

**BOARD
OF
DIRECTORS**

ASIAN DEVELOPMENT BANK

R156-04
31 August 2004

**TECHNICAL ASSISTANCE TO INDIA
FOR PREPARING THE NORTH EASTERN STATE ROADS PROJECT**
(Financed by the Government of the United Kingdom)

The attached Report is circulated for the information of the Board. The President approved the technical assistance on 23 August 2004.

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ASIAN DEVELOPMENT BANK

TAR: IND 37143

TECHNICAL ASSISTANCE
(Financed by the Government of the United Kingdom)

TO

INDIA

FOR PREPARING THE
NORTH EASTERN STATE ROADS PROJECT

August 2004

CURRENCY EQUIVALENTS

(as of 2 August 2004)

Currency Unit	–	Indian rupee/s (Re/Rs)
Re1.00	=	\$0.0216
\$1.00	=	Rs46.33

ABBREVIATIONS

ADB	–	Asian Development Bank
BRO	–	Border Roads Organization
EIA	–	environmental impact assessment
HIV/AIDS	–	human immunodeficiency virus/acquired immunodeficiency syndrome
IEE	–	initial environmental examination
JBIC	–	Japan Bank for International Cooperation
MDONER	–	Ministry of Development of North Eastern Region
MORTH	–	Ministry of Road Transport and Highways
NEC	–	North Eastern Council
PWD	–	public works department
TA	–	technical assistance

TA CLASSIFICATION

Poverty Classification	–	Poverty intervention
Sector	–	Transport and communication
Subsector	–	Roads
Themes	–	Sustainable economic growth, Governance, and Private sector development

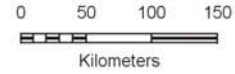
NOTES

- (i) The fiscal year (FY) of the Government and its agencies ends on 31 March. FY before a calendar year denotes the year in which the fiscal year begins, e.g., FY2003 ends on 31 March 2004.
- (ii) In this report, "\$" refers to US dollars.

This report was prepared by K.E. Seetharam, Transport and Communications Division,
South Asia Department.



INDIA NORTH EASTERN STATE ROADS PROJECT



PEOPLE'S REPUBLIC OF CHINA



- National Capital
 - State Capital
 - City/Town
 - ADB-Financed Road Project
 - Priority Roads (Indicative partial list)
 - National Road
 - State Highway
 - Railway
 - River
 - State Boundary
 - International Boundary
- Boundaries are not necessarily authoritative.

I. INTRODUCTION

1. The project preparatory technical assistance (TA) is included in the 2003–2006 country strategy program of the Asian Development Bank (ADB) for India.¹ A fact-finding mission and a follow up consultation mission visited India on 9–21 May 2004 and 1–2 July 2004, respectively, and reached an understanding with the Government of India regarding the goals, outputs, selection of states, activities, implementing and financing arrangements, and counterpart support.²

II. ISSUES

2. The North Eastern Region, comprising the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura, spreads over a vast expanse of over 260,000 square kilometers (km²) with about 40 million people.³ The region is characterized by heavy precipitation; extremely rich biodiversity; fragile hills; high seismicity; and a drainage pattern marked by lateral valleys in the north and transverse valley in the south, dissected by huge rivers and raging torrents. The northeastern states have suffered from lack of adequate roads, rail, inland waterways, and civil aviation to other parts of India, as well as poor municipal infrastructure. These have contributed to poverty and impaired economic development. In terms of per capita state domestic product and other development indexes, such as power and road length, the region ranks well below the national average. Nearly 32% of the region's population was below the poverty line, which was higher than the national average (26%), for 1999–2000. The region has been affected by insurgency.

3. In 1998, the Government decided to accelerate development of the North Eastern Region by annually assigning it 10% of Government budgetary support. Subsequently, law and order significantly improved and the level of insurgency came down in the region.⁴ The Government also created a focal point, the Ministry of Development of the North Eastern Region (MDONER), with the mandate to coordinate and manage the flow of resources and infrastructure development by various stakeholders, e.g., state governments (state public works departments [PWDs]); central line ministries (the Ministry of Road Transport and Highways [MORTH], Ministry of Rural Development, and North Eastern Council [NEC]);⁵ and private investors.

