

**ASIAN DEVELOPMENT BANK**

**TAR: VIE 34356**

**TECHNICAL ASSISTANCE**  
(Financed by the Japan Special Fund)

**TO THE**

**SOCIALIST REPUBLIC OF VIET NAM**

**FOR PREPARING THE**

**CENTRAL REGION TRANSPORT NETWORK PROJECT**

**December 2002**

## CURRENCY EQUIVALENTS

(as of 10 October 2002)

Currency Unit	–	Dong (D)
D1.00	=	\$0.0001
\$1.00	=	D15,384.00

## ABBREVIATIONS

ADB	–	Asian Development Bank
DFID	–	Department for International Development
GIS	–	geographic information system
HIV/AIDS	–	Human immunodeficiency virus/acquired immune deficiency syndrome
MOT	–	Ministry of Transport
NGO	–	nongovernment organization
PMU-1	–	project management unit number 1
RT1	–	rural transport 1 project
RT2	–	rural transport 2 project
STD	–	sexually transmitted disease
TA	–	technical assistance
VRA	–	Viet Nam Road Administration

## NOTE

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

This report was prepared by a team consisting of P. Valley (Team Leader), C. Litwin, M. Huddleston, and Y. Yamada, Infrastructure Division, Mekong Department.

## I. INTRODUCTION

1. The Government of Viet Nam has requested the Asian Development Bank (ADB) for technical assistance (TA) to prepare the Central Region Transport Network Project.<sup>1</sup> The TA has been included in ADB's TA program for Viet Nam and the ensuing loan is in the lending pipeline. A TA reconnaissance mission visited Viet Nam during 28 June to 12 July 2002 and held initial discussions with the Government on the proposed scope of the TA and the proposed ensuing project. Following on from these initial discussions, the TA Fact-Finding Mission visited Viet Nam during 16 to 27 September 2002 and reached an understanding with the Government on the goals, purpose, scope, implementation arrangements, cost, financing arrangements, and terms of reference for the TA.<sup>2</sup>

## II. ISSUES

2. The central region of Viet Nam consists of 18 provinces distributed among three sub-regions—north central coast, south central coast, and central highlands. The population of the central region is approximately 22 million people comprised of 11 indigenous groups belonging to 3 linguistic families, the Kinh, Malayo-Polynesian, and Mon-Khmer. As shown in the Government's Comprehensive Poverty Reduction and Growth Strategy, the provinces comprising the central region have relatively high poverty incidences. Two of these provinces are among the poorest in the country and nearly all have strikingly high incidences of rural poverty. Remoteness and poor linkages to the rest of the economy, including lack of transport connections through all-weather roads, are key factors in the incidence of poverty in the region. The ADB *Country Strategy and Program Update 2003–2005 for Viet Nam*<sup>3</sup> focuses on the Central Region and a series of projects in the agriculture, urban development, and water resources sectors have been targeted at the region.

3. The transport sector in Viet Nam is dominated by the road sector but modes of transport include railways, inland waterways, coastal shipping, and aviation. Viet Nam had a road network of over 200,000 kilometers (km) as of 1999 and the road subsector has drawn 72% of an estimated \$5.7 billion invested in the transport sector during 2000–2003. Road transport carries about 70% of freight tonnage and 80% of passengers. National roads, however, account for merely 15,250 km, and provincial and district roads account for 17,449 km and 36,372 km, respectively.<sup>4</sup> The entire road network is well developed but poor in quality. Only 60% of national roads and 27% of provincial roads are paved and the poor condition of rural roads make access to many villages difficult. Rural roads are the main means of access for the rural population.

4. Since the lifting of the embargo on external financing in 1993 a series of projects have been, or are being, implemented in the road subsector in Viet Nam. Initially these projects focused on rehabilitating National Highway 1, which runs along the coast of Viet Nam and acts as the central spine for the road network. With the work on National Highway 1 drawing to a close, projects have increasingly focused on other parts of the road network. ADB's Provincial Roads Improvement Project<sup>5</sup> is upgrading provincial roads in 17 provinces in the northern uplands and Red River Delta regions. Upgrading of rural roads in 18 provinces was addressed

---

<sup>1</sup> Listed as the Central Region Road Sector Project.

<sup>2</sup> The TA first appeared in *ADB Business Opportunities* (Internet edition) on June 2002.

<sup>3</sup> ADB. 2002. *Country Strategy and Program Update 2003-2005 for Viet Nam*. Manila.

