

ASIAN DEVELOPMENT BANK

TAR: LAO 30271

TECHNICAL ASSISTANCE
(Financed from the Japan Special Fund)

TO THE

LAO PEOPLE'S DEMOCRATIC REPUBLIC

FOR PREPARING THE

ROADS FOR RURAL DEVELOPMENT PROJECT

October 2001

CURRENCY EQUIVALENTS

(as of 15 October 2001)

Currency Unit	–	Kip (KN)
KN1.00	=	\$0.0001
\$1.00	=	KN9,550

ABBREVIATIONS

ADB	–	Asian Development Bank
CSP	–	Country Strategy and Program
DCTPC	–	Department of Communication, Transport, Post and Construction
EIA	–	environmental impact assessment
IEE	–	initial environmental examination
IDP	–	institutional development plan
km	–	kilometer
Lao PDR	–	Lao People's Democratic Republic
MCTPC	–	Ministry of Communication, Transport, Post and Construction
REMDP	–	resettlement and ethnic minority development plan
TA	–	technical assistance

NOTES

- (i) The fiscal year (FY) of the Government and its agencies ends on 30 September.
- (ii) In this report, "\$" refers to US dollars.



I. INTRODUCTION

1. During the 2000 country programming mission for the Lao People's Democratic Republic (Lao PDR), the Government and the Asian Development Bank (ADB) agreed that ADB would assist the Government in preparing the roads for rural development project,¹ which is programmed for 2002/2003 in the 2001 Lao PDR country strategy and program (CSP). The feasibility study was completed in 1999.² However, it was recognized that the investment and policy packages for the ensuing project would require more detailed analysis of specific areas in accordance with priorities agreed in the CSP. The Fact-Finding Mission was fielded during 4-13 September 2001 to discuss with the Government the objectives, scope, cost estimates, financing plan, terms of reference for consulting services, and implementation arrangements for the technical assistance (TA).³

II. BACKGROUND AND RATIONALE

2. The Lao PDR has a rich and varied natural resource base and is a center of economic corridors linking subregional economies. However, mountainous geography, remote settlements, and low population density are barriers to access and the cost-efficient delivery of public services. Despite remarkable economic growth and reduction in poverty in the Lao PDR within the last decade, widespread poverty is still the most pressing problem: more than 38 percent of the population, or about 1.9 million people, live below the poverty line. Significant disparity has been identified in the incidence of poverty across regions as well as between urban and rural areas. The northern region has the highest ratio, with Houaphan as the poorest province. On average, economic growth benefited the urban areas more than the rural areas.

3. In June 2001, ADB and the Government agreed on the CSP and partnership agreement to guide ADB support to Lao PDR over the next five years in accordance with the overarching objective of poverty reduction. The CSP was approved on 18 September 2001, and the partnership agreement was signed in Vientiane on 28 September 2001. It was agreed that "Poverty Reduction through Broadening Community Participation and Opportunities" would be the theme of ADB's interventions in the Lao PDR over the next five years.⁴ Core strategies are (i) sustainable economic growth, (ii) inclusive social development, and (iii) good governance through policy and institutional development. To realize the strategic goals, ADB will focus on (i) rural development and market linkages, (ii) human resource development, (iii) sustainable environmental management, and (iv) private sector development and regional integration, as the main operational priorities for the CSP. Results of the participatory poverty assessment highlight the need to improve rural infrastructure and the importance of increasing market access in rural areas. Given that the poor are concentrated in rural areas and that agriculture provides income for most people, rural development is critical to achieving sustainable economic growth and poverty reduction. The next ADB involvement will focus in the northern part of the country, its poorest region. A project preparatory TA for northern region roads is programmed for 2003 with an ensuing project programmed for 2004.

¹ To better reflect the scope of the project, it was agreed to change the title of the project from *Second Rural Access Roads* to *Roads for Rural Development*.