4. MDONER, NEC, and the northeastern state governments have generally responded to the immediate needs of the region. However, the central level line ministries were either not able to spend their 10% fiscal allocations or implemented schemes of national importance, which did not always fully meet the felt needs of the North Eastern Region. Therefore, the Government decided that the funds allocated to the region would not lapse and the unspent money of about Rs10 billion (\$216 million equivalent) a year would be pooled together for future schemes coordinated by MDONER.

5. The region's road network consists of about 145,000 kilometers (km), comprising (i) 35,000 km of surfaced roads, which are mostly national highways, state highways, and district roads; and (ii) 110,000 km unsurfaced roads. The network is characterized by insufficient

¹ ADB. 2002. *Country Strategy and Program (2003–2006): India*. Manila.

² The TA first appeared in *ADB Business Opportunities* (Internet edition) on 14 April 2004.

³ Ministry of Road Transport and Highways. 2001. *Road Development Plan Vision: 2021*. India.

⁴ Some areas in Assam, Manipur, Nagaland, and Tripura still have insurgency issues that remain barriers to development, and the authorities are making efforts to overcome the problem.

⁵ NEC comprises governors and chief ministers of all states and is currently chaired by the governor of Assam, with the permanent secretariat located in Shillong. NEC was formed in 1972 and the Ministry of Development of North Eastern Region in 1998. The latter oversees the activities of NEC. Both were originally under the Ministry of Home Affairs and they are under the newly-formed Ministry of Development of North Eastern Region, after the start of the new Government in May 2004.

coverage, weak pavement, poor geometrics, submersible stretches, poor riding quality, weak and distressed bridges. The network has more than 5,000 semi-permanent timber bridges (particularly in Assam, Sikkim, and Tripura), a problem unique to the region.⁶ Access to the region from other parts of India is through a narrow corridor in West Bengal.

6. The Government recognizes the urgent need to adopt a medium-term plan for road network development in the region. It is important to initiate systematic attempts to establish a comprehensive database of the condition of the region's road network and current flows of goods, people, and services from the region to other parts of India as well as neighboring countries. The PWDs in the region's eight states have very low capacities for planning, engineering, supervision, and monitoring of road development works. They are inexperienced in handling externally-funded projects and lack skills to undertake detailed project report preparation and other investigations. Their problems are exacerbated by the lack of availability and capacity of local contracting and consulting services within the region.

7. The current level of maintenance is generally low in the region and varies widely among the states, in terms of monitoring road conditions and planning for maintenance, allocating funds, and executing civil works. The governments of Assam and Mizoram have made initial steps toward setting up a road fund for maintenance.

8. The country strategy program of the Asian Development Bank (ADB) puts special attention on the North Eastern Region, responding to the Government's request to help bring the region into the mainstream of development. Increased focus on the North Eastern Region also fits well ADB's efforts to promote cross-border regional cooperation, since the northeastern states share common borders with Bangladesh, Bhutan, the People's Republic of China, Myanmar, and Nepal. In addition, the poverty impact of an integrated intervention in the North Eastern Region will be high, especially in improving the road network connectivity.⁷ ADB's previous state-level road sector operations in Chhattisgarh and Madhya Pradesh addressed generic sector issues and state-specific impediments to develop a reform agenda and policy measures to suit those states.⁸

9. ADB has assisted Assam and Sikkim and is preparing an urban infrastructure project in 2004 for the capital cities of the North Eastern Region.⁹ The World Bank has supported the preparation of strategic option studies for roads in Assam, Manipur, Mizoram, and Tripura.¹⁰ The World Bank has also been funding state roads in Assam and Mizoram and is likely to process a second loan for the state roads in Assam. The Japan Bank for International Cooperation (JBIC) has not been active in India's highway sector for the last few years. ADB has been in close contact with JBIC to exchange information and explore the possible areas of cooperation in the North Eastern Region. The Department for International Development (DFID) of the United

⁶ Nearly 70% of the roads in the region are in poor condition. The vehicle operating costs are high, signified by low average journey speed of less than 20 km per hour, and high fuel consumption of 0.4 liters per kilometer (l/km). Source: MDONER. 2002. North Eastern Databank.

