

ASIAN DEVELOPMENT BANK

TAR:NEP 37266

TECHNICAL ASSISTANCE
(Financed by the Japan Special Fund)

TO THE

KINGDOM OF NEPAL

FOR PREPARING THE

TRANSPORT CONNECTIVITY SECTOR PROJECT

June 2004

CURRENCY EQUIVALENTS

(as of 2 June 2004)

Currency Unit	–	Nepalese rupee/s (Nre/NRs)
NRe1.00	=	\$0.014
\$1.00	=	NRs73.00

ABBREVIATIONS

ADB	–	Asian Development Bank
CSP	–	country strategy and program
DOR	–	Department of Roads
EA	–	executing agency
EIA	–	environmental impact assessment
IA	–	implementing agency
IEE	–	initial environmental examination
MOF	–	Ministry of Finance
MPPW	–	Ministry of Physical Planning and Works
O&M	–	operation and maintenance
PIP	–	Priority Investment Plan
SASEC	–	South Asia Subregional Economic Cooperation
SRN	–	strategic road network
TOR	–	terms of reference
TA	–	technical assistance

TA CLASSIFICATION

Poverty Classification	Poverty intervention
Sector	Transport and communication
Subsector	Roads
Thematic	Sustainable economic growth, Governance, Regional cooperation, and Private sector development

NOTE

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

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I. INTRODUCTION

1. The project preparatory technical assistance (TA) will prepare a transport connectivity sector project to improve feeder road connectivity from the strategic road network (SRN) to remote areas. The TA is included in the 2004–2006 Country Strategy Program (CSP) Update for Nepal.¹ A Fact-Finding Mission visited Nepal from 3-9 March 2004 and reached an understanding with the Government on the objectives, scope, cost and financing arrangements, and the terms of reference for the TA. The TA framework is attached as Appendix 1.

II. ISSUES

2. The transportation system in Nepal depends heavily on the road network. A key part of the network is the 4,740 kilometers (km) of the SRN formed by the national highways and feeder roads, which constitutes 36% of the total road network. The national highways consist of the east-west highway, which acts as a backbone running the length of the country in the terai,² and north-south highways linking major towns that serve a large portion of the population.

3. Although investments for rehabilitating and improving the national highways have been considerable, the feeder and access roads connecting the district headquarters to the SRN need be improved to provide the people with access to social services, trade, and employment opportunities. The feeder roads are major links to national highways and provide access to the district headquarters and places of national importance such as tourism areas, industry, power generation, and pilgrimage sites. The Rural Infrastructure Development Project of the Asian Development Bank (ADB) comprises the construction and rehabilitation of 250 km of village roads in three districts.³

4. The Government's Tenth Plan (FY2002-FY2007) considers poor transport connectivity to the rural areas as a key constraint to economic growth in Nepal. The Plan has identified integrated transport infrastructure development, linked to balanced regional development, as a powerful instrument of poverty reduction, given the close nexus between poverty and excluded development. The Plan has identified specific measures to build the capacities of the Department of Roads (DOR) and the private sector.⁴ The Plan's strategy and programs are fully in line with the provisions of the National Transport Policy.⁵ A 20-year road master plan has been prepared by DOR, and DOR is in the process of obtaining Government approval for it. The Ministry of Local Development prepared a draft National Policy for Local Infrastructure in February 2004 and is in the process of obtaining Government approval for it.

5. The Plan identifies tourism as an important instrument of poverty reduction by virtue of its potential for realizing multiple objectives. Tourism provides additional income and employment opportunities in both urban and rural areas, particularly in the hills and mountain areas. It is important to strengthen the SRN, particularly the feeder roads, which can open up new areas for rural tourism.

¹ The TA first appeared in *ADB Business Opportunities* (Internet edition) on 12 March 2004.

² Nepal is divided into three geographic regions: the terai (flat plains), middle hills, and mountains.

³ ADB.1996. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Nepal for Rural Infrastructure Development Project* Manila (For \$12.2 million, approved on 27 June 1996. The project is being implemented. A follow-on Decentralized Rural Infrastructure Livelihoods Project under preparation is expected to construct another 450 km of district roads).