² TA 2889-LAO: *Rural Access Roads Improvement Project*, for \$600,000, approved on 6 October 1997, from which four road sections have been implemented through Loan 1795-LAO: *Rural Access Roads Project*, for \$25.0 million, approved on 7 December 2000.

³ The TA first appeared in *ADB Business Opportunities* (Internet edition) on 20 July 2001.

⁴ *Country Strategy and Program*, Asian Development Bank, September 2001.

4. ADB involvement in the transport sector in the Lao PDR started in 1979 when the deteriorated road infrastructure was recognized as a serious constraint to economic development and physical integration of the country. Since then, ADB has been actively involved in the transport sector through its loan and TA program, which has resulted in the rehabilitation and improvement of significant sections of the main arterial road network, capacity building of institutions, and policy reforms in the sector. The development impact of the previous projects has been significant, with a visibly enhanced degree of commercial and agricultural development in the project areas. Once the main transport network is approaching completion, a transport network for rural development will be needed to ensure that social and economic benefits from the main network improvements are maximized and that impacts benefit the rural population. Poverty reduction through economic growth and improved access to the poor is the theme of ADB's interventions in the transport sector. Efficient transport and improved access in particular is one of the keys to economic development and poverty reduction.⁵ The current and next phases of ADB's sector strategy is to assist with the development of a transport network to complement the planned program of the Government in rural development.

5. The Government's report to the 7th roundtable meeting in November 2000 focused on the Government's strategic approach to poverty alleviation. Its strategic coherence has been established by identifying the main sectors (agriculture and forestry, education, health, and road infrastructure), which at this point in time will contribute most decisively to poverty reduction. While development and improvement in all sectors of the economy are needed to achieve sustainable long-term development, these four sectors represent the backbone of the Government's approach to immediate poverty reduction and response to the population expectations as well. A major effort was undertaken to establish a national long-term strategic vision for these sectors, and has been the subject of policy dialogue with the external funding agency community.

6. The Government, supported by ADB and in extensive consultation with other external funding agencies, prepared a paper, *Strategic Directions for the Development of the Road Sector (2001-2015)*,⁶ which provides a sector-wide framework for future road sector development. The Government and ADB agree that if the objectives of the strategy are to be achieved, a time-bound realistic and achievable medium-term implementation plan must be prepared. ADB also assisted the Government in preparing a medium-term road investment plan that is well accepted by the external financing agency community.⁷ Furthermore, the World Bank, in collaboration with ADB, the Nordic Development Fund, and Sweden, assisted the Government in preparing a road maintenance program that develops sustainable mechanisms for maintaining the existing roads, and a road maintenance fund has been established.⁸ However, interim support will still be necessary until the fund is fully operational and self-sufficient.

7. ADB has provided significant advisory assistance, particularly within the Department of Roads, in management information systems, commercialization and privatization of road construction enterprises and transport operations, increased transparency through the use of local competitive bidding procedures for road construction and maintenance, project

⁵ TA 5947-REG: *Assessing the Impact of Transport and Energy Infrastructure on Poverty Reduction*, for 800,000, approved on 25 October 2000.

⁶ Lao PDR. June 2000. *Strategic Directions for the Development of the Road Sector*. Vientiane.

⁷ Under TA 3070-LAO: *Road Infrastructure for Rural Development*, for \$720,000, approved on 17 September 1998.

⁸ Under the World Bank's *Road Maintenance Project*, for \$25 million, approved on 31 January 2001, including mechanisms financing, accounting, revenue collection, control, financial reporting and audit of the road maintenance fund.

coordination and contract management, and road network planning. Other external agencies have also provided valuable assistance, particularly in road network planning, maintenance programming, and financial management. Considerable progress has been made in strengthening the Ministry of Communication, Transport, Post and Construction (MCTPC) and its units, and a decentralization policy was introduced in 1996 to delegate more responsibility to its provincial units (departments of communication, transport, post and construction [DCTPCs]). However, staff and organizational limitations still need to be improved to enable them to properly fulfill their designated role.