⁷ During the PPTA implementation, the consultants will elaborate on the issues and undertake a cause-effect analysis to develop the components under the proposed project.

⁸ ADB. 2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to India for the Madhya Pradesh State Roads Sector Development Program*. Manila (Loan 1958-IND, approved on 5 December 2002 for \$30 million); ADB.2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to India for the Madhya Pradesh State Roads Sector Project*. Manila (Loan 1959-IND, approved on 5 December 2002 for \$150 million); and ADB.2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to India for the Chhattisgarh State Roads Development Sector Project*. Manila (Loan 2050-IND, approved on 15 December 2003 for \$180 million).

⁹ ADB. 2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to India for the Assam Power Sector Development Program (Project and Program)*. Manila (Loans 2036 and 2037, approved 10 December 2003 for \$250 million); and four advisory technical assistance projects approved in 2003, for \$2.5 million to Assam and \$600,000 to Sikkim, to initiate public sector reforms.

¹⁰ MDONER plans to update these studies and complete studies for other states before the TA starts.

Kingdom, an important partner in ADB's operations in India, has recorded its full support to the proposed Project. The Project will be prepared consistent with ongoing and planned activities of other external funding agencies.

10. The TA has incorporated lessons from previous ADB road sector projects. ADB's close supervision and adequate consulting services during project preparation are critically important to (i) build the capacity for PWD staff and transfer skills for modern technology, and (ii) reduce operational and institutional constraints that cause delays during project implementation. The complementary role of the proposed Project with the activities under the ongoing West Bengal Corridor Development Project,¹¹ which is the main corridor for port connectivity to the North Eastern Region, as well as the proposed subregional transport connectivity project, will also be taken into account during project formulation.

III. THE TECHNICAL ASSISTANCE

A. Purpose and Output

11. The proposed Project will assist the states of the North Eastern Region to develop their road network and establish reliable road connectivity to the national and subregional road networks and thus facilitate regional integration and trade flows. The Project will also build the capacity of road sector institutions at state level and contribute to effective and efficient management of the road assets. The preliminary project framework is in Appendix 1.

12. The main outputs of the TA will comprise (i) prioritization of national highways, state highways, and major district roads to improve the national and subregional level connectivity for efficient flows of goods, people, and services in and out of the region; (ii) determination of the feasibility of an investment project for improvement of priority state roads and bridges; and (iii) an institutional strengthening action plan comprising immediate action to support implementation of the proposed Project. The outputs will be reviewed and finalized based on the Government's priority needs assessment, ADB's focus, and projects funded by other multilateral and bilateral institutions in the northeastern states.

B. Methodology and Key Activities

13. **Prioritization.** Taking the eight northeastern states as a region, the purpose of the prioritization program is to select roads (national highways, state highways, and major district roads that connect district headquarters to capitals of the states, and a few interdistrict linkages) that facilitate regional integration and trade flows to other parts of India and neighboring countries. The TA will prioritize about 2,500 km of roads using simple criteria of road condition, traffic, and connectivity.¹² In undertaking this work, the consultants will coordinate preparation of a database by the northeastern states, drawing on available data, and then consolidate and analyze the data. The database will comprise simple mapping, inventory, and condition surveys.

14. **Feasibility Study.** The TA will prepare feasibility studies for improving, with the application of modern construction technology to ensure all-weather connectivity, about 1,000–1,200 km of prioritized state highways and major district roads, for inclusion under the proposed ADB Project. The feasibility studies in states like Nagaland will also evaluate newer technologies such as the use of softer materials and treatment of side slopes to protect the roads in hilly areas from landslides. Economic evaluation will be carried out following ADB's

¹¹ ADB. 2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to India for the West Bengal Corridor Development Project*. Manila (Loan 1870-IND, approved on 5 December 2002 for \$150 million).

¹² With the support of an ADB-financed staff consultant, a long list of about 4,000–5,000 km has been identified.