⁴ The Government has enacted legislation for implementing build-operate-transfer (BOT) and build-own-operate-transfer (BOOT) policies. The Road Fund Board was established in January 2004 providing a framework for improved road maintenance that will be operational and financed by a road levy. ADB has been continuously supporting the operation of the road fund.

⁵ The National Transport Policy approved by the Cabinet in 2001 includes the establishment of a National Transportation Board, under which the roles of the departments of transport management and roads will be integrated.

6. The development of Nepal's main roads has depended on substantial foreign assistance. Typically, 50-70% of the road budget has come from foreign loans and grants. ADB's strategic objectives in the transport sector in Nepal⁶ are to (i) continue to improve the existing core network, (ii) ensure adequate funding for operation and maintenance (O&M) of existing transport facilities, (iii) support subregional linkages, (iv) strengthen institutions, and (v) promote private sector participation. ADB prepared a transport sector strategy for Nepal in 2002,⁷ and since 1983, has provided seven loans totaling \$198.4 million⁸ for the road sector. ADB and the Government concur that to further improve the overall developmental impact of these investments, a medium-term program for improving and maintaining feeder and access roads is needed. It is important to coordinate and improve synergy among ongoing and newly prepared externally funded projects, especially for institutional strengthening and development.

7. Overall ADB's operations in the transport sector in Nepal have been rated successful.⁹ The lessons learned highlight the importance of providing transport connectivity to remote areas and increasing the involvement of the local contracting industry, for greater economic and social development. The lessons also suggest insulating projects from implementation delays due to political changes and adverse macroeconomic conditions, as well as ensuring adequate funding for sustainable O&M. In this regard, all civil works contracts including new road constructions financed under ADB's assistance will include maintenance for at least the first 5 years, to be funded by the Government's counterpart contribution.

8. Nepal is participating in dialogues on multimodal transport and communication through the ADB-assisted South Asia Subregional Economic Cooperation (SASEC) comprising Bangladesh, Bhutan, India, and Nepal. Specifically, Nepal chairs the Transport Working Group and is assisting in the Subregional Corridor Operational Efficiency Study¹⁰ that will assess the operational efficiency of selected subregional corridors connecting these countries. Nepal is also chair-country of the SASEC Tourism Working Group. To enhance the development objectives of the subregional cooperation, the transport links to India and Bangladesh need to be improved.

9. The ongoing conflict that has brought to light a mosaic deep-seated divisions within society has also become a serious constraint to the implementation of infrastructure

⁶ ADB. 2003. *Nepal Country Strategy and Program Update 2004-2006*. Manila. (The new CSP 2005-2009, which is under preparation, also emphasizes improvement of road transport).

⁷ ADB. 2002. *Transport Sector Strategy Paper*. Manila. One of the main thrusts of the strategy is to improve access to remote areas with high poverty levels.

⁸ ADB.1972. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Nepal for Hetauda-Narayangarh Road*. Manila (Loan 117-NEP[SF], approved on 19 December 1972 for \$10.1 million); ADB. 1976. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Nepal for Hetauda-Narayangarh Road (Supplementary)*. Manila (Loan 274-NEP[SF], approved on 23 September 1976 for \$4.8 million); ADB. 1983. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Nepal for Feeder Roads*. Manila (Loan 651-NEP[SF], approved on 10 November 1983 for \$17.5 million); ADB. 1986. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Nepal for Road Improvement*. Manila (Loan 806-NEP[SF], approved on 2 December 1986 for \$30.0 million); ADB.1989. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Nepal for Second Road Improvement*. Manila (Loan 982-NEP[SF], approved on 9 November 1989 for \$50.0 million); ADB. 1995. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Nepal for Third Road Improvement*. Manila (Loan 1377-NEP[SF], approved on 21 September 1995 for \$40.0 million); ADB.2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Kingdom of Nepal for Road Network Development Project*. Manila (Loan 1876-NEP[SF], approved on 13 December 2001 for \$46.0 million).

