

**BOARD  
OF  
DIRECTORS**

**ASIAN DEVELOPMENT BANK**

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**TECHNICAL ASSISTANCE TO EAST TIMOR  
FOR ENVIRONMENTAL ASSESSMENT CAPACITY IMPROVEMENT**

The attached Report is circulated for the information of the Board. The President approved the technical assistance on 15 September 2000.

For Inquiries: Mr. C. D. Saldanha, Office of Pacific Operations  
(Ext. 6125)  
Ms. S. Jarvenpaa, Office of Pacific Operations  
(Ext. 6146)

**ASIAN DEVELOPMENT BANK**

**TAR:ETM 34061**

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## **ABBREVIATIONS**

ADB	–	Asian Development Bank
CNRT	–	National Council for East Timorese Resistance
EIRP	–	Emergency Infrastructure Rehabilitation Project
UNDP	–	United Nations Development Programme
UNTAET	–	United Nations Transitional Administration in East Timor
TA	–	technical assistance

## **NOTES**

- (i) The fiscal year (FY) of the United Nations Transitional Administration in East Timor ends on 30 June. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2000 ends on 30 June 2000.
- (ii) In this report, "\$" refers to US dollars.

## I. INTRODUCTION

1. During the World Bank-coordinated multiagency Joint Assessment Mission (October-November 1999), the Asian Development Bank (ADB) reviewed the transport sector restoration and development requirements of East Timor. Under the prepared reconstruction program, a lead-agency role was allocated to ADB for infrastructure sector restoration, including the transport, energy, telecommunications, and water and sanitation subsectors. The Appraisal Mission for the Emergency Infrastructure Rehabilitation Project (EIRP),<sup>1</sup> was conducted in February 2000. ADB has also prepared the Water Supply and Sanitation Rehabilitation Project.<sup>2</sup> In the context of implementing its lead agency role in the infrastructure sector, ADB has identified the need to establish capacity in East Timor to carry out environmental impact analysis. This has been discussed with the International Force for East Timor, National Council for East Timorese Resistance (CNRT), United Nations Development Programme (UNDP), United Nations Transitional Authority in East Timor (UNTAET), and World Bank.

2. This report was prepared on the basis of the discussions and observations in the field by the Mission. The Mission reached understandings with the East Timorese counterparts and UNTAET on the TA objectives, scope, cost estimates, and terms of reference.<sup>3</sup> A framework for the TA is provided in Appendix 1.

## II. BACKGROUND AND RATIONALE

3. In 1975, Indonesia absorbed the Portuguese colony of East Timor. On 30 August 1999, a referendum was held in East Timor that demonstrated an overwhelming preference of the population for independence over Indonesian-controlled autonomy. The violence that followed the referendum resulted in the displacement of more than 75 percent of the East Timor population of 875,000 people and destruction of more than 70 percent of the residences, public buildings, and essential utilities. All government functions including public services, peace and security, health, education, and community services collapsed with the sudden withdrawal of the Indonesian government officials. Many skilled people were displaced or left the country.

4. Since September 1999, a major humanitarian operation has been implemented under the leadership of the United Nations Office for Coordination of Humanitarian Affairs. Under a resolution of the Security Council of the United Nations, UNTAET was established with wide powers to ensure stability, and establish local government and sector administration, judiciary, policies, and laws. UNTAET is headed by an administrator and houses a unit for national planning and environment. UNTAET will administer East Timor until the fourth quarter of 2001, when general elections will establish an indigenous government. CNRT has established a national legislative council and a cabinet to provide policy guidance and to consult with UNTAET on administrative matters.

5. Indonesian environmental management laws, regulations, and standards that were enforced in East Timor prior to the referendum continue to be valid unless revoked by UNTAET or its successor. However, the enforcement and implementation of the environmental management laws, regulations, and standards are not being carried out as the officials of the environmental management authority in East Timor have limited technical capacity. There is a need to develop a core of East Timorese expertise to review, evaluate, and monitor the enforcement and implementation of environmental management laws, regulations, and standards.

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<sup>1</sup> Grant 8181-ETM(TF): *Emergency Infrastructure Rehabilitation Project*, for \$29,800,000, approved on 13 April 2000.

<sup>2</sup> Grant 8185-ETM(TF): *Water Supply and Sanitation Rehabilitation Project*, for \$4,500,000, approved on 4 August 2000.

<sup>3</sup> The TA first appeared in the *ADB Business Opportunities* in July 2000.