Guidelines for the Economic Analysis of Projects (February 1997)¹³ taking into account the remote locations of the North Eastern Region and low traffic volumes. In selecting the candidate roads, consideration will be given to the distribution of net benefits to the poor in providing access to market, health, education, shortening of distances and reduction in travel times, other essential services, and improved road traffic safety. During project formulation, the Government and ADB will also consider including prioritized national highways under the scope of the Project. MDONER will coordinate with MORTH and the Border Roads Organization (BRO) on the improvement of such national highways. These might be funded from the 10% budget allocations earmarked each year by MORTH and BRO for the North Eastern Region. The consultants will also assess the potential for private sector participation through build-operate-transfer or other arrangements.

15. Environmental assessment will be conducted in accordance with ADB's Environment Policy, the Operations Manual F1/BP and F1/OP (2003),¹⁴ *Environmental Guidelines for Selected Infrastructure Projects*,¹⁵ and *Environmental Assessment Guidelines* (2003),¹⁶ and the Government's environmental policy and relevant guidelines. Social analysis will be carried out in accordance with ADB's *Handbook on Poverty and Social Analysis*.¹⁷ The summary initial poverty and social analysis is in Appendix 2.

16. **Institutional Strengthening.** This component will have a pragmatic rather than comprehensive focus. The TA will accomplish quick diagnostic reviews in each state, covering (i) institutional arrangements for national highways and state and major district roads; (ii) capacity for planning, engineering, investigations, detailed project report preparation, supervision, and monitoring; and (iii) availability of contracting capacity and consulting services. Based on the reviews, the TA will develop a simple set of options for institutional strengthening to support efficient implementation of the project investments. These outputs will become the starting point for policy dialogue between ADB, MDONER, and the state governments on institutional reforms to be agreed during loan processing. The TA will include workshops in each state to develop consensus on the institutional issues and options, and to support formulation of institutional strengthening action plans for each state. These outputs will be used to develop a framework for a more comprehensive medium-term institutional development program, including training needs assessment, and framework for training, under the proposed ADB advisory TA programmed in 2005.¹⁸ The proposed advisory TA is to be implemented in parallel with the proposed preparatory TA and to assist in the preparatory activities and advance actions for the proposed Project. The training and "learning-by-doing" exercises in the two TAs will also ensure that the proposed Project is of high quality and is ready for implementation. The two TA study teams will interact to prepare appropriate reform programs covering the eight northeastern states. The results of both TAs will provide the basis of the ensuing loan Project.

17. The project preparatory TA consultants will assess the level of funding required for sustainable maintenance of roads assets, as well as prioritized roads, and the availability of funds at the state level.¹⁹ The consultants will propose alternative mechanisms, including creation of dedicated road maintenance funds, and will consider the option of MDONER initially helping to meet the financing gaps at the state level. The outcomes of the work will be used to achieve commitment to maintenance financing during loan processing.

¹³ ADB. 1997. *Guidelines for the Economic Analysis of Projects*. Manila.

¹⁴ ADB. 2003. Environmental Guidelines. *Operations Manual*, F1BP/OP. Lotus Notes database, LNADBG1. Manila.

¹⁵ ADB. 2003. *Environmental Guidelines for Selected Infrastructure Projects*. Manila.

¹⁶ ADB. 2003. *Environmental Assessment Guidelines*. Manila.

¹⁷ ADB. 2003. *Handbook on Poverty and Social Analysis*. Manila.

¹⁸ The proposed advisory TA for developing the capacity of transport in the North Eastern Region is for \$1 million and will be processed for approval in early 2005.

¹⁹ More than 80% of the available budgets in the northeastern states are used to meet the salary and benefits of staff and labor.

C. Cost and Financing

18. The total TA cost is estimated at \$1 million equivalent, comprising \$386,000 in foreign exchange and \$614,000 equivalent in local currency. The Government of the United Kingdom will finance \$800,000 on a grant basis, covering all the foreign exchange costs and \$414,000 equivalent of local currency cost. The TA will be administered by ADB. The Government of India will provide \$200,000 equivalent in local currency, to finance office space, local transport, and counterpart and support staff. The cost estimates and financing plan are in Appendix 3. The Government has been informed that ADB's funding for the TA does not commit ADB to finance any ensuing investment project.

