

ASIAN DEVELOPMENT BANK

GRANT 0017-TIM

ROAD SECTOR IMPROVEMENT PROJECT

PROJECT ADMINISTRATION MEMORANDUM

October 2005

CURRENCY EQUIVALENT

Timor-Leste uses the US dollar as its currency

ABBREVIATIONS

ADB	–	Asian Development Bank
DRBFC	–	Directorate of Roads, Bridges, and Flood Control
EIRP	–	Emergency Infrastructure Rehabilitation Project
EIRR	–	economic internal rate of return
EMP	–	environmental management plan
EU	–	European Union
GDP	–	gross domestic product
HIV/AIDS	–	human immunodeficiency virus/acquired immunodeficiency syndrome
IEE	–	initial environmental examination
km	–	kilometer
LCB	–	local competitive bidding
MOH	–	Ministry of Health
MPW	–	Ministry of Public Works
NGO	–	nongovernment organization
PIA	–	poverty impact assessment
PMU	–	project management unit
PNA	–	protected national area
SIEE	–	summary initial environmental examination
STI	–	sexually transmitted infection
TA	–	technical assistance
UN	–	United Nations

NOTE

The fiscal year of the Government ends on 30 June

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GRANT PROCESSING HISTORY

Fact-finding	:	17–26 May 2005
MRM	:	17 June 2005
SRC Waiver	:	8 August 2005
Appraisal	:	Not required
Grant Negotiations	:	17–25 August 2005
Management Approval	:	2 September 2005
Board Approval	:	27 September 2005
Milestones		
Grant Signing	:	20 January 2006
Grant Effectiveness	:	3 March 2006
Missions		
Inception Mission	:	18–27 October 2005
Review Mission	:	21 August to 1 September 2006

I. PROJECT DESCRIPTION

A. Project Area and Location

1. Timor-Leste is one of the least-developed countries in the world. Per capita gross domestic product was estimated at \$405 in 2004. Officially, more than 40% of the population is reported to live under \$0.55 per day, the national poverty line. However, according to the estimates of Asian Development Bank (ADB) technical assistance for Transport Sector Improvement, poverty prevalence is likely as high as 88%, and approximately 46% of the population live in absolute poverty. During the 1999 conflict, most communication and power facilities were destroyed. In spite of some restoration efforts, postal services are still closed except in Baucau and Dili. The electrification ratio for all households is only 20%; 95% of rural households are without electricity. About 48% of the population does not have access to safe water supply, and 69% does not have access to adequate sanitation facilities. Access to health facilities remains problematic. The time and money costs to reach a community health center or a hospital are substantial. Life expectancy is low—less than 60 years. Currently, about a third of children are not enrolled in primary school; 20% of the enrolled do not attend classes. More than half the population is illiterate. Markets are either nonexistent or access is prevented due to mountainous topography, poor transport system, and lack of transport services.

2. As a new nation, Timor-Leste faces many challenges. The most pressing issues include (i) sustained economic growth, (ii) poverty reduction, (iii) employment, (iv) a legal and institutional framework to manage and administer the new nation state and transform the agrarian subsistence production to a market-oriented economy, and (v) weak human and institutional capacity.

3. In the short term, economic growth and employment have to come from infrastructure investments. The Government recognizes that infrastructure is of overarching importance to all sectors of the economy and society; and that improving infrastructure, particularly the transport system, is critical in fostering private sector development, improving agricultural productivity, reducing poverty, promoting investment and human development, and strengthening government capacity to deliver services. ADB's country strategy and program update for 2005 identifies infrastructure development and institutional capacity building as the major areas for ADB assistance. ADB has recently approved a technical assistance to address cross-sectoral infrastructure issues and technical capacity building in the road sector. The Project, therefore, will focus on physical road infrastructure and its implementation. As a post-conflict country, Timor-Leste is eligible for grant financing from the Asian Development Fund.

B. Impact and Outcome

5. The Project will rehabilitate and maintain four crucial roads in agricultural areas to promote economic and social development, and explore low-cost, community-based modalities for road maintenance.

6. The Project will produce the following outputs: (i) rehabilitation and improvement of about 123 kilometers (km) of core network roads; (ii) labor-intensive routine road maintenance on 45 km; (iii) sound and sustainable road maintenance policies; (iv) an efficient bidding and contracting system for engaging communities in road maintenance through local small contractors; (v) improved project management, supervision, and monitoring; and (vi)

identification of modalities to ensure sustained rehabilitation and maintenance of rural feeder roads.

C. Project Outputs

8. The Project will produce the following outputs: (i) rehabilitation and improvement of about 123 km of core network roads; (ii) labor-intensive routine road maintenance for 45 km; (iii) sound and sustainable road maintenance policies; (iv) an efficient bidding and contracting system for engaging communities in road maintenance through local small contractors; (v) improved project management, supervision, and monitoring; and (vi) identification of modalities to ensure community-based, gender-inclusive rehabilitation and maintenance of rural feeder roads. Project activities include

- (i) rehabilitation of three road sections to fair conditions: (a) Oeleu–Zumalai (35.9 km), (b) Aituto–Same (30.8 km), and (c) Viqueque–Uatucarbau (55.8 km), by strengthening the base, resurfacing, protecting and stabilizing slopes, and improving drainage system and shoulders;
- (ii) routine maintenance for Iliomar–Lospalos (45 km), to be implemented by small local contractors using labor-intensive methods, and include patching, improving side drains, repairing culverts, improving shoulders, constructing lined drains, and bioengineering;¹
- (iii) international and domestic consulting services for project management, construction supervision, establishment of road maintenance policies, road maintenance training and supervision, and socioeconomic impact monitoring; and
- (iv) community empowerment initiatives, including (a) identification of community-based and gender-inclusive modalities for rehabilitation and maintenance of rural feeder roads adjacent to the project roads; (b) HIV/AIDS prevention and road safety awareness programs along the project roads to be implemented by an international NGO with expertise in community-based and labor-intensive infrastructure development and service delivery in one selected subdistrict along the project roads; and (c) monitoring of employment targets for women.

D. Special Features

1. Project Management and Supervision

1. Actual implementation of the second EIRP (EIRP-2) did not commence until 2 years after its effectiveness. Experience with EIRP-2 illustrates the crucial role of the PMU. Currently, the PMU has four staff: a project manager, chief technical adviser (international), road engineer, and financial administrator. They are working effectively and efficiently to implement EIRP-2. The proposed Project will maintain and strengthen the PMU to enable it to accommodate increased responsibilities. One highway engineer will be added to the PMU's current staff. Consulting services, comprising 212 person-months of international and domestic consulting services, will assist the PMU in supervising civil works contracts and environment mitigation measures. Another 8 person-months of international consulting and 10 person-months of domestic will assist the PMU in monitoring and evaluating the Project's socioeconomic impacts.

¹ Bioengineering is the use of vegetation, terracing, and construction of efficient drainage systems to stabilize road embankments and slopes. The purpose of the vegetation is to minimize water penetration into the ground layers and to reduce the risk of erosion of the surface soils to ensure long-term sustainability of the roads. Bioengineering includes tree planting with deep-rooted species to reduce the risk of shallow slides and debris flow.

The international consultant will provide the domestic consultant with hands-on training and ensure knowledge transfer.

2. Prioritization of Road Investments

2. Rehabilitating and maintaining an extensive road network requires sizeable investment. Given the constraints of financial resources and institutional capacity, prioritizing road investments to maximize economic and social benefits is crucial.

3. To define the project scope and develop a medium- to long-term road investment program, 1,650 km of the core road network and relevant district roads were surveyed and traffic counts carried out at 30 locations across the country. Based on the road characteristics and conditions, traffic volume, and proposed interventions, rigorous economic analyses were conducted, using the highway design and management model (HDM-4) (a model for searching for an optimum combination of investments and interventions for the road sector) developed jointly by the World Bank and ADB, among others, to identify road interventions that give the best economic net present values with least-cost investments. The three roads, comprising five road sections to be financed by the Project, top the list in terms of economic net present value.

4. The 5–10-year prioritized road investment program based on the economic analysis will give directions for future ADB assistance in the road sector, benefit aid coordination to ensure consistent road sector development planning, and serve as the basis for the Government's own road sector investments.

3. Aid Coordination and Project Complementarity

5. In the process of selecting road sections for the Project, close consultations with aid agencies involved in the road sector, particularly the Japan International Cooperation Agency and EU, were conducted to maximize complementarities and avoid overlap. The Aituto–Same road connects to the Dili–Suai road, which is currently under repair funded by the Japan International Cooperation Agency. Rehabilitation of the Viqueque–Ilioma road section complements the EU's bridge project, which is now at the design stage, and ensures that the whole road is in fair condition. The Project is also complementary to EIRP-2, which is repairing short damaged road sections from Maliana and Zumulai.

4. Road Safety and Sustainability

6. Road fatalities in Timor-Leste are among the highest in southeast and south Asian countries with more than 20 deaths per 10,000 vehicles. The potential for even greater accident rates is high, considering the increase in vehicles, growing population, and increased vehicle speeds resulting from improvements to the road network. However, data on traffic accidents and fatalities show that most occur in urban areas, and especially in Dili. A national road safety strategy was prepared, but implementation has not started.

7. Road accidents have various causes, including poor road design standards, driver behavior, and lack of awareness among villagers. Road widening and realignment are not justifiable at this stage due to demand constraints. The Project includes a pilot road safety awareness campaign program to be implemented by an NGO.