⁹ ADB. 2000. *Impact Evaluation Study of the Asian Development Bank Assistance to the Road Sector in Nepal*. Manila; ADB.1998. *Project Performance Audit Report on the Roads Improvement Project in Nepal*. Manila; ADB.2002. *Impact of Rural Roads on Poverty Reduction: A Case Study-Based Analysis*. Manila.

¹⁰ For \$250,000, approved in 2003. The PPTA is under implementation and the loan will be processed in 2004.

development projects in Nepal.¹¹ Subject to the improved security situation, the 2004-2006 CSP Update supports the Government to prioritize reconstruction and rehabilitation of infrastructure that delivers greater benefits to the disadvantaged groups in the conflict-affected areas.¹² Connectivity through feeder and access roads is expected to promote greater local involvement in the development process and will improve access to resources. With parallel efforts that aim at more inclusiveness and accountability in the delivery of basic social services and incorporating appropriate social and environmental safeguards, the overall economic impacts of feeder and access roads can be significant.

10. With ADB assistance under the Road Network Development Project (footnote 8), measures to improve road safety have been undertaken, consistent with ADB's *Guidelines on Road Safety*.¹³ Nevertheless, road safety in Nepal is only slowly being accorded importance. There is a need to improve the enforcement of road safety measures relating to axle overloading, and overspeeding. Transport connectivity through feeder and access roads is expected to increase vehicle ownership and travel by villagers as well as their exposure to risk of road crashes and injuries. A community-oriented road safety program will be needed to mitigate the risk of road crashes for road users living near the SRN.

11. Traffic volumes on the majority of the feeder and access roads average less than 500 motorized vehicles per day. Evidence in other developing member countries (DMCs) shows that in addition to benefits from savings in vehicle operating costs to normal traffic, connectivity to remote areas offers economic benefits through traffic generated and induced by feeder roads, and the growth in local economic development.¹⁴ There is a need to estimate these benefits using verifiable indicators and consider what additional complementary infrastructure is required to make the investment in feeder and access roads projects economically justifiable.

III. THE TECHNICAL ASSISTANCE

A. Purpose and Output

12. The overall goal of the transport connectivity sector project is to improve feeder road connectivity from the SRN to rural areas, and increase the capacity and efficiency of the road network in the country. The project goals are fully consistent with the priorities in the current CSP Update as well as the CSP under preparation, which concur that efficient road transport and improved connectivity to rural areas are key to poverty reduction. The main outputs of the TA will be (i) a medium-term (10 years) transport connectivity program (the Medium-Term Program), consistent with the 20-year master plan (para. 4), with a time-bound action plan for achieving the overall sector objectives; and (ii) a road investment sector project that is geographically focused, economically viable, technically feasible, and socially and environmentally sound.

13. The TA will also recommend steps to strengthen (i) the Government's long-term capacity to manage and operate the road network as a safe and efficient mode of transport, (ii) ensure sustainable funding for O&M of road assets, and (iii) strengthen local contractors' capability to improve and maintain the roads. A sustainable mechanism will also be proposed to give DOR an in-house means of financing feasibility studies. The project logical framework is in Appendix 1.

¹¹ As part of ADB's new CSP 2005-2009, a conflict assessment report was prepared. The draft will be finalized in June 2004.

¹² ADB is currently preparing the 2005-2009 CSP. The new CSP is scheduled for finalization in 2004.

¹³ ADB. 1997. *Road Safety Guidelines for the Asian and Pacific Region—Road Safety Trends*. Manila.

¹⁴ Generated traffic is traffic that did not use the road before improvement but will be attracted to use the roads after improvement due to reduced travel cost or travel time. Induced traffic is additional traffic caused by the growth in local economic development because of road improvement.