D. Implementation Arrangements

19. A national steering committee, chaired by MDONER and comprising participants from MORTH, BRO, NEC, and the northeastern states, will provide guidance and direction to the TA consultants. MDONER will also establish an implementing counterpart team for the TA and the Project, comprising at least one representative from each northeastern state. The team will work with the TA consultants on a full-time basis, and the representatives will be drawn from senior-level financial, technical, and planning experts in the states. The TA consultants will be stationed in the North Eastern Region.

20. The TA will be implemented over 9 months, beginning in November 2004 and ending in August 2005. The TA will be carried out by a firm of international consultants in association with domestic consultants, together with individual international and domestic consultants. The firm of consultants will include experts in regional transportation planning and transport economics, trade economics, institutional development and capacity building, road engineering and maintenance, and traffic engineering and road safety. The individual consultants will include experts in environment, resettlement, social concerns, legal issues, and poverty reduction. The input from the firm will be about 11 person-months of international and 35 person-months of domestic consultants. About 5 person-months of individual international and 15 person-months of individual domestic consultants will be required. Outline terms of reference and reporting requirements for the consulting services are in Appendix 4. The consulting firm will be selected and recruited using ADB's quality-and cost-based selection method. Simplified technical proposals will be requested from the short-listed firms. The individual consultants will be engaged in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for engaging domestic consultants.

21. Workshops involving all stakeholders—central agencies, district development committees, private sector representatives, nongovernment organizations, and other development partners—will be conducted on the prioritization program and the investment project at the inception of the TA, upon submission of the interim report and near the time of submission of the draft final report. Specifically, the TA will involve the relevant development partners during project formulation and will identify cofinancing opportunities during stakeholder consultations for the investment Project.

IV. THE PRESIDENT'S DECISION

22. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$800,000 to the Government of India to be financed on a grant basis by the Government of the United Kingdom, for preparing the North Eastern State Roads Project and hereby reports this action to the Board.

PRELIMINARY PROJECT FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Goal (for the investment project)</p> <ul style="list-style-type: none"> Regional integration and trade flows Effective and efficient management of the road assets 	<ul style="list-style-type: none"> Improvement in state-level economic development indicators Road maintenance fund established in each state Improvement of well-being of poor people within 10 years (in terms of income levels, better health, access to market, and environmental improvements) 	<p>Baseline studies and impact studies by MDONER</p>	
<p>Purpose (For the investment project)</p> <ul style="list-style-type: none"> Improved road network and Improved capacity of road sector institutions at state level 	<ul style="list-style-type: none"> Better access to key services (health, education, markets) Road sector institutions possess sufficient and skilled staff 	<p>Project performance monitoring and evaluation reports of ADB</p> <p>Annual Reports of MDONER and NEC</p>	<p>National, social, and economic development situation is not adversely affected by conflict and political instability.</p>
<p>Outputs (for the technical assistance (TA))</p> <ul style="list-style-type: none"> A prioritization program Investment project institutional strengthening action plan <p>(Outputs for the project will be identified during the TA)</p>	<ul style="list-style-type: none"> The prioritization is comprehensive and responsive to the needs of the North Eastern Region The feasibility of the investment project is consistent with the 2003–2006 country strategy program of the Asian Development Bank (ADB) for India and the priorities of the Government Recommendations for institutional strengthening and framework for institutional development All outputs completed by September 2005 	<p>The project performance monitoring system, ADB review mission</p>	<p>Government support and involvement of local people during the TA implementation.</p>
<p>Activities/ Inputs (for the TA)</p> <ul style="list-style-type: none"> Consultant services Stakeholder workshops <p>(Activities/Inputs for the project will be identified during the TA)</p>	<ul style="list-style-type: none"> 16 person-months of international and 50 person-months of domestic consultants and training to accomplish all tasks in the terms of reference 	<p>ADB's project performance monitoring system, ADB review mission</p> <p>Report and recommendations of meetings</p>	<p>Counterpart funding and staff participation for the timely completion of consultant activities.</p>

ADB=Asian Development Bank, MDONER=Ministry of Development of North Eastern Region, NEC=North Eastern Council, and TA=technical assistance.