<sup>4</sup> Almec Corporation, Pacific Consultants International. 2002. *The Study of the National Transport Development Strategy in the Socialist Republic of Viet Nam (VITRANSS)*. Hanoi: Japan International Cooperation Agency.

<sup>5</sup> ADB. 2001. *Loan 1888-VIE(SF): Provincial Roads Improvement Project*. Manila.

under ADB's Rural Infrastructure Sector Project<sup>6</sup> and rural roads are being improved in 40 provinces across the country with funding from the World Bank and Department for International Development (DFID) under the rural transport 1 (RT1) and rural transport 2 (RT2) projects. The Central Region needs better connection of rural areas to the provincial and national road networks<sup>7</sup> and improvement of the national and provincial roads themselves.

5. Responsibility for administering the national road network is shared between the Viet Nam Road Administration (VRA) and the provinces. VRA's responsibilities are limited to the national highways; the maintenance of provincial and district roads is the responsibility of the provinces. VRA has received capacity building and training funded by ADB, under the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> road improvement projects,<sup>8</sup> and under various interventions by World Bank and other donors. Under the World Bank/DFID-financed RT1 and RT2 projects, support is being given to build capacity at the provincial level for rural roads. Capacity at the provincial level for road sector administration and maintenance is weak. In the Central Region, the demand for rehabilitation and maintenance outstrips the capacity of the provincial authorities<sup>9</sup> and there is a need to strengthen management systems, particularly maintenance management systems.

6. Geographical remoteness and disconnection from the rest of the economy is a key cause of poverty in areas where the poor have not been able to capture the benefits of economic growth. To overcome this restraint requires that all the links between communities and markets are present. Thus, upgrading of one link in a road network should not be considered in isolation from its place in a series of links from communities to the rest of the economy and vice versa. Clearly a single project cannot address all linkages in a network but if a particular link is to be upgraded then consideration must be given to the condition of the links within the subnetwork to which the link is directly connected.

### III. THE TECHNICAL ASSISTANCE

#### A. Purpose and Output

7. The TA will assist the Government to implement its poverty reduction strategy and stimulate economic growth by helping to prepare a project to improve the road transport network in the central region of Viet Nam. The proposed project will reduce poverty and enhance economic development in poor provinces by improving (i) critical national, provincial, and district road links; and (ii) the management of the provincial road networks.

8. The outputs from the TA will be (i) an assessment of the institutional capacity of provincial governments within the central region and proposals to strengthen the provincial road sector institutions, particularly with respect to maintenance of road assets; (ii) an institutional development strategy for the provincial authorities to administer the road network in an efficient, effective, and sustainable manner; (iii) socioeconomic data on the central region to evaluate the proposed project's economic viability and poverty impact; (iv) ranking of proposed subprojects and packaging them for implementation under a sector loan modality; (v) an analysis that demonstrates that the selected subprojects for the core subprojects under the first phase of the

<sup>6</sup> ADB. 1997. *Rural Infrastructure Sector Project*. Manila.

<sup>7</sup> ADB. 2000. *TA 2959-VIE: Preparation of Action and Investment Plans for the Central Region Development Strategy*. Final Report. Manila.

<sup>8</sup> ADB. 1993. *Road Improvement Project*. Manila.

ADB. 1996. *2<sup>nd</sup> Road Improvement Project*. Manila.

ADB. 1998. *3<sup>rd</sup> Road Improvement Project*. Manila.

<sup>9</sup> ADB. 2000. *TA 2959-VIE: Preparation of Action and Investment Plans for the Central Region Development Strategy*. Final Report. Manila.

proposed project are economically feasible, technically sound, cost effective, and environmentally, and socially responsible; (iv) preparing manuals and other documentation for use in preparing subprojects under a sector loan modality; (v) sample resettlement and ethnic minority development reports; and (vi) an initial environmental examination.