8. Road sustainability is a major challenge. This is not mainly because of financial constraints and difficult geographical conditions; but rather capacity constraints to establish road maintenance policies, and to plan, organize, and execute capital and maintenance works. The Government is expecting total revenues to be above \$100 million per year for an indefinite

period, and has committed about \$190 million from the budget for road maintenance during the Project. In spite of growing capacity, spending the budget funds remains a challenge for the Government. The Project, through the routine road maintenance Iliomar–Lospalos component, will establish sound and sustainable road maintenance policies for the road sector and project roads, and institutionalize a bidding and contracting system for engaging local small contractors from communities in routine maintenance. This will help the Government continue with its own road maintenance investments and preserve road assets at low costs.

5. Labor-Intensive Maintenance

9. Road assets can be prevented from rapidly deteriorating if timely routine maintenance can be done. Routine road maintenance mainly involves clearing vegetation from shoulders, improving and shaping shoulders, clearing drains and culverts, and constructing stone masonry-lined drains, which can be done by labor without heavy equipment. Labor-intensive routine maintenance will help extend the life of roads, and generate business opportunities and income for local communities. Under the Project, the Iliomar–Lospalos road section, which is in relatively good and maintainable condition, was selected for routine maintenance using labor-intensive methods. The ten contract packages for the road will target small contractors from local communities. An international road maintenance specialist will be provided to train the local contractors, improve their maintenance skills, and ensure works are done properly. With the establishment of road maintenance policies, institutionalization of a bidding and contracting system for engaging local small contractors, and skill development, systematic labor-intensive road maintenance is expected in the future to preserve assets, while generating income and job opportunities.

6. Gender Inclusive Development

10. In light of women's traditional exclusion from employment opportunities derived from road construction, the Project will support socioculturally sensitive modalities to ensure women's involvement in road rehabilitation and maintenance. In this respect, MPW—through the PMU—will encourage civil works contractors to increase the percentage of women workers to 30% of wage-laborers (including at least 75% of bioengineering activities). The community empowerment initiatives for sustainable rehabilitation and maintenance of selected rural feeder roads will have a strong gender focus and support a broad range of initiatives that include (i) participatory and gender-inclusive identification and selection of rural feeder roads to be rehabilitated under the Project; and (ii) skills transfer to women in bioengineering, agroforestry, and agricultural extension, combined with literacy, nutrition, reproductive health, and HIV/AIDS prevention. The initiatives will include the design of sustainable modalities to ensure gender-inclusive maintenance of rehabilitated feeder roads.

7. HIV/AIDS Prevention and Reproductive Health

11. Although accurate data on HIV prevalence are not available, recent surveys jointly carried out by MOH and the World Health Organization estimate HIV at 0.64% of the population.² In light of the potential impact of road rehabilitation on the spread of HIV/AIDS, the Project will fund culturally sensitive and gender-responsive HIV/AIDS awareness and education initiatives along the project road; and target high-risk groups, including local construction workers, long-distance drivers, and women in the campsites and in the corridors of influence along project roads. These initiatives—to be funded as part of the community empowerment

² Ministry of Health. 2002. *HIV/AIDS Summary Report, 2002*. Dili.

initiatives (component 4)—will complement Government-led initiatives for HIV/AIDS prevention, be implemented in consultation with MOH and local government agencies, and are in line with the National Strategic Plan for a Comprehensive and Multi-Sectoral Response to HIV/AIDS and STI 2002–2005 (2002).

8. Institutional Capacity Development in the Road Sector

12. The ADB country strategy and program update for 2005-2006 identified institutional capacity development as central to all activities. Four infrastructure sector capacity development TAs are programmed, including one approved in July 2005³. The TA is designed to address infrastructure institutional issues across sectors; and the shortage of qualified road engineers to plan, execute, and supervise the road investment projects. The TA will train 60 local individuals with some technical background, both from the Government and private sector.

13. Although the Project focuses on physical road infrastructure and its implementation, in light of the capacity-building TA, the Project will provide an ideal training ground for the trainees to practice what they have learned from the courses and acquire practical experience in project implementation, construction supervision, and contract management. The PMU has already produced a construction supervision guide and trained four Government officials by involving them in project implementation and supervision. With more technical people available, more staff can be trained by working with the PMU and international consulting team.

9. Stakeholder Participation and Consultation

14. Extensive public consultations were conducted with Government officials; international/national NGOs involved in community-based infrastructure development, service delivery, and HIV/AIDS prevention; as well as local communities in the project area. Consultations aimed to plan and prioritize road investments, assess the potential impacts of proposed interventions, and mitigate associated adverse risks. A consultation workshop was successfully conducted on 7 March 2005. During road condition surveys of the national and district road network and socioeconomic surveys, the TA consulting team⁴ conducted 10 key informant interviews with district administrators, district development officers, village (*suco*) and hamlet chiefs, and women's groups and associations. Nine village focus group discussions were held. Sample surveys with households, vehicle operators, passengers, and freight shippers were conducted. In total, about 600 stakeholders were consulted. They showed keen interest in sharing their perceptions about the causes of poverty, approaches to poverty reduction, and potential impact of road improvements on the economic and social development of the villages. Road improvement ranked among the main priorities, which also include education, skill training, fertilizers, farming machines, and irrigation to increase farming productivity and the water supply system. Local community concerns were considered and reflected in the project design, particularly in designing the community empowerment component.

³ ADB. 2005. *Technical Assistance to the Democratic Republic of Timor-Leste for Infrastructure Sectors Capacity Development*. Manila.

⁴ ADB. 2001. *Technical Assistance to the Democratic Republic of Timor-Leste for Transport Sector Improvement*. Manila.

II. COST ESTIMATES AND FINANCING PLAN

A. Detailed Cost Estimates

15. The total cost of the Project is estimated at \$12.50 million, with a foreign exchange cost of \$5.08 million and local cost of \$7.42 million (Appendix 1). The costs of different components are summarized in Table 1.

Table 1: Cost Estimates
(\$ million)

Item	Foreign Exchange	Local ^a Currency	Total Cost
A. Base Cost			
1. Civil Works	3.52	5.77	9.29
2. Consulting Services			
a. Engineering Design and Preparation of Bidding Documents	0.14	0.06	0.20
b. Project Management	0.24	0.24	0.48
c. Project Performance Monitoring	0.19	0.02	0.21
d. Construction Supervision	0.28	0.27	0.55
e. Road Maintenance Policies, Training and Supervision	0.08	0.00	0.08
f. Financial Auditing	0.01	0.00	0.01
3. Community Empowerment Initiatives (Nongovernment Organization)	0.16	0.40	0.56
Subtotal (A)	4.62	6.76	11.38
B. Contingencies			
1. Physical Contingencies ^b	0.27	0.41	0.68
2. Price Contingencies ^c	0.12	0.21	0.33
3. Consulting Services	0.07	0.04	0.11
Subtotal (B)	0.46	0.66	1.12
Total	5.08	7.42	12.50

^a Including taxes and duties of approximately 2%.

^b Physical contingency is computed at 7% of base cost for civil works.

^c At 3.5% per annum for the local cost. For the foreign exchange cost, 3% in 2006 and 2.8% in 2007.

Source: Asian Development Bank estimates.

B. Financing Plan

16. The Government has requested a grant of \$10 million from ADB's Asian Development Fund to help finance the Project. ADB will finance all foreign exchange cost, local cost for consulting services, and community empowerment initiatives (NGO); and 60% of the local cost of civil works, while the Government will provide \$2.5 million, financing the remaining local cost of civil works, including contingencies, taxes, and duties. The financing plan is presented in Appendix 2 and summarized in Table 2.

Table 2: Financing Plan
(\$ million)

Foreign	Local	Total
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Source	Exchange	Currency	Cost	Percent
Asian Development Bank	5.08	4.92	10.00	80
Government ^a	—	2.50	2.50	20
Total	5.08	7.42	12.50	100

^a Committed from the budget.

Source: Asian Development Bank estimates.

C. Allocation of Grant Proceeds

17. The Categories of goods, services and other items to be financed out of the proceeds of the Grant and the allocation of amounts of the Grant to each category is summarized in Table 3.

Table 3: Allocation and Withdrawal of Grant Proceeds

Amount Allocated (\$)				ADB Financing
No	Item	Category	Subcategory	%
1	Civil Works	6,990,000		
1A	Aituto-Same		1,683,000	76
1B	Viqueque-Uatucarbau		1,032,000	76
1C	Oeleu-Zumalai		3,971,000	76
1D	Iliomar-Lospalos		304,000	61
2	Consulting Services	1,525,000		100*
3	Community Empowerment Initiative	560,000		100*
4	Unallocated	925,000		
	Total	10,000,000		

*Excluding of local taxes

18. No withdrawals from the Grant Account shall be made in respect of any local taxes.

19. Except as ADB may otherwise agree, the items of the Categories and subcategories listed in the Table shall be financed out of the proceeds of the Grant on the basis of the percentages set forth in Table 3.

20. Notwithstanding the allocation of Grant proceeds set forth in Table 3, (a) If the amount of the Grant allocated to any Category appears to be insufficient to finance all agreed expenditures in that Category, ADB may, by notice to the Government, (i) reallocate to such Category, to the extent required to meet the estimated shortfall, amounts of the Grant which have been allocated to another Category but, in the opinion of ADB, are not needed to meet other expenditures; and (ii) if such reallocation cannot fully meet the estimated shortfall, reduce the withdrawal percentage applicable to such expenditures in order that further withdrawals under such Category may continue until all expenditures shall have been made; and (b) if the amount of the

Grant allocated to any Category appears to exceed all agreed expenditures in that Category, ADB may, by notice to the Government, reallocate such excess amount to any other Category.

