cooperation. Ways should be found to recover at least some of the expenditure over time.</td>
</tr>
<tr>
<td>2</td>
<td>Build a Road from the Anxan Border Port to Tamsagbulag</td>
<td>Once the bridge is built, there is a gap in the road transport network from the border to Tamsagbulag. This project is to construct a rudimentary road to connect these areas.</td>
</tr>
<tr>
<td>3</td>
<td>Improving Road Transport for Tourism</td>
<td>If tourism is to be promoted in the southeast corner of Mongolia as part of cross-border activities, it will be necessary to control access to sites from an environmental point of view. This project identifies environmentally acceptable routes for tourist vehicle traffic.</td>
</tr>
<tr>
<td>4</td>
<td>Market Study for Export of Mongolia’s Mineral Resources</td>
<td>See Mining Sector Project Number 1.</td>
</tr>
<tr>
<td>5</td>
<td>Anxan to Choybalsan Railway</td>
<td>This is the single most important transport project to consider in terms of therequired investment outlays and its potential to reduce the isolation of eastern Mongolia. The project is a full feasibility study with detailed analyses of the environmental impacts, costs of construction, cash flows, debt-servicing requirements and risk analysis. The study should also recommend ways to structure the project in order to maximize private sector interest.</td>
</tr>
<tr>
<td>6</td>
<td>Role of Railway Transport in Tourism</td>
<td>It is unlikely that tourists would generate enough income to be considered a major customer of the railway. But it may still be possible to generate a useful contribution to the financial case for a railway. This project considers ways of earning income from tourists using the railway service.</td>
</tr>
<tr>
<td>7</td>
<td>Build an Airport in Anxan</td>
<td>The project area covers a large area. Many tourists will not want to travel by surface transport. There is a proposal to build an airport in Anxan, principally to serve tourists. But it also could play a role in the control of fires. This project evaluates air service concepts suitable for a regional airport in Anxan and carries out an evaluation of the proposed investment.</td>
</tr>
<tr>
<td>8</td>
<td>Upgrade the Airport at Ulanhot</td>
<td>There is a proposal to upgrade Ulanhot’s airport to the point where it can handle regular services by B737 type aircraft. The project proposed is to examine the role of Ulanhot Airport for tourism purposes. This calls for an experienced tour operator to identify ways to increase the number of tourists travelling into the project area through this airport.</td>
</tr>
<tr>
<td>9</td>
<td>Air Service Arrangements Required to Support Tourism</td>
<td>This project investigates the potential for easing restrictions on air travel within the project area. This project should be initiated only after completion of Tourism Sector Project Number 2 that examines the potential for tour products and estimates future demand. This information will help establish a case for more liberal air service agreements between Mongolia and the PRC.</td>
</tr>
<tr>
<td>10</td>
<td>Use of Choybalsan Airport for Air Cargo Operations</td>
<td>Currently, the world’s airlines are pioneering new routes across the Arctic taking advantage of improved air navigation systems. The routes allow the airlines to cut up to two hours off a flight from New York to Southeast Asia. However, there is a need to stopover en route and one area of potential is for Choybalsan to attract air cargo flights. This would assist local producers improve their supply chains for international markets. This project will investigate the potential of Choybalsan Airport to attract international cargo operators.</td>
</tr>
</tbody>
</table>
Evaluation of Potential Transportation Development Projects

As cited throughout this report, the transport sector is undeveloped in the eastern region of Mongolia. Unless ways are found to improve this infrastructure, development and economic integration into growth areas such as the TREDA will be slow. In this situation, governments can play a vital role in making the necessary investments. However, the financial resources available for this in Mongolia is limited and there are many competing projects. This is a case where the public sector will have to leverage its position by creating conditions that are attractive to private investors, especially for the large projects like the railway and the road to the border.

The technical requirements for the proposed Transport Project Number 1 have been investigated and some preliminary estimates of construction costs have been made. This project is necessary if the border port is to function on a regular basis. It is difficult to carry out a cost-benefit analysis in this case, but the governments can share the costs and perhaps look at ways to recover those costs over time through the imposition of a toll.

The road from the border port to Tamsagbulag will eventually form part of the Millennium Road. For the light traffic volumes likely to be encountered initially, this project will have a low priority. The absence of an improved road will certainly not help facilitate trade, but it will not be a binding constraint. The case for investing in any formal road will be stronger as trade develops and as tourism grows.

If cross-border tourism is to develop, it will be necessary to consider what road transport facilities are required. This will include a link to the Mongolian road network at Tamsagbulag, but there are issues of access to historical and natural sites in the border area and around Buir Nuur. Though it is common for vehicles to travel overland, this is an environmentally sensitive area and tourist routes need to be delineated. Currently, there is no agreement allowing road transport vehicles to cross over the border. This is a situation where the national governments may be willing to experiment with little risk of adverse implications outside the project area. The Sub-regional Economic Cooperation Committee should consider this matter, but it will help improve the viability of cross-border trade and tourism in this case.

The single largest project considered in the project area is the Arxan to Choybalsan Railway. There can be no doubt that this infrastructure would generate benefits for both Xinganmeng and the eastern region of Mongolia and that it would integrate the project area with the TREDA and beyond. However, it is not clear yet that the project is guaranteed of making a profit. In any case, it requires such a large amount of capital that it cannot be considered yet as a practical project. Much more work needs to be done with this proposal to reach the stage where it can be implemented. In part, this relies on the market potential of mineral bulk products. It also requires detailed thinking about ways to attract private finance.

Xinganmeng Prefecture included a project to build an airport in Arxan in its Tenth Five-Year Plan. A site has been identified, but this has to be evaluated first from a technical point of view. One of the key constraints that will inhibit development of tourism in the project area is the difficulty that foreign visitors have in gaining access to the attractions. Many tourists simply do not have more than one week in total for their holiday. It can take that amount of time at present just getting from Beijing or other gateways in the PRC to the border area. There is no doubt that air transport service can help. However, it is also true that the key to success lies on having reliable air transport service, and the mere existence of an airport is no guarantee that this will happen. An airport in Arxan would help bring foreign and domestic tourists directly to the border area. If the border can be opened up to the passage of foreigners, both countries can gain from this. The important issue at this stage is to understand what types of air service can be sustained for such an airport and the extent of role it can play.

At the same time, Xinganmeng Prefecture is looking to upgrade the existing airport at Ulanhot. Currently, the airport is still struggling to establish frequent and reliable air services. However, the PRC’s air travel industry is going through a period of sustained, and strong growth. It is normal practice with airports to undertake master planning studies and to upgrade their capacity in line with demand. The potential for this project to generate benefits for both areas of the project area will depend on its success in bringing both business travelers and tourists. Its role in tourism would be greater if the airport is designated as a regional gateway, especially for tourists from within the TREDA. The airport could also play a role if flights are permitted between Choybalsan and Ulanhot, even if only on a charter basis. Again, this is an area where the PRC and Mongolia can experiment on more liberal aviation arrangements with few risks.

The final transport project is inspired by the fact that Choybalsan Airport is one of the most developed pieces of transport infrastructure in the project area, but it is under
utilized. The project also takes account of the new polar air routes and the location of Choybalsan under routes from the northeast of the U.S.A. to Southeast Asia. There may be scope to attract some cargo flights. This is a growing market with strong long-term prospects and air cargo operators prefer to use uncongested airports for stopovers. If operators do begin to stopover, this opens up access to an efficient supply chain for the project area’s exporters. This would be particularly the case for the “green food” industry and for some high value mining products.

Energy

Overview

In general, major constraints were not identified in the development of energy in the project area based on the proposals currently under consideration. The one particular constraint in Xinganmeng Prefecture was the poor state of the transmission line from Ulanhot to Arxan.

Policies and Strategies in the Energy Sector

If Arxan is to play a role as a tourist city, it is imperative that it has a reliable supply of electricity. The current growth rate of tourism is very strong and the need is immediate. Arxan is of strategic importance in cross-border tourism.

However, a longer-term issue is that the governments in the project area should ensure that development occurs in compatible ways. The coal-fired power and heating stations in Xinganmeng Prefecture and in the eastern region of Mongolia should be supplemented and perhaps eventually replaced by “green power”. The region has prospects for wind power and for geothermal power. Both regions can gain by joint investigation of these possibilities. Hence, two projects were identified for the energy sector as shown in Table 4.6.

Evaluation of Potential Energy Development Projects

The current transmission line from Ulanhot to Arxan is one constraint on the development of tourism in the border areas. The requirement is known and the only constraint here is the lack of funds. Private investors will be reluctant to invest in upgraded accommodation facilities in Arxan while this situation continues. The Subregional Economic Cooperation Committee will need to consider whether this project should be considered as a requirement for cross-border economic cooperation. Much will depend on the timing. If other initiatives to open the border port progress quickly, the inadequate state of this power line will be a constraint.

The second proposed project examines the potential for developing a “green power” capacity, taking advantage of the wind conditions and the geothermal resources in the project area. Though both regions can draw upon large deposits of coal for generating power and heating, it would be more compatible with plans for tourism and agriculture to reduce the extent of pollution from coal-fired power stations. Since both regions enjoy similar conditions, it would be valuable for them to share knowledge and also jointly work towards attracting investors in “green power” projects.

Table 4.6: Potential Projects for Energy Development Cooperation

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project Title</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Replacement of Transmission Line from Ulanhot to Arxan</td>
<td>The power transmission line from Ulanhot to Arxan is old and is the cause of power failures in Arxan. This project entails the replaced of old transmission lines to improve delivery of power. If the border port is opened then this could pose a constraint on progress.</td>
</tr>
<tr>
<td>2</td>
<td>Investigation on the Potential for Producing “Green Power” in the Project area</td>
<td>The government of Xinganmeng Prefecture already has noted the possibility of generating wind power and has completed a pre-feasibility study to construct wind power generation facilities, taking into account the strong winds in autumn and winter blowing down from Siberia. This project extends work to both areas of the project area. Specifically, the aim is to carry out a broader feasibility study into the development of “green power” (wind power and geothermal power and heating) in the project area. It should consider ways in which both regions can cooperate to produce power and heating on an efficient scale and how such a project could be financed.</td>
</tr>
</tbody>
</table>
CHAPTER 5

Environmental Concerns and Challenges

Environmental Policies

The People’s Republic of China

The People’s Republic of China has several laws and regulations centered on environmental protection. The major laws are as follows:

(i) The Environmental Protection Law of the PRC, 1989;
(ii) The Solid Waste Pollution Prevention Law of the PRC, 1995;
(iii) The Water Law of the PRC, 1988;
(iv) The Atmospheric Pollution Prevention Law of the PRC, 1995;
(v) The Water Pollution Prevention Law of the PRC, 1996;
(vi) The Noise Pollution Prevention Law of the PRC, 1996;
(vii) The Regulations on Environmental Protection Management of Construction Project, the State Council of the PRC, Document Number: Guo-Wu-Yuan, 1998, 253;
(ix) The Provisional Regulations on Environmental Protection Management for Projects Financed by International Financial Organisations;
(x) Regulation on Nature Reserves (promulgated and enforced in 1994);
(xi) Act for Environmental Protection and Control in Construction (enacted in 1986);
(xii) Regulations on Environmental Protection Design in Construction (enacted in 1988);
(xiii) Procedures for Environmental Protection and Control in Construction (enacted in 1990); and

The main law on environmental planning, policy and practice in the country is the Environmental Protection Act of 1989 with enforcement on 1997. The act provides for basic measures for environmental preservation such as the principle of Three Simultaneous Acts and the Pollutant Emissions Charge System.

The national agency responsible for combating environmental pollution and ecological environment deterioration is the State Environment Protection Administration (SEPA). It has been recently upgraded to a ministry level indicating the country’s commitment to improve environmental management. The major role of SEPA is to formulate policies, guidelines and procedures, and make recommendations to the State Council. It is also responsible for the implementation of international environment treaties, agreements, etc. SEPA coordinates with different offices in case the environmental problems extend over the jurisdiction of other ministries or bureaus.

Inner Mongolia Autonomous Region of PRC

Within the national laws and regulations, the Inner Mongolia Autonomous Region (IMAR) government has adopted a number of regional policies and filtered
these to the Xinganmeng Prefecture local plans. The major policies and regulations developed by the IMAR government are as follows:

(i) Prevention and Control of Water Pollution in Yellow River Basin of IMAR, issued by IMAR People’s Congress in 1996;
(ii) Pollution Discharge Fees of IMAR (tentative) issued by IMAR Environmental Protection Bureau (EPB) in 1996;
(iii) Environmental Protection Management on Importing Solid Waste (tentative), issued by IMAR-EPB in 1996;
(iv) Attempt on Strengthening Environmental Protection Management Projects Construction, issued by IMAR-EPB in 1996;
(v) Regulation on Environmental Protection of IMAR, revised by IMAR People’s Government in 1997;
(vi) Enforcement Regulations on Nature Reserves, issued by IMAR People’s Government in 1997; and
(vii) Regulation on Prevention and Control of Water Pollution in West Liao River Basin, issued by IMAR People’s Congress in 1998.