## **B. Methodology and Key Activities**

9. The TA will consist of a subsector review component and a project preparation component. The two components will be implemented concurrently. The subsector review component will address administration of the road subsector at the provincial level and will comprise (i) reviewing the current status of policy reform in the road subsector to provide the basis for further policy dialogue; (ii) preparing an institutional development strategy for the provincial authorities to administer the road network in an efficient, effective, and sustainable manner based on an evaluation of their capacity and capabilities; and (iii) preparing a strategy to improve the planning, budgeting, and implementation of maintenance of provincial roads, including an assessment of the potential for the involvement of the private sector in road maintenance. This work will draw on existing and ongoing studies funded by ADB<sup>10</sup> and World Bank.<sup>11</sup>

10. Project Management Unit No. 1 (PMU-1) of the Ministry of Transport (MOT), has proposed a list of 239 subprojects covering 3,225 km of road improvement works and 9,568 km of bridge improvement works in 17 provinces<sup>12</sup> in the central region. Most of the subprojects are for provincial roads, the remainder are for district roads. PMU-1 has estimated the cost of implementing the subprojects at \$239 million. This list of subprojects will be the basis for the services under the project preparation component of this TA. A summary of initial poverty and social analysis is in Appendix 1.

11. The project preparation component will commence with a survey that will include (i) a review of recently completed, ongoing, or proposed physical infrastructure and social and economic development projects in the central region;<sup>13</sup> (ii) an inventory and condition survey of the selected roads to be used as a basis for feasibility studies to determine improvement requirements and standards; (iii) an assessment of the road network linking to each selected road; and (iv) environmental, poverty, and social impact assessments. The purpose of the assessment of road network links is to ensure that (i) the selected road is connected to the national network (connecting roads) at a standard consistent with that proposed for the selected road; and (ii) roads extending out from the selected road to communities (community roads) are of a standard that allows these communities to access the selected road. The required standard for community roads, which may be district or commune roads, will be maintainable all weather access. If upgrading work is required for a connecting or community road this road will be included as a new subproject. However, the intent is that where upgrading of community roads is required but is only economically justified to an unsealed standard then this upgrading will be adopted under the provincial government's own works program. The consultants will confirm that budget is available and that these works have been included in the provincial government's work program.

<sup>10</sup> For example, Booz-Allen Hamilton. 2002. *Improvement of Highway Management Capacity of the Ministry of Transport, and Implementation of Sector Development Policy*. Hanoi, Vietnam: Ministry of Transport.

<sup>11</sup> Particularly work under the ongoing Rural Transport 2 Project.

<sup>12</sup> No data was available for Thanh Hoa Province.

<sup>13</sup> Examples include the ADB's Central Region Livelihood Restoration Project, and Forests for Livelihood in the Central Highlands Project

12. The subprojects will be ranked and packaged as a series of phases. The subprojects under the first phase, the core subprojects, will be fully prepared under the TA and subsequent phases will be addressed on a sector basis under an ensuing investment project that may be financed from one or more loans. Packaging of the subprojects will take into account logistical considerations for implementing the investment project, for example, addressing all subprojects within a limited number of provinces under each phase. Detailed preparation work for the core subprojects will include (i) a resettlement plan; (ii) an indigenous peoples action plan, if required; (iii) an initial environmental examination, and, if necessary, an environmental impact assessment; (iv) poverty and gender profiles for peoples traversed; (iv) social and economical justification based on a list of improvement options; and (iv) bidding documents. In addition, the TA will (i) prepare and implement a training program for the central Government and provincial authorities in project identification, preparation, implementation, and administration; and (ii) prepare generic designs and documentation to be applied to selected roads.

13. All data gathered during the implementation of the TA will be collated and stored using geographic information systems (GIS) software. The design of the underlying databases and the type of software will be consistent with that being used on the ongoing RT2 project. A copy of the GIS database developed under the RT2 project will be made available to the consultants by DFID.

### **C. Cost and Financing**

14. The total cost of the TA is estimated at \$1.25 million equivalent, of which the foreign exchange cost is \$633,800 and the local currency cost is \$616,200 equivalent. The Government has requested ADB to finance \$1.00 million equivalent, comprising the entire foreign exchange cost and a portion of the local currency cost amounting to \$366,200 equivalent. The TA will be financed on a grant basis by the Japan Special Fund, funded by the Government of Japan. The Government will finance the remaining \$250,000 equivalent of local currency costs through in-kind contributions of the executing agency and provincial counterpart staff; office space, transport, and local communications for the counterpart staff; and maps, reports, and other information. Detailed cost estimates are provided in Appendix 2. The Government has been advised that ADB's approval of the TA does not commit the ADB to finance any ensuing project.

### **D. Implementation Arrangements**

15. MOT will be the executing agency for the TA, MOT has designated PMU-1 as the implementing agency. The general director of PMU-1 will have overall responsibility for its contribution to the TA, and will set up a subunit suitably staffed with counterpart personnel for day-to-day coordination and to work with the TA consultant's personnel as well as other government agencies, particularly the provincial departments of transport, nongovernment organizations (NGOs) and other interested parties. To oversee the TA implementation, MOT will establish a steering committee comprising representatives from other ministries, provincial governments, and government agencies and chaired by a senior official of MOT.