6. The initial environmental examination of the EIRP requires contractors to comply with established environmental mitigating measures during project implementation. While the environmental impacts of the EIRP are not critical, the Project provides useful training opportunities for the East Timorese officials to undertake rigorous evaluation of the environmental impacts under future projects funded by ADB and other bilateral and multilateral funding agencies. There is also a need to (i) review and recommend changes to the Indonesian environmental management laws, regulations, and standards to ensure their effective implementation in the existing and future administrative, environmental, and social conditions of East Timor; (ii) establish a strategy for implementing an institutional environmental management capability; and (iii) prepare an environmental profile for East Timor.

### **III. THE TECHNICAL ASSISTANCE**

#### **A. Objective**

7. The main objective of the TA is to (i) implement appropriate environmental and natural resource management techniques in the assessment and execution of development projects in East Timor and (ii) prepare an environmental profile for East Timor. The TA will (i) build basic awareness of appropriate environmental and natural resource management techniques, capacity, and skills to implement the environmental impact assessment process; (ii) identify critical environmental issues in East Timor; (iii) review the existing environmental policies and legislation, and recommend appropriate modifications; (iv) initiate development of a suitable environmental management institution; and (v) facilitate implementation of environmental impact assessment and monitoring procedures.

#### **B. Scope**

8. The TA will (i) provide a short course for six selected East Timorese professionals on environmental management in East Timor, and identify in-service training in environmental departments of two ADB developing member countries on environmental impact assessment evaluation and implementation monitoring; (ii) develop an institutional development plan for environmental management in East Timor; (iii) review the environmental and natural resource laws, legislation, and regulations currently enforced in East Timor, and make related recommendations considering the conditions in East Timor; and (iv) prepare an environmental profile of East Timor identifying critical environmental issues and problems.

#### **C. Cost Estimates and Financing Plan**

9. The TA is estimated to cost \$250,000. The entire cost of the TA will be financed by ADB on a grant basis from the ADB-funded TA program. This includes international consultant remuneration and per diems, international and local travel, communications, supplies, training course and in-service costs, and contingencies. The cost estimates and financing plan are given in Appendix 2.

#### **D. Implementation Arrangements**

10. The Executing Agency for the TA is UNTAET. Daily activities under the TA will be conducted in close consultation with East Timorese civil society and funding agencies involved in infrastructure development in East Timor, particularly the World Bank, UNDP, and the Australian Agency for International Development.

11. The TA will be implemented over 12 months commencing in October 2000 and ending in September 2001. A total of six person-months of international consulting services in the fields of environmental management and assessment, impact evaluation and mitigation, institution development, and environmental management capacity building will be engaged from a firm in accordance with ADB's *Guidelines on Use of Consultants*. In light of the detailed objectives, scope, and terms of reference given under the TA, the consultant firm will be selected using the simplified technical proposal procedure. Terms of reference are provided in Appendix 3.

12. UNTAET will appoint suitably qualified personnel to coordinate the activities in Dili, and identify, in consultation with ADB, six East Timorese professionals in its organization involved in execution of infrastructure projects. These six Timorese will have a background in engineering, life sciences, or project management. At least one of the six East Timorese professionals will focus on maritime environmental issues, and one of the six will be selected team leader. Under the TA, terms of reference and other institutional arrangements will be prepared for the six East Timorese professionals to work within the prepared institutional framework as impact assessment and monitoring professionals.

13. The consultants will submit inception, interim, draft final, and final reports. The inception report will include a curriculum for the in-country training; details of the in-service training program in two developing member countries; evaluation criteria to determine the effectiveness of the training; as well as a methodology, approach, and resource utilization plan for accomplishing all items under the terms of reference. The consultant is expected to make full use of environmental reference materials prepared by ADB including its *Environmental Guidelines*, *Environmental Assessment Requirements*, *Environmental Impact Assessment for Developing Countries in Asia*, and the tutorial materials including CD-ROM for *Environmental Impact Assessment*.

14. The consultants will organize a minimum of two tripartite meetings to ensure a close monitoring and consultation process. Coordination of external funding agencies will be conducted during TA implementation. After the in-country training program, the consultant will submit an interim report summarizing the training activities and effectiveness of the training program, and provide recommendations for further training, if needed. The consultant's interim report will include an operational plan for the six East Timorese professionals to apply their training with EIRP as the case study, the draft institution development plan, and environmental country profile. The consultant will submit to ADB a draft final report one month before the completion of the TA. The draft final report will include a summary of the activities, outputs, and recommendations for action to strengthen the environmental management institution in East Timor. The inception, interim, and draft final reports will be reviewed by ADB, UNTAET, and the East Timorese civil society represented by the Cabinet.

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

15. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance, on a grant basis, to the United Nations Transitional Administration in East Timor, in an amount not exceeding the equivalent of \$250,000 for the purpose of Environmental Assessment Capacity Improvement, and hereby reports such action to the Board.

### TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Targets	Monitoring Mechanism	Assumptions/Risks
<b>A. Goals</b>  Develop environmental and natural resources management capacity.	(i) Capacity of at least six East Timorese officials in environmental impact assessment (EIA) and monitoring of impact mitigation  (ii) Appropriate legal and regulatory framework for environmental management  (iii) Plan for establishment of an appropriate environmental management institution  (iv) Country environmental profile identifying major environmental issues	TA performance report Evaluation of training and capacity building  Report on review of existing legislation with recommendations and new regulatory texts  An agreed plan and strategy for implementing institutional framework for environment  Environmental profile	Qualified trainees  Successful coordination with other donors involved in infrastructure development  Swift decision making on the part of the United Nations Transitional Administration in East Timor (UNTAET)  Availability of economic and restoration development plans for assessment of environmental sustainability
<b>B. Purpose</b>  Establish professional capacity to undertake and monitor environmental sustainability.  Assessment of EastTimor's most pressing environmental issues.	Direct East Timorese involvement in preparation and monitoring of EIAs  Documentation of environmental sensitivities	UNTAET lead role in preparing and evaluating of EIAs using East Timorese staff  Cooperative recognition of need to ensure environmental sustainability or restoration	Quality and availability of trainee and incumbent staff
<b>C. Outputs</b>  (i) Training and capacity development of at least six East Timorese staff in professional preparation and monitoring of EIAs  (ii) Recommend, as appropriate,	(i) A short course for six selected East Timorese professionals on environmental management, and training in environmental departments of two Asian Development Bank (ADB) developing member countries on EIA and mitigation monitoring by September 2001  (ii) review of the environmental and natural resources	Award of contracts  ADB's review reports  TA Performance Report  EIAs  TA reports	Timely mobilization of consultants and training in accordance with ADB's procurement guidelines  Efficient consultation process with all stakeholders  Availability of qualified trainees and incumbents

<b>Design Summary</b>	<b>Performance Targets</b>	<b>Monitoring Mechanism</b>	<b>Assumptions/Risks</b>
<p>environmental and natural resources laws, legislation, and regulations</p> <p>(iii) Preparation of an institutional plan for environmental management in East Timor</p> <p>(iv) Preparation of an environmental profile for East Timor</p>	<p>laws, legislation, and regulations currently enforced in East Timor and provision of related recommendations by December 2000 (draft report)</p> <p>(iii) Consensus on the appropriate institutional framework for environmental management by December 2000 (draft report)</p> <p>(iv) Documentation of environmental issues of East Timor</p>		
<p><b>D. Inputs</b></p> <p>Technical assistance in environmental management to prepare, monitor, and evaluate the training program; and to review the regulatory framework and prepare the institutional plan</p> <p>Training programs</p>	<p>Award of consulting services contract to prepare training program the regulatory and institutional recommendations, and a environmental profile 31 October 2000</p> <p>Identify training courses and in-service training program and a formal training program by December 2000</p>	<p>Time- and quality-bound delivery of consulting services, outputs, and reports</p>	<p>Effective consultant selection process</p> <p>Timely (delayed) selection of trainees</p> <p>Effective consultation with other donors involved in infrastructure and UNTAET</p>



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

<b>Items</b>	<b>Foreign Exchange</b>	<b>Local Cost</b>	<b>Total Cost</b>
<b>Asian Development Bank Financing</b>			
1. International Consultants			
Renumeration	108,000		108,000
Per diem	28,800		28,800
International Travel	12,000		12,000
2. Training			
Short course	20,000		20,000
In-Service training	26,000		26,000
International travel	24,000		24,000
3. Report Preparation	2,000		2,000
4. Communication	3,000		3,000
5. Equipment	3,000		3,000
<b>Subtotal</b>	<b>226,800</b>		<b>226,800</b>
6. Contingency	23,200		23,200
<b>Total</b>	<b>250,000</b>		<b>250,000</b>

Source: Staff estimates.

## **OUTLINE TERMS OF REFERENCE FOR CONSULTANTS**

1. Consulting services in the field of environmental management and assessment, impact evaluation and mitigation, institution development, and environmental management capacity building will be required to provide six person-months of services over a 12-month period. The assignment will include the following tasks.