8. The Government appreciates that transport sector performance can be improved through private sector participation. Efficiency in the land transport sector should be increased by promoting public-private sector participation and competition in transport infrastructure and services provision. The commercial passenger and freight transport industry is currently operating in a competitive market, but the remaining controls on route competition and fares and rates need to be reexamined to test their continuing relevance. There is also a need to ensure that the industry adheres to regulations introduced to protect road assets, to minimize inconvenience to other road users, for operator and public safety, and to assure that good business practices are observed. Introducing the industry with legal, accounting, and audit requirements will assist operators to improve their services and to lower costs. Affordable and user-friendly transport services should be available to the poor. Development of the local contracting industry is still a pressing need. Despite the commercialization initiated in the 1990s, the industry is weak in human resources and access to financial resources and equipment. While a more stable flow of works is expected from the road maintenance program and some road improvement works, available and affordable equipment will be required. Joint ventures of local and international contractors need to be encouraged to promote transfer of the knowledge of management techniques from the international to the domestic contractors.

9. As part of the feasibility study for the rural access roads improvement project, from which four roads have been taken up under Loan 1795 (footnote 2), economic, environment, and social analyses were prepared. The remaining roads are to be implemented under the ensuing project. An additional study will be required to further review and, to the extent possible, quantify the development benefits, the distribution of benefits, and impacts on poverty reduction in the project area of influence that will result from improved transport access. This emerging study was not part of the scope of the original feasibility study, which focused more on a traditional vehicle operating cost savings approach to project viability, which also should be reviewed. Furthermore, in line with the theme of ADB's interventions in the Lao PDR over the next five years, village consultation and community participation to identify community needs and potential economic development is necessary to maximizing economic benefits from road development.

10. Consistent with the Government's strategy and ADB's CSP, the envisaged project will help to (i) reduce rural poverty in remote villages, including those of ethnic minorities, by increasing economic opportunities and improving the quality of life in rural communities; and (ii) improve the efficiency of road network management and maintenance.

III. THE TECHNICAL ASSISTANCE

A. Objectives

11. Efficient transport and improved access in particular is one of the keys to economic development and poverty reduction. Investment in roads is part of a continuing program to support the development of an integrated and balanced road network in the country. The objectives of the TA are to assist the Government in formulating the next steps for implementing the road sector strategy to develop an efficient road transport system, and to design the envisaged roads for rural development project. The ensuing project will aim to provide the rural poor with access to markets, employment opportunities, and social facilities contributing to economic growth and poverty reduction.

B. Scope

12. The scope of the TA consists of (i) formulation of a medium-term action plan to implement the strategic directions for road sector development; (ii) a capacity building component to assist Government officials, local contractors, and service operators; and (iii) the design of an investment component for the ensuing project.

13. The TA will prepare a pragmatic and achievable action plan that includes establishment of performance indicator benchmarks and monitoring system. The TA will assess the capacity of local contractors, service providers, and the DCTPCs of Attapeu, Borikhamxai, and Sayaburi. Based on this assessment, the major issues and strategic options and priorities to improve their capacities will be formulated. The TA will update the feasibility study of Xaisetha-Sanxai (54 km), Pakxan-Thasi (79 km), and Sayaburi-Hongsa (90 km), and conduct additional feasibility study for Xiengman-Muang Ngeun (170 km), Kouang Xi access road (30 km), and Pakton-Ban Vang (43 km). These roads (see the Map) are included in the medium-term road investment plan. Further prioritization, including assurance that 12 percent economic internal rate of return cutoff point is warranted, will be needed in anticipation of the programmed loan amount and possible cofinancing. The TA will also conduct a benefit distribution analysis and estimate the poverty impact ratio. District economic potential and community needs within the project areas will be identified using a participatory approach to formulate a poverty intervention component.⁹ A series of workshops will be conducted as necessary.