16. The TA will require about 148 person-months of consulting services, including about 23 person-months of international and 125 person-months of domestic consultants. The TA will be implemented over a 10 month period commencing in July 2003. Outline terms of reference are in Appendix 3. Reporting requirements include the submission of inception, interim, and final reports, and brief progress reports on a monthly basis. Tripartite meetings will be held after the submission of the inception, interim, and draft final reports. A workshop will be held after submission of the draft final report to present the project to the Government, NGOs, and other

stakeholders. The international consultants will have expertise in transport planning and economics, highway design and maintenance, bridge maintenance, environmental impact assessment, resettlement, social issues, and institutional development. The consultants will be engaged by ADB in accordance with its *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for the engagement of domestic consultants. Consultants will be recruited using the quality and cost-based selection procedures; simplified technical proposals will be requested. Equipment to be financed under the TA will be procured in accordance with ADB's *Guidelines for Procurement*.

#### **IV. THE PRESIDENT'S DECISION**

17. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$1,000,000 to the Government of Viet Nam for preparing the Central Region Transport Network Project, and hereby reports this action to the Board.

## SUMMARY INITIAL POVERTY AND SOCIAL ANALYSIS

### A. Linkages to the Country Poverty Analysis

Sector identified as a national priority in country poverty analysis?	Yes	Sector identified as a national priority in country poverty partnership agreement?	Yes
Contribution of the sector/subsector to reduce poverty in Viet Nam:			
<p>Viet Nam's impressive economic growth during the 1990s has been strongly pro-poor. With only marginal increases in inequality, the proportion of people living below the total poverty line has dropped from 58% in 1993 to 37% in 1998. The proportion living below the food poverty line also declined from 25% to 15%, indicating that even the poorest segments of the population have benefited from economic growth. However, the poverty incidence in Viet Nam is still high and remains as a rural phenomenon with 45% of the rural population living in poverty. To support the Government in pursuing a balanced economic growth the Country Strategy and Program Update 2003–2005 for Viet Nam and the poverty partnership agreement between Viet Nam and the Asian Development Bank (ADB) emphasize regional development through geographical focus on the central region. The central region comprises provinces with relatively high poverty incidences, two of which are amongst the poorest in the country. Nearly all provinces have strikingly high rural incidences of poverty. This suggests that geographical remoteness and disconnection from the rest of the economy are among the key factors for explaining poverty.</p> <p>Remoteness translates into higher input costs, and high transactions costs for bringing goods to the market and is a barrier for school attendance and health care. Studies show that the burden of inaccessibility falls on women. Rural transport infrastructure is important for improving connectivity and lifting underlying barriers for poverty reduction. This infrastructure comprises networks of commune and district roads linking into larger networks of provincial and national roads. Provincial roads form an important link between "lower level" infrastructure and "upper level" national networks. Connectivity is a key factor for enabling the poor to respond to market incentives and participate in economic growth. A recent study<sup>1</sup> shows that ethnic minorities living in poverty in remote and access-deprived areas have not been able to benefit from economic growth. Remoteness and disconnection has been identified as the key factors for the inability of ethnic minorities to benefit and has led to low returns to both capital and human endowments. Improved transport infrastructure will contribute to a regionally balanced and equitable economic growth by stimulating agricultural production and access to employment opportunities and facilitating access to social services.</p>			

### B. Poverty Analysis

#### Proposed Classification: Poverty Intervention

<p>The poverty analysis to be undertaken in the project preparatory technical assistance (TA) for the Central Region Transport Network Project will focus on the impact of road network improvements on social service delivery, movement of goods and people, and their impact on poverty. It will include an assessment of the ability of the poor to benefit from resulting economic activities and a review of barriers that might prevent the poor from benefiting from economic growth. The poverty analysis will include the role of provincial roads in interlinking targeted community and district roads with the larger national network and the extent to which the mobility of the poor can be improved by increased access and by what means. The economic analyses of subprojects and extended networks will include individual distributional analysis between stakeholders, including the poor. A poverty impact ratio will be calculated for each subproject and for the first phase of identified subprojects.</p> <p>The core analysis will be based on existing data such as the census, national socioeconomic surveys with poverty indicators and the poverty database developed by the Ministry of Labor and Social Welfare (MOLSA). The study will use existing surveys and reports to the extent possible. The consultants will coordinate work with the Rural Transport Project 2 (RT2) funded by the World Bank and the Department for International Development. Additional quick rural appraisals and key informant interviews can take place after data and information gaps for conducting the analysis have been identified. Provincial data on education and health will be collected to analyze the effect of road conditions and accessibility on social services. If data availability allows, it will include an assessment of the impact of road conditions on cost efficiency of social services delivery across provinces in the central region. The poverty analysis will use the findings of a forthcoming ADB technical assistance (TA) on transport service networks for the poor, which focuses on transport services in two provinces in the central region, if these findings are available in sufficient time.</p>
---