B. Methodology and Key Activities

14. The TA will review and analyze transport sector performance, key problems relating to connectivity to remote areas, and opportunities for local economic and social development. Based on the review, the TA will propose the Medium-Term Program to resolve key problems (paras. 2-11), including financing strategies for construction, rehabilitation, and proper maintenance; and propose a pragmatic and achievable medium-term action plan to implement the Medium-Term Program. The Program will be consistent with ADB's Transport Sector Strategy (footnote 7) and incorporate lessons from previous ADB-assisted projects and projects funded by other agencies. The TA will assess the existing performance of the Road Fund Board and identify realistic mechanisms to progressively increase revenues for the fund to eventually be sufficient to finance 100% road maintenance works. In addition, the TA will confirm that DOR has adequate institutional and organizational capacity to prepare and implement a sector project, consistent with ADB's policy for sector lending.¹⁵

15. The TA will prepare a feasibility study for a sector investment project to implement the first part of the action plan for the Medium-term Program, and other priority road sections, including a segment along the north-south transport corridor identified in the Subregional Transport Facilitation Project, in consultation with other development partners.¹⁶ A list of candidate feeder roads is in Supplementary Appendix 1. The project will have a geographical focus and take into account the following: (i) constraints from the conflict as well as the need for rehabilitation and reconstruction due to the conflict; (ii) local development in other sectors to maximize the overall developmental impact of connectivity; (iii) proper engineering alternatives that take into account environmental concerns in road construction, including minimal use of explosives and bulldozing on the mountain slopes, and adopting bio-engineering for slope protection; (iv) alternatives to improving transport to remote areas; and (v) negative affects of issues in increased access, including increases in illegal logging, trafficking of women; and pollution and road safety issues.

16. Baseline data for the current situation will be created for a set of objectively verifiable indicators on connectivity and regional economic activity, in accordance with the latest ADB requirements, guidelines, and handbooks for project performance management. The TA consultants will forecast the 20-year normal, generated, and induced traffic. Economic evaluation will be carried out following ADB's *Guidelines for the Economic Analysis of Projects*, taking into account the mountainous conditions of Nepal and its low traffic volumes, especially in the remote areas. In selecting the candidate roads, consideration will be given to the distribution of net benefits to the poor through connectivity to market, health, education, and other essential services, and improved road safety.

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

¹⁵ The Government has satisfactorily met the following eligibility criteria as per ADB's policy for a sector type loan: (i) there is a 20-year master plan to meet the priority development needs of the sector, (ii) DOR has the institutional capacity to implement the plan, and (iii) the policies applicable to the sector are appropriate.

¹⁶ Among other priority sections in the strategic network to be identified by the Government, the feasibility study will also update feasibility studies prepared under other financing assistance, such as the tunnel road and railway between Kathmandu and Hetauda, upgrading of Kathmandu – Pokhara (World Bank).

C. Cost and Financing

18. The TA total cost is estimated at \$720,000 equivalent, comprising \$397,000 in foreign exchange and \$323,000 equivalent in local currency. It is proposed that ADB contribute up to \$600,000, covering all the foreign exchange cost and \$203,000 equivalent of local the currency cost. The ADB portion of the TA will be financed on a grant basis by the Japan Special Fund, funded by the Government of Japan. The Government will provide \$120,000 equivalent in local currency, to finance office space, local transport, as well as 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 automatically commit ADB to finance the ensuing investment project.

D. Implementation Arrangements

19. The Ministry of Physical Planning and Works (MPPW) will be the Executing Agency for the TA. The Implementing Agency will be DOR. During the formulation and implementation of the TA, ADB's Nepal Resident Mission will be actively involved, especially in addressing ADB's safeguard policies relating to social and environmental concern.

20. The TA will be implemented over 9 months, beginning in October 2004 and ending in July 2005. A multidisciplinary team of consultants will provide about 16 person-months of international and 40 person-months of domestic inputs. The consultants will have expertise in (i) institutional and private sector development, (ii) regional transportation planning and transport economics, (iii) road engineering, (iv) road safety, (v) the environment, (vi) resettlement, and (vii) social development. All consultants will be selected and recruited using the quality- and cost-based selection method, in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for engaging domestic consultants. Simplified technical proposals will be requested from the short-listed consultants. Terms of reference for the consultants are in Appendix 4. The consultants will be a firm of international consultants in association with domestic consultants. Individual international and domestic consultants will also be engaged for any required tasks, independently or in association with the consulting firm. This flexible consultant recruitment arrangement reflects the participatory approach envisaged in the TA.