C. Cost Estimates and Financing Plan

14. The total cost of the TA is estimated at \$480,000 equivalent, comprising \$329,000 in foreign exchange cost, and \$151,000 equivalent in local currency cost. ADB will provide \$400,000 equivalent, covering the entire foreign exchange cost and \$71,000 equivalent of the local currency cost, on a grant basis, to be financed from the Japan Special Fund, funded by the Government of Japan. The Government will finance the remaining \$80,000 equivalent in local currency, covering counterpart staff and related salaries, provision of government vehicles, office accommodation, and related services and facilities. Detailed cost estimates and the financing plan are in Appendix 1. The Government has been advised that approval of the TA does not commit ADB to finance any ensuing project.

⁹ Including a possible proposal to be financed by the Japan Fund for Poverty Reduction.

D. Implementation Arrangements

15. The TA will be implemented over four months, commencing on 15 February 2002 and finishing on 14 June 2002. A multidisciplinary team of consultants will be required to provide a total input of 13 person-months of international and 25 person-months of domestic consultants. The international consultants will have expertise in (i) transport policy analysis, institutional capacity building, and private sector development; (ii) transport economic and poverty impact analysis; (iii) road engineering; (iv) environmental impact analysis; and (v) resettlement and social development. The domestic consultants will have expertise in public administration, road and traffic engineering, road safety, sociology, environment, and community organization and participation. A firm of international consultants, in association with domestic consultants will be recruited in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for the engagement of domestic consultants. The international consulting firm will be responsible to ADB for the overall scope of work. The outline terms of reference for the consultants are attached as Appendix 2. The simplified technical proposal procedure will be used.

16. The Executing Agency for the TA will be MCTPC, which will establish a TA implementation unit to coordinate TA implementation with concerned line ministries, agencies, and external funding agencies. MCTPC will appoint a full-time TA project manager to guide the implementation of the TA and supervise counterpart staff. MCTPC will provide suitable office accommodation; office support staff; and the required equipment including vehicles, personal computers, and facsimile machines. The Government will also provide assistance with surveys, workshops, and other participatory exercises. A TA counterpart team, headed by the project manager, will be established and comprise a minimum of three full-time counterpart staff with the following technical expertise: road and transport planning and policy, public administration, and training.

17. The consultants will prepare (i) an inception report three weeks after commencing their services, focusing on strategic directions and feasibility study reviews and work program; (ii) a draft final report 14 weeks after commencing their services and covering the overall TA scope; and (iii) a final report in a format acceptable to ADB incorporating all comments received on the draft final report from the Government and ADB. A tripartite meeting between the Government, consultants, and ADB will be held in Vientiane, chaired by MCTPC, to discuss the draft final reports.

III. THE PRESIDENT'S DECISION

18. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance, on a grant basis, to the Government of the Lao People's Democratic Republic in an amount not exceeding the equivalent of \$400,000 for the purpose of preparing the Roads for Rural Development Project, and hereby reports such action to the Board.

COST ESTIMATE AND FINANCING PLAN
(\\$)

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing^a			
1. Consultants			
a. Remuneration			
i. International Consultants	243,000	0	243,000
ii. Domestic Consultants	0	50,000	50,000
b. Travel			
i. International	25,000	0	25,000
ii. Domestic	0	2,000	2,000
2. Workshop Administration	0	2,000	2,000
3. Benefits Distribution Surveys	0	5,000	5,000
4. Community Consultation Surveys	0	5,000	5,000
5. Communications, Reports, and Documents	3,000	0	3,000
6. Government Representative at Negotiations	5,000	0	5,000
7. Contingencies	53,000	7,000	60,000
Subtotal (A)	329,000	71,000	400,000
B. Government Financing			
1. Counterpart Staff (salary and per diem)	0	15,000	15,000
2. Surveys	0	8,000	8,000
3. Workshops	0	7,000	7,000
4. Maps, Reports, etc	0	6,000	6,000
5. Office Equipment	0	10,000	10,000
6. Furnished Office Space in Vientiane	0	10,000	10,000
7. 4wd Vehicles	0	10,000	10,000
8. Telecommunications	0	2,000	2,000
9. Contingencies	0	12,000	12,000
Subtotal (B)	0	80,000	80,000
Total	329,000	151,000	480,000