<sup>1</sup> Baulch, Bob, Chuyen Troung Thi Kim, Haughton Dominique, and Jonathan Haughton. 2002. *Ethnic Minority Development in Vietnam: A socioeconomic Perspective*. Washington: World Bank.

**C. Participation Process**

## Stakeholder Analysis:

During preparation of the resettlement plan for each core road, all affected households will be surveyed and will participate in the inventory of assets, identification of compensation and resettlement preferences, and a replacement cost study. Affected communities will also be required to participate in preparation of the ethnic minority development plans and gender strategy.

## Participation strategy required:

Yes, participation strategy will be required in the resettlement plan and the ethnic minority development plan to ensure the plans are culturally appropriate and implementable.

**D. Potential Issues**

<b>Subject</b>	<b>Significant, Not Significant, Uncertain, None</b>	<b>Strategy to Address Issues</b>	<b>Plan Required</b>
<b>Resettlement</b>	Significant	<p>Since the project roads are not identified yet, the level of impact cannot be known. However, experience on other provincial road projects in Viet Nam indicates that land acquisition and resettlement impact will be necessary due to road widening and drainage works. The executing agency, Project Management Unit Number 1 (PMU-1), has considerable experience in planning and implementing resettlement in accordance with international standards.</p> <p>In accordance with ADB requirements for a sector project, prior to appraisal, a resettlement framework will be required that will be applicable for all project roads plus a resettlement plan for each core subproject for which land acquisition will be required, in accordance with ADB's <i>Policy on Involuntary Resettlement</i>. During project implementation, a resettlement plan will be required for each subproject for which land acquisition will be required.</p>	Resettlement Framework and Plan for each Core Road
<b>Gender</b>	Uncertain	Gender strategy should be included to provide women of poor rural and ethnic minorities increased opportunities to learn new skills and decision-making, and take advantage of new employment and income generating opportunities. The Project will address any needs to build increased community-based awareness and efforts to prevent and reduce the risks of increased prostitution of women and girls; risks of transmission of sexually transmitted diseases (STDs) and human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), risks of trafficking through training of communities, truck drivers, and contractors; and capacity building.	Not Known
<b>Affordability</b>	None		None
<b>Labor</b>	Uncertain	Local labor requirements and safety measures.	None
<b>Indigenous People</b>	Uncertain	Project roads will pass through ethnic minority communities in the central region. Ethnic minority people will be directly affected by acquisition of land, and by other social impacts such as in-migration, STDs and HIV/AIDS, and trafficking of women and children. The consultants will be required to identify risks associated with spread of and design interventions to mitigate STDs and HIV/AIDS and trafficking of women and children, including awareness and preventive education programs. The	Ethnic Minority Development Framework and Plan for each core road as necessary

		<p>consultant will be required to propose implementation arrangements and detailed cost estimates.</p> <p>In accordance with requirements for a sector loan, the TA study will identify the type and significance of project impacts on ethnic minority people for the project in general, and for specific project roads, as well as the need for development interventions. The TA consultants will design the selected interventions in consultation with communities and relevant agencies. An ethnic minority development plan framework will be prepared for the entire project. During the TA, the ethnic minority communities and relevant agencies will be consulted about local ethno-cultural situations, potential impacts and benefits from the roads, and possible mitigation and enhancement interventions .</p>	
<b>Other Risks/ Vulnerabilities</b>	Uncertain		Not Known