Mongolia

The environment protection is considered an important national issue in Mongolia and the eastern region. The Ministry of Nature and Environment (MONE) is responsible for the formulation and promotion of environmental policies, laws, procedure, conventions, etc. The country is trying to decentralize the administration and, hence, the need to introduce a number of changes to existing legislation’s and policies. At present, there is numerous laws (25), enforcement procedures (500), international conventions (10), and action programs/plans (including those on forestry, ecology, water, desertification, ozone layer, and air quality) on environmental protection. Table 5.1 lists the recent environmental and natural resource protection related laws in Mongolia.

A fundamental principle of the Mongolian state environmental policy is that economic development must be in harmony with the environment. Measures will be taken to check possible negative environmental consequences linked with the extraction and utilization of natural resources, and that air, water and soil pollution will be combated. Development projects require EIA.

| Table 5.1: List of Environmental and Related Laws in Mongolia |
|-----------------|-----------------|
| Title                        | Year Promulgated |
| Land Law                   | 1994            |
| Underground Resources Law  | 1994            |
| Mineral Resources Law      | 1994            |
| Protection of Livestock Genetic Fund & Health Law | 1994 |
| Environmental Protection Law | 1995            |
| Air Law                     | 1995            |
| Hunting Law                 | 1995            |
| Protection from Toxic Chemicals Law | 1995 |
| Forests Law                 | 1995            |
| Natural Plants Law          | 1995            |
| Water Law                   | 1995            |
| Law on Hunting Reserve Use and Hunting and Trapping Fees | 1995 |
| Natural Plants Use Fees Law | 1995            |
| Water & Mineral Water Use Fees Law | 1995 |
| Law on Fees for Harvest of Timber & Fuel wood | 1995 |
| Special Protected Areas Law | 1995            |

Environmental Concerns

National Level

On a national and regional scale, both the PRC and Mongolia share the same environmental concerns as evidenced by the number of cooperative agreements entered into by these countries since the 1990s. To wit:

(i) A Cooperation Agreement on the Natural Environment Protection on May 1990 between PRC and Mongolia. The major thrusts of the agreement are:
(a) developing bilateral cooperation in soil erosion; anti-desertification efforts; grassland protection; and establishment of common natural reserves and hunting ban zones along the borders and coordinating surveys and experimental works; (b) jointly study and implement techniques on control of sand storm and soil erosion; (c) jointly study and implement conservation, research, breeding and rational utilization of Mongolia Gazelle and other wildlife animals and vegetables along China/Mongolia border; and (d) under the support of the UN and its professional organizations, encourage Non-Government Organizations (NGOs) to cooperate on natural environment conservation.
(ii) The Memorandum of Environmental Protection Cooperation between the then National Environmental Protection (NEPA) of PRC and the Ministry of Natural and Environment (MONE) of Mongolia on September 1990. The main provisions of the memorandum are to: (a) to establish protected areas for wildlife animals, especially for Mongolian Gazelle along the border; (b) conduct survey and research on prevention and control of pollution as well as water resources use of the border rivers and lakes, especially for Halkh River and KeLuLun River; and (c) to exchange experiences on nature conservation and management.

(iii) Agreement between the PRC, Mongolia and the Russian Federation on the Establishment, Management and Protection of Trans-boundary Nature Reserves on March 1994. The purpose of the agreement was the establishment of joint nature reserve and, hence, to protect the biological diversity, as well as joint scientific research and monitoring along the borders. The area of the joint nature reserve covers the Daurski nature reserve in Chita Province in the Russian Federation, the Dalai Lake nature reserve in IMAR, PRC and the Daur nature reserve in Dornod Province of Mongolia.

(iv) The Establishment of the Third Committee of Trade and Economy Cooperation (CTEC) with the signing of its Terms of Reference in Huhhot (IMAR) on December, 2000. The aim was to coordinate the development of bilateral relationships between the IMAR government and the Mongolian Ministry of Industry and Trade (MIT). The committee's activities included environmental conservation and protection measures.

(v) In 1992, PRC and Mongolia are signatories to the Biodiversity Treaty. This has the potential to facilitate bilateral cooperation.

Subregional Level

On a localized scope within the project area, the major environmental concerns and challenges broadly confronting the local governments can be summarized by sector as follows:

Agriculture
This sector is still the main source of income in the project area. As such, much importance is given to it by the local governments in the region. The major concerns are as follows:
(i) Land degradation and associated productivity loss;
(ii) Water pollution and salinity;
(iii) Water usage and water conservation;
(iv) Overgrazing, pasture degradation, and well maintenance;
(v) Farming practices;
(vi) Land protection, sustainability and ownership;
(vii) Institutional strengthening and reform in areas;
(viii) Enhancement of capacity building;
(ix) Livestock health and meat and other product quality;
(x) Desertification;
(xi) Steppe and pasture sustainability; and
(xii) Enhancement of bilateral cooperation on technical areas.

Mining
Mining is an extractive industry, which usually have obvious effects on the environment. The major concerns under this sector are summarized as follows:
(i) Land rehabilitation and mine closure. This could be linked to financial bond for rehabilitation and incentive for good environmental management;
(ii) Environmental Impact Assessment (EIA) enforcement, consistency of environmental protection and enforcement including an environmental management plan;
(iii) Groundwater and buffer zones protection, particularly in the Mongolian steppe where damage and low maintenance of livestock watering wells are evident;
(iv) Acid mine tailing and overburden management.
(v) Mine planning and water and energy management to improve the productivity;
(vi) Occupational health and safety; and
(vii) Geo-technical issues such as slope stability.

Energy
The major environmental concerns related to the energy sector are as follows:
(i) Waste management and waste discharge in power generation stations;
(ii) Occupational health and safety including asbestos exposure;
(iii) Ash pond management and monitoring for coal power stations;
(iv) Air emission of noxious gases and fine particles;
(v) Electro-magnetic field;
(vi) Soil and groundwater contamination resulting from spills, accidents, etc.;
(vii) Visual impact of transmission pylons on the natural landscape and also fire management;
(viii) Cooling water discharge to a water body;
(ix) Energy efficiency from production to transmission to consumption. Public awareness and user-pay principle are amongst the important measures to be implemented;
(x) Provision of central electricity to reduce the large household and private enterprises use of coal so that air pollution is reduced and a more natural environment is ensured including the reduced tree logging in both areas; and
(xi) Enhancement of capacity building and institutional strengthening.

**Transport**

As transport projects are a priority, environmental impact assessment is very important especially considering the naturally fragile environment on both sides of the project area. It is recognized that both countries realize this and have already set up a good EIA system. However, enforcement and monitoring activities should be improved. Below is a summary of the major environmental concerns related to transport infrastructure development:

(i) Enforcement of the EIA system and monitoring system for project implementation;
(ii) Land erosion and land compaction;
(iii) Impact on wildlife, especially on the Mongolian steppe for gazelle habitat;
(iv) Impact on natural landscape;
(v) Impact on sensitive environmental areas (the possibility of avoiding such areas when it is not financially practical to undertake the necessary measures to mitigate any impact);
(vi) Air pollution from vehicular emissions;
(vii) Noise especially in settlement areas;
(viii) Geo-technical issues; and
(ix) Water run off and related erosion issues.

**Tourism**

Ecotourism has been determined to be the center for potential future development. Hence, environmental management to prevent/mitigate the impact on natural resources is vital to sustain the sector in an environmentally sustainable way. The major environmental concerns are summarized as follows:

(i) Development and enforcement of environmental management plan for tourism areas;
(ii) Enhancement and control of tourism gers camp (in Mongolia and to a lesser extent in the PRC) and further enforcement of licensing system with imposed conditions to ensure proper management;
(iii) As part of the licensing system, the requirement for proponents to have adequate skills in nature management with regular training, which can be progressively implemented so that it does not deter the private sector from investing in this sector;
(iv) Development of ecotourism skills as part of improving the capacity building for both the private and government staff, especially in Mongolia;
(v) Establishment of financial incentive system for good environmental performance using an accredited tourism environmental audit system;
(vi) Improvement of infrastructure around the tourism sites to minimize littering;
(vii) Design and implementation of public awareness campaigns to improve people’s knowledge of environmental sustainability and conservation; and
(viii) Setting up of specialized ecotourism tertiary education using developed countries and specialized NGOs experience and best practice.

**Potential Environmental Impact of Proposed Projects**

Preliminary environmental assessment was carried out only for some of the proposed projects enumerated in Chapter 4 of this report. The general objective is to determine which development projects bear potential environmental impacts. As such, institutional projects and technical cooperation studies are not subject to assessment. Mitigating measures are then recommended for the assessed projects so that they can be implemented with minimum or no impact. This is part of the guiding principle of ADB in integrating economic development with the environment even at the strategic study level.

**Proposed Agricultural Projects**

The following potential projects for agricultural development cooperation are environmentally assessed:
(i) **Market Study for “Green Food.”** (proposed Project Number 2): The production of “Green Food” is most unlikely to have any adverse environmental impact. If implemented, it will be based on organic agriculture, which means no fertilizers, pesticides, or other chemicals will be used. In order to sustain such production, there is a need to implement good agricultural practices (i.e., crop rotation and inclusion of crops that are rich in soil nutrients such as legumes/beans, broad beans, lentils etc.; mulching or mixing residual plant parts with the soil to increase the soil organic matter content; use of animal manure; use compost etc.). As living standards and public awareness are improving in most parts of the world, there is an increased demand for green agriculture (including livestock products) which the big multinational food companies are actively pursuing. Hence, this ensures the continuation of the relatively clean and pristine environment.

(ii) **Market Study for Export of Fodder from the Eastern Mongolian Steppe to the Xingmaneng Prefecture** (proposed Project Number 3): This project does not bear any adverse environmental impact on the steppes of Mongolia if it is well planned and implemented. The vast steppes are certainly capable of producing more fodder than what is needed locally, especially if pasture production is improved. As the other side of the border needs such products, then it would appear logical to serve that market. The demand should be assessed against sustainable pasture production so that no undue pressure is placed on the steppes. A detailed study as to the manner of production should also be carried out. One foreseen impact during the shipment process would be the transmission of disease through the fodder. However, this can be controlled through sound pasture practices and monitoring.

**Proposed Mining Projects**

There are two projects proposed for mining development cooperation in the Mongolian side of the border. One is a **Market Study on the Demand for Mongolian Minerals** (proposed Project Number 1) while the other is an **Environmental and Economic Impact Study of Mining in Mongolia** (proposed Project Number 2). Both projects themselves are urgently needed before any further consideration can be made in venturing into massive mining activities. It is a known fact that any mining activity would have profound environmental impact. Therefore, a serious EIA is required for any mining project and stringent measures adopted to ensure minimal impact on the environment. Already some of the environmental issues experienced in Mongolia include the non-rehabilitation of mines since the mining companies are small and without good environmental knowledge. As such, there is need to impose a bond for the mine rehabilitation as well as the formulation on a good environmental management plan. Likewise, there is need to modernize the mining technology to minimize environmental impacts and develop skills in integrating environment with mining activities. Projects under this sector should be well integrated with other projects, especially those under the tourism and agriculture sectors.

**Proposed Tourism Projects**

A number of proposed projects dwell on studies on market potential, accommodation, sharing benefits with local residents, and air services. These are clearly projects without any environmental impact. However, projects that are directly link to actual development of a tourism product or site should include the study on relevant environmental issues.

It has been established that both areas in the project area are committed to developing ecotourism. However, in order to set up the right foundation for such industry, it is important to include the following activities in the studies:

(i) Development of ecotourism skills based on international experience;
(ii) Assessment on the extent of pressure expected on the environment from the number of tourist visits;
(iii) Development of a base line and a good understanding of the existing ecosystem and biodiversity to be used as the foundation for managing the ecotourism and setting up the bench mark for any impact;
(iv) Assessment of existing infrastructure and services so that the potential impact on the environment could be investigated (e.g. sewer system, sewage treatment plant, construction development impact on water resources at Arxan hot springs);
(v) Development of implementing guidelines for ecotourism licensing and environmental auditing for tourism camps as part of the licensing conditions;
(vi) Undertake an EIA as part of developing a master plan, and
(vii) Development and implementation of environmental management plans (EMPs) for the area and nature reserves designated for tourism.
Proposed Transport Projects

The following environmental issues are raised for the proposed development projects below:

(i) **Construction of a Bridge across the Halkh River (proposed Project Number 1):** This project is small in scale and is not expected to have an environmental impact to an extent of concern. However, a construction environmental management plan would be helpful in preventing/mitigating any transition impacts on the environment such as construction residue, debris and noise mitigation. Moreover, such a project would even prove useful in addressing some of the environmental issues such as speeding up fire fighting and control activities across the border.