21. The consultants will submit an inception report no later than 3 weeks after starting their services, focusing on the work program and feeder roads selection. An interim report will be submitted 4 months after TA inception, and a draft final report will be submitted 8 months after their services begin. A tripartite meeting of the Government, consultants, and ADB to be held in Kathmandu and chaired by MPPW will review the draft final report. Within 3 weeks after the meeting, the consultants will submit a final report, in a format acceptable to ADB, incorporating all comments received on the draft final report from the Government and ADB. Stakeholders' workshops involving all stakeholders—central agencies, district development committees, private sector representatives, nongovernment organizations, and other development partners—will be conducted on the medium-term transport connectivity program and the investment project within a month after the interim report and before the tripartite meeting. Specifically, the TA will involve the relevant development partners during project formulation, and seek cofinancing to implement the program and the investment project.

IV. THE PRESIDENT'S DECISION

22. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$600,000 to the Government of Nepal to be financed on a grant basis by the Japan Special Fund (JSF), funded by the Government of Japan, for preparing the Transport Connectivity Sector Project, and hereby reports this action to the Board.

PROJECT FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Goal (for the medium term program) Secure and sustainable livelihoods for the poor and disadvantaged areas in Nepal</p>	<p>Improvement of well-being of poor people within 10 years (in terms of income levels, better health, access to market, and environmental improvements)</p>	<p>Baseline studies and impact studies</p>	
<p>Purpose (for the investment project) Improvements in poor people's access to goods, markets, and basic services</p>	<p>A significant portion (percentage to be decided during the Project Preparatory Technical Assistance (PPTA) of the poor people in the project influence area reporting better access to key services (health, education, markets)</p>	<p>Project performance monitoring and evaluation reports</p>	<p>National, social, and economic development situation not adversely affected by conflict and political instability</p>
<p>Outputs (for the PPTA) A medium-term program and action plan Sector investment project Sustainable funding for operation and maintenance of road assets (Outputs for the project will be identified during the PPTA)</p>	<p>Program and action plan completed by July 2005, comprehensive and responsive to the needs of the poor people Feasibility of the investment project developed by July 2005 and consistent with ADB CSP 2005-2009 in Nepal and the priorities of the Government Road Fund Board operational with sufficient funding by 2008 Recommendations for capacity building and institutional development completed by July 2005 and likely to receive grant assistance</p>	<p>Asian Development Bank's (ADB's) project performance monitoring system, ADB review mission</p>	<p>Government support and involvement of local people during PPTA implementation</p>
<p>Activities/ Inputs (for the PPTA) Consulting services Stakeholder workshops (Activities/Inputs for the project will be identified during the PPTA)</p>	<p>16 person-months of international consultants and 40-person months of domestic consultants to meet the TOR About 40 participants—representing all stakeholders—in the workshops to adopt the medium-term program and action plan</p>	<p>ADB's project performance monitoring system, ADB review mission Report and recommendations at meetings</p>	<p>Counterpart funding and staff participation for timely completion of consultant activities</p>

SUMMARY INITIAL POVERTY AND SOCIAL ANALYSIS

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 Nepal: The project will support pro-poor economic growth by improving transport connectivity that will generate increases in employment especially for the poor.</p> <p>Improvement of the feeder and access roads network will be targeted to areas with a high incidence of poverty, to provide the isolated communities with the initial connection for 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 Project Preparatory Technical Assistance (PPTA) stage.</p>			

B. Poverty Analysis

Proposed Classification: Poverty Intervention

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.

C. Participation Process

Is there a stakeholder analysis? Yes No
This Technical Assistance (TA) is being developed through extensive consultation with government and private stakeholders and will continue during PPTA implementation.

Is there a participation strategy? Yes No
Public consultations with primary and secondary stakeholders will be conducted throughout the TA.

D. Gender and Development

Strategy to maximize impacts on women:
Gender plan prepared?
The Project will equally impact men and women. Gender analysis will be carried out and women beneficiaries will be consulted throughout the TA.