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
<b>A. Asian Development Bank Financing<sup>a</sup></b>			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	463.5	0.0	463.5
ii. Domestic Consultants	0.0	168.5	168.5
b. International and Local Travel	52.0	4.2	56.2
c. Vehicle Rental	0.0	70.0	70.0
d. Reports and Communications	15.0	23.0	38.0
2. Equipment <sup>b</sup>	15.0	0.0	15.0
3. Training, Seminars, and Conferences	0.0	20.0	20.0
4. Miscellaneous Administration and Support Costs <sup>c</sup>	0.0	34.0	34.0
5. Representative for Contract Negotiations	8.0	0.0	8.0
6. Contingencies	80.3	46.5	126.8
<b>Subtotal (A)</b>	<b>633.8</b>	<b>366.2</b>	<b>1,000.0</b>
<b>B. Government Financing<sup>d</sup></b>			
1. Counterpart Staff	0.0	100.0	100.0
2. Provincial Survey Staff	0.0	140.0	140.0
3. Others	0.0	10.0	10.0
<b>Subtotal (B)</b>	<b>0.0</b>	<b>250.0</b>	<b>250.0</b>
<b>Total</b>	<b>633.8</b>	<b>616.2</b>	<b>1,250.0</b>

<sup>a</sup> Japan Special Fund

<sup>b</sup> Equipment to be procured will include the following: 2 desktop computers, including standard office software; 1 printer; 1 scanner, 2 handheld geographic positioning units, 2 licensed copies of geographic information system software; 1 photocopier, 1 fax machine; and 2 digital cameras.

<sup>c</sup> Includes for office rental, supply of office equipment and utilities.

<sup>d</sup> In kind.

Source: Asian Development Bank estimates.

## OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The technical assistance (TA) study will consist of a subsector review component and a project preparation component. The subsector review component will address policy and institutional issues for the road subsector at the provincial level and the project preparation component will address the issues of design of the proposed ensuing investment project and preparing project processing documentation. The two components will be implemented concurrently.

### A. Sector Review Component

2. The work to be undertaken in this component will draw on existing and ongoing studies funded by Asian Development Bank (ADB)<sup>1</sup> and World Bank. Initial assessments under this component will be undertaken for the region as a whole; more detailed assessments will focus on provinces to be included in phase 1, the core subprojects, of a proposed ensuing investment project. In relation to the objective and scope of the TA, the consultants' scope of work will include, but not necessarily be limited to, the following:

- (i) Undertake a transport sector profile for the central region. The profile should review transport planning and coordination, the road network, the vehicle fleet and traffic, the relationship between roads and poverty, environmental issues, road sector expenditures and revenues, maintenance arrangements, road safety, and axle load control.
- (ii) Prepare an institutional development strategy for the provincial authorities to administer the road network in an efficient, effective, and sustainable manner based on an evaluation of their capacity and capabilities. Prepare a training needs assessment to address weaknesses in administrative, managerial, and technical skills. Based on the strategy, recommend a project implementation structure that will allow any subsequent project to be effectively prepared, managed, and implemented. Assess the capacity of responsible institutions at central and provincial levels to plan, manage, implement, finance, and monitor effective land acquisition, compensation, and resettlement and identify capacity building measures to be included in the project. Define project implementation arrangements, demonstrate the relationship between relevant institutions, and indicate the responsibilities of each unit in a participatory implementation framework.
- (iii) Prepare a strategy to improve the planning, budgeting, and implementation of maintenance of provincial and district roads, including an assessment of the potential for the involvement of the private sector in road maintenance. This work will draw on, and be consistent with, the work being undertaken under the Rural Transport 2 (RT2) Project funded by the World Bank and the Department for International Development (DFID) funded regarding capacity building for maintenance of rural roads under provincial governments. Review the fiscal budgetary allocations of provincial governments including those for maintenance and investments for transport project.

---

<sup>1</sup> For example, Booz-Allen Hamilton. 2002. *Improvement of Highway Management Capacity of the Ministry of Transport, and Implementation of Sector Development Policy*. Hanoi, Vietnam: Ministry of Transport.

- (iv) Analyze the contractors available in the central region in terms of numbers, capability, resources, etc., and develop an approach to effectively involve these contractors in a subsequent project.

## **B. Project Preparation Component**

3. In relation to the objective and scope of the TA, the consultants' scope of work will include, but not necessarily be limited to, the items in paragraphs 4–6.