(ii) **Construction of a Road between Arxan Port and Tamsagbulag, and Railway between Choybalsan and Arxan (proposed Project Numbers 2 and 4):** Both the road and railway bear similar environmental issues. An EIA should be conducted prior the implementation of said projects. More specifically, the selection of the area where the proposed road and railway would be constructed needs to take into account the following issues:
- Any sensitive environmental area;
- Wildlife habitat and balance of species distribution issues; and
- Gas emission (a specific study on the railway commissioned by UNDP-TRADP has already established that the trains would emit less greenhouse gases than roads).

(iii) **Construction of an Airport in Arxan and Upgrade the Airport at Ulanhot (proposed Project Numbers 6 and 7):** Airport construction or upgrade has potential environmental impacts. Therefore, prior to building or upgrading an airport it is necessary that an EIA be conducted. The EIA would address normally numerous environmental and heritage issues. An important issue on the proposed Arxan Airport is the selection of the site as it is anticipated that the area has a shallow water table. This would pose some difficulty on building the airport. Moreover, any potential impact on wetland habitat around the area needs to be addressed.

Proposed Energy Projects

Two projects have been proposed for the energy sector:

- **Project Number 1—Replacement of the Transmission Line from Ulanhot to Arxan and Project Number 2—Investigation on the Potential for Producing “Green Power” in the Project Area.** Needless to say, the second project is an environment friendly option for power generation. On the other hand, the project on transmission line replacement carries some environmental issues, which are as follows:
  (i) Visual impact of the transmission lines on the landscape especially from the tourism perspectives;
  (ii) Electro-magnetic field; and
  (iii) Fire risk especially in the forest area, which can be managed by keeping adequate distance between the trees and the transmission lines.
Conclusions and Recommendations

There is virtually little information on trade between the two areas in the project area. If the governments of the PRC and Mongolia want to achieve development through economic cooperation in these two isolated areas, it will be necessary to be flexible. Both countries can take risks in experimenting with more liberal conditions for trade and investment. If these experiments produce valuable outcomes, then it will be possible to achieve much greater benefits by extending the initiatives to a broader area.

There is potential for sustainable development in the study area, both in the short- and long-term through a series of measures. There are some options that each area can pursue independently, but focused on the scope to work cooperatively. These neighboring areas have much in common as well as possess complementary resources. They both suffer from isolation; are underdeveloped compared to their resource endowments; find it difficult to generate their own investment funds; and have not attracted large amounts of foreign direct investment. Moreover, they have scope to exploit mineral wealth and/or focus on their comparative advantage in the production of “green food”, medicinal plants and ecotourism. Choices may have to be made about how to proceed, but this project recommends studies that will guide policy makers in understanding the environmental, economic and financial trade-off.

In order to remove the constraints on economic cooperation, there are several immediate priorities, which stand above all others:

(i) Establishment of a Subregional Economic Cooperation Committee and give it a mandate to form action-oriented working groups to pursue the projects raised in this report (refer to Chapter 4); and

(ii) Construction of a bridge across the river and provision of necessary facilities to allow this port to be opened for regular trade, at least on the same level as Khavirga Port in the initial phase.

Tangible benefits will flow from improvements to the productivity and quality of the agricultural and animal husbandry sectors that dominate the local economies. Improved methods of farming and seed types will give immediate benefits to some of the poorest people. The Asian Development Bank (ADB) is already active in agriculture in Mongolia but more can be done to share knowledge and resources across the border. The region should capitalize on its image as an unspoiled area of the world where food can be grown under natural conditions. This is an avenue for increasing the value of production, but three key success factors require attention. The first is to protect and promote the image of a “green food” producer of world quality. The second is to attract foreign investors who are able to develop, produce, process and sell the products to world markets. The third is to ensure that these investors are supported by the infrastructure and services they require to establish efficient supply chains. This could involve Xinganmeng’s railway infrastructure and could very likely involve airfreight services if the region is successful in this area. This highlights the fact that a successful strategy for development cannot be based on independent projects undertaken in an ad hoc fashion.

With the exception of the airport at Choybalsan, the transport sector in the eastern region of Mongolia is undeveloped. This is understandable given the region’s sparse population and the distances involved, but there is an opportunity to link with the good surface transport system in Xinganmeng Prefecture. The railway project
and the Millennium Road are visionary projects and they will not come to fruition quickly. Road construction can be a gradual process, and the railway will not be a realistic option until it can be established that it has committed customers and until there is a financial model capable of attracting private investors. The recommended studies in both the mining and transport sectors are strategic in nature, but bear a more immediate demand for the construction of a bridge across Halkh River at the Arxan Border Port. The Subregional Economic Cooperation Committee should regard this project as high priority.

The air transport services in Mongolia face severe constraints in the future. Plans to replace the domestic aircraft in Mongolia will lead to demands for upgrading the airports at Baruun Urt and Ondorhaan. Both have very low levels of traffic. In contrast, Choybalsan airport is a valuable resource that has potential for greater use. Studies have been recommended for the development of air transport, which will bring benefits to both countries, principally through tourism. Moreover, there are possibilities of developing air cargo operations in Choybalsan airport. This would reinforce any attempts to capitalize on the development of the animal husbandry industry and related processing industries, as well as improving the supply chain for a "green food" industry. With further development, Ulanhot airport can also play a complementary role. At this point, both countries can experiment in a limited way with more liberal aviation policies.

The tourism and mining sectors offer great potential to raise living standards to a much higher level. There is no doubt that both Xinganmeng and the eastern region of Mongolia have both variety and quantity of mineral deposits, but the isolation from markets and the environmental constraints need to be considered carefully. However, if eastern Mongolia can establish markets for its minerals it will be considerably easier to justify the construction of a railway to give access to the Tumen River Economic Development Area (TREDA). For this reason, further investigation of the market for eastern Mongolia’s minerals is a high priority. Consequently, a complementary study is recommended to look into the economic and environmental impacts of mining. It is possible that some mining activities will not be compatible with some of the proposed projects for the project area. It is important that governments understand the trade-offs for appropriate decision making.

There are many beautiful sites around the world. Indeed, even in the PRC and Mongolia alone there are many first-class attractions, but the project area faces intense competition in the tourism business. Nevertheless, it does have some comparative advantages. For one, it is relatively close to the tourism generating countries within the TREDA, including the PRC itself. Given appropriate supporting actions, there is potential to bring group tours into the area. Another advantage is that the region is capable of supporting a unique identity as an unspoiled natural area with a rich cultural and historical background.

Two ways can be considered for a joint tourism development study for the project area. The first is a comprehensive tourism development study while the other is a series of short studies on specific tourism aspects. In the end, they amount to the same thing – a comprehensive tourism plan. However, it is better to mount the series of studies (the second approach) because it has a greater chance of generating immediate benefits. In particular, concern is placed on Xinganmeng Prefecture, which could become a victim of rapid success. In other parts of the PRC, domestic tourism is growing so quickly that it is not possible to provide adequate protection to the environment. Xinganmeng Prefecture needs guidance on some of these matters urgently.

On the environmental aspect of the projects, there are several considerations placed forth for integration into the specific proposed projects as follows:

(i) The establishment of a working group under the umbrella of the Subregional Economic Cooperation Committee. The working group could be composed of members from the State Environment Protection Administration (SEPA) of PRC and the Ministry of Natural Environment (MONE) of Mongolia as well as representatives from active NGOs in both countries. Such a group should have a specific Terms of Reference with defined responsibilities for each member and specified agenda with clear objectives to be achieved within a predetermined time frame.

(ii) As ecotourism is highly recommended with clear commitments from the local governments in the project area toward this development direction, a good quality and balanced plan should be prepared prior to implementation. An EIA should be undertaken as part of the proposed comprehensive tourism development plan.

(iii) With the compelling move toward development of the mining sector, the provision to rehabilitate the land used at end of the mine life should be reassessed. It is recommended that the “rehabilitate as you go” principle be adopted instead. This recommendation is made in light of the current practice of leaving rehabilitation at the last six months of mining.
operation. Worldwide experiences is moving toward progressive rehabilitation with fee incentives and bond requirements from mining entities to ensure that the country is not left with orphan mine sites.

(iv) On the energy sector side, the move toward “green power” should be encouraged. It is recommended that this concept be integrated with other projects on the development of agriculture and tourism.
APPENDIX 1

The Regional Technical Assistance 5696 of the Asian Development Bank

The Asian Development Bank (ADB) has approved a regional technical assistance (RETA 5969) for the Strategic Study on Development Options for Economic Cooperation between the People’s Republic of China (PRC) and Mongolia in the Eastern Parts of Inner Mongolia Autonomous Region, PRC and Mongolia. The objective of RETA 5969 is to assist the governments of the PRC and Mongolia to jointly undertake a strategic study on development options available for strengthened economic cooperation between the two countries in the project area.

The project area of RETA 5969 covers Xinganmeng Prefecture of Inner Mongolia Autonomous Region (IMAR), PRC and the eastern provinces of Dornod, Hentiy, and Suhbaatar of Mongolia. The strategic study under RETA 5969 has three components as follows:

(i) Social and economic profile of the project area which includes the social structure, living standard, poverty incidence and its causes, status of government services, current economic activities, availability of financial services and basic social and physical infrastructure, availability of natural resources including tourism resources, and trade and economic relations within the project area and those with the outside markets;

(ii) Environmental profile which highlights the key domestic and cross-border environmental issues that must be addressed to ensure sustainable development; and

(iii) A strategic development outline for promoting economic cooperation between the two countries, which are based on the first two components.

The ADB is the Executing Agency of RETA 5969 responsible for engaging the consultants and providing overall guidance for their work. In Mongolia, the Ministry of the Infrastructure coordinated the implementation. In PRC, the Government of the Inner Mongolian Autonomous Region was the key counterpart for the implementation of the RETA under the overall coordination of the State Development Planning Commission supported by Ministry of Finance.

The RETA 5969 was conducted by a team of nine consultants comprising of three international experts; one each in the field of development planning, economics, and environmental management, who were supported by three domestic experts in the same fields in the PRC and Mongolia, respectively. English was the working language of the study team and their reports. Under the guidance of ADB, the consultants worked closely with the Ministry of Infrastructure in Mongolia and the Government of Inner Mongolia Autonomous Region in PRC.

The implementation of RETA 5969 started in May for a period of about two months. Ultimately, the study made recommendations on various development options by economic sector and by implementation time frame for promoting the proposed economic cooperation of the project area.
APPENDIX 2:
Highlights of the Workshops

First Workshop

The study on Strategic Development Outline for Economic Cooperation between Mongolia and the PRC in the Project Area commenced on 17 May 2001 and the first milestone was a workshop in Beijing on 22 May 2001. The workshop was attended by officials from the government agencies of the People's Republic of China (PRC) and Mongolia as well as by representatives from the United Nations Development Programme (UNDP) and the Asian Development Bank (ADB). The objective of the workshop was to present the objectives and framework of the study and to obtain inputs to guide the study team in their work. Mr. Ayumi Konishi, Programs Manager of ADB, chaired the workshop and the activities followed the program shown in Box 1 below.

As a strategic study, the key output was expected to be a set of promising options for further detailed investigation. As such, a set of criteria was proposed during the workshop for the evaluation of various development options. Furthermore, clear commitments were given by the government officials of the PRC and Mongolia during the workshop to further develop the relationship between their countries especially in the fields mentioned in this study.

Second Workshop

The second workshop followed on 1 August 2001 in the Parliament of Mongolia to present the study’s findings and recommendations. In like manner as the previous workshop, Mr. Ayumi Konishi, Programs Manager of ADB, chaired the workshop. The workshop proceeded according to the program shown in Box 2 below.

The highlights of the workshop are encapsulated in Mr. Konishi’s summary of the concluding workshop as presented below.