### **A. Training**

2. The consultant will prepare a detailed course syllabus for evaluation and monitoring of environmental impacts of development projects, specifically using the Asian Development Bank's guidelines and operational procedures. The consultant will arrange for a special short course with a suitable institution to train 6 East Timorese professionals on the evaluation and monitoring of the environmental impacts of infrastructure projects. At least one of the six East Timorese professionals will focus on maritime environmental issues, and one will be identified as team leader accountable for the participation of the six East Timorese and later application of the learned processes and skills. The short course, for a minimum period of two weeks, will involve intensive lectures, laboratory experiments, and field visits. Experts may be invited to give lectures and provide practical advice to the trainees. ADB may nominate one of its environmental specialists to give a short lectures on its environmental impact assessment procedures, guidelines, and practices;

3. After the short course, the consultant will arrange for in-service training with the environmental management departments of two developing member countries (DMCs) of ADB. The in-service training will preferably involve actual participation in the review of initial environmental examination (IEE) and environmental impact assessment (EIA) reports, deliberations by the review panel or committee, and preparation of the review and evaluation reports. The in-service training will also include monitoring and compliance assessment of projects with recommendations for the EIA review panel. Two DMCs are selected to provide the trainees with an opportunity to compare alternative systems and practices for reviewing and evaluating IEE and EIA reports. The consultant will review the output of the short course and in-service training, and make recommendations for further training, if needed.

4. After the training program, the consultant and the six East Timorese professionals will prepare a detailed monitoring and assessment program to implement the recommendations of IEE under the Grant 8181-ETM: Emergency Infrastructure Rehabilitation Project and the Grant 8185-ETM: (TF) Water and Sanitation Sector Rehabilitation Project. The consultant will review the equipment and facilities needed for the East Timorese professionals to monitor implementation of the mitigating measures identified in the IEE of these and other projects.

5. The consultant will, in coordination with the United Nations Transitional Administration in East Timor (UNTAET), assist in preparing specifications and procuring equipment. All equipment will be procured in accordance with ADB's *Guidelines on Procurement*.

### **B. Review of Environmental Legislation and Regulations**

6. Briefly review and summarize the overall existing environmental legislation framework, environmental policies and plans. The consultant will review the Indonesian environmental laws, regulations, and standards currently enforced and in force under UNTAET administration. The consultant will identify provisions, requirements, and procedures in those laws, regulations, and standards that are inappropriate to East Timor's current circumstances, and make

recommendations for their correction. The consultant will review the utility of ADB environmental guidelines and procedures as a minimum standard for EIA guidelines. The consultant will closely coordinate with all donor agencies involved in the infrastructure sectors to make recommendations and carry out the technical assistance activities and review.

### **C. Development of an Institution Development Plan for Environmental Management**

7. Analyze the existing institutional structure with respect to environmental management. Identify key institutions and processes required under the proposed and appropriately scaled environmental policy framework and legislation. Identify gaps in the institutional current structure and constraints, and possible policy implementation and enforcement problem areas. Discuss in detail proposed institutional capacity constraints, and requirements for administrative and organizational arrangements to implement the proposed policy and legislation enforcement with a particular focus on structures, organizational arrangements, procedures, and regulations relating to the implementation of the EIA system for new development projects.

8. The consultant will review the capacity of the six professionals in monitoring the implementations of the monitoring program and mitigating measures of the project IEE. The consultant will prepare an organizational plan that includes job descriptions, and delegation of duties and responsibilities for the team to evaluate, review, and monitor the implementation of IEE and EIA reports of future infrastructure projects. The consultant will also identify bond/guarantee arrangements ensuring that an appropriate length of services is required of the trainees with the new government, as appropriate.

9. Review ongoing and planned external (bilateral and multilateral) emergency and development assistance programs/projects, and major implications for the environment. Review external assistance programs in the environment sector, if any.

10. Based on findings (paras. 6 to 8), identify main strategies and programs to address key environmental issues and prepare a broad action program for capacity and institution building for environmental management and the establishment of EIA processes and procedures.

11. In addition, (a) identify the potential use of economic instruments for environmental management; (b) support measures for institutional establishment, strengthening, and other capacity building initiatives; and (c) make recommendations/prepare an institutional legislation strategy that can be used by ADB in its environmental institutional strengthening and capacity building operations for the country.

12. Finally, on the basis of this, prepare an overall summary matrix outlining a strategy implementation framework for environmental management by identifying major priority actions, components, objectives, proposed sites and criteria, time sequencing, responsible agencies, current status, and other crucial aspects as per format agreed with ADB during study inception. Prepare a specific institutional and legislation action program matrix for the establishment of EIA processes and implementation procedures.

### **D. Preparation of an Environmental Profile**

13. Review the socioeconomic system and its general trends, and identify major implications for the environment and the natural resource base.

14. Review and broadly evaluate current and any new economic development planning of UNTAET, policies, and the economic policy framework with regard to major implications for sustainable development.

15. Evaluate main sector policies and planned emergency, reconstruction, and medium-term development investment programs with major implications for environmental sustainability.

16