SUMMARY INITIAL POVERTY AND SOCIAL ANALYSIS (indicative)

A. Linkages to the Country Poverty Analysis

Is the sector identified as a national priority in country poverty analysis?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is the sector identified as a national priority in country poverty partnership agreement?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Contribution of the sector/subsector to reduce poverty in India: The Project will support pro-poor economic growth by improving transport connectivity that will increase employment, especially for the poor. The improvement of the state highways and district-level road network will be targeted to areas with a high incidence of poverty, providing the isolated communities with reasonable access to markets, schools, and health centers. The Project will be implemented using environment-friendly construction methods, which are labor extensive, and will provide employment opportunities to local communities. It will reduce poverty by increasing economic efficiency through lower costs and prices and enhanced social and economic opportunities. Explicit attention to poverty issues and specific poverty components will be addressed during the project preparatory technical assistance (TA).</p>			

B. Poverty Analysis

Proposed Classification: Poverty Intervention

<p>What type of poverty analysis is needed? Poverty assessment will be conducted to (i) identify the poverty profile of the population affected by the Project (including users); (ii) assess the relevant market structure and estimate the likely distributive impacts of the Project; (iii) where appropriate, incorporate the needs of the poor, and minimize or compensate for adverse impacts on the poor; (iv) identify more systematic integration of the Project with other sectoral interventions (health, education, rural development, etc.) so as to strengthen poverty reduction strategies; and (iv) develop low-cost mechanisms for monitoring to contribute to the understanding of the links between the project and poverty reduction.</p>

C. Participation Process

<p>Is there a stakeholder analysis? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No This TA is being developed through extensive consultations with Government and private stakeholders. Stakeholder analysis will continue during TA implementation.</p> <p>Is there a participation strategy? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Public consultations with primary and secondary stakeholders will be conducted throughout the TA.</p>

D. Gender and Development

<p>Strategy to maximize impacts on women: Gender plan prepared? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No The Project will equally impact men and women. Gender analysis will be carried out and women beneficiaries will be consulted throughout the TA.</p> <p>Has an output been prepared? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
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E. Social Safeguards and other Social Risks

Item	Significant/ Not Significant/ None	Strategy to Address Issues	Plan Required
Resettlement	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	Resettlement framework will be prepared. Land acquisition and resettlement plan will be prepared as required.	<input checked="" type="checkbox"/> Full <input type="checkbox"/> Short
Affordability	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> None	No affordability issues as no road user fees will be levied on the beneficiaries other than taxes on the purchase of motorized vehicles, which will not affect the poor.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Labor	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	The Executing Agency will be requested to assure that the minimum wage will be paid to labor—men and women—on project sites.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Indigenous Peoples	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	The TA will identify any ethnic group along the project roads and identify the likely project impact on indigenous people and/or ethnic minority.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Gender, Other Risks and/or Vulnerabilities	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	The issue of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), gender trafficking, and road safety will be addressed during the TA implementation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Environment	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	Initial environmental evaluation and its summary for the core roads will be prepared during TA.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
A. Government of the United Kingdom Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	290.0	0.0	290.0
ii. Domestic Consultants	0.0	200.0	200.0
b. International and Local Travel	40.0	30.0	70.0
c. Reports and Communications	0.0	10.0	10.0
2. Equipment (computers, road condition survey equipment)	20.0	14.0	34.0
3. Workshops	0.0	40.0	40.0
4. Road Inventory, Condition, Surveys, and Studies	0.0	100.0	100.0
5. Representative for Contract Negotiations	6.0	0.0	6.0
6. Contingencies	30.0	20.0	50.0
Subtotal (A)	386.0	414.0	800.0
B. Government Financing			
1. Office Accommodation and Transport	0.0	150.0	150.0
2. Remuneration and Per Diem of Counterpart Staff	0.0	40.0	40.0
3. Others	0.0	10.0	10.0
Subtotal (B)	0.0	200.0	200.0
Total	386.0	614.0	1,000.0

^a Administered by the Asian Development Bank.