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

OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES

A. Sector Development Component

1. The consultants will do the following for the institutional development aspect:
 - (i) Review *Strategic Directions for Road Sector Development* together with the *Government Report to the 7th Roundtable Meeting*, and propose a pragmatic and achievable medium-term action plan to implement the strategy, including establishing benchmark indicators, a monitoring system, and resources required to implement the action plan.
 - (ii) Assist the Government to conduct a stakeholder workshop, including external funding agencies involved in the road sector of the Lao People's Democratic Republic (Lao PDR) to discuss the action plan and finalize accordingly.
 - (iii) Review recent (the last 5 years) and likely future road sector expenditures (broken down into construction, maintenance, and administration) and road revenues (sales and import duties on vehicles, spare parts, tires, and automobile fuel products, vehicle license fees, registration and inspection fees, and driver license fees).
 - (iv) Prepare an institutional development program (IDP)¹⁰ to assist departments of communication, transport, post, and construction (DCTPCs) in Attapeu, Sayaburi, and Borikhamxai provinces to (a) reorganize; (b) upgrade the technical and managerial skills of their staff; (c) formulate and implement appropriate management, financial, and technical policies and procedures; and (c) generally improve the efficiency of their management of the road network under their responsibilities.
 - (v) Produce job specifications for DCTPCs technical and managerial staff, identify training and skill development needs, and design and deliver appropriate training programs as necessary.
 - (vi) Assist the target DCTPCs with the production of annual road improvement and maintenance budget application for their provinces.
 - (vii) Conduct workshops in Attapeu, Borikhan, and Sayaburi, inviting each surrounding DCTPCs, to present the IDP and facilitate knowledge sharing among DCTPCs.
2. The consultants will do the following to assist development of the contracting industry:
 - (i) Review related studies on developing local contracting industry, including final reports of technical assistance (TA) numbers 2389-LAO and 2862-LAO: Management Information System in the MCTPC, Phase I and Phase II.

(Reference in text: page 5, para. 15)

¹⁰ The IDP will be prepared in consistency with previous and on-going capacity building program in other provinces provided by other external funding agencies, particularly in the financial management supported by Sweden.

- (ii) Formulate a time-bound action plan to simplify bureaucratic requirements for documentation, payment reimbursement, and obtaining of finance in locally-financed contracts to improve contractor efficiency.
 - (iii) Implement a system for registration of contractors according to technical and financial capability to undertake road construction and maintenance activities based on the system, categories, and classifications developed under TA 2389-LAO. Assist the Government to institute an effective system to identify capable contractors as a basis for prequalification for work let under local competitive bidding procedures.
 - (iv) Plan and implement a training system to increase the technical and managerial capabilities of private sector contractors. Identify different types of training courses needed and formulate syllabus for the courses.
 - (v) Assist the Government to set up a sustainable equipment leasing company or purchasing system (whichever is more suitable and acceptable to the Government and to the Asian Development Bank [ADB]) responsible for its own operating expenditure, interest charges, and depreciation. Advise on the structure and staffing levels of the company/unit, the type and numbers of equipment and spare parts to be purchased or rented from other sources (e.g., neighboring countries), and the tariff rates, bearing in mind the need to cover expenses mentioned.
 - (vi) Identify appropriate packaging of contract sizes to maximize the use of local contractors in foreign funded projects, using the ensuing project as a pilot case.
 - (vii) Propose an integrated joint venture scheme to promote transfer of knowledge in management techniques from international to domestic contractors.
3. The consultants will do the following to assist development of Land Transport Services:
- (i) Review related studies on the land transport services sector, assess market performance, and prepare strategies to promote the development of the transport services industry with any necessary regulatory framework.
 - (ii) Review the existing regulation on numbers of operators, routes, pricing, and the requirement to joint transport provider association, recommend any deregulation needed to improve transport services efficiency.
 - (iii) Formulate an awareness campaign to all transport services industry participants to ensure that the industry adheres to regulations introduced to protect road assets, for operator and public safety, and that good business practices are observed.
 - (iv) Introduce the industry with legal, accounting, and audit requirements to assist operators to improve their services and to lower the costs.
 - (v) Identify existing demand and supply for passenger and freight transport services in the country and in the project areas, and estimate demand in the next 5 and 10 years.
 - (vi) In the project areas, estimate the financial viability of required passenger transport services being served by private sector companies. For areas where the financial viability is relatively low, identify incentives that the Government can consider to encourage private sector operators to serve passenger transport