4. For data gathering and project assessments, the consultants will do the following:

- (i) Based on the geographic information system (GIS) databases prepared under the RT2 project, design a data collection system to input into these existing GIS databases information for the proposed project. The new data should be compatible with existing data, particularly that associated with poverty mapping. The consultant will be expected to work closely with the RT2 consultant for this work.
- (ii) A list of subprojects to be addressed under this TA has been agreed between the Ministry of Transport (MOT) and ADB and will be provided to the consultant. Each subproject, as listed by the MOT, consists of a single road, a section of a road, or an individual bridge. Assess each subproject's connections with (a) the national and provincial road network (connection roads), and (b) the communities that will use the subproject to access the national and provincial road network (community roads). The combination of each subproject and its associated connection and community roads will be termed the subproject network. When upgrading work is required for a connecting or community road, this road will be included as new subproject. However, if upgrading of community roads is required but is only economically justified to an unsealed standard, then the upgrading will be adopted under the provincial government's own works program. Where this applies, confirm that budget is available and that the works have been included in the provincial government's work program.
- (iii) Review TA and physical infrastructure, social and economic development projects recently completed, under way, or proposed in the selected provinces. Include all sources of assistance both external and internal.
- (iv) Assess the environmental impact of each subproject. Clearly identify any subproject that may impact on ecologically sensitive areas or sites of cultural or historical significance.
- (v) Investigate the extent of unexploded ordnance (UXO) contamination in the project area and determine the extent, if any, of clearance that will be required under the project. Prepare documentation and cost estimates to implement such clearance under the project.
- (vi) Categorize and prioritize the subprojects using a simple computer spreadsheet based on a screening analysis and taking into account traffic and potential vehicle operating cost savings, influence area development potential, population density, improvement cost, environmental, social, and other relevant factors. Based on a sample of typical sections representing the major social and economic

characteristics and terrain and soil types in the study area, prepare a detailed economic evaluation of the needed improvements. Sample subprojects for this purpose should be of a wide enough variety that a list of economically justified improvement options can be prepared and applied to all subprojects throughout the study area. This list will show, using a multidimensional matrix, the level of improvement that meets an economic rate of return of at least 12%. Prepare a social index to identify and help prioritize roadwork improvements. This work should be based on the analysis approach and matrix developed under TA 3455-VIE: Viet Nam Provincial Roads Improvement Project.

- (vii) Based on a socioeconomic survey, prepare traffic forecasts by representative traffic types taking into account population growth, production increases, economic activity, and income. The forecasts should be developed in sufficient detail that they can be applied to each subproject to be considered under the study.
- (viii) Based on the results of engineering investigations, prepare preliminary designs, construction quantities, and overall construction costs for each project road section for each improvement option. The costs should be broken down into foreign exchange, local currency, and tax components. Indicate direct and indirect foreign exchange separately.
- (ix) Calculate economic vehicle operating costs for each subproject with and without the proposed improvements, based on estimated changes in road surface roughness, and quantify the benefits (using shadow prices) for each project road section and for each improvement option, including benefits in terms of time savings generated from reduced congestion and travel distance, road maintenance savings, traffic accidents, etc.
- (x) Conduct an economic and distributional evaluation of all subprojects, individually and jointly, in accordance with ADB's *Guidelines for Economic Analysis of Projects* by comparing with and without subproject cases. Identify risks and undertake appropriate risk and sensitivity analysis of the economic internal rate of return, in accordance with ADB's *Handbook for Integrating Risk Analysis in the Economic Analysis of Projects*. In addition, prepare an economic and distribution analysis for each subproject network.
- (xi) Based on item (x), conduct a distributional analysis of net project benefits in accordance with ADB's *Handbook on Poverty and Social Analysis* and *Handbook for Integrating Poverty Impact in Economic Analysis of Projects*. Calculate the poverty impact ratio and the cost effectiveness of the project of reducing poverty. Assess the change in impact if the analysis is performed at the subproject networks level. Undertake appropriate risk and sensitivity analysis of the poverty impact ratio.
- (xii) Review data on poverty and prepare a poverty and stakeholder profile for each of the sample subprojects in item (vi). Prepare a poverty analysis focusing on the impact of road network improvements on social service delivery and movement of goods and people, and their impact on poverty and employment. Include an assessment of the ability of the poor to benefit from resulting economic activities and examine the barriers that could prevent the poor from benefiting from

economic growth. The poverty analysis will make use of the findings of a forthcoming TA on transport service networks for the poor, which will focus on transport services in two provinces in the central region, if these findings are available. Summarize findings on impacts, risks, and barriers and include the channels through which impacts occur in a matrix form.