^b Includes one desktop computer, one printer, and other necessary office equipment. The Government is responsible for all taxes and duties. Equipment will be turned over to the Ministry of Development of North Eastern Region after technical assistance completion.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE

1. Para. 12 of the main text describes the main outputs of the technical assistance (TA). The Asian Development Bank (ADB) plans to process a loan for the Project in 2006.

A. Scope of Services

2. The consultants' main tasks include but are not limited to the following.

1. Prioritization Program

3. Review studies already carried out or currently being carried out by the state governments and, where necessary, supplement the studies so as to bring out a complete inventory of the national highways, state highways, major district roads, and bridges thereon together with assessment of flows of goods, people, and services in and out of the North Eastern Region.¹ Review plans for the current and future socioeconomic development of the states for agriculture, mining, industrial, and other economic and tourism purposes to identify the main corridors of movement of goods and people.

4. Estimate the likely traffic demand on each corridor for the next 10 years. Estimate the capacity of the current road infrastructure in each of the identified corridors to handle the estimated traffic. Identify the gaps in the road network with respect to requirements and potential. Determine the interventions required for new road construction, major improvement/upgrading of existing roads, and maintenance/minor upgrading of existing roads required to handle the estimated traffic volume.

5. Examine issues affecting the road sector with emphasis on environmental, institutional, social, and legal aspects, and barriers to development.

6. Prioritize about 2,500 kilometers of roads using simple prioritization criteria of road condition, traffic, and connectivity. In undertaking this work, coordinate preparation of a database by the northeastern states, drawing on available data, and then consolidate and analyze the data. Train the state public works departments to undertake such tasks, while ensuring quality through random checks and field inspection.

7. Prepare an action plan to implement the prioritization program, including establishing benchmark indicators, a monitoring system, and financial and other resources required to implement the program.

8. Develop project selection criteria and package the prioritization program into investment projects with indicative dates of when they are needed to be implemented.

9. Propose an investment project for ADB loan assistance of about \$300 million for improving all weather connectivity using modern construction technology, for about 1,000–1,200 kilometers of high priority roads in the North Eastern Region to be implemented during 2007–2010.

¹ ADB is preparing a long list of about 4,000–5,000 kilometers of such roads.

2. Institutional Strengthening Action Plan

10. Undertake quick diagnostic reviews in each state covering (i) institutional arrangements for national highways, state highways, and major district roads; (ii) capacity for planning, engineering, investigations, detailed project report preparation, supervision, and monitoring; and (iii) availability of contracting capacity and consulting services.
11. Analyze the current situation of maintenance of state highways and district roads and identify financing requirements for maintenance of the state road network. Assess the level of funding required for sustainable maintenance of existing roads assets, as well as prioritized roads, and the availability of funds at the state level. Review initiatives taken by the states in ensuring sustainable maintenance of state roads. Propose alternative mechanisms, including creation of dedicated road maintenance funds, with possible initial support from Ministry of Development of North Eastern Region (MDONER) to fill the financing gaps at the state level.
12. Assess the adequacy of road legislation, regulations, and other legal provisions to check overloading by trucks and enforce good driving standards.
13. Develop a simple set of options for institutional strengthening to support efficient implementation of the project investments. Hold workshops in each state to develop consensus on the institutional issues and options, and to support formulation of institutional strengthening action plans for each state.
14. Provide inputs to the proposed advisory TA programmed in 2005. The advisory TA is to develop a framework for a comprehensive medium-term institutional development program, including training needs assessment, and framework for training. Develop outlines for guidelines and manuals to train public works department staff in the states. Review the capacity of contractors in the North Eastern Region to undertake the state road projects and suggest strategies for their training and growth.

3. Investment Project

a. Feasibility Studies and Poverty Assessment

15. The consultants will do the following:
 - (i) Carry out preliminary technical feasibility studies for roads and bridges selected for ADB loan assistance.
 - (ii) Identify maintenance and design standards for different road classes and traffic levels, and introduce the HDM-4, an appropriate bridge maintenance software.
 - (iii) Carry out economic evaluation, including economic internal rate of return and net present value calculations, for all roads and bridges, according to ADB's *Guidelines for the Economic Analysis of Projects (February 1997)* by comparing the with- and without-project cases.
 - (iv) Prepare a preliminary project cost estimates table for the proposed investment (and any defined subprojects) taking into account all relevant financial costs and benefits. Prepare a preliminary project financing plan, including proposed ADB

lending, any prospective cofinancing, and appropriate counterpart funds for local currency expenditures.