Has an output been prepared? Yes No

E. Social Safeguards and Other Social Risks

Item	Significant/ Not Significant/ None	Strategy to Address Issues	Plan Required
Resettlement	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> Unknown	Resettlement framework will be prepared. Land acquisition and resettlement plan will be prepared as required.	<input type="checkbox"/> Full <input type="checkbox"/> Short <input checked="" type="checkbox"/> To be determined
Affordability	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	No affordability issues as no road user fees or taxes 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 would 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 type="checkbox"/> No <input checked="" type="checkbox"/> To be determined
Other Risks and/or Vulnerabilities	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> Unknown	The issue of Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome, gender trafficking, and road safety will be addressed during PPTA stage.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> To be determined
Gender	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> Unknown	Women and men will equally benefit from the Project through employment opportunities during construction and lower cost of transport. Impact of better transport system to women will be assessed at the PPTA stage	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> To be determined

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	320.0	0.0	320.0
ii. Domestic Consultants	0.0	120.0	120.0
b. International and Local Travel	30.0	15.0	45.0
c. Reports and Communications	5.0	0.0	5.0
2. Equipment ^b	0.0	5.0	5.0
3. Training, Seminars, and Conferences	0.0	10.0	10.0
4. Surveys	0.0	30.0	30.0
5. Miscellaneous Administration and Support Costs	2.0	3.0	5.0
6. Representative for Contract Negotiations	5.0	0.0	5.0
7. Contingencies	35.0	20.0	55.0
Subtotal (A)	397.0	203.0	600.0
B. Government Financing			
1. Office Accommodation and Transport	0.0	50.0	50.0
2. Remuneration and Per Diem of Counterpart and Support Staff	0.0	50.0	50.0
3. Others	0.0	20.0	20.0
Subtotal (B)	0.0	120.0	120.0
Total	397.0	323.0	720.0

^a Financed by the Japan Special Fund, funded by the Government of Japan.

^b Includes one desktop computer, one printer, and other necessary office equipment. The Government is responsible for all taxes and duties, if any. Equipment will be turned over to the Department of Roads after technical assistance completion.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The consultants will have extensive experience in all elements of the transport sector in Nepal and the South Asia region, skills in sound quantitative analysis, and the ability to clearly articulate and present proposals for policies and strategies. The team leader must have expertise in regional transport policy, institutional capacity building, private sector development, and road engineering. The team leader will have overall responsibility for implementing the technical assistance (TA) and managing the team of consultants with expertise in regional transportation planning, transport economics, road engineering, geology, road safety, social development, and environment. The consulting firm will be mainly responsible for transport planning and transport economics, road engineering, road safety, institutional assessment, and overall coordination of the consulting services. Individual consultants will mainly prepare the poverty and social assessment, resettlement plans, and environmental assessments.

2. The consultants will work closely with the staff of the Ministry of Physical Planning and Works (MPPW), Ministry of Local Development, Department of Roads (DOR), Department of Local Infrastructure Development and Agricultural Roads (DOLIDAR), local officials, and other related ministries/agencies, as well as ADB's Nepal Resident Mission. The consultants will be located in Kathmandu and will visit selected areas to undertake their tasks. As required they will conduct stakeholder workshops as required involving all stakeholders. The terms of reference (TOR) for the consultants include but are not limited to the following;

A. Transport Connectivity Program

3. Specific tasks related to the program are as follows:

- (i) Review DOR's transport sector strategy, the Government's Tenth Plan, 20-year transport master plan, previous ban of Asian Development Bank (ADB), TA documents, and evaluation studies, and relevant documents from other external agencies.¹ Review and analyze sector performance, key problems, and development challenges; and present cause-effect tree analysis.
- (ii) Identify key problems such as poverty, access to services, markets, tourism potential, etc, facing the area where the subprojects are proposed. Propose alternative options to resolve key problems, as well as those relating to construction and rehabilitation. The public expenditure review should not be limited to operation and maintenance (O&M) funding; but rather, it should be general review that shows the limits of government investment in the sector. Prepare a pragmatic and achievable medium-term program and action plan to implement the strategies, including establishing benchmark indicators, monitoring system, and resources required to implement the action plan.
- (iii) Using a regional planning and a programmatic approach, formulate a series of investment projects and starting points for institutional reform and capacity building before initiating the projects. Each project will have a geographical focus and take into account the following: (a) constraints from the conflict as well as

¹ Refer to footnotes 8 and 9 of the main paper. Under World Bank assistance, the Department of Roads (DOR) also prepared a 10-year Priority Investment Plan (PIP) in 1997. The Plan includes strategic road network (national highway and feeder roads) and rural transport components (district roads, main trails, suspension bridges, and domestic aviation). The World Bank is assisting DOR to update this PIP. The consultants will avoid duplicating these activities.

need for rehabilitation and reconstruction due to the conflict, and (b) local development in other sectors to maximize the overall impact of connectivity.