### Programme for First Workshop
Beijing, People’s Republic of China
22nd May 2001

<table>
<thead>
<tr>
<th>AGENDA</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Remarks</td>
<td>9:00-9:30</td>
</tr>
<tr>
<td>Head of PRC Delegation</td>
<td></td>
</tr>
<tr>
<td>Head of Mongolian Delegation</td>
<td></td>
</tr>
<tr>
<td>Representative of Asian Development Bank</td>
<td></td>
</tr>
<tr>
<td>Presentation of Research Outline, Consulting Team Leader</td>
<td>9:30-10:30</td>
</tr>
<tr>
<td>Terms of Reference</td>
<td></td>
</tr>
<tr>
<td>Research Methodology</td>
<td></td>
</tr>
<tr>
<td>Data Requirements and Logistic Requirements</td>
<td></td>
</tr>
<tr>
<td>Implementation Schedule</td>
<td></td>
</tr>
<tr>
<td>Coffee Break</td>
<td>10:30-10:45</td>
</tr>
<tr>
<td>Plenary Discussion about the Research Outline</td>
<td>10:45-11:45</td>
</tr>
<tr>
<td>Scope and Methodology</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>12:00-13:30</td>
</tr>
<tr>
<td>Plenary Discussion about the Research Outline</td>
<td>13:30-14:30</td>
</tr>
<tr>
<td>Data Availability and Logistic Support</td>
<td></td>
</tr>
<tr>
<td>Summary of Plenary Discussion, Consulting Team Leader</td>
<td>15:00-15:30</td>
</tr>
<tr>
<td>Closing Remarks</td>
<td>15:30-16:00</td>
</tr>
<tr>
<td>Representative of Asian Development Bank</td>
<td></td>
</tr>
<tr>
<td>Head of Mongolian Delegation</td>
<td></td>
</tr>
<tr>
<td>Head of PRC Delegation</td>
<td></td>
</tr>
</tbody>
</table>

### PARTICIPATION

**Participants:**
The Delegation of PRC Government
The Delegation of the Mongolian Government
Representatives of Asian Development Bank
Members of Consulting Team

**Guests:**
Representative of the Mongolian Embassy
Representatives of UNDP
Representatives from Government Agencies Recommended by PRC Government
The concluding workshop of the regional technical assistance for Strategic Study on Development Options for Economic Cooperation between the People’s Republic of China (PRC) and Mongolia in the Eastern Parts of Inner Mongolia Autonomous Region, PRC and Mongolia (the Study) was conducted in Ulaanbaatar, Mongolia on 1 August 2001. The workshop was attended by the official delegations of PRC and Mongolia, other participants from PRC and Mongolia, officials from the Asian Development Bank (ADB), the consultants engaged by ADB for the Study, and the representatives from Tumen Secretariat of United Nations Development Programme (UNDP) and the Embassy of PRC in Mongolia. The workshop was chaired by ADB.

The leader of the consultant team (the Study Team) engaged by ADB for the Study presented to the workshop the findings and recommendations, which are contained in a draft report entitled Strategic Development Outline for Economic Cooperation between PRC and Mongolia in the Project Area.

Both delegations extended their appreciation to ADB for the technical assistance and their general support to the recommendations made by the Study Team. After extensive discussions about the findings and recommendations presented, the workshop has reached consensus on the following key issues:

- **Relevance of the Study**
  
  The delegations of the two governments confirmed the relevance of the Study to their national development strategies, and emphasized, in particular, the poverty reduction potential of implementing those recommendations of the Study to promote economic cooperation between the two countries in the project area. They recognized that there is a need to identify high priority projects to implement the recommendations in a phased manner.

- **High Priority Projects**
  
  **Border Bridge at Arxan (Aershan).** Both delegations agreed that construction of a border bridge and associated border facility crossing the Halhin Gol River at the Arxan (Aershan) for a permanent border port would provide the necessary condition to promote the cross border economic activities in the project area, and should be, therefore, given the highest priority.

  **Environmental Protection Plan.** Both delegations recognized that there is an urgent need to develop an environmental protection plan for the project area that comprises steppes, wetland, and various endangered species. Given the rapid increase of tourists to the project area and the economic potential in developing the tourism, mining, and transportation industries in the project area, both delegations agreed that priority should be given to addressing this concern.

  **Mining Industry and Transportation Infrastructure.** Both delegations agreed that there would be a great potential to develop the mineral resources within the project area in Eastern Mongolia for export. Both delegations recognized that there is an urgent need to have a survey of these resources, which
should include an economic evaluation of the development cost and effective demand for these resources in the world market. Both delegations agreed that a medium term development strategy for transportation infrastructure (including railway infrastructure) could be developed in line with such a detailed mineral resources study.

**Follow-up Activities**

Both delegations reconfirmed their governments’ commitment to promoting the economic development in the project area. To accelerate regional economic cooperation between the two countries in the project area, however, both delegations requested that ADB should provide further technical assistance particularly for the follow-on activities to implement the high priority projects identified at the workshop. For general coordination, both delegations agreed that the existing coordination mechanism established for the Study should be maintained and developed as appropriate. It was further agreed that a bilateral multi-agency committee supported with various working groups could be established as recommended by the Study, when a specific development project or program for economic cooperation becomes ready for processing and implementation.

**Further Processing of the Study Report**

The delegations agreed to circulate the report of the Study Team Strategic Development Outline for Economic Cooperation between PRC and Mongolia in the Project Area for further review by the concerned agencies and furnish to ADB additional comments, if any, by 15 August 2001. By incorporating the comments received, the leader of the Study Team will finalize the Strategic Development Outline for Economic Cooperation between PRC and Mongolia in the Project Area by 31 August 2001. It was further recommended that the Study Team’s report should be made public with a view to attracting more support for the economic cooperation in the project area from the community of international funding agencies and the private sector.

The Chairperson has taken note of the request made by the two delegations for additional technical assistance in facilitating the implementation of the high priority projects identified at the workshop. This request will be brought to the attention of higher authorities of ADB for consideration.
Activities of the Mongolian Chamber of Commerce

The Mongolian Chamber of Commerce and Industry (MCCI) was established in 1960 and is the main organization representing the Mongolian business community. In 1990, the MCCI became an independent body and in 1995 the Government passed the Law of Chamber of Commerce and Industry. The objective of the MCCI is to promote trade, industry and to protect common interests of its members. It has more than 600 member companies that, together, produce more than 80 percent of the nation’s GDP.

Its activities include:

(i) Services to members;
(ii) Arbitrating foreign trade disputes;
(iii) Certifying the origin for export goods;
(iv) Inspecting exports and imports of goods on a neutral basis;
(v) Registering trademarks and patents;
(vi) Export and SME promotional activities;
(vii) Organizing trade fairs and Exhibitions;
(viii) Operating a display of Mongolian export goods;
(ix) Handling trade inquiries;
(x) Operating bilateral economic cooperation committees;
(xi) Sending and hosting business missions;
(xii) Gathering, processing, disseminating business information;
(xiii) Training, seminars and conferences; and
(xiv) Developing dialogue and partnership with the Government and its institutions on improving the overall environment for business.

The MCCI is a full member of the International Chamber of Commerce (ICC), the Asian Trade Promotion Forum (ATPF), the Confederation of Asia-Pacific Chambers of Commerce (CACCI) and cooperates with many international organizations. In relation to economic cooperation, the MCCI has established various committees and councils, including:

(i) Mongolian-Chinese Economic and Business Council
(ii) Mongolia-Korea Economic Cooperation Committee
(iii) Mongolian-Turkish Business Council
(iv) Mongolian-Japanese Economic Development Center

The MCCI is also an umbrella organization for:

(i) Association of Freight Forwarders;
(ii) Consumers Association;
(iii) Importers Association;
(iv) Leather Association;
(v) Meat Association;
(vi) Wool and Cashmere Association;
(vii) Constructors Association;
(viii) Tourism Association;
In addition, the Chamber offers a comprehensive management education program totalling 992 hours. It is made up of the following subjects:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Subject</th>
<th>Duration (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Basic English</td>
<td>140</td>
</tr>
<tr>
<td>2.</td>
<td>Business English</td>
<td>164</td>
</tr>
<tr>
<td>3.</td>
<td>Computer</td>
<td>60</td>
</tr>
<tr>
<td>4.</td>
<td>Introduction to Economics</td>
<td>50</td>
</tr>
<tr>
<td>5.</td>
<td>Marketing</td>
<td>30</td>
</tr>
<tr>
<td>6.</td>
<td>Business Ethics</td>
<td>14</td>
</tr>
<tr>
<td>7.</td>
<td>Business Statistics</td>
<td>30</td>
</tr>
<tr>
<td>8.</td>
<td>Essentials of Accounting</td>
<td>30</td>
</tr>
<tr>
<td>9.</td>
<td>International Economics</td>
<td>40</td>
</tr>
<tr>
<td>10.</td>
<td>Business Law</td>
<td>40</td>
</tr>
<tr>
<td>11.</td>
<td>International Trade Practice and Techniques</td>
<td>40</td>
</tr>
<tr>
<td>12.</td>
<td>Export Marketing</td>
<td>30</td>
</tr>
<tr>
<td>13.</td>
<td>Sector and Product Marketing</td>
<td>50</td>
</tr>
<tr>
<td>14.</td>
<td>Export Costing and Pricing</td>
<td>20</td>
</tr>
<tr>
<td>15.</td>
<td>Foreign Trade Arbitration</td>
<td>6</td>
</tr>
<tr>
<td>16.</td>
<td>Foreign Trade Financing</td>
<td>44</td>
</tr>
<tr>
<td>17.</td>
<td>Project Appraisal</td>
<td>44</td>
</tr>
<tr>
<td>18.</td>
<td>Import Management</td>
<td>20</td>
</tr>
<tr>
<td>20.</td>
<td>International Negotiations &amp; Intercultural Management</td>
<td>10</td>
</tr>
<tr>
<td>21.</td>
<td>Business Information &amp; Trade Facilitation</td>
<td>10</td>
</tr>
<tr>
<td>22.</td>
<td>International Trade Fairs and Figureions</td>
<td>10</td>
</tr>
<tr>
<td>23.</td>
<td>Customs Practices</td>
<td>20</td>
</tr>
<tr>
<td>24.</td>
<td>Guest Lectures</td>
<td>30</td>
</tr>
<tr>
<td>25.</td>
<td>Project Management</td>
<td>10</td>
</tr>
<tr>
<td>26.</td>
<td>Patents and trade marks</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>992</strong></td>
</tr>
</tbody>
</table>

The main program takes over one year to complete, but there are short-term intensive courses and seminars on business management and marketing designed for trading and manufacturing companies. The objectives are to:

(i) Achieve competency in basic and business English;
(ii) Develop proficiency in basic methods of management, including techniques for carrying out foreign trade, international marketing and marketing research;
(iii) Ensure participants are able to evaluate projects and carry out practical investment appraisal; and
(iv) Improve management techniques and ability in SME management.

The one-year course is carried out in four phases:

(i) September to December: update and improve basic knowledge of trainees;
(ii) January to March: techniques of foreign trade;
(iii) April to May: essential methods and knowledge of project evaluation and planning; and
(iv) May to June: practical experience in a company with preparation of a final report on a selected topic and final examinations.

Facilities include computers and a library housing a collection of more than 10,000 materials. The faculty consists of specialists of the MCCI and practitioners of business and foreign trade institutions and organizations. The plan is to develop as a Foreign Trade Academy.

---

1 Source: Mongolian Chamber of Commerce and Industry.
Institutional Sector Project Profile Number 1

**Project Name:** Formation of a Subregional Economic Cooperation Committee  
**Sector:** Trade and Investment/All Sectors

**Rationale and Objectives:**
Since 1989, there have been numerous initiatives to promote economic, environmental and other forms of cooperation between the People’s Republic of China and Mongolia. Though there is evidence of significant progress at the national levels, this has not reached the neighboring regions of eastern Mongolia and Xinganmeng Prefecture. Officials from both sides of the border have entered into discussions with their counterparts to establish trade, to develop infrastructure and to cooperate in various ways. However, nothing has been realized so far. Hence, the first steps are exploratory in nature and require a good deal of entrepreneurship.

Though the set of agreements between the PRC and Mongolia provide a general framework to facilitate cooperation, the issues that must be addressed are local in nature. The current process of dialogue allows officials to enter into discussions. But what is lacking is an overall framework for making progress on trade and investment at the subregional level. In many cases, proposals have to be submitted to the highest levels of government within each country and the bilateral negotiations take place over an extended period of time. When approvals are given, there is no well-defined strategy or structure for implementation.

This issue has arisen in other subregional trade groups and a key step required to make all other projects work efficiently is to establish a Subregional Cooperation Committee. Its objectives should be to:

(i) Facilitate trade and investment through development of appropriate infrastructure;
(ii) Pursue mutually beneficial opportunities for subregional trade;
(iii) Improve the flow of communications between officials and technical experts and business leaders at the subregional level; and
(iv) Promote environmental cooperation.

**Scope of the Project:**
The Subregional Economic Cooperation Committee should develop guidelines based upon treaties and agreements between the PRC and Mongolia on cooperation measures. Based on these guidelines, it should appoint appropriately constituted working groups of officials and technical experts to deal with specific projects and initiatives. These working groups should be action-oriented with stated agenda and they should be made accountable to report on implementation plans within an agreed timetable. The Committee should also foster the development of the private sector and encourage it to adopt a trade orientation.