- (v) Identify project revenue and cost risks, conduct relevant sensitivity analysis, and identify practical risk-mitigation strategies and approaches. The financial analysis will be guided by, and outputs prepared in accordance with, the *Guidelines for the Financial Governance and Management of Investment Projects Financed by the Asian Development Bank*, the ADB Operations Manual, ADB Project Administration Instructions, and the ADB Loan Disbursement Handbook.
- (vi) Follow ADB's *Guidelines on Road Safety*² and formulate a plan to improve road safety during project implementation and operation.

b. Project Framework and Monitoring of Impacts

16. The consultants will do the following:

- (i) Develop a draft project framework following ADB's project performance management system.
- (ii) Develop the baseline indicators for monitoring the impact of the proposed Project.
- (iii) Incorporate in the project framework indicators to monitor issues relating to poverty and social risk and covenants that impact the Project.

c. Stakeholder Participation, Resettlement, and Social Analysis

17. The consultants will do the following:

- (i) Prepare an involuntary resettlement plan and indigenous people impact analysis for the project roads according to ADB's *Handbook on Involuntary Resettlement: A Guide to Good Practice* and ADB's *Policy on Involuntary Resettlement and Indigenous People*. Review ADB guidelines on procurement for community participation using labor-based methods in civil works.
- (ii) With participation of all stakeholders, identify all groups at risk due to the project, and analyze the reasons for their vulnerability, as described in ADB's *Handbook for Poverty and Social Analysis*.³ Identify the likely project impact on indigenous people or ethnic groups in the zone of influence and propose mitigation measures.
- (iii) In addition to confirming compliance with ADB's safeguard policies, propose additional measures to address concerns relating to gender, child labor, HIV/AIDS,⁴ road safety in project design.

² ADB. 2002. *Guidelines on Road Safety*. Manila.

³ ADB. 2003. *Handbook for Poverty and Social Analysis*. Manila.

⁴ Human immunodeficiency virus/acquired immunodeficiency syndrome.

d. Environmental Assessment

18. The consultants will do the following:

- (i) Prepare a sector impact assessment to identify potential environmental impacts and benefits of overall transport connectivity, including increases in pollution resulting from additional vehicles using the road network. Provide inputs for project design, construction, and operation to incorporate environmental mitigation measures.
- (ii) Prepare an initial environmental examination (IEE) and its summary for the core road sections in accordance with ADB's Environment Policy, the Operations Manual F1/BP and F1/OP (2003),⁵ *Environmental Guidelines for Selected Infrastructure Projects, and Environmental Assessment Guidelines*, as well as the Government's environmental assessment guidelines for road improvement and bridge construction.
- (iii) If the IEE recommends that a full environmental impact assessment (EIA) be undertaken, prepare relevant terms of reference acceptable to ADB and the Ministry of Environment. Conduct the EIA and prepare the report and its summary accordingly.
- (iv) Prepare an environmental management plan as part of the IEE and/or EIA reports.

4. Others

19. Coordinate all consulting services inputs under the TA. Support ADB's loan fact-finding and appraisal missions.

B. Implementing Arrangements

20. The TA will be carried out by a firm of international consultants and by individual international and domestic consultants (paras. 19–21 of the main text). The individual consultants will provide inputs for items in Appendix 4, paras. 5, 15, 17, and 18.

C. Reporting Requirements

21. The firm of consultants and individual consultants will each prepare an inception report, monthly progress reports, other reports, an interim report, a draft final report, and a final report. All reports will be in English. The consultants will submit in hard copy and CD-ROM 5 copies of all reports, technical working papers, and progress reports to ADB, and 16 copies to the Government.

⁵ ADB. 2003. Environmental Guidelines. *Operations Manual*, F1BP/OP. Lotus Notes database, LNADBG1. Manila.