- (iv) Develop a set of objectively verifiable indicators for identifying the economic development impact of the transport connectivity program and the individual investment projects. Establish a baseline for candidate roads selected in the sector investment project. Follow ADB's project performance management system (PPMS).
- (v) Propose appropriate and realistic standards of road safety and recommend integrated measures to improve road users' safety, consistent with ADB's *Guidelines on Road Safety*.² Formulate a community-oriented road safety program to mitigate the risk of road crashes for road users living near the SRN.

4. The following tasks are closely linked to the ongoing Strengthened Maintenance Divisions Programme (SMDP) program:³

- (i) Assess the adequacy of total available funding for road maintenance and propose appropriate policy measures to achieve proper O&M. Specifically, review how the Road Fund is operating and assess the performance of the existing Road Fund Board. Identify realistic mechanisms for the progressive increase of revenue for the fund to eventually be sufficient to finance 100% of road maintenance works.
- (ii) Review the present situation on private sector participation in the local road contracting industry. Develop a systematic strategy that will eventually have DOR act as a facilitator, supervisor, and certifier of road works. Analyze options and opportunities available for developing private industries in road construction and management.⁴
- (iii) Identify the capacity building requirements, with a time-bound action plan, TOR, and cost estimates for future technical assistance, for the Government to implement the program. Assess the institutional and organizational capacity of DOR to prepare and implement a sector project, in keeping with ADB's policy for sector lending.

B. Transport Connectivity Sector Project

5. The sector project covers the north-south roads and about 350 km of priority roads for new construction, upgrading, widening, and improvement from the indicative list of feeder roads in Supplementary Appendix 1. The consultants will review all available reports and data—including traffic surveys and beneficiaries—on the roads to be included in the sector project. The consultants will prepare model appraisal reports for a set of core roads comprising the north-south roads and some priority roads. The consultants will also develop a set of eligibility

² ADB. 1997. *Road Safety Guidelines for the Asian and Pacific Region – Road Safety Trends*. Manila.

³ The Swiss Agency for Development and Cooperation (SDC) has an ongoing Strengthened Maintenance Divisions Programme (SMDP, 2002–2006). The three strategic thrusts of SMDP are capacity building focusing on DOR, service delivery focusing on roads, and empowerment focusing on people.

⁴ The consultants need to be aware of a recent World Bank-financed institutional study: World Bank.2003. *From Department of Roads to Road Transport Authority –A Road Map*. Washington DC.

criteria for selecting additional priority roads, prepare guidelines and manuals to train DOR staff, and strengthen DOR's capacity to appraise the roads to be included in the project.

6. The consultants' tasks for the specific studies for selected core roads are as follows; Details are provided in Supplementary Appendix 2

1. Engineering Study

- (i) Survey conditions of the core roads identified for the project, evaluate their pavement strength, determine residual life, and divide the roads into homogeneous sections.
- (ii) Propose a required level of improvement for each road section, and estimate the required costs of civil works including foreign exchange and local cost components, separately identifying taxes and customs duties.
- (iii) Prepare a summary of technical approaches and design standards, after evaluating proper engineering alternatives that apply environment-friendly methods (green roads) for road construction, including minimal use of explosives and bulldozing on the mountain slopes.
- (iv) Propose appropriate contract packages in accordance with ADB's *Guidelines for Procurement*, and prepare draft standard bid documents accordingly.
- (v) Prepare the proposed project implementation schedule, taking into account the conflict situation; i.e., will implementation be stopped because of escalating conflict? Will this be determined on a case-by-case basis, or will the entire project schedule just be longer?