The Subregional Economic Cooperation Committee should meet on two occasions each year. It should be comprised of senior officials with the authority to act on recommendations. Each government should bear the cost of
attending meetings, but the Committee should prepare promotional material designed to attract investors. In the first instance this should be in the form of a brochure. The brochure can base its information on data generated in the Strategic Study on Development Options for Economic Cooperation between the People’s Republic of China (PRC) and Mongolia (in Eastern Parts of Inner Mongolian Autonomous Region, PRC and Mongolia Area) conducted under an ADB Regional Technical Assistance (RETA 5969). A next stage should be to publish this information on the Internet and to establish a channel to pursue communications from potential trading partners and investors.

As an integral part of implementing projects, the working groups should identify the funding requirements and the strategy for the realization of such.
Rationale and Objectives:

The private sector is not well developed in the eastern provinces of Mongolia as well as in Xingan Prefecture. The governments in each part of the project area can take various measures to improve the scope for private sector participation in economic development. Some of the issues that have to be dealt with are national in nature as they include taxation arrangements, restrictions on foreign investment, bankruptcy and other commercial laws. While progress on these matters is critical, it will also help if steps are taken on the local level to improve the capacity of the business community.

In this respect, effort should be taken to draw upon the resources of the national chambers of commerce. These bodies have developed considerable experience in fostering entrepreneurship and trading capabilities. Moreover, they have training resources and networks that can be of considerable value to emerging businesses.

The objectives of the Subregional Chamber of Commerce should be to:

(i) Improve communication within the business community, particularly between the two parts of the study area;
(ii) Provide means for business people to improve their skills and knowledge;
(iii) Set up opportunities to improve qualifications; and
(iv) Increase awareness of the benefits of trade and procedures required.

Scope of the Project:

The medium-term goal should be to establish a Subregional Chamber of Commerce. Initially though, it is reasonable to establish local chapters of national chambers of commerce in each part of the project area led by a designated local expert or eminent business person. Each chapter should draw upon the resources of its national association (in the case of Xinganmeng Prefecture, the appropriate association may be in Ulanhot).

As a first step, it is recommended that the Mongolian Chamber of Commerce and Industry (MCCI) and its counterpart in PRC should be requested to conduct a survey of commercial establishments in the project area. For each establishment, information as to the business name, nature of business (main products), and contact addresses should be gathered. This information should be published in English, Mandarin and Mongolian and it should be made available freely to participating enterprises on both sides of the border.

A second step would be to carry out an assessment of the training and development needs. Although these might differ in some respects, it is also likely that there will be some common needs and every effort should be made to use existing resources on management training and development efficiently. A priority should be given to development of workshops and seminars bringing the business communities in the two parts of the project area together.

The regional chapters of the national chambers of commerce should be encouraged to meet on a regular basis to discuss matters of mutual interest with the ultimate objective of establishing a formal Subregional Chamber of Commerce.
Institutional Sector Project Profile Number 3

Project Name: Open Arxan Border Port for Regular Trade
Sector: Trade and Tourism

Rationale and Objectives:
At present, Arxan Port is a second-class port without any facilities. Trade across this port can only take place during winter when the Halkh River freezes over and crossing the river is possible. There has been very little trade since it was opened in 1992, and the probability of the situation improving is very small unless the border port is opened up as a first-class port.

Based on the experience of Khavirga Port, trading activities could develop quickly once port conditions are favorable. Moreover, the passage of citizens of Mongolia and the PRC is possible with a first-class port standard. Tourism will certainly be able to prosper in this condition. In time, the aim should be to make it possible for foreigners to pass from one country to another through Arxan. An additional benefit is that officials and technical experts from each part of the economic cooperation region could pass through this port and would be able to hold meetings on a more regular basis to gain a better understanding of the opportunities and issues on each side of the border.

This project is linked to the transport sector projects, particularly the construction of a border bridge.

Scope of the Project:
The facilities required in a first-class port include power, telecommunications, water, heating, accommodations for officials, and areas for inspection and storage. The investments required would be modest in comparison to the major infrastructure projects but it is important from a strategic point of view to open up the border. Given that the PRC has almost completed a paved road to the border port now, and given the plans to construct the Millennium Road in Mongolia up till this point by 2010, it is inevitable that Arxan will be opened as a permanent port. The issue is really about opening the port early rather than later.

A working group of the Subregional Cooperation Committee should be formed to make progress on this project. There are specific issues that must be dealt with by the immigration, customs and other authorities. This working group also needs to coordinate closely with a similar a working group dealing with the construction of a bridge over Halkh River.

The immediate task of the working group on the Border Port should be to prepare plans for the construction of facilities on each side of the border and to prepare the necessary documentation required by each national government to make the decision on opening permanent ports.
Rationale and Objectives:

The agriculture sector is well developed in Xinganmeng Prefecture but under-developed in the eastern region of Mongolia. Nevertheless, animal husbandry accounts for a large share in the agricultural sector in both regions. With virtually similar conditions in this sector, there is potential for technical cooperation to improve productivity in both areas.

In particular, cooperation could be based on the sharing of knowledge and experience with the selection of plant and seed varieties, cultivation and irrigation methods, animal breeding and the control of diseases. Cooperation would also be valuable in the fields of marketing and distribution.

Foot and mouth disease is a problem in the eastern provinces of Mongolia especially during the winter. Disposing of infected livestock coupled with an immunization program controlled the outbreak. Moreover, the outbreak becomes controllable during warmer weather. Close cooperation is required to ensure the disease does not spread and to ensure that trade is not necessarily disrupted.

There has been little direct cooperation in this sector in the past. This project, therefore, should be viewed as a first step to establishing closer relationships and increasing dialogue in the future.

Scope:

A project should start to explore the scope for cooperation on:
(i) Choice of crop and seed types and farming methods to increase productivity in agriculture;
(ii) The potential in developing a niche market in the production of higher-yielding “green food”;”
(iii) Improvement of animal breeds;
(iv) Control of diseases;
(v) Financial needs of farmers to adopt improved methods; and
(vi) Supply chain and marketing improvements.

A working group should be established under the auspices of the Subregional Cooperation Committee to develop these ideas further.
Rationale and Objectives:

Xinganmeng Prefecture is placing due consideration on its comparative advantage in producing “green food” with its pollution-free and natural farming methods that do not rely on artificial fertilizers. This is in view of the growing world market demand for healthy foods; a market that gives better prices compared to the market for staple crops grown in both areas of the project area.

This is a sensible strategy building upon the region's comparative advantage and it is focused on trade outside the region. The eastern region of Mongolia also shares these same characteristics and it would be useful to investigate the economic potential of this industry in greater detail.

Potentially the products from this region can be marketed under a special label and sold at premium prices. This business tends to be dominated by large, global firms that can devote resources to research, product development, supply chain management and marketing. This project should aim to show the potential of the “green food” industry in this region and to attract the interest of one or more of these global companies to invest in the region.

Scope:

A project should begin to explore:

(i) The commercial potential of “green food” production in world markets;

(ii) Evaluate what comparative advantage exists in the project area to play a significant role in the “green food” business;

(iii) Identify the major global companies that play the major role in the development and marketing of “green food”; and

(iv) Research the supply chain requirements of a “green food” industry.
Project Name: Market Study for Cut Grass (Animal Fodder) from Mongolia to Xinganmeng Prefecture

Sector/Location: Agriculture and Trade

Rationale and Objectives:
During severe winters in previous years, there has been a demand for animal fodder in Xinganmeng Prefecture, which was met with supplies originating from Mongolia. This trade ceased partly due to logistical problems and concerns about the transmission of animal diseases. Nevertheless, the idea has considerable merit.

Mongolia has vast grasslands, which pose as a fire hazard for both Mongolia and the PRC every year. By turning grass into a commercial fodder crop for the market in Xinganmeng Prefecture and perhaps for export to Japan or other nearby countries, environmental and economic benefits could be realized by both parties. The increased income earned by farmers in Mongolia will help stimulate trade in the opposite direction, including the purchase of vegetables and “green food” from Xinganmeng Prefecture.

Moreover, there is scope as well to develop high quality fodder, free from chemicals and pollution, for export to Japan and South Korea. This possibility should be investigated.

Scope of the Project:
Among others, this project should assess the demand for cut grass in Xinganmeng Prefecture. Likewise, a price at the point of sale should be recommended. The project should also examine the economics of cutting grass and transporting it across the border to the market, including taxes and duties.

The project should also identify the constraints that inhibit this trade and provide doable measures to be considered by the local governments concerned.

Furthermore, the project should evaluate the potential in the region to produce high quality fodder for export to other nearby countries.
**Rationale and Objectives:**

The mining sector has the potential to play a significant role in the economic development of the eastern region of Mongolia. The associated processing activities that follow the extraction of minerals can occur in both parts of the project area. In addition, the railway required for transporting the mineral products would also generate major impact on the economies of Xinganmeng Prefecture and the eastern region of Mongolia.

However, the commercial risks at this stage are the construction of a railway line and related problems at the start of any new mining and/or processing activity. A way has to be explored to reduce the risks for the mining entities. This can be best achieved through the conduct of a detailed market study for coal, oil, zinc and uranium. The objective of said study would be to identify prospective markets and customers for these mining products and to understand whether it is possible to sustain economic freight rates on the railway.

The study should be credible to the mining and processing companies to the extent that they will be prepared to sign letters of intent. These commitments can then be used to encourage private investors to play a large role in the construction of the railway.

**Scope of the Project:**

This project should focus specifically on current proposals to exploit mineral resources in the eastern provinces of Mongolia. In particular, attention should be given to coal, oil, zinc and uranium.

A mining industry economist should be engaged to assess the economic potential of these ventures. The study should also produce independent assessments of the resources available for exploitation. Particular attention should be paid to what it takes to be competitive in selling these products in world markets, having regard to a realistic range of costs of transporting the products to those markets.

The major mining and related mineral processing ventures that would make use of the railway should produce business plans for the mining industry expert. The mining industry expert should then evaluate the degree of commercial risk associated with each venture.
Project Name: Study in the Environmental and Economic Impacts of Mining in Mongolia
Sector/Location: Mining

Rationale and Objectives:
Based on Mongolia’s experience with previous mining ventures, no real land rehabilitation was carried out for the mining sites. The same situation prevails in the project area. This environmental issue stems from the fact that there is lack of commitment for land rehabilitation by the mining entities, as they are small and do not have the resources for good environmental practice. Moreover, the government is lenient in this area, as they do not require the mining companies to post bonds for land rehabilitation purposes. It was pointed out that there is need to modernize mining technology to minimize environmental impacts and develop skills for integrating environmental and mining activities.

The project area has an opportunity to exploit its comparative advantages in the production of “green food” and ecotourism. However, the prospects in these initiatives could be placed at risk if the mining sector continues its reputation for bad environmental practice. Already there are problems with degradation of the landscape around the airport at Choybalsan where the Russian military was based, and it is important that Xinganmeng Prefecture and the eastern region of Mongolia understand clearly the trade-off in developing the mining sector.

It has been proposed that a study be carried out to examine the environmental impacts of mining vis-a-vis its contribution to the economy. Mining tends to be capital-intensive and it may require large amounts of foreign capital. In contrast, tourism can be labor-intensive and it offers many opportunities for the local people to participate in the business. A similar study in the tourism sector is, likewise, proposed so that both projects could consider devising joint future development strategies.

Scope of the Project:
The project scope is primarily to carry out an environmental impact study for mining in the project area. This study should consider some of the issues related to land rehabilitation and mine closure and the effectiveness of financial regulations and incentives to encourage sound environmental practices. The study should consider the practical issues associated with implementation and enforcement of environmental regulations. Particular attention should be paid to the protection of groundwater resources, acid mine tailing and overburden management, and mine planning and waste and energy management.

An important contribution of the study would be to have a good understanding of the conflicts between mining and other development opportunities such as the production of “green food” and ecotourism.

The study should investigate the economic impact of mining, including its role in alleviating poverty in the project area.
Tourism Sector Project Profile Number 1

Project Name: Comprehensive Tourism Development Study for Eastern Mongolia and Xinganmeng Prefecture
Sector: Tourism

Rationale and Objectives:

Xinganmeng Prefecture and eastern provinces of Mongolia have much in common in the development of their tourism sectors. They have world-class attractions. On one hand, Mongolia has virgin steppes that abound with wildlife. Xinganmeng Prefecture, on the other hand, has its pristine lakes, beautiful rivers and hot springs. However, the two regions are relatively remote from the main hubs of foreign tourist and they are relatively not well known. Within Mongolia, the general strategy to develop the tourism sector in the eastern region has been mostly viewed to be a long-term undertaking. However, there is an opportunity to take advantage of the growing travel market in the member countries of the Tumen River Development Programme (TRADP) and, by adopting a cross-border approach, establish a much stronger presence in the market. Both Xinganmeng and the eastern provinces of Mongolia could stand to gain from the cross-border relationship.