III. IMPLEMENTATION ARRANGEMENTS

A. Executing and Implementing Agency

22. Ministry of Public Works (MPW) will be the Executing Agency, responsible for overall project management. MPW will operate through the PMU established under MPW for EIRP-2.

B. Project Management Unit

23. The Project will use the PMU established under MPW for EIRP-2. The PMU will be strengthened for the Project and (i) handle bidding processes, (ii) manage contracts, (iii) monitor project progress, (iv) prepare withdrawal applications, (v) prepare project progress reports and project completion report, (vi) maintain project accounts and complete grant financial records for auditing, and (vii) monitor the Project's socioeconomic impacts. It will ensure that two resident engineer offices staffed with a team of international and domestic consultants are established in Baucau and Maliana to oversee construction supervision and environmental monitoring, and ensure quality. To the extent possible, it will involve regional MPW offices in Baucau, Maliana, and Same in project implementation.

IV. IMPLEMENTATION SCHEDULE

24. The Project will be implemented over 2 years. The prerehabilitation activities—detailed design, preparation of bidding documents, tendering, and awarding of contracts—will start in January 2006. Commencement of civil works is targeted for November 2006, with completion in December 2007. The implementation schedule is attached as Appendix 2.

V. COST ESTIMATES AND FINANCING PLAN DURING IMPLEMENTATION

25. The economic costs of the Project are (i) the capital cost, including labor, equipment and materials, consulting services, and physical contingency; and (ii) the costs of maintaining the project roads. The economic benefits arise from (i) savings in vehicle operating costs, particularly repair costs, due to the improved road conditions; (ii) savings in maintenance costs; (iii) time savings for road users; and (iv) benefits to generated traffic. The Project will have other benefits, such as improved food security and access to economic and social services, which were not included in the economic internal rate of return (EIRR) calculation.

26. Using a 12% discount rate, the net present value is \$6.85 million and the EIRR 24.1%. The vehicle operating cost savings account for the majority of the benefits (95% of the total). The results of the sensitivity analysis confirm the Project's economic viability. The switching value⁵ for increased rehabilitation costs is determined to be 92%, and the switching value for decreased benefits 44%. In the worst case scenario—a combination of increased costs and decreased benefits—the net present value would be reduced to \$3.42 million, and the EIRR to 17.7%. Detailed economic analysis is in Appendix 3.

⁵ The switching value shows the percentage increase in a cost variable (or decline in a benefit variable) required for the net present value to become zero, which is the same as the EIRR reducing to the cut-off level of 12%.

VI. CONSULTANT RECRUITMENT

27. International and domestic consulting services will be required for (i) engineering design and preparation of bidding documents; (ii) construction supervision; (iii) road maintenance, including formulation of policies, training, and supervision; (iv) project management; (v) socioeconomic monitoring and evaluation; (vi) financial auditing; and (vii) community empowerment initiatives. The Project will fund a total of 132 person-months of international and 310 person-months of domestic consulting services (Table 4).

Table 4: Consulting Services
(person-months)

Item	International	Domestic
1. Engineering Design and Preparation of Bidding Documents	20	0
2. Construction Supervision	32	180
3. Road Maintenance (policies, training, and supervision)	10	0
4. Project Management	24	120
5. Socioeconomic Monitoring and Evaluation	8	10
6. Financial Auditing	2	0
7. Community Empowerment Initiatives	36	0
Total	132	310

Source: Asian Development Bank estimates.

28. Consulting services for engineering design, construction supervision, project management, road maintenance policies, training and supervision for maintenance, and socioeconomic monitoring will be engaged in accordance with ADB's *Guidelines on the Use of Consultants*. Due to Government agencies' limited capacity to implement grassroots initiatives, an international NGO will be recruited, using the direct selection method, to implement the community empowerment component. With the assistance of the ADB Fact-Finding Mission, the Government has identified CARE Timor-Leste, an experienced international NGO, to implement the component. CARE is the only international NGO whose geographic coverage is consistent with the planned project coverage. Its strategy and priorities are consistent with ADB's program of assistance in the country. Its demonstrated track record of involvement in community-based and labor-intensive infrastructure development and service delivery, including community-based HIV/AIDS prevention, is in line with the objective and scope of the component. The terms of reference for community empowerment component are attached in Appendix 4.

A. Advance Action

29. The Government requested ADB approval of advance action for recruitment of consulting services, and procurement of civil works. The approval of advance action was given during the Management Review Meeting. Advance action covers invitation of bids, bidding, and bid evaluation, but will not include contract awards. The advance action will be undertaken in accordance with ADB's *Guidelines for Procurement* and *Guidelines on the Use of Consultants*. The Government was advised that approval of the advance action does not commit ADB to financing the Project.

VII. PROCUREMENT

30. All procurement under the Project, including both ADB and the Government-financed packages, will follow ADB's *Guidelines for Procurement*. The civil works will be divided into

seven packages, all to be procured using local competitive bidding procedures (Appendix 6). These procedures are justified because of the good experiences under EIRP-2 and existence of a competitive construction sector, in which joint ventures and foreign contractors are permitted to bid. Postqualification procedures will be used to shorten the bidding process. Technical and financial qualifications of contractors will be reviewed in conjunction with the review of the bid proposals. Only contractors with adequate technical and financial capacities will be allowed to bid for several packages. They may be awarded more than one contract based on the least-cost combination of contracts. The relevant sections of ADB's Anticorruption Policy will be included in all documents and contracts related to the bidding and project implementation.

VIII. DISBURSEMENT ARRANGEMENTS

31. The grant will be disbursed in accordance with ADB's *Loan Disbursement Handbook*. The disbursement procedures will include direct payments, imprest account, and reimbursements. The PMU will open and maintain an imprest account separate from the one for EIRP-2 in a domestic commercial bank in Dili. The maximum amount in the account will be either 10% of the total ADB grant or equivalent to 6 months of expenditure, whichever is lower.

32. MPW, through the PMU, will maintain a separate account for the Project and prepare separate financial statements, indicating sources and application of funds, and have them audited by the international accountant engaged by the Project. The audited project accounts and the auditor's reports will be provided to ADB within 6 months after the end of each financial year. MPW, through the PMU, will prepare and submit to ADB quarterly project progress reports and a project completion report within 3 months after project completion.

33. Except as ADB may otherwise agree, the Government shall establish, immediately after the effective date, an imprest account at a domestic commercial bank in Dili. The imprest account shall be established, managed, replenished and liquidated in accordance with ADB's "Loan Disbursement Handbook: dated January 2001, as amended from time to time, and detailed arrangements agreed upon between the Government and ADB. The initial amount to be deposited into the imprest account shall not exceed \$1,000,000.

IX. PROJECT PERFORMANCE MONITORING AND EVALUATION

34. ADB and the Government will agree on a set of indicators for monitoring and evaluating project performance in relation to its goals and purposes, with an emphasis on poverty reduction, prior to project commencement. Eight person-months of international consulting services and 10 person-months of domestic consulting services are provided under the Project to establish and monitor indicators, and evaluate project performance. The international consultant will work with the domestic consultant to establish gender disaggregated baseline data for social and poverty impact indicators, monitor the indicators during project implementation and at project completion, and assess the Project's socioeconomic impacts. The consultant will provide hands-on training to the domestic consultant on data collection, monitoring, and evaluation. The indicators may include (i) economic development and poverty indicators for the project area; (ii) industrial and agricultural outputs; (iii) transport costs and time; (iv) transport services and charges, (v) accident rates; (vi) level of social services including school enrollment and infant mortality; and (viii) jobs created in rehabilitation and maintenance. Employment impact indicators include information about unskilled laborers, poor laborers, and women laborers.

35. The Project will be reviewed every 6 months. Each review will cover all institutional, administrative, organizational, technical, environmental, social, poverty reduction, resettlement, economic, financial, and other relevant aspects that may have an impact on the performance of the Project and its continuing viability.

36. The design and monitoring framework is attached as Appendix 5.

A. Project Benefits, Impacts, Assumptions, and Risks

37. Traffic forecasts by vehicle type and type of traffic (normal and generated) were prepared for the project road sections for 20 years from 2005 to 2024. The forecasts are based on expected GDP growth and on the income elasticity for national transport demand in relation to GDP growth. According to the International Monetary Fund's medium-term outlook for Timor-Leste, GDP will grow at 5% per annum. Income elasticity of demand for normal traffic is estimated at 1.2. Therefore, growth for normal traffic is estimated at 6%. This applies to all types of vehicles and is justified, given the lack of secondary data and any previous studies. Generated traffic is assumed to represent 10% of normal traffic, adjusted for seasonal patterns. A conservative assumption is that no traffic will be generated on roads that are not in very poor overall condition. The traffic forecast for the project road sections is summarized in Appendix 6.

The matrix of activities is in Appendix 7.