- (xiii) Evaluate the likely social impact of the proposed project, particularly the potential for indigenous peoples or other vulnerable groups to be significantly and adversely affected. Describe the social justification of the proposed project. Prepare a gender strategy to provide women of poor rural and ethnic minorities, increased opportunities to learn new skills and decision-making, and take advantage of new employment and income generating opportunities. Assess the risk of spreading human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) and other sexually transmitted diseases (STDs) and trafficking of women and children. Identify existing or planned programs of the Government, nongovernment organizations (NGOs), and other agencies. Design appropriate mitigation measures, and include cost estimates and implementation arrangements.
- (xiv) Assess land issues, titles, and the potential impact of in-migration on the land use rights of the communities along the roads. Identify means of protecting the land-use rights of the communities along the roads.

5. For selection of core subprojects and detailed project preparation, the consultants will do the following:

- (i) Based on the provincial road inventory, and consultations with local stakeholders and NGOs, and the results of the economic analysis, prepare a list of subprojects by priority to be improved, warranted improvement options, and estimated improvement costs. Package the subprojects into a series of phases to be implemented under an investment project that may be financed from one or more loans. Subproject roads for the first phase, the core subprojects, will be selected, analyzed, and prepared in full for implementation under subsequent financing. This work will include preparation of detailed cost estimates with subdivided foreign exchange cost, local currency costs, and customs duties and taxes, prequalification documents, and tender documents.
- (ii) For the core subprojects prepare an initial environmental examination, and summary thereof, following ADB's *Environmental Guidelines for Selected Infrastructure Projects* and other environmental assessment requirements. The examination will identify environmentally sensitive areas and receptors in the project areas, assess potential environmental impacts, propose environmental mitigation measures and a management plan, identify environmental management capacity of the institutional arrangements in terms of road improvements and management, and recommend whether there is a need for an environmental impact assessment. Prepare an environmental impact assessment when needed.
- (iii) Identify and prepare socioeconomic profiles of the project affected communities in terms of household sizes, demographic trends, income sources and levels, occupations, socioeconomic conditions, social service infrastructure, and social

organizations. Prepare the profiles in accordance with (a) relevant ADB guidelines and publications, including *Handbook on Poverty and Social Analysis* (2001), *Handbook on Resettlement* (1998), and *Handbook for Incorporation of Social Dimensions in Projects* (1994); and (b) the requirements of Viet Nam. The profiles will include the gender and local ethnic minority profiles. Carry out any further surveys as necessary.

- (iv) For core subprojects, undertake social analysis as per the guidelines in (iii) and ADB's *Policies on Involuntary Resettlement* (1995), *Indigenous Peoples* (1999), and *Gender and Development* (1998). Identify the affected populations and principal beneficiaries of the project. Implementable resettlement plans and frameworks should be prepared as per ADB's *Policy on Involuntary Resettlement* and *Handbook on Resettlement: A Guide to Good Practice*. Preparation should involve full stakeholder participation including participation of the executing and implementing agencies. Assist the executing agency to prepare an information brochure to be distributed to affected people.
  - (v) Investigate aspects of provincial road safety and include them in the designs, as appropriate. Make recommendations for improving safety on the study roads.
  - (vi) Review and update the approach prepared under the ADB Provincial Roads Project for providing low-cost, all-weather pavement for all provincial and district roads. Based on these approaches, prepare technical specifications for the improvement works.
  - (vii) Prepare sample contract documents, specifications, and cost estimates for typical improvement contracts, all documents being as simple as possible. Standardize contract documents have been adopted in Viet Nam. Therefore, for contracts to be procured by local competitive bidding, the bidding documents should follow the agreed formats used under other projects. Refer to the documents and specifications prepared for the World Bank-financed rural transport 1 and rural transport 2 projects, and the ADB-financed provincial road improvement project. Also refer to World Bank's sample bidding documents prepared in Vietnamese. For contracts to be bid by international competitive bidding, documentation must follow the ADB's *Standard Bidding Documents for Procurement of Civil Works*.
6. For preparation of implementation documentation, the consultants will do the following:
- (i) Prepare manuals for project identification, preparation, management, technical aspects of road construction, procurement, and other relevant activities. The manuals should be based on a similar manual prepared under ADB's Provincial Roads Improvement Project but revised to incorporate lessons learned during the implementation of this project. Prepare a training program to be implemented at the central and provincial level on these and other relevant subjects.
  - (ii) Design a project performance management system in accordance with ADB's Guidelines. Provide cost estimates and implementation arrangements.
  - (iii) Prepare prefeasibility and feasibility reports for submission to the Government of Viet Nam that met the requirements of Decree No. 52/CP.