The study should adhere strongly to the principles of ecologically sustainable tourism and ensure mutual benefits to both the eastern provinces of Mongolia and Xinganmeng Prefecture. The study should also make a clear demarcation between the responsibilities of the public and private sectors in tourism, although an important objective of the master plan is to demonstrate that investments by the private sector in this region can be profitable.

Scope of the Project:

This project should be undertaken over a period of two years by a team of international and domestic consultants. It should:

(i) Prepare an inventory of natural, historical and cultural attractions in the project area.
(ii) Undertake a market potential study to identify promising market niches and ways to promote the region. Particular emphasis should be placed on cross-border tourism that adds strength to the tourism marketing of each country. In addition, focus should also be placed on the potential of attracting visitors from the member countries of the TRADP to the project area.
(iii) Evaluate the tourism concepts identified in the market study from an environmental point of view and categorize areas for further development (ranging from most suitable areas for immediate development to areas where tourists should not be encouraged). In addition, the study should outline measures required for ecologically sustainable tourism.
(iv) Identify accommodation, restaurant, tour operation and other service requirements to support promising market concepts suitable for development.
(v) Select representative hospitality (accommodation, restaurant, etc) projects and carry out pre-feasibility studies to demonstrate the commercial potential for private investors.
(vi) Identify actions required by governments to attract private investors (fiscal incentives, institutional arrangements).
(vii) Identify the steps required to facilitate cross-border tourism and initiate actions.
(viii) Investigate the human resource requirements to support tourism development and evaluate current resources available to support initiatives. Identify constraints and recommend action plans.
(ix) Carry out training for the resource managers (park rangers, guides, etc) in environmental management and in ways to add value to the tourism experiences of visitors.
(x) Conduct a study of the economic benefits from the tourism sector, including its impact on poverty.
(xi) Prepare an integrated tourism development plan, including attention to the role of governments in promoting the region and in maintaining a sound information base for future planning by both the private and public sectors. The plan should be action-oriented, identifying responsibilities and financial requirements.
(xii) Present the Development Plan at a Trade and Investment Forum designed to promote the region to private investors and the travel industry.
Tourism Sector Project Profile Number 1.1

Project Name: Market Study for Tourism in Eastern Mongolia and Xinganmeng Prefecture with Particular Emphasis on Cross-Border Tourism

Sector: Tourism

Rationale and Objectives:

Xinganmeng Prefecture and eastern provinces of Mongolia have much in common in the development of their tourism sectors. They have world-class attractions. On one hand, Mongolia has virgin steppes that abound with wildlife. Xinganmeng Prefecture, on the other hand, has its pristine lakes, beautiful rivers and hot springs. However, the two regions are relatively remote from the main hubs of foreign tourist and they are relatively not well known. Within Mongolia, the general strategy to develop the tourism sector in the eastern region has been mostly viewed to be a long-term undertaking. However, there is an opportunity to take advantage of the growing travel market in the member countries of the Tumen River Development Programme (TRADP) and, by adopting a cross-border approach, establish a much stronger presence in the market. Both Xinganmeng and the eastern provinces of Mongolia could stand to gain from the cross-border relationship.

Both regions lack the resources to develop tourism, and to the maximum extent the proposed transport projects should complement tourism development. In addition, every effort should be made to attract the private sector to invest in accommodation, restaurants, tour operations, and other services. It is likely this will require investment from outside the region, but the study should identify ways that local people can derive some benefits from tourism. If the private sector is to be attracted to invest in this region in any significant way, it is imperative that an independent group that is credible to international investors in the tourism sector carries out the market study.

In lieu of a comprehensive tourism development study, short separate individual studies could be carried to address some requirements in the development of the tourism sector in the project area. This market study should be the first priority. Potential markets should be prioritized based on the gains they can provide to local communities and to investors, and in terms of the likelihood that such markets can be captured. Particular attention should be paid to the growth in travel within the member countries of the TRADP.

Based on the study, both sets of governments can assess the potential for cross-border tourism. As a result, they will be in a better position to know how much commitment should be made to subsequent studies designed to develop plans to manage development in an environmentally sustainable way and to improve the human resource capabilities in the region. These studies can also be targeted more carefully. The market research study can also be used immediately to mobilize private sector interest, particularly airlines (charter and scheduled) and accommodation service providers. If packaged tour products are to be designed, it is important to understand that there are long lead times between the design of the packages and the arrival of tourists. Early commitments can allow commercial planning to proceed alongside physical planning and development.

Scope of the Project:

A credible, international group that has gained the confidence of investors should undertake the study. It should undertake a physical inventory of the tourist attractions in eastern Mongolia and in Xinganmeng Prefecture, taking into account the seasonal factors. The researchers should also consider the potential to pioneer markets using charter flights arriving in Choybalsan and/or Ulanhot. Often it is the case that airlines are prepared to test consumer demand for new destinations with charter services. If demand is strong, these can become scheduled services. However, the value of direct flights from nearby countries could take advantage of the growth in tourism within the TRADP member countries.

In particular, the study should:
(i) Decide on appropriate ecotourism products in both regions;
(ii) Identify market niches that are attracted to these types of destinations;
(iii) Evaluate options for cross-border tourism
(iv) Consider how to promote a single identity for the region; and
(v) Recommend marketing strategies.
Rationale and Objectives:

The comparative tourism advantage of the study area is its unspoiled nature, its abundant wildlife and its natural beauty, together with its historical and cultural features. But these are not an area that can cope with mass tourism. Any development of this sector must be carried out carefully after investigation of environmental consequences of tourist activity and of the carrying capacity of the tourist areas.

These issues include the impact of tourism on Arxan City, and urban planning consistent with protection of the water resources and hot springs. But it also will be necessary to evaluate different concepts of tourism development identified by experienced travel planners. This should be a focused study considering specific ideas about tourism development, perhaps by operating a charter tour business via Choybalsan airport or by permitting cross-border tourism.

Scope of the Project:

This project should evaluate the tourism concepts identified in the market potential study in terms of their environmental impact. This evaluation should take account of the following factors:

(i) Investigate the environmental impacts of increased tourism activity in Xinganmeng Prefecture given the trends occurring in domestic tourism in the PRC and taking account of environmental issues in other scenic spots in the PRC

(ii) Investigate the environmental impacts of increased tourism activity in the Eastern region of Mongolia and Xinganmeng Prefecture given tourism development concepts identified in Tourism Sector Project Number 2

(iii) Develop guidelines for tourism development, including the provision of accommodation stock, attractions, and ground transport and tour operations

(iv) Consider the merits of licensing systems for tourism operations

(v) Identify specific skills that need to be developed to ensure effective on-the-ground management of the environment

(vi) Recommend institutional frameworks necessary to manage a sound ecotourism sector in a cross-border context

The project should prepare guidelines for ecologically sustainable tourism development and recommend ways in which these guidelines be implemented. The project should also specify training needs for managers of the tourism resources (park rangers, tour guides, etc.)
Tourism Sector Project Profile Number 1.3

Project Name: Identification of Accommodation, Restaurant and Other Support Services for Tourism Development
Sector: Tourism

Rationale and Objectives:

This study should be undertaken after the market potential study (Tourism Sector Project Number 2) and the environmentally sustainable tourism project (Tourism Sector Project Number 3) are completed.

The current tourism accommodation and service infrastructure is poorly developed at this stage and this project has to identify standards required by the promising market segments and then identify ways in which these can be met. Account will have to be taken of the guidelines for ecologically sustainable tourism.

Scope:

Based on the market potential study and the environmentally sustainable tourism project, identify accommodation and other tourism-related services that need to be developed in the project area.

The project should also consider ways in which standards can be maintained and improved. For example, account should be taken of licencing of hotels and ger camps, and of tour operators arising from the Mongolian Tourism Master Planning Study.
Tourism Sector Project Profile Number 1.4

Project Name: Pre-Feasibility Study for Selected Accommodation Projects to Demonstrate Commercial Potential and Ways to Share Benefits with Local Residents
Sector: Tourism

Rationale and Objectives:

The premise here is that accommodation and many tourism-related services can and should be provided by the private sector. However, there is little private investment in the project area at present. The aim of this project is to select some representative cases for accommodation and other tourism-related services and to show that they can be profitable. These case studies should be made available freely to interested parties.

An important objective with tourism development is to deliver tangible economic benefits to local residents. This study should demonstrate how this can be achieved in practice.

Scope:
Select at least 4 representative case studies within the Eastern Provinces of Mongolia and another 4 within Xingannmeng Prefecture. Selected projects should demonstrate appropriate concepts and give a good coverage of:

- Hotel accommodation in an established center
- Tourist camps
- Restaurants
- Tourist shops

For each case study, a financial analysis should be carried out. This should show how much capital is required, the profile of cash flows, and profits. For each case, consideration should be given to ways in which the economic benefits can be shared with local residents.
Tourism Sector Project Profile Number 1.5

Project Name: Identification of Incentives Required to Attract Private Investors
Sector: Tourism

Rationale and Objectives:
Both regions lack capital resources for any kind of development and it is important to gain access to outside sources of finance, including foreign direct investment. Although Tourism Sector Project Number 5 aims to identify profitable opportunities in commercial establishments, additional measures will be required to achieve self-sustaining growth.

A common problem in establishing new tourism destinations is in reaching a minimum efficient scale. Airlines will not fly into a destination until they are confident that accommodation and tour arrangements are in place. At the same time, investors are reluctant to build that supporting infrastructure until such time as they are confident the airlines will deliver customers on a regular basis.

During the early stage of the destination life-cycle, it is important that the government be action oriented. To reach the minimum scale, governments should consider giving incentives to investors to mitigate their risks. Such incentives can include tax holidays and perhaps even subsidies. However, it should be made very clear that these are temporary in nature and the expectation is that the tourism sector should attain self-sustaining growth at an early stage. The study should also indicate constructive approaches whereby the government can participate in joint ventures with the aim of facilitating initial investments. Such arrangements might include joint ventures provided that there is a plan for the government to sell its stake once the project is successful. The government should not, as a rule, seek a controlling interest in the management of such joint ventures.

An important consideration in deciding how long such incentives should remain in place is that tourism promotion and marketing can take two to three years to have an appreciable effect.

Scope:
This project should be carried out simultaneously with Tourism Sector Project Number 6 that examines the financial feasibility of selected case studies. This project should consider the commercial risks faced by tourism operators during the beginning stage of the life-cycle and should evaluate different incentive schemes to mitigate those risks.

This project should recommend specific measures to be adopted by governments, taking account of the limited financial resources in the project area.
Project Name: Facilitating Cross-Border Tourism
Sector: Tourism

Rationale and Objectives:
This project is related to the Economic Cooperation Project Number 3 designed to open the Arxan Port on a regular basis. Based on the experience of the Khavirga Border Port between Dornod Province and Heilongjiang Province, it is not a difficult matter to allow the passage of people from both countries. Given the strong growth in domestic tourism in the PRC, this indicates there is potential for development in the short to medium term.

However, it is another matter to open a port to entry by nationals of third countries. A wide range of issues must be addressed, and these will take time to resolve through consultative processes in both countries. This matter is being discussed within the TRADP Tourism Working Group. One of the ideas under consideration is to allow people on group tours to pass through borders with the minimum of requirements. This seems like a useful approach that gives governments a high degree of control and which makes it possible to experiment without far-reaching consequences.

Scope:
This project should identify the steps required to:
- Open a border port for the passage of tourists from the PRC and Mongolia
- Allow citizens of third countries to pass through a border port
- Open up Choybalsan and Ulanhot airports for processing of foreign arrivals and departures
Information requirements to meet government requirements should be identified, and a case should be prepared to facilitate the necessary bilateral agreements.
Rationale and Objectives:

Tourism is a service business and the satisfaction of tourists depends very much on the way services are delivered. The lack of experience with foreign tourists in both the Eastern region of Mongolia and in Xinganmeng Prefecture is an impediment to the progress of this sector. Improvement of the human resources at all levels is required. Managers need to understand the expectations of foreigners, and they need to see successful role models where tourists are highly satisfied and where the operator is profitable. Chefs need training in food preparation for visitors from different countries in addition to understanding hygiene requirements. Service staff need to learn basic skills. For those staff who have direct contact with foreigners, some language skills need to be developed. Although many of these staff will be employed in the private sector, this is a matter that is better dealt with by governments – especially during the early stages of development.

Scope:

This project should identify the human resources required during the initial growth phase of the tourism sector in the project area. It should specify minimum skills required in the key occupations and then consider how those skills can be developed. It will be necessary to identify sources of tourism sector training and programmes designed to train the trainers. Account should be taken of existing human resource development programmes in Mongolia and in Inner Mongolia Autonomous Region. In addition, resources provided by private sector organization such as the Mongolian Chamber of Commerce and Industry should be identified. The project should recommend a comprehensive programme of human resource development, including estimation of the financial requirements and an action plan.
Rationale and Objectives:

The tourism sector has been identified as a key sector for development in both Xinganmeng Prefecture, IMAR, PRC and the eastern provinces of Mongolia. This is a strong potential area for economic cooperation based on a set of determined factors for cooperation. However, before governments commit themselves to this sector it is important to understand how tourism will deliver economic benefits. This project should undertake a broad economic evaluation of tourism, emphasizing the approaches that will maximize economic returns to the economy generally and to local residents in particular. The study should be considered together with a parallel study looking at the economic impacts of mining in order to appreciate the nature of the trade-off between the two sectors (if they exist).