2. Economic and Financial Analysis and Poverty Assessment

- (i) Forecast the normal, generated and induced traffic flows for 20 years. Prepare economic evaluation, and undertake sensitivity analysis, risk analysis, and poverty impact assessment following ADB's *Guidelines for the Economic Analysis of Projects*.⁵
- (ii) 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.
- (iii) Identify project revenue and cost risks and (a) conduct relevant sensitivity analyses and (b) identify practical risk-mitigation strategies and approaches. The financial analysis will be guided by, and outputs prepared in accordance with, ADB's *Guidelines for the Financial Governance and Management of Investment Projects*, ADB's Operations

⁵ADB. 2003. *Key Areas of Economic Analysis of Projects: An Overview*. Manila. http://www.adb.org/Documents/Guidelines/Key_Areas/key_areas.pdf; http://www.adb.org/Documents/Guidelines/Eco_Analysis/default.asp

Manual, ADB's Project Administration Instructions, and the ADB Loan Disbursement Handbook.

- (iv) As applicable, review or suggest disbursement procedures, including imprest account and Statement Of Expenditures arrangements. Confirm fund-flow mechanism design and disbursement arrangements. The preliminary design should take account of the financial management responsibilities of DOR, following ADB's *Loan Disbursement Handbook*.

3. Project Framework and Monitoring of Impacts

- (i) Develop a draft project framework following ADB's Project Performance Management System (PPMS).
- (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 affect the project impacts.

4. Stakeholder Participation, Resettlement, and Social Analysis

- (i) Identify key stakeholders' (poor and vulnerable groups in particular) project-related interests, and likely barriers to their participation in and benefiting from the project resources. Suggest possible strategies for addressing their concerns.
- (ii) With the participation of all stakeholders, identify all groups at risk from the project, and analyze the reasons for their vulnerability, including their exposure to risks as described in ADB's *Handbook for Poverty and Social Analysis*. Identify the likely project impact on indigenous people or ethnic groups in the zone of influence and propose mitigation measures.
- (iii) Prepare an involuntary resettlement framework for the sector program and resettlement and ethnic minority development plan for the core roads according to ADB's *Handbook on Involuntary Resettlement: A Guide to Good Practice* and ADB's *Policy on Involuntary Resettlement and Indigenous People*. Identify covenants or policy changes necessary to ensure the protection of populations at risk and vulnerable groups during project implementation.
- (iv) In addition to confirming compliance with ADB's safeguard policies, propose measures to address concerns relating to gender, child labor, Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome, road safety in project design.

5. Environmental Assessment

- (i) Prepare sector impact assessment to identify potential environmental impacts—increases in pollution resulting from additional vehicles using the road network and benefits of overall transport connectivity. 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, Operations Manual F1/BP and F1/OP (2003)*, *Environmental Guidelines for Selected Infrastructure Projects*, and *Environmental Assessment Guidelines*, as well as the Government's environmental assessment guidelines for improving highways and constructing feeder roads.
- (iii) If the IEE recommends a full environmental impact assessment (EIA), prepare TOR acceptable to ADB and the National Environmental Commission. Conduct the EIA and prepare the report and its summary accordingly.
- (iv) Prepare an environmental management plan to implement mitigation measures for each core road section. Develop an environmental impact assessment framework as a guideline in approving the follow-up subprojects.

C. Reports

7. The consultants will submit 5 copies of all reports, technical working papers, and progress reports to ADB, and 16 copies to the Government. The timetable for submitting the reports follows:

- (i) an inception report setting out the initial findings, detailed methodology, detailed work schedule, and plan including the timetable for submission of technical working papers, within 1 month of the start of consulting services; technical working papers, according to the schedule set out in the inception report and agreed to by ADB;
- (ii) monthly progress reports at the end of each month, outlining the progress of work during the previous month, the work program for the subsequent month, and major issues to be addressed; and
- (iii) a draft final report setting out the consultants' findings and recommendations including all technical working papers, within 8 months of the start of the consulting services; and a final report to be submitted within 2 weeks after the receipt of comments from ADB and the Government.