demand. Prepare an implementation schedule for the introduction of passenger transport services in the project areas, for consideration by the Government.

- (vii) Identify suitable locations for weigh stations and rest areas along the Project roads.

B. Road Improvement Component

1. Saisetha-Sanxai, Paksan-Thasi, and Sayaburi-Hongsa Roads

4. The consultants will review and update the feasibility study, including the economic analysis, social assessment and environmental impact study carried out under TA 2889 and its detailed design. The review will include the following:

- (i) Review and update as necessary the economic analysis for the project roads based on the most recent available traffic and road condition data.
- (ii) Review all related studies, obtain the most recent available environmental baseline for each of the selected project roads, and review environmental impact and the mitigation approach of each road section.
- (iii) Update the environmental baseline for all project roads. Revise and amend the environmental impacts and mitigation approach as necessary. Prepare an updated initial environmental examination (IEE) and its summary, and environmental impact assessments (EIAs) as necessary, for the overall project.
- (iv) Review social assessment reports prepared under the TA 2889-LAO: Rural Access Roads Improvement Project. Review its detailed design, and other related studies, including the involuntary resettlement and ethnic minority development plan (REMDP).
- (v) Design and conduct any necessary socioeconomic surveys using household questionnaires and participatory approaches to fill any gap in the REMDP. Prepare an overview of ethnic population characteristics in the zone of influence of each road for both mainstream and minority groups. Show their access to and control over land and natural resources, and identify existing problems perceived by ethnic groups and community needs in the zone of influence and propose solutions.
- (vi) Review and revise as necessary the arrangements for valuing and disbursing compensation, housing relocation, and income restoration, and for implementing and monitoring the REMDP, including costs, funding resources, and time schedule. Based on these, prepare updated REMDP of the Project.

5. The consultants will review the development impact and poverty reduction, as follows:

- (i) Based on a review of existing studies and surveys, prepare a socio-economic and poverty profile of the area of influence of the project roads, including (a) the patterns of economic activity, employment including agricultural sector, and (b) unemployment, poverty levels, and causes.
- (ii) Review the historical constraints to expansion of economic and social activity in the project area of influence.
- (iii) Conduct a semistructured interview program with road users and prospective beneficiaries to obtain evidence of existing transport-related constraints. Identify

how improved transport access and other related facilities through the ensuing project will help alleviate these constraints. Quantify the likely impact of the project in terms of improved socio-economic level.

- (iv) Provide a qualitative analysis of the impact of the project in terms of reduction of unemployment, poverty, and gender disparities.

6. The consultants will provide a benefits distribution analysis and determine the poverty impact ratio, as follows:

- (i) Obtain information for, and prepare and supervise a short traffic survey to provide assumptions necessary to prepare a distribution analysis and poverty impact analysis of the quantified of benefits of the project.
- (ii) In accordance with ADB's Guidelines for Economic Analysis, prepare the distribution analysis and poverty impact analysis including sensitivity analysis, and prepare a short report describing the assumptions, analysis, and findings.