Scope:

Carry out a broad economic evaluation of the investment in the tourism sector.
Tourism Sector Project Profile Number 1.12

Project Name: Integrated Tourism Development and Promotion Plan for Cross-Border Tourism
Sector: Tourism

Rationale and Objectives:
Tourism Sector Projects 2 through to 10 can be undertaken over a 2-year period. Though each one should strive to initiate actions immediately upon completion, there is a need to summarize the findings and recommendations in a comprehensive tourism development plan as a guide to the future.

Scope:
This project should integrate Tourism Sector Projects 2 through to 10, taking account also of the related Transport Sector Projects. This plan should be action oriented with responsibilities for actions clearly specified. Budgets should be prepared and sources of finance should be identified.
Tourism Sector Project Profile Number 1.13

Project Name: Trade and Investment Forum to Promote Region to Private Investors and Travel Industry
Sector: Tourism

**Rationale and Objectives:**

The tourism sector is one where a significant role can be played by the private sector. With the completion of all of the tourism sector studies, it is appropriate to communicate the findings to a trade and investment forum. The objective should be to get firm commitments to invest in the project area, particularly from those enterprises that are highly respected as leaders in their fields.

**Scope:**

A Prospectus for Tourism Development should be prepared. This should explain why this region is attractive to tourists and what actions have been taken to establish the basic infrastructure and commercial environment to take the destination through the first stage of its life cycle. The Prospectus also should include the case studies demonstrating the financial viability of tourism investments and it should indicate the incentives governments are prepared to offer. This Prospectus should be distributed widely, including through national and regional chambers of commerce.

The Trade and Investment Forum should be convened on several occasions as and when required, taking advantage of Tourism Trade Fairs where potential investors are easy to reach.
Transport Sector Project Profile Number 1

Project Name: Construct a Bridge Across Halkh River
Sector: Transport, Trade and Tourism

Rationale and Objectives:

The only way to conduct trade at Arxan Port now is to push goods across the ice when the river freezes over in winter. This is a major obstacle to trade between the two areas of the project area.

When Mongolia’s Millennium Road is built all the way to the border, it is inevitable that this bridge will be constructed. This road corridor will provide Mongolia with a road transport link to the Tumen River Economic Development Area (TREDA). Although the transport strategy recommended for Mongolia by the World Bank in 1999 did not anticipate the strength of interest in the Millennium Road, the road bridge has an important role to play. The World Bank wanted to see at least two trade corridors competing with each other. Construction of this bridge at an early stage begins the process of developing the third corridor.

Within Mongolia, the strategy for developing the eastern region recognizes the importance of trade with Mongolia’s immediate neighbors, but even more important is the access to markets within the TREDA.

This project will make a more valuable contribution to cross-border cooperation if it proceeds simultaneously with Institutional Sector Project Number 3 aimed at opening the border port for regular trade. Nevertheless, in the sequence of development, the bridge is a higher priority. The border port cannot function efficiently without the bridge, but the bridge can facilitate trade even if the border port continues with its current role. The specific aim of the project is to make it possible to conduct trade on a year-round basis.

Scope:

Preliminary design work has been carried out. The Tumen River Area Development Programme listed this as one of its projects entitled “Assistance for Opening of Border Crossing Point”. It stated that Xinganmeng Prefecture would cover its share of the costs of the bridge, but that the Mongolian side would cost between $150,000 and $200,000. The principal requirement for this project is funding. It is unlikely that private financing can be attracted for this project and it needs to be seen as necessary infrastructure to be provided on a cooperative basis. The Government of Mongolia should give a high priority to this project. It should consider ways to recover its costs over time through imposition of a toll, especially if the border is opened up for the passage of tourists. It is unlikely that this would generate much income at the early stages, but in time it is likely that the government would be able to recover its costs. Moreover, the Government of Mongolia could use the bridge as a way to raise income for improvement of the road leading to the border port.

The Xinganmeng Prefecture Government should also consider this option and the two parties should reach an agreement about when it would be appropriate to impose a toll, how much to charge, and how long to maintain the toll. A technical working group should complete the design work and commence construction.
Project Name: Build a Road from Arxan Port to Tamsag Bulag
Sector: Transport, Trade and Tourism

Rationale and Objectives:
The Government of Mongolia plans to complete the Millennium Road by 2010. The extension of the road to the border is of low priority in the construction program. The current gravel road runs from Choybalsan to Tamsagbulag in Dornod Province. It is another 200 kilometers from Tamsagbulag to the border without any road. This has not proven to be an insurmountable obstacle to traders who have used the port in the past. However, it would facilitate trade if at least a rudimentary roadway were pushed through from Tamsagbulag to the border.

It would be an advantage if this road follows the planned route for the Millennium Road. The Millennium Road requires the construction of several bridges and culverts near the border, but the rudimentary road need not be constructed to this standard initially. This is possible noting that the road to Khavirga Port (located at the border of Dornod Province, Mongolia and the PRC) is little more than an earth track.

The aim should be to improve the safety of travel to the border, to reduce the damage to goods and vehicles, and to reduce travel time.

Scope:
This project is linked to Transport Sector Project Number 1, building a bridge at the Arxan border, and Institutional Sector Project Number 3, opening the border port on a regular trade basis. It has the lowest priority of the three and it can be completed over time as the traffic begins to build up.

However, it would be useful to ensure that the alignment of the Millennium Road is identified and that vehicles are encouraged to follow this route.
Rationale and Objectives:

This project takes off from Transport Sector Project Number 2 (Build a Road from the Arxan Border Port to Tamsagbulag) and is linked to the tourism sector projects. Tourists from the PRC would begin crossing the border as soon as it is open to the passage of people. There could well be adverse environmental impacts with the complete freedom in movement of people in the area and it would be desirable to take this step only after Tourism Sector Project Number 1.2 (Identification of Concepts and Requirements for Environmentally Sustainable Tourism) is completed. However, once areas are identified where tourism development can occur it would be desirable to begin the process of commercialization.

Initially, tourists could be permitted to travel within Mongolia on a day-visit. Licensed operators from Mongolia would provide the tour vehicles at the border and would be regulated to travel along defined routes to approved attractions. It would help if the tour guides also played a role as park rangers with a responsibility to protect the environment.

The purpose of this study would be to identify environmentally acceptable routes for vehicle traffic within the eastern region. This could be a progressive study carried out over several years, with the first priority being to map out routes closest to the border to encourage the growth in day tourism.

Scope:

This project should be commenced only after the completion of Tourism Sector Project Number 1.2, which would develop plans for environmentally sustainable tourism. Within the guidelines set out in that project, environmentally acceptable access routes should be mapped out to the key attractions. These routes should make maximum use of the alignment set out for the Millennium Road.

Mongolia should establish a licensing system for tour operators in this area, perhaps requiring that a park ranger who has received appropriate training in environmental management conduct each tour.

A levy can be placed on visitors to cover the costs of this project.
Rationale and Objectives:

Eastern Mongolia is unable to exploit its rich endowment of mineral resources due to lack of transport links to international markets. For this reason, there is considerable interest in Mongolia in linking the eastern region to the ports in the Tumen River Economic Development Area (TREDA). The United Nations Development Programme (UNDP) sponsored Tumen River Area Development Programme (TRADP) has carried out a pre-feasibility study, which concluded that the best option was to connect Choybalsan of Dornod Province, Mongolia with Arxan, IMAR, the PRC by rail. This connection would extend 460 kilometers within Mongolia and another 30 kilometers of new track in the PRC with standard gauge line. From there the freight could be carried to Baicheng via Ulanhot in the PRC and then turn eastwards to the TREDA.

This railway could carry general cargo between Choybalsan and Arxan all year round. This would encourage trade and support the development of industry in the project area. Cut grass (hay) is another example of a commodity that could be carried by rail, but it is clear that the railway will be financially viable only if it attracts substantial cargo volumes from the mining and industrial sectors.

There is a view that this railway link could also form part of a land bridge connecting Northeast Asia with Europe, taking a considerable distance off the current, congested northern route via Siberia. Additionally, the railway is expected to contribute to social development. Again, it is unlikely that passenger traffic will add much to the financial case for the railway.

The total cost of the project was estimated to be about $0.5 billion. The pre-feasibility study predicted traffic volumes of 5 million tons a year by 2005 at relatively high freight rates. On this basis, the railway was expected to be profitable and the consultants who completed the work recommended that a detailed feasibility study be commenced. The Tumen River Area Development Programme estimates that this detailed feasibility study would cost $350,000 and includes this in its project profiles.

There is no immediate prospect for financing the project. But if the consultants assessed the railway to be profitable, this is a project that could be financed by the private sector. What is needed is further work to establish the extent of demand under various freight tariffs.

Currently, there are various proposals to rehabilitate industries in Choybalsan. The Aduunchuluu Coal Mining Company in Choybalsan, for example, has entered into negotiations to supply one million tons of coal each year to Primorsky Territory in the Russian Federation. Construction of the railway from Choybalsan to Arxan would make this an even more attractive proposition. The company has very large deposits of brown coal that is easy to extract and it is looking for additional customers.

In addition, the Choybalsan City Administration has several development proposals before it. One of them is to construct a zinc smelter and the output would be exported to the PRC. Another proposal is to bring crude oil up the railway line from Tamsagbulag to Choybalsan for refining.

These initiatives demonstrate the strong commitment in the eastern provinces to making the railway project work. A mining sector project (Market Study on Demand for Mongolian Minerals) has been recommended to look into specific projects that will generate large traffic volumes. A key aim of this project will be to identify realistic opportunities for the railway to enter into contracts to carry specified cargo volumes at agreed tariffs so that the commercial risks of building a railway can be shared with the major users. It will be very difficult to get final commitments to mine the resources and to invest in the processing infrastructure unless there is a cost-effective way to get the products to markets. But constructing the railway would be a risky venture without commitments from actual customers.

The situation would be different were there a sufficient volume of traffic coming from one or two sources, but this railway will have to generate its income from a broader base of customers. The prediction that the project will be profitable raises hopes that this major infrastructure could be financed by the private sector. There are several ways that this could be done. For example, the track can be set up independently of the train operations. The track operator...
simply agrees to provide right-of-way for agreed charges. The coal mine might then run its own trains over the railway track. This ensures that there is scope for competition in the provision of services provided that there is access to essential infrastructure (the tracks). For countries like Mongolia with a large land mass and a small population, it is imperative that the maximum efficiency be gained from the transport infrastructure. This project should evaluate different ways to structure the railway as a business.

Private investors will pay a considerable amount of attention to the cash flow of the project and the risks involved. A detailed analysis of the project from this point of view is required. Such analysis of the risks and the prospective cash flows will suggest ways in which the railway can be financed. It is possible that the government will have to bear the burden of some of the commercial risk, but ways should be found to enter into partnerships with the private sector so that the government can maximize its influence to get this project commenced with the minimum of financial commitment. Hence, an important matter that needs to be addressed in the feasibility study is to consider innovative ways to structure the railway business venture in order to leverage the government’s limited resources.

Scope:

TRADP recommended that the detailed railway feasibility study be carried out at a cost of $350,000 and would forecast transport demand, describe alternative methods of construction, recommend traffic organization, and undertake a comprehensive cost benefit analysis.

The full feasibility study should address the following matters:

- A more thorough analysis of demand (building on the mining sector project mentioned above) explores the possibility of entering into commercial agreements with some of the major users. Particular attention should be paid to the relationship between demand for the railway and tariffs required to make the project financially viable. This work should produce most likely predictions of demand, and optimistic and pessimistic bounds with analysis of the conditions required to produce these variations.
- A more detailed design of the railway line, including signaling and telecommunications, with field studies to investigate geology, geotechnics, water conditions, etc., principal location, functions and size of stations and meeting loops.
- Further examination of train operations and capacity requirements, paying attention to the capacity constraints in the railway system in the PRC and plans for upgrading key links to the TRED.
- Planning of border station facilities based on border crossing agreements concerning transport documentation, customs procedures, safety, etc.
- An update of the estimates of infrastructure costs, taking into account the comments from several sources that the pre-feasibility study over-estimated construction costs.
- An environmental impact assessment of the railway, paying particular attention to ways of mitigating the impact of the railway on wildlife.
- A financial and economic evaluation (social cost-benefit analysis) of the project.
- A detailed analysis of the cash flow profile, debt servicing requirements and evaluation of the commercial and other risks involved in this project.
- Attention to the organization/management of the new railway line and particularly innovative ways to finance the project that require a minimal commitment of public financial resources.
**Project Name: Role of Railway Transport in Tourism**

**Sector: Transport and Tourism**

**Rationale and Objectives:**

The United Nations Development Programme (UNDP) sponsored pre-feasibility study under the Tumen River Area Development Programme (TRADP) for the railway connection from Choybalsan in Dornod Province, Mongolia to Arxan in Inner Mongolia Autonomous Region (IMAR), PRC gave only a brief analysis of passenger demands. It adopted the view that there was no historical basis for predicting the demand and did not explore in any detail who would use the passenger services. It is very likely that some of the passengers would be travelling for business purposes, but the low density of population in this part of Mongolia makes it unlikely that there would be many people travelling to visit friends and relatives. It is difficult to say how many cross-border trips could be categorized in the “family visits” group. Hence, the base level of passenger traffic is likely to be very small.

Larger numbers of passengers might be induced to travel on the train if it is part of the tourism product for the region. Taking a medium to long-term view, it is conceivable that direct charter flights could bring tourists into Choybalsan from Japan, South Korea and other countries. In that case, a railway component of a tour package could be developed. This would be a comfortable way to enjoy the scenery of the grassland steppes and to reach the historical sites along the border. The passengers could also then travel on to areas in the PRC such as the Xinganmeng Prefecture and perhaps return home via Ulanhot Airport and Beijing.

It is not at all likely that the railway would be justified on the basis of a tourist train service, but every contribution to costs will improve the viability of a railway connection between Choybalsan and Arxan. No particular assumption is made here about who would operate the tourism train. However, there would be merit in giving this task to a service-oriented business, perhaps through a competitive tender. Fees for operating over the track could be paid to the track owner. It might be necessary to establish guidelines for how the costs of using the track are to be decided.

**Scope:**

The project requires an experienced tour planner to evaluate ways to incorporate a tourism train service into travel packages for foreign tourists. This expert should specify the requirements of a tourist train in this context and estimate the volume of tourists who would be likely to use the service and predict the amount of revenue that would accrue to the operator.

A railway expert should consider the concept described by the tour operator expert and estimate the costs of purchasing the rolling stock and its operational cost. An important element of costs would be the estimation of the costs of using the track. This should be done in accordance with principles of competitive access to essential infrastructure. Key issues will be whether the operation of passenger trains causes delays to freight trains and whether special passing loops will need to be constructed to accommodate the passenger service.

A financial expert should evaluate the concept and, if financially sound, should prepare a prospectus that should be distributed to potential investors.
Rationale and Objectives:

The distances of places within the project area covering Xinganmeng Prefecture of Inner Mongolia Autonomous Region (IMAR), PRC and the eastern provinces of Mongolia are large. The train takes five to six hours to reach Arxan from Ulanhot within the Xinganmeng Prefecture of the PRC and is only of “hard sleeper” standard. For foreign tourists, the quality is inadequate and, with only three trains a day, the schedule is not always convenient. There is a need to improve access to the Arxan area using air transport. The flight time from Ulanhot to Arxan would be approximately 20 minutes.

Ulanhot, a much larger city, is still at an early stage of development and it is slowly building up the number of scheduled flights. The best prospects for Arxan would be regional air transport services, probably on an infrequent, charter basis initially.

Scope:

A site has been proposed for the airport near Yirshi. However, a technical planning study is required to investigate the suitability of the site. The technical experts will need to give consideration to the problems of constructing a runway and related facilities in a wet grassland area with surrounding mountains. Alternative sites exist and it appears that the technical study will be carried out in the near future.

This project should evaluate air service concepts suitable for a regional airport in Arxan and carry out an evaluation of an investment in the airport infrastructure.
Transport Sector Project Profile Number 8

Project Name: Upgrade the Airport at Ulanhot
Sector: Transport and Tourism

Rationale and Objectives:

The airport of Ulanhot at Xinganmeng Prefecture, PRC was opened in 1995. It was designed for scheduled flights by aircraft such as the Bae-146 capable of carrying around 85 to 90 passengers. Although a Boeing 737 was able to land at the airport during the floods in 1998, upgrading works are required to allow regular operations for this aircraft size. The Boeing 737 usually carries between 110 and 140 passengers depending on the seating configuration and particular model. This type of aircraft is used widely around the world for domestic and international air services.

The air travel market is growing rapidly in the PRC by about 10% per annum, and it is predicted that Ulanhot Airport will reach its capacity within five years. The Tenth Five-Year Plan envisages that the airport will be constructed to 4C standard with the runway being extended by another 600 meters and widened by 45 meters. This will permit regular operations of the B737 aircraft. In addition, there will be improvements to the terminal for baggage handling and processing of passengers.

Upgrading the airport will have additional benefits for local businesses and for the community.

Scope:

This project should examine the role of Ulanhot Airport for tourism purposes. An experienced tour operator should identify ways to increase the number of tourists travelling into the project area through this airport.

Consideration will need to be given to the need for airlines to offer tour operators discounts in order to prepare competitive and attractive package tours. Forecasts of tourist potential should be prepared and this information should be used to encourage airlines to provide improved air services to Ulanhot. This information will also be valuable in the planning for the tourism sector in Xinganmeng Prefecture.
Project Name: Air Service
Arrangements Required to Support Tourism  Sector: Transport and Tourism

Rationale and Objectives:

At present, air services are not well developed in either Xinganmeng Prefecture, PRC or in the eastern provinces of Mongolia. Given the distances from major gateways, the project area needs to improve access by air transport. Notably, Mongolia’s Tourism Development Plan found that Mongolia is regarded in Japan as a long-haul destination despite its geographic proximity. This restricts the project area to niche markets and some lower yielding domestic travel within the PRC.

Choybalsan of Dornod Province, Mongolia has a long runway and a new passenger terminal, which was recently completed. This airport is designated as an alternate airport for Ulaanbaatar, capital city of Mongolia, and can accommodate the current aircraft types in operation. When Ulanhot’s airport is upgraded, it will also be able to accommodate the Boeing 737. This is the type of aircraft used by Air China between Beijing, PRC and Ulaanbaatar, Mongolia. The capacity to handle direct international flights exists already in Choybalsan and will exist in Ulanhot.

Mongolia’s most recent air services agreements with Japan and South Korea make allowance for flights to land in Choybalsan. In a progressively more liberal environment, it is becoming less difficult to open regional gateways. However, experience in other countries suggests that airlines are cautious about pioneering new routes. This is especially the case where the route relies on tourist traffic, which generally generates a low yield and is highly sensitive to economic fluctuations. It is even more difficult to establish new routes where there is lack of supporting infrastructure.

Hence, the time is not yet right to begin trying to attract scheduled, international airlines to Choybalsan or to Ulanhot. However, Tourism Sector Project Number 2 (Market Potential study for Tourism in Eastern Mongolia and Xinganmeng Prefecture with Particular Emphasis on Cross-border Tourism) requires an experienced consultant to assess the potential for tour operations. Depending on the outcome of that project, steps should be taken to create a more liberal regulatory framework for the airlines. In particular, a working group should begin exploring the scope for a liberal air transport policy between the PRC and Mongolia.

In Southeast Asia, for example, the ASEAN adopted an “open skies” policy to encourage the airlines to open up direct routes between secondary airports. A first step that the two countries might be prepared to accept is to allow charter flights to fly from one nation to the other without needing to obtain special permission. Charter flights tend to serve special markets and pose little threat to the established airlines. What is more, charter services provide a useful way to pioneer new routes.

Steps should then be taken to broaden this agreement within Northeast Asia. Assuming that supporting initiatives are taken in developing the tourism industry across the board, the airlines could make greater use of Choybalsan and Ulanhot as entry points for foreign tourists, and there is a possibility of developing regular flights between the two centers based on this tourist traffic.

The Tumen River Area Development Programme (TRADP) Secretariat has identified this as an area for further investigation, but it may be possible to demonstrate the success of the concept on a bilateral basis with a limited experiment in the project area.

Scope:

This project requires the formation of a working group to investigate the potential for easing restrictions on air travel within the project area. This project should be initiated only after completion of Tourism Sector Project Number 2 that examines the potential for tour products and estimates future demand. This information will help establish a case for more liberal air service agreements between the PRC and Mongolia.

The initial aim should be to obtain open skies for cross-border flights, at least for charter flights. However, the medium term objective should be to broaden the arrangement to allow very liberal conditions for tourist charter flights within Northeast Asia.
Project Name: Use of Choybalsan Airport for Air Cargo Operations
Sector: Transport and Trade

Rationale and Objectives:
Currently, the world’s airlines are pioneering new routes across the Arctic Region taking advantage of improved air navigation systems. This route allows the airlines to reduce flight time by 2 hours from New York to Southeast Asia. However, there is a need for a stopover en route.

Air cargo operators take account of a number of factors in choosing stopover points and hubs. Choybalsan of Dornod Province, Mongolia could save some airlines costly flying time. The airport is not congested and there is ample room for cargo operators to expand their business if necessary. The cargo operators also avoid airports where charges on aircraft and freight are high.

Singapore is a major transport hub and it has established a significant air cargo market, including sea-air intermodal operations. Choybalsan lies under the New York to Singapore route and its potential as a freight hub warrants further investigation.

Clearly, any success in attracting cargo operators on international flights will improve the competitiveness of industry in the project area.

Scope:
An expert in air cargo operations should be commissioned to study the potential of Choybalsan Airport to attract international cargo operators.
Energy Sector Project Profile Number 1

Project Name: Replace the Transmission Line From Ulanhot to Arxan
Sector: Energy

Rationale and Objectives:

The current transmission line from Ulanhot to Arxan of the PRC is old and deteriorating. It needs to be replaced to improve the delivery of power especially if the city is to support an increased amount of development and play a key role in developing cross-border tourism in the project area.

Scope:

The project entails the replacement of approximately 208 kilometers of the old transmission line and associated substation facilities.
Energy Sector Project Profile Number 2

**Project Name:** Investigate the Potential for Producing “Green Power” in the Project Area  
**Sector:** Energy

**Rationale and Objectives:**

The government of Xinganmeng Prefecture already has noted the possibility of generating wind power and has completed a pre-feasibility study to construct wind power generation facilities, taking account of the strong winds in autumn and winter blowing down from Siberia. The cost of this project is $3.9 million and the intention is to find ways to produce renewable and non-polluting sources of energy. There also is a proposal to tap geothermal sources of energy in the Arxan area and a budget of $36.3 million has been planned. It seems that the intention is that this source would serve the growing demand for power and heating for tourists.

These projects, if successful, will provide renewable sources of energy with minimal environmental impacts. This direction for the production of power and heating is compatible with the development of a “green food” industry and ecotourism.

**Scope:**

Carry out a broader feasibility study into the development of “green power” (wind power and geothermal power and heating) in the project area. Consider ways in which both regions can cooperate to produce power and heating on an efficient scale and how such a project could be financed.
APPENDIX 5

Major Reference Documents


Xinganmeng Prefecture (2000) *The Investment Guidebook of the Xingan League, the Xingan League Outside Investment Invitation Bureau of The Inner Mongolia Autonomous Region of China.*
APPENDIX 6

List of Organizations Consulted During the Course of the Study

International Agencies and NGO’s
Asian Development Bank
Asian Development Bank PRC Resident Mission
Asian Development Bank Mongolia Resident Mission
Institute of Geo-Ecology
North-East Asian Association
United Nations Development Programme
Mongolia Resident Mission
United Nations Development Programme, Tumen Secretariat

Government of Mongolia
Border Troops of Mongolia
Civil Aviation Authority of Mongolia
Department of Geology, Mining, Policy Development and Coordination
Dornod Aimag Mongolia
Government of the City of Choibalsan
MIAT Mongolian Airlines
Ministry of Education and Science
Ministry of Finance and Economy
Ministry of Foreign Affairs
Ministry of Food and Agriculture
Ministry of Nature and Environment
Ministry of Industry and Trade
Ministry of Infrastructure
Mongolian Railways
Mongolian Tourism Board
National Statistical Office of Mongolia

Government of the PRC
Arxan City Council
Development Planning Commission, Inner Mongolia Autonomous Region
Ministry of Communications
Ministry of Finance
State Development Planning Commission (SPDC)
State Environmental Protection Administration (SEPA)
State Forestry Department
The People’s Bank of China
Xinganmeng Prefecture Government Administration

Private Sector
Aduunchuluun Coal Mining Company
Juulchin Tourism Corporation of Mongolia
Mongolian Chamber of Commerce
Mongolian Consultancy Services Group
Mongolian Stock Exchange
Mongolian Tourism Association
Ulanhot Cement Factory
Ulanhot Steel Group