X. MAJOR LOAN COVENANTS

38. In addition to the standard assurances, the Government has given the following assurances, which will be incorporated in the Grant Agreement:

- (i) **Counterpart financing.** The Government will make available on a timely basis \$2.5 million from its ordinary budgetary allocations as counterpart financing to ensure completion of the Project.
- (ii) **Project management.** The Government, through MPW, will maintain the PMU established under EIRP-2 and will provide office accommodation for the PMU.
- (iii) **Progress reports.** During project implementation, the Government, through the PMU, will submit to ADB quarterly project progress reports and a project completion report within 3 months after physical completion of the Project.
- (iv) **Rehabilitation quality.** The Government, through the PMU, will ensure that the project roads are rehabilitated in accordance with the design technical specifications, and that construction supervision, quality control, and contract management are carried out in accordance with internationally accepted standards.
- (v) **Road maintenance policy.** Six months before completion of the Project, the Government, assisted by the road maintenance consultant, will establish maintenance policies for the road sector and project roads, including budget and implementation arrangements, and submit them through the PMU to ADB for review.
- (vi) **Environment.** The Government, through the PMU, will ensure that (a) the IEE is reviewed and updated at the engineering design stage; (b) the Project complies with the EMP reflected in the updated IEE, all applicable national environmental laws, regulations, and guidelines, and ADB's *Environment Policy* (2002); (c) the

EMP in the IEE is reflected as part of bidding documents and civil works contracts; (d) any adverse environmental impacts arising from the Project are minimized by implementing the agreed mitigating measures; and (e) environmental monitoring is done properly by the construction supervision team.

- (vii) **Project performance monitoring and evaluation.** The Government, through the PMU, assisted by the international and domestic consultants engaged under the Project, will monitor and evaluate project impacts. The Government will discuss and agree with ADB on the indicators and baseline data prepared by these consultants prior to the commencement of civil works, and will ensure that the consultants monitor and compare the data during project implementation and at project completion. The Government, through the PMU, will submit monitoring and evaluation reports to ADB 1 month after the completion of the consultants' field work. To the extent possible, the indicators and baseline data will make full use of gender-disaggregated data and information.
- (viii) **Labor laws.** The Government, through the PMU, will ensure that civil works contractors comply with all applicable labor laws and related international treaty obligations, and do not employ child labor for rehabilitation and maintenance activities.
- (ix) **Road safety.** The Government will ensure that MPW installs appropriate road safety facilities during project implementation, including pavement markings, traffic signs and signals, warning signs, and hazard barriers.
- (x) **Land acquisition and resettlement.** The Government will ensure that all project rehabilitation works are undertaken within existing rights-of-way. In the event of any unforeseen resettlement, the Government will inform ADB and prepare a resettlement plan or plans according to relevant laws and regulations, and ADB's Policy on *Involuntary Resettlement* (1995). The PMU will ensure that no construction of civil works commences until ADB has reviewed and approved the resettlement plan/s.
- (xi) **Gender and development.** The PMU will (a) encourage local contractors to employ 30% of women in road rehabilitation and labor-intensive maintenance of selected national roads (including at least 75% of those employed for bioengineering activities), (b) provide equal pay to men and women for work of equal type in accordance with national laws and international treaty obligations, and (c) provide safe working conditions for both male and female workers. Specific provisions to this effect will be included in the bidding documents. The PMU will be responsible for monitoring the employment targets for women by reviewing periodically the payroll statements of the construction contractors through the engagement of CARE Timor-Leste, and will reflect progress in achieving the employment targets for women in the project progress reports and project completion report.
- (xii) **Health risks.** The PMU will ensure that all civil works contractors engaged under the Project participate in the HIV/AIDS prevention and road safety program to be funded under the Project in the construction campsites. In addition, the PMU will ensure that similar information on the risk of transmission of HIV/AIDS and other sexually transmitted diseases is disseminated to local communities in the corridor of influence, in coordination with national agencies working on this issue. The PMU will include specific provisions to this effect in civil works contracts, and will strictly monitor compliance through CARE Timor-Leste.

The Status of Grant Covenants is in Appendix 8.

XI. KEY PERSONS INVOLVED IN THE PROJECT

A. Ministry of Finance

- (i) Hon. Maria Madalena Brites Boavida
Minister
Ministry of Planning and Finance
Palacio do Governo
Edificio 5, 1 Andar
Dili, Timor-Leste
Fax No. 670 332 1339

B. Ministry of Public Works

C. Project Management Unit

D. Asian Development Bank

- (i) Philip Erquiaga
Director General, Pacific Department
- (ii) Indu Bhushan, Director
Pacific Operations Division
- (iii) Charles Andrews
Resident Representative, SOTL
- (iv) Marcelo J. Minc,
Principal Infrastructure Specialist, Pacific Operations Division
- (v) Gladdys S. Nave
Operations Assistant, Pacific Operations Division

XII. ANTICORRUPTION

39. The term “corruption” is used as a shorthand reference for a large range of illicit or illegal activities. Although there is no universal or comprehensive definition as to what constitutes corrupt behaviour, the most prominent definitions share a common emphasis upon the abuse of public power or position for personal advantage.⁶

40. The Fact-Finding Mission explained ADB’s Anticorruption Policy to MPW and the PMU, highlighting the section on fraud and corruption in ADB’s *Guidelines on Procurement* and *Guidelines on the Use of Consultants*. For the Project, the financial administrator in the PMU for EIRP-2 will continue to be employed and funded by the Project, and an international consultant with adequate knowledge and experience of international accounting practices will be recruited to audit the project accounts and financial statements.

⁶ ADB. 1998. *Anticorruption Policy*. Manila.

COST ESTIMATE AND FINANCING PLAN (\$ '000)

Item	Foreign Exchange	Local Currency	Total Cost	ADB			Government		
				Foreign Exchange	Local Currency	Total Cost	Foreign Exchange	Local Currency	Total Cost
A. Base Cost									
1. Civil Works									
a. Aituto–Same	0.89	1.33	2.22	0.89	0.80	1.69	0.00	0.53	0.53
b. Viqueque–Uatucarbau	0.54	0.81	1.35	0.54	0.49	1.03	0.00	0.32	0.32
c. Oeleu–Zumalai	2.09	3.13	5.22	2.09	1.88	3.97	0.00	1.25	1.25
d. Iliomar–Lospalos	0.00	0.50	0.50	0.00	0.30	0.30	0.00	0.20	0.20
Subtotal (A1)	3.52	5.77	9.29	3.52	3.47	6.99	0.00	2.30	2.30
2. Consulting Services									
a. Engineering Design and Preparation of Bidding Documents	0.14	0.06	0.20	0.14	0.06	0.20	0.00	0.00	0.00
b. Project Management	0.24	0.24	0.48	0.24	0.24	0.48	0.00	0.00	0.00
c. Project Performance Monitoring	0.19	0.02	0.21	0.19	0.02	0.21	0.00	0.00	0.00
d. Construction Supervision	0.28	0.27	0.55	0.28	0.27	0.55	0.00	0.00	0.00
e. Road Maintenance Policies, Training and Supervision	0.08	0.00	0.08	0.08	0.00	0.08	0.00	0.00	0.00
f. Financial Auditing	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00
Subtotal (A2)	0.94	0.59	1.53	0.94	0.59	1.53	0.00	0.00	0.00
3. Community Empowerment Initiatives	0.16	0.40	0.56	0.16	0.40	0.56	0.00	0.00	0.00
Subtotal (A)	4.62	6.76	11.38	4.62	4.46	9.08	0.00	2.30	2.30
B. Contingencies									
1. Physical Contingencies	0.27	0.41	0.68	0.27	0.30	0.57	0.00	0.12	0.12
2. Price Contingencies	0.12	0.21	0.33	0.12	0.13	0.25	0.00	0.08	0.08
3. Consulting Services	0.07	0.04	0.11	0.07	0.03	0.10	0.00	0.00	0.00
Subtotal (B)	0.46	0.66	1.12	0.46	0.46	0.92	0.00	0.20	0.20
Total	5.08	7.42	12.50	5.08	4.92	10.00	0.00	2.50	2.50

ADB = Asian Development Bank.

Source: Asian Development Bank estimates.

IMPLEMENTATION SCHEDULE

Item	2006												2007												2008					
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
A. Civil Works																														
1. Bidding Process																														
a. Contract Packages 1 and 2																														
b. Contract Packages 3 and 4																														
c. Contract Packages 5 and 6																														
d. Iliomar–Lospalos																														
2. Construction																														
a. Contract Packages 1 and 2																														
b. Contract Packages 3 and 4																														
c. Contract Packages 5																														
d. Contract Packages 6																														
e. Iliomar–Lospalos																														
B. Consulting Services																														
1. Engineering Design																														
2. Construction Supervision																														
3. Socioeconomic Monitoring																														

Source: Asian Development Bank estimates.

ECONOMIC ANALYSIS

A. Traffic Analysis and Projections

1. Existing Traffic

1. Based on Timor-Leste's existing vehicle fleet, the following vehicle types were adopted for the traffic analysis: (i) motorcycles; (ii) cars, jeeps, and four-wheel drives; (iii) pickups and vans; (iv) micro and minibuses (up to 20 seats); (v) medium and large buses (more than 20 seats); (vi) light trucks (less than 5 tons); and (vii) medium and heavy trucks (over 5 tons).

2. Traffic surveys were conducted on the proposed project road sections as a basis for determining average daily traffic. Seasonal patterns were used to obtain annual average daily traffic, and adopted as normal traffic for 2005 (Table A3.1).

Table A3.1: Annual Average Daily Traffic

Categories of Vehicles	A05-01 and 02	A08-01	A12-02	A12-03
Motorcycles	108	43	106	67
Cars/Jeeps and 4WD	32	4	158	66
Pickups and Vans	25	12	185	73
Micro and Minibuses	86	23	132	66
Medium and Large Buses	0	13	12	6
Light Trucks	105	27	83	56
Medium and Heavy Trucks	43	25	86	52
Total	399	147	762	386

A05-01 = Aituto-Betulala, A05-02 = Betulala-Same, A08-01 = Viqueque-Uatucarbau, A12-02 = Lourba-Zumalai, Phase I, A12-03 = Lourba-Zumalai, Phase II, 4WD = four-wheel drive.

Source: Asian Development Bank estimates.

2. Traffic Forecast

3. Normal traffic growth rates were based on the projected gross domestic product (GDP) growth rate.⁷ Traffic growth rates for 2005–2024 were subsequently based on the income elasticity for the national transport demand in relation to GDP growth, estimated at 1.2. Therefore, growth for normal traffic is estimated at 6%.

4. Generated traffic arises either because a journey becomes more attractive by virtue of a cost reduction or because of the increased development brought about by the road investment. For all sections in very poor overall condition and for all the major improvement options, which would bring up the condition level of the road to good, the generated traffic was assumed to represent 10% of the levels of normal traffic, once adjusted for seasonal patterns. Generated traffic would occur during the first year after rehabilitation works end. Overall, generated traffic accounts for 4% of total traffic after the year of opening. To ensure conservative estimates, no traffic is assumed to be generated for roads that are not in very poor overall condition.

5. Volumes of traffic forecast on the project road sections are summarized in Table A3.2.

⁷ International Monetary Fund medium-term outlook for Timor-Leste: 5% GDP growth per year.

Table A3.2: Actual and Projected Average Traffic Volume (2005–2024)
(vehicles per day)

Road Segment	Component	2005	2009	2014	2019	2024
A05 Jct–Betulala	Normal Traffic	398	502	672	900	1,204
	Generated Traffic	0	50	69	95	131
	Subtotal	398	552	741	995	1,335
A10&A12 Jct–Zumalai	Normal Traffic	387	489	654	875	1,171
	Generated Traffic	0	49	68	93	128
	Subtotal	387	538	722	968	1,299
Betulala–Same	Normal Traffic	398	502	672	900	1,204
	Generated Traffic	0	0	0	0	0
	Subtotal	398	502	672	900	1,204
Oeleu–A10&A12 Jct	Normal Traffic	633	799	1069	1431	1,915
	Generated Traffic	0	0	0	0	0
	Subtotal	633	799	1,069	1,431	1,915
Viqueque–Uatucarbau	Normal Traffic	147	186	248	332	445
	Generated Traffic	0	0	0	0	0
	Subtotal	147	186	248	332	445
Total		1963	2577	3452	4626	6198

Jct = junction.

Source: Asian Development Bank estimates.

6. Motorcycles and buses each make up an average of 22% of total motorized traffic. Light vehicles, such as four-wheel drives and pickups, make up a quarter of total traffic and trucks make up a third (Table A3.3).

Table A3.3: Actual and Projected Average Traffic Volume (2005–2024)
(vehicles per day)

Road Segment	Component	2005	2009	2014	2019	2024
A05 Jct–Betulala	Motorcycles	108	150	202	270	363
	Cars, 4WD, and pickups	57	78	105	141	189
	Buses	87	121	162	217	291
	Trucks	147	203	273	366	492
	Subtotal	399	552	742	995	1,335
A10&A12 Jct–Zumalai	Motorcycles	68	95	127	170	228
	Cars, 4WD, and pickups	139	193	259	347	466
	Buses	72	99	133	179	240
	Trucks	108	151	202	272	364
	Subtotal	387	538	721	968	1,298
Betulala–Same	Motorcycles	108	136	182	244	326
	Cars, 4WD, and pickups	57	71	95	128	171
	Buses	87	110	147	196	263
	Trucks	147	185	248	332	444
	Subtotal	399	502	672	900	1,204
Oeleu–A10&A12 Jct	Motorcycles	106	133	179	239	320
	Cars, 4WD, and pickups	215	272	364	487	651
	Buses	144	182	244	326	437
	Trucks	168	212	283	379	508
	Subtotal	633	799	1,070	1,431	1,916
Viqueque–Uatucarbau	Motorcycles	43	55	73	98	131
	Cars, 4WD, and pickups	16	20	27	36	48
	Buses	36	45	61	81	109
	Trucks	52	66	88	117	157
	Subtotal	147	186	249	332	445
Total		1965	2577	3454	4626	6198

4WD = four-wheel drive, Jct = junction.

Source: Asian Development Bank estimates.

B. Economic Evaluation

1. General

7. The economic analysis was carried out for the three project roads by comparing the with- and without-project scenarios using the highway design and management (HDM-4) model. The economic analysis covers 20 years (2005–2024), based on a construction period of 1 year starting in 2007. All benefits and costs are in constant 2005 prices. The economic prices are expressed using the world price numeraire.

8. In the without-project scenario, the project road sections road are assumed to receive a minimum of maintenance and to continue to deteriorate from average roughness of 13.5 in 2008 to an average of 16 in 2016. Minimum maintenance means maintenance required to prevent the roads from collapsing. The with-project scenario includes routine and periodic maintenance.

9. During project preparation, various mutually exclusive improvement options were considered, and the Project is based on the most cost-effective. In the with-project scenario, the average level of roughness would decrease to about 4.5 in 2008 and only slightly vary thereafter

to reach about 5.5 in 2015. The improvement in 2008 reflects that substantial road improvements are gained through construction in 2007.

2. Costs

10. Project economic costs include the financial construction costs of road improvement in terms of materials, equipment, labor, and consulting services. Taxes and duties are excluded. Costs were divided into tradable and nontradable components. The nontradable component is made of labor and represents 5% of costs. To account for local unemployment and underemployment, costs for labor were adjusted by a shadow wage rate factor of 0.50 to arrive at the economic opportunity cost.

3. Benefits

11. Benefits are substantial on the three project roads because they have relatively high traffic levels due to high agricultural and business activities, and because they are in overall poor or very poor condition. The main benefits comprise savings of vehicle operating costs and time for road users, and of maintenance costs.

12. Vehicle operating costs include the costs of (i) spare parts replacement; (iii) gas and diesel; (iv) lubricating oil; (v) maintenance labor; and (vi) crew wages. We used the economic costs for inputs to the analysis.

13. The value of time as derived in the economic analysis is made of two components: (i) working time and (ii) nonworking time. The value of working time during productive hours was derived from the per capita average income of \$415 per year. A 48-hour work week and 48 weeks of work per year were assumed. The hourly value of working time used in the analysis was therefore \$0.180. Nonworking value of time was estimated to be a quarter of the value of working time, or \$0.045 per hour. This conservative assumption is commonly used to acknowledge that time is a valuable resource, even if the time is not used to earn income. These two values were used as inputs to the highway design and management model, along with other assumptions made on vehicle characteristics, to determine the value of time at a disaggregated level. Other vehicle characteristics considered are (i) annual km driven, (ii) working hours per year, (iii) percentage of private use of the vehicle, and (iv) work-related passenger trips. Based on a typical day of 8 hours of work and 16 hours of "leisure" or other time, we estimate that the daily value of time would be around \$2.20.

14. Table A3.5 shows the main benefits in terms of vehicle operating costs, as calculated by the highway design and management model:

Table A3.5: Vehicle Operating Costs by Vehicle Type
(average for all project at end of opening year, 2008)
(\$ per '000 vehicle km)

Item	Without Project	With Project	VOC Savings
Jeep and 4WD	492.1	319.4	172.7
Light Truck	373.7	272.2	101.5
Medium and Big Bus	380.1	273.6	106.5
Medium Truck	592.9	446.4	146.4
Microbus and Minibus	340.0	262.2	77.8
Motorcycle	50.4	38.8	11.6
Pickup and Van	373.5	264.7	108.8
Total	2602.7	1877.3	725.3

VOC = vehicle operating cost, 4WD = four-wheel drive.
Source: Asian Development Bank estimates.

15. Maintenance cost savings are derived from less investment required on the newly rehabilitated roads. A road improvement project does not necessarily lead to a reduction in maintenance costs, especially when without the project the road is not maintained at all. However, the results on the priority roads project show that over the analysis period, the present value of capital cost after project implementation is smaller in the with-project scenario than with the without-project scenario.

4. Results of Economic Analysis

16. Using a 12% discount rate, the economic benefits for the infrastructure component of the Project are substantial. The net present value is \$6.85 million and the economic internal rate of return (EIRR) is 24.1%. Benefits are made of (i) \$14.68 million decrease in vehicle operating costs, and (ii) \$0.80 million in time savings. These benefits more than compensate for the increased capital and recurrent costs of \$8.62 million over the economic evaluation analysis period. Vehicle operating cost savings are by far the most important; they make up to 95% of the total road user savings. The net benefit streams are shown in Table A3.6.

Table A3.6: Net Benefit Streams–Undiscounted
(\$ million)

Year	Costs			Benefits					Net Benefit
	Construction	Maintenance	Total	Normal Traffic VOC	Traffic Time	Generated Traffic VOC	Traffic Time	Total	
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007	9.32	(0.08)	9.24	0.00	0.00	0.00	0.00	0.00	(9.24)
2008	0.00	0.01	0.01	1.57	0.07	0.04	0.00	1.68	1.67
2009	0.00	0.01	0.01	1.83	0.09	0.05	0.00	1.97	1.96
2010	0.00	(0.13)	(0.13)	2.10	0.11	0.05	0.00	2.26	2.39
2011	0.00	0.01	0.01	2.28	0.12	0.05	0.00	2.46	2.45
2012	0.00	0.01	0.01	2.39	0.13	0.06	0.00	2.58	2.56
2013	0.00	1.50	1.50	2.49	0.14	0.06	0.00	2.69	1.19
2014	0.00	0.02	0.02	2.66	0.15	0.06	0.00	2.88	2.86
2015	0.00	0.96	0.96	2.77	0.15	0.07	0.00	3.00	2.04
2016	0.00	(0.14)	(0.14)	3.03	0.17	0.07	0.00	3.27	3.42
2017	0.00	0.03	0.03	3.16	0.17	0.08	0.00	3.41	3.38
2018	0.00	0.04	0.04	3.29	0.18	0.08	0.00	3.56	3.52
2019	0.00	0.25	0.25	3.43	0.19	0.08	0.00	3.71	3.46
2020	0.00	0.95	0.95	3.46	0.20	0.09	0.00	3.76	2.81
2021	0.00	0.05	0.05	3.42	0.21	0.08	0.00	3.72	3.67
2022	0.00	(0.23)	(0.23)	3.53	0.22	0.09	0.00	3.85	4.08
2023	0.00	0.06	0.06	3.64	0.24	0.09	0.00	3.97	3.91
2024	0.00	1.69	1.69	3.75	0.25	0.10	0.01	4.09	2.40
								EIRR	24.1%
								NPV	6.85

EIRR = economic internal rate of return, NPV = net present value, VOC = vehicle operating cost.
Source: Asian Development Bank estimates.

5. Sensitivity Analysis

17. Sensitivity analysis was carried out to test the effects of negative changes in the key parameters that determine the benefits and costs of the Project. The sensitivity analysis indicates that benefits outweigh costs for each of the following sensitivity tests: (i) increased rehabilitation costs, (ii) reduced benefits, (iii) increased costs and reduced benefits, (iv) delay in project implementation by 2 years, and (v) not considering benefits due to generated traffic.

18. The switching value⁸ for increased rehabilitation costs was determined to be 92% and the switching value for decreased benefits 44%. If implementation of the Project is delayed by 2 years, the EIRR will only be slightly reduced to 23.7%. If only benefits due to vehicle operating cost savings of normal traffic are considered, the EIRR would also only slightly decrease to 21.0%. In what could be considered as the worst case scenario—a combination of increased costs and decreased benefits—the net present value would be reduced to \$3.42 million, and the EIRR to 17.7% Table A3.7.

Table A3.7: Sensitivity Analysis

Sensitivity Test	Economic Internal Rate of Return (%)	Net Present Value (\$ million)	Switching Values (%)
Base case	24.1	6.85	
Increase rehabilitation costs by 15%	21.1	5.74	92
Reduce benefits by 15%	20.4	4.53	44
Increase costs by 15% and reduced benefits by 15%	17.7	3.42	
Delay project implementation by 2 years	23.7	4.84	
Do not consider benefits due to generated traffic	21.0	5.73	

Source: Asian Development Bank estimates.

⁸ The switching value shows the percentage increase in a cost variable (or decline in a benefit variable) required for the net present value (NPV) to become zero, which is the same as the economic internal rate of return (EIRR) reducing to the cut-off level of 12%.

TERMS OF REFERENCE FOR COMMUNITY EMPOWERMENT COMPONENT

A. Objectives and Scope

1. The community empowerment component of the Road Sector Improvement Project aims to strengthen the capacity of rural communities to respond to the risks and opportunities associated with increased connectivity to the national roads. The three subcomponents will include (i) sustainable rehabilitation and maintenance of rural feeder roads in one selected subdistrict; (ii) HIV/AIDS prevention and road safety program along the project roads, which include Aituto–Same [A05], Viqueque–Uatucarbau [A08], Oeleu–Zumalai [A16], and Iliomar–Lospalos [A08]; and (iii) monitoring of the employment target for women. Consulting services will be provided, during the 2 years of project implementation, by an international nongovernment organization (NGO) with expertise in community-based and labor-intensive infrastructure development and service delivery in the project area. This integrated approach to community empowerment—connecting isolated communities to main roads, primary facilities, and/or markets while providing skills necessary for economic activities and raising awareness on health and safety related issues—is likely to bring significant benefits to participating communities as a whole, building upon extensive experience and demonstrated success of international NGOs working in one selected district.

B. Project Subcomponents

2. **Subcomponent A: Sustainable Rehabilitation and Maintenance of Rural Feeder Roads.** This component aims to empower local communities to ensure community-based, labor-intensive, and sustainable rehabilitation and maintenance of rural feeder roads in one selected subdistrict along the project road. The subcomponent will support (i) participatory and gender-inclusive identification and selection of rural feeder roads to be rehabilitated under the Project; (ii) training of local communities (focusing on veterans, other disaffected stakeholder groups, and the youth) on labor-intensive road rehabilitation and maintenance, combined with management and business skills transfer; (iii) training of women (with focus on widows and women who are household heads) in bioengineering and agricultural extension, combined with literacy, food nutrition, reproductive health and HIV/AIDS prevention, road safety management, and business skills transfer; (iv) rehabilitation of selected rural feeder roads that are required to directly connect to the project trunk roads; and (v) design of gender-inclusive modalities to ensure sustainable maintenance of rehabilitated feeder roads. The subcomponent will support an integrated approach to community empowerment and contribute to (i) reducing travel time; (ii) supporting basic needs for water supply, energy, and food security; (iii) ensuring uninterrupted access to basic social services (health and education) and markets where the local farmers can sell their products; (iv) promoting income-generating opportunities; and (v) ensuring the mitigation of HIV/AIDS and road safety risks associated with road construction.

3. Specific features of the subcomponent include

- (i) consulting with the Ministry of Public Works (MPW)/project management unit (PMU), and relevant central and district government agencies on the proposed subdistrict community empowerment initiatives;
- (ii) selecting rural feeder roads to be rehabilitated from among those connecting rural communities to the main project roads to be rehabilitated or maintained under the other two project components;⁹

⁹ The selection and length of the feeder roads will be done by mutual understanding between the NGO and ADB.

- (iii) ensuring that quality road engineering assessment and detailed design for the rehabilitation of the rural feeder roads are carried out, by recruiting national and/or international engineering consultants, as needed;
- (iv) ensuring the effective involvement of women and women's groups in the consultative process for identifying and selecting rural feeder roads to be rehabilitated under the Project;
- (v) ensuring vulnerable groups (veterans, the youth, widows and female heads of households, and other disaffected stakeholders) are targeted for the skills transfer activities to be funded under the Project; and
- (vi) organizing training and labor skills transfer activities so that they are appropriately timed and sequenced with the rural communities' involvement in project activities.

4. **Subcomponent B: HIV/AIDS Prevention and Road Safety.** The international NGO will provide a broad range of HIV/AIDS and road safety awareness programs to target high-risk groups, including local construction workers, long-distance drivers, and women in the construction campsites and corridors of influence. The programs will include (i) publication of information, education, and communication materials on HIV/AIDS and reproductive health for illiterate communities; (ii) behavior change communication on HIV/AIDS and reproductive health, including family planning; (iii) socioculturally sensitive condom awareness and availability in construction camps and corridors of influence; and (iv) dissemination of educational and advisory materials on road safety. Emphasis will be on ensuring women's effective involvement in the design and implementation of the HIV/AIDS prevention and road safety program.

5. The Government's commitment to ensure effective participation of construction workers at campsites in the HIV/AIDS prevention and road safety program to be funded under the Project is covenanted in the Assurances section of the grant document.

6. **Subcomponent C: Monitoring of the Employment Targets for Women.** In line with the project goal of promoting increased access by women to opportunities provided by road rehabilitation and maintenance, the international NGO, in coordination with MPW/PMU, will be responsible for monitoring the implementation of employment targets for women under the Project, which will encourage public works contractors to increase the percentage of women workers to 30% of wage-laborers (including at least 75% of bioengineering activities).

7. The Government's commitment to ensure the enforcement of specific employment targets for women is covenanted in the Assurances section of the grant document.

C. Cost Estimate

8. The cost estimates for the component is presented in Table A4.1.

Table A4.1: Preliminary Cost Estimate
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
A. Base Costs			
1. Civil Works (rehabilitation of feeder roads)	00	180	180
2. Consultants			
a. Remuneration and Per Diem			
i. International consultants	90	00	90
ii. Domestic consultants	00	90	90
b. International and Local Travel	10	00	10
c. Reports and Communications	10	00	10
d. Transport Services for Field Works of Domestic Consultants	00	10	10
3. Equipment ^a	00	60	60
4. Training, Seminars, and Conferences	00	60	60
5. Miscellaneous Administrative and Support Costs	10	00	10
Subtotal (A)	120	400	520
B. Contingencies	40	00	40
Total	160	400	560

^a This category includes the acquisition of basic tools and hardware for community-based road rehabilitation and maintenance.

Source: Asian Development Bank estimates.

D. Implementation Arrangements

9. A qualified international NGO, which will affiliate with domestic NGOs, will be recruited for not more than 24 months to implement the component. The international NGO will be retained following ADB's *Guidelines on the Use of Consultants*, based on direct selection procedure. To be eligible for funding, the international NGO must have (i) long-term presence and credibility in working with local communities in districts adjacent to the project roads; (ii) demonstrated track record of involvement in community-based and labor-intensive infrastructure development and service delivery; (iii) involvement in promoting socioculturally sensitive HIV/STI prevention and road safety in the project roads; (iv) extensive experience in working with and strengthening the capacity of local NGOs in the project area; and (v) expertise in the proposed areas of agricultural extension services, food nutrition issues, and rural development in general. The services are expected to commence in the second half of 2006 or 3 months before the commencement of the road rehabilitation and to be completed 2 years later in 2008. Equipment, supplies, and materials under the component will be procured following ADB's *Guidelines for Procurement*. The equipment will be turned over to the local communities after grant completion.

E. Monitoring and Reporting

10. The international NGO will produce an inception report 2 months after the commencement of services, and submit quarterly progress reports and a final report to the PMU and ADB. It will submit a draft final report covering all subjects and requirements after the completion of all activities. The final report will include comments from the Government and ADB 30 days after the final tripartite meeting of the Government, ADB, and the international

NGO. The report will be submitted in English and should include technical analysis supported by data, with administrative and other details in appendixes.

11. The component will be monitored based on indicators including (i) women's inclusion in the processes of identification and selection of rural feeder roads; (ii) veterans' and other disaffected stakeholder groups' inclusion in the process of identification and selection of rural feeder roads; (iii) meeting the employment targets for women workers; (iv) visits to health facilities and local markets; (v) acquired labor skills in bioengineering, feeder roads built, and agricultural extension; (vi) knowledge on literacy, nutrition, reproductive health, and HIV/AIDS prevention; and (vii) knowledge on road safety, management and business skills acquired, and gender-inclusive modalities for sustainable maintenance of rural feeder roads. Specific indicators will be established by mutual understanding between the NGO and the PMU, along with conditions that will enable the NGO to achieve the targets set through the indicators within the time frame of the Project and within the agreed-upon final budget.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Economic growth and poverty reduction	<ul style="list-style-type: none"> Annual gross domestic product (GDP) growth rate of 5% by 2008 A 10% increase in job opportunities in the project area over 3 years A 10% increase in income in the project area over 3 years A 5% increase in freight traffic 	<ul style="list-style-type: none"> Donors' country reports Socioeconomic monitoring reports 	Assumptions <ul style="list-style-type: none"> Political stability Continued donors' financial and institutional support Sound management of financial resources Sufficient incentives exist for agriculture and industry to expand in response to improved transport. Pilot maintenance arrangements are continued and expanded.
Outcome Improved road transport for economic and social activities	<ul style="list-style-type: none"> A reduction of vehicle operating cost by 20–25% after project completion A 15% increase in food trade volume over 5 years in the corridors of influence A 10% increase in school enrolment by 2011 A 10% increase in visits to health facilities in the corridors of influence by 2011 increased range and frequency of transport services 	<ul style="list-style-type: none"> Sample surveys of vehicle operators/owners Socioeconomic monitoring report Road condition surveys 	Assumptions <ul style="list-style-type: none"> Increased competition of transport services Government pro-competition policy in the transport service markets Adequate budget for maintenance after project completion Vehicle operating cost savings are passed on to public, making transport services affordable Vehicle owners respond by improving range and frequency of services
Outputs 1. Three core network roads rehabilitated and improved 2. Systems for road maintenance established	<ul style="list-style-type: none"> 1. Reduced roughness on 123 kilometers (km) of roads to 5 m/km by end 2007 2.1. Routine maintenance of 45 km by end 2007 2.2. Maintenance training provided 2.3. Road maintenance policies established 2.4. Bidding and contracting system to engage local small contractors 	<ul style="list-style-type: none"> Road condition survey Project progress and supervision, and completion reports Road maintenance consultants' reports Nongovernment organization's (NGO) reports Field surveys 	Assumptions <ul style="list-style-type: none"> No interruptions from force majeure Preservation of the Project Management Unit (PMU) PMU staffed with qualified people Low staff turnover in PMU

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>3. Improved Ministry of Public Works capabilities for project management, supervision and monitoring</p> <p>4. Increased awareness of road safety and HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome)</p> <p>5. Change in work arrangements with enhanced participation of women in road maintenance</p>	<p>institutionalized;</p> <ul style="list-style-type: none"> 3.1. Project implementation and completion as scheduled 3.2. Quality project progress reports and completion report 4.1. Increased road safety awareness campaign in the project area 4.2. Increased HIV/AIDS awareness campaigns carried out for contractors and communities in the project area 5.1. Contractors are encouraged to employ 30% women in wage labor, including at least 75% of bioengineering activities. 		
<p>Activities with Milestones</p> <p>1.1 Rehabilitation of 123 km to fair conditions by the end of year 2007</p> <p>2.1 Routine maintenance of 45 km by the end of 2007</p> <p>3.1 International and domestic consulting services for engineering design, project management, construction supervision, road maintenance training and supervision, and socioeconomic impact monitoring engaged by 2006</p> <p>4.1 Recruitment of an international NGO to commence the community empowerment initiative by 2006</p> <p>4.2 Community empowerment, including awareness campaigns on road safety, HIV/AIDS and gender issues, and women's participation in road maintenance by 2007</p>			<p>Inputs</p> <ul style="list-style-type: none"> Asian Development Bank: \$10 million grant funded by Asian Development Fund Government: \$2.5 million Beneficiaries: the Government, private sector, villagers, vehicle operators/owners, and international and domestic NGOs

CONTRACT PACKAGES

Contract	NR	Road	Length (km)	Estimated Cost (\$)	Procurement Mode
A12-1	A12	Oeleu–Lourba (A10 Jct)	9.9	1,622,000	LCB
A12-2	A12	Lourba (A10 Jct)–Zumalai, Phase I	13.0	1,800,000	LCB
A12-3	A12	Lourba (A10 Jct)–Zumalai, Phase II	13.0	1,800,000	LCB
A05-1	A05	Aituto (A02 Jct)–Betulala	10.8	1,500,000	LCB
A05-2	A05	Betulala–Same	20.0	713,000	LCB
A08-1	A08	Viqueque–Uatucarbau	55.8	1,356,000	LCB
A08-2	A08	Iliomar–Lospalos Maintenance ^a	45.0	500,000	LCB
Total			167.5	9,291,000	

Jct = Junction, LCB = local competitive bidding, NR = national road.

^a To be divided into 10 contract packages.

Source: Asian Development Bank estimates.

ROAD SECTOR ANALYSIS

A. Road Network

1. Roads, the dominant mode of transport in Timor-Leste, carry about 70% of freight and 90% of passenger traffic. The road network is dense compared with other countries with comparable income levels. The total length of the road network is estimated at 6,040 kilometers (km), consisting of 1430 km of national roads linking district centers, 870 km of district roads, providing links to large administrative centers, and 720 km in Dili and several smaller regional towns. The remaining 3,020 km comprises rural access or feeder roads. Urban roads represent about 800 km and feeder/rural roads roughly 3,020 km. About 1,800 km of roads are paved, representing a relatively large part of the core network (84%). Almost 100% of the national roads are paved, and all were paved at some time.

2. The road network is strongly influenced by its spatial and physical environment. A main arterial road runs along the semiarid northern coast, serving the economic activity around Dili and trade connections by sea and to the west. Connections with the southern economic zone cross a mountainous and midland area, which includes steep lands of unstable rock and poor soils that are highly susceptible to erosion and landslides. Most of the north-south road connections are impassable year-round at this time. The southern coastal zone, which has higher population density, agricultural production, and energy reserves, has a moisture climate and comprises alluvial formations and numerous rivers which are prone to changing course during the monsoon. The network is thus vulnerable to natural hazards of erosion and flooding, and access is frequently cut at high-risk locations during the wet season and frequently remains impassable during the dry season. The terrain and low standard of roads limit the support provided to the economy in the south and midlands, such as coffee and agriculture, and soon energy resources.

3. The extensive road network was constructed with relatively low standards of design and materials. A pragmatic approach adapting to the often severe terrain conditions were obviously used, resulting in a very low horizontal and vertical geometrical standard in mountainous regions. The road widths appear to have been compromised according to the actual terrain conditions, resulting in many very narrow roads. While 100% of national roads and 71% of district roads were bitumen paved, shoulders are often constructed out of impervious earthen material. This, combined with the difficult geological conditions, torrential rains, and lack of maintenance, has caused rapid deterioration of the road system. Only 24% of national roads and 11% of district roads are currently in good condition.

B. Traffic Volume

4. Traffic volume is small and concentrated around Dili. Traffic counts in 2000 showed that one third of the road network outside urban centers carried more than 200 vehicles per day (with 15% carrying more than 500 vehicles per day, less than 2% carrying more than 1,000 vehicles per day). One third of the network carried less than 50 vehicles per day. Traffic counts conducted in 2005 suggest that the average daily traffic for motorized vehicles is about 160 on national roads, 90 on district roads, 30 on rural roads, and 170 on urban roads. The heaviest traffic flows, in excess of 400 vehicles per day, are on the northern coastal road.

5. The truck fleet consists almost entirely of light and medium-sized trucks, due to the narrow winding mountainous roads, which are hardly passable for large trucks. The traffic loading on the roads is generally very light, and is not the cause of the poor condition of the road network. This is evidenced by the fairly good shape of the pavement structure in spite of a damaged and washed-out surface due to adverse weather conditions and lack of maintenance for more than a decade. In addition, the roads have little rutting—normally a sign of overloading.

C. Transport Services

6. Walking is the most common mode of transportation, followed by small trucks and minibuses. Transport services are mainly provided by small-scale private companies, with one or two vehicles, and a small number of vehicle owner-operators. The Government has set minimum taxi fare rates, but has not set rates for passenger and freight buses and trucks. Drivers associations are apparently developing and setting rates. Passenger fares range from \$0.50 to \$3.00, depending on the distance, and average approximately \$1.00 per one-way trip. This is high and not affordable for many rural people, particularly, the poor. On the other hand, the fares barely allow vehicle operators to achieve a decent living standard. Half of vehicle operators and owner-operators are estimated to be living below the national poverty line. Operating costs are high, with repair costs averaging about \$1,500 per year. Nearly 50% of the total repair costs are caused by the poor road conditions.

D. Road Safety

7. Road fatalities are relatively high with more than 20 persons per 10,000 vehicles. A recent study of available data gathered at the National Dili Hospital shows that the total number of patients from road traffic accidents reached 2,728 or an average of 114 patients per month in 2002 and 2003. There were 41 deaths for the same period or an average of 2 deaths per month associated with road traffic accidents. In 2003, 1,354 road traffic accident patients were treated at the emergency facility, accounting for 11% of all hospitalized patients in the same year. The potential for even greater accident rates is high, considering the increased number of vehicles, growing population, and increased vehicle speeds resulting from improvements to the road network. A national road safety strategy was prepared, but implementation has not started.

E. Institutional Framework

8. The Government has made great progress in establishing the institutions necessary to run the country. In the road sector, the Government has established much of the essential framework, including laws, institutions, and development plans.

9. In 2003, the Government introduced two laws to regulate and manage the road sector: (i) Basic Law for Vehicle Transport; and (ii) Road Code. The former covers rules and regulations governing vehicle registration, road charges, passenger and freight transport services and passenger fares, and planning and coordination of public infrastructure provision. The Road Code covers road rules, traffic management, classification and use of roads, vehicle categorization, fines, vehicle emissions, accident reporting, and licensing of drivers.

10. The Directorate of Roads, Bridges, and Flood Control (DRBFC) of MPW is responsible for the provision and management of road infrastructure. It operates through a central administration and five regional offices (in, Baucau, Dili, Maliana, Oecussi and Same). The Directorate of Equipment and Materials manages equipment owned by the Government. DRBFC has 12 staff with engineering qualifications, out of a total of 91. Due to historic circumstances, DRBFC has a very limited capacity for strategic planning, project preparation and implementation, construction supervision, contract management, and socioeconomic evaluation.

F. Government Vision and Strategy

11. The Government currently is faced with managing a degraded road network, which entails a very high cost for the reactive work needed to keep it functioning. The Government therefore has set a 10-year vision for the road system to accomplish the following:

- (i) Bring the road network up to a sustainable condition where, with regular maintenance, life-cycle costs will be minimized, road closures will be reduced and manageable, and road access will be reliable.
 - (ii) Improve key roads to support regional connectivity and a growing economy.
 - (iii) Ensure effective capacity to manage the road system, comprising asset management systems (including risk management), use of the private sector for cost-effective delivery, and reliable funding and adequate cost-recovery from users.
12. The Government has the following objectives for roads, bridges, and flood control:
- (i) Identify the national, district, and rural road networks essential for the support of economic and social development.
 - (ii) Initiate policies within a legal and regulatory framework to improve quality of life, encourage private enterprise, and improve access and safety particularly in impoverished areas.
 - (iii) Develop roads, bridges, and topologies of flood control that provide environmental protection and reverse existing ecological damage.
 - (iv) Ensure development and regulation for the safe circulation of transport.
 - (v) Ensure transport infrastructure meets national defense imperatives, and establish technical standards for a national road network.
 - (vi) Preserve existing road assets as the first priority through sustainable maintenance and long-term management plans for support systems.
 - (vii) Establish an institutional structure and develop technical and administrative capacity of East Timorese staff to manage, maintain, and improve the road network.
 - (viii) Implement sustainable strategies for the maintenance of rural access roads.
 - (ix) Establish and implement erosion control measures to prevent damage to physical infrastructure and economically valuable property (National Development Plan, 2002:271).

G. Budget Allocation for Road Maintenance

13. According to the Ministry of Planning and Finance, the Government is expecting total revenues to be above \$100 million per year for an indefinite period, and total expenditures to be between \$70 million and \$80 million each year. The Government has committed about \$190 million from the budget for road maintenance during the Project's life. This will be sufficient to cover the maintenance cost of the project roads, which only accounts for about 5% of the total budget allocation for road maintenance, or \$8.8 million during 18 years after project completion.

H. Main Issues and Challenges

14. The Government faces a number of challenges with respect to the road transport infrastructure. The challenges relate mainly to financing and capacity of planning and implementing capital investment projects. Major issues include (i) rehabilitating roads in some locations, (ii) moving from a reactive to a preventive approach regarding infrastructure works, (iii) orienting road design standards and maintenance practices in a way to minimize life-cycle transport costs, (iv) developing sustainable arrangements for managing the rural road network, (v) addressing social impacts and involvement, (vi) providing additional resources and skills for DRBFC, and (vii) increasing spending levels to maintain the current road system.

MATRIX OF ACTIVITIES

Milestones	Inputs
1. Rehabilitation of 123 km to fair conditions by the end of 2007	
<ul style="list-style-type: none"> ▪ Rehabilitation of three road sections to fair conditions by strengthening the base, resurfacing, protecting and stabilizing slopes, and improving drainage system and shoulders <ul style="list-style-type: none"> a) Oeleu-Zumalai (35.9 km) b) Aituto-Same (30.8 km) c) Viqueque-Uatucarbau (55.8 km) 	
2. Routine maintenance of 45 km by end of 2007	
<ul style="list-style-type: none"> ▪ Routine maintenance of Iliomar-Lospalos, to be implemented by small local contractors using labor-intensive methods, and include patching, improving side drains, repairing culverts, improving shoulders, constructing lined drains, and bioengineering 	
3. International and domestic consulting services for engineering design, project management, construction supervision, road maintenance training and supervision, and socioeconomic impact monitoring engaged by 2006	
4. Recruitment of an international NGO to commence the community empowerment initiatives by 2006	
5. Community empowerment, including awareness campaigns on road safety, HIV/AIDS and gender issues, and women's participation in road maintenance by 2007.	
<ul style="list-style-type: none"> a) Identification of community-based and gender-inclusive modalities for rehabilitation and maintenance of rural feeder roads adjacent to the project roads 	
<ul style="list-style-type: none"> b) HIV/AIDS prevention and road safety awareness programs along the project roads to be implemented by an international NGO with expertise in community based and labor-intensive infrastructure development and service delivery in one selected subdistrict along the project roads 	
<ul style="list-style-type: none"> c) Monitoring of employment targets for women 	

STATUS OF COMPLIANCE WITH GRANT COVENANTS

Condition/Covenant	Reference in Grant Agreement	Status of Compliance
1. The recipient shall cause the proceeds of the Grant to be applied to the financing of expenditures on the Project in accordance with the provisions of this Grant Agreement	Section 3.01	
2. The goods and services and other items of expenditure to be finance out of the proceeds of the Grant and the allocation of amounts of the Grant among different categories of such goods and services and other items of expenditures shall be in accordance with the provisions of Schedule 2 of the Grant Agreement, as such Schedule may be amended from time to time by agreement between the recipient and ADB	Section 3.02	
3. Except as ADB may otherwise agree, all goods and services to be financed out of the proceeds of the Grant shall be procured in accordance with the provisions of Schedule 3 and Schedule 4 of the Grant Agreement	Section 3.03	
4. Withdrawals from the Grant Account in respect of goods and services shall be made only on account of expenditures relating to (i) Goods which are produced in and supplied from and services which are supplied from such member countries of ADB as shall have been specified by ADB from time to time as eligible sources for procurement, and (ii) goods and services which meet such other eligibility requirements as shall have been specified by ADB from time to time	Section 3.04	
5. The Grant Closing Date for the purposes of Section 8.02 of the Grant Regulations shall be 30 June 2008 or such other date as may from time to time be agreed between the recipient and ADB	Section 3.05	
6. In carrying out the Project and operation of the Project facilities, the recipient shall perform, or cause to be performed, all obligation set forth in Schedule 5 of the Grant Agreement	Section 4.01	
7. a) The Recipient shall : (i) Maintain, or cause to be maintained, separate accounts for the Project;	Section 4.02	

Condition/Covenant	Reference in Grant Agreement	Status of Compliance
<p>(ii) Have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB;</p> <p>(iii) Furnish to ADB, as soon as available but in any event not later than 6 months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and report of the auditors relating thereto (including the auditors' opinion on the use of the Grant proceeds and compliance with the financial covenants of this Grant Agreement as well as on the use of the procedures for imprest account/statement of expenditures), all in the English language; and</p> <p>(iv) Furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request</p> <p>a) The recipient shall enable ADB, upon ADB's request, to discuss the recipient's financial statements for the Project and its financial affairs related to the Project from time to time with the auditors appointed by the recipient pursuant to Section 4.02 (a) hereabove, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of the recipient unless the recipient shall otherwise agree.</p> <p>8. The recipient shall enable ADB's representatives to inspect the Project, the goods financed out of the proceeds of the Grant, and any relevant records and documents</p> <p>9. A date ninety (90) days after the date of the Grant Agreement is specified for the effectiveness of the Grant Agreement for the purposes of Section 9.04</p>	<p>Section 4.03</p> <p>Section 5.01</p>	

Condition/Covenant	Reference in Grant Agreement	Status of Compliance
<p>of the Grant Regulations</p> <p>10. The Minister of Planning and Finance of the recipient is designated as representative of the recipient for the purposes of Section 11.02 of the Grant Regulations.</p> <p>11. Procurement of goods and services shall be subject to the provisions of the “Guidelines of Procurement under Asian Development Bank Loans” dated November 2004 (hereinafter called the Guidelines for Procurement), as amended from time to time, which have been furnished to the recipient.</p> <p>12. Procurement of goods and services shall be made without any restriction against, or preference for, any particular supplier or contractor or any particular class of suppliers or contractors, except as otherwise provided</p>	<p>Section 6.01</p> <p>Schedule 3, para. 2</p> <p>Schedule 3, para. 3</p>	