7. The consultants will prepare a poverty intervention plan, as follows:

- (i) Review the social assessment prepared under the previous feasibility study, and its detailed design, including the socioeconomic and poverty profile of the area of influence.
- (ii) Review any related community development activities in the project areas, and identify districts to be targeted for the poverty intervention plan based on the poverty, socioeconomic profile, and lack of other interventions. Assess incomes, identify productive activities, and propose a program for income-generating activities.
- (iii) Using a participatory approach, identify community needs and districts' economic potential, and propose a community development program in the target districts, particularly for improving the livelihood of the community.
- (iv) Identify and assess capability of international and local nongovernment organizations and community-based organizations, including the Lao Women's Union, that are in the country and in the project areas and can implement the community development component.
- (v) Calculate cost estimates for the community development program, and identify possible funding resources, including the Japan Fund for Poverty Reduction.

2. Xiengman - MuangNgeun, Kouang Xi Water Fall Access and Pakton - Ban Vang Roads

8. The consultants will do the following:

- (i) Review all available reports and data including traffic surveys relating to the subject roads. Noted that Road No.4B has been the subject of an earlier feasibility study (financed by Sweden), which should be reviewed in regard to technical, economic, environmental, and social aspects.
- (ii) Assess the level of engineering and any additional traffic surveys that are required. Prepare preliminary designs and cost estimates for the road sections.
- (iii) Carry out an economic evaluation (assume a 20 year benefit stream) for each of the road sections by calculating the economic internal rate of return (EIRR)

based on benefits and costs. The economic analysis is to be carried out in accordance with ADB's *Guidelines for Economic Analysis of Projects*.

- (iv) Carry out an IEE for each of the road sections and determine if a detailed EIA is required. If an EIA is not required prepare a summary IEE. These documents should be prepared in accordance with ADB's *Environmental Guidelines* and Ministry of Communication, Transport, Post, and Construction's *Environmental Guidelines for Road Projects (1999)*.
- (v) Prepare an initial social assessment, which will include a social economic profile along the road sections and also the associated issues of poverty reduction, ethnic groups, land acquisition and involuntary resettlement. Prepare a Resettlement Plan and necessary Ethnic Groups Development Plan in accordance with the ADB's related Policies and Guidelines.
- (vi) Taking into account the economic evaluation and social and environmental assessments, recommend the most suitable improvement option for each road section. Prepare the results in a tabular form showing road section, length, improvement level, present motorized traffic, cost of civil works, and economic internal rates of return.
- (vii) Undertake sensitive analysis for the recommended improvements, identify major risks, and recommend measures to minimize them.
- (viii) Prepare a preliminary implementation schedule for the road sections.
- (ix) Carry out reconnaissance along the road sections and determine the extent of unexploded ordnance contamination through interviews with local people and information available with the Ministry of Defense.

3. Logical Framework

- 9. The consultants will prepare a detailed logical framework for the ensuing project.

C. Required Expertise

- 10. The TA will require about 38 person-months of consulting services, comprising about 13 person-months of international and about 25 person-months of domestic consulting services. The required international consultants and their scope of work (Part A and B of this Appendix) are estimated in the table:

International Consultants' Works

Consultant	Scope of Works
<ul style="list-style-type: none"> • Team Leader (transport policy/private sector specialist) • Transport Economist • Road Engineer • Environment Specialist • Resettlement and Social Development Specialist 	<ul style="list-style-type: none"> • Coordinator, A and B.3 • B.1: para.4(i), paras. 5, and 6; B.2: (i) and (iii) • B.2: (i), (ii), (vi), (vii), and (ix) • B.1.para.4 (ii) and (iii), and B.2.(iv) • B.1.para.4 (iv), (v), and (vi); B.1.para.7; B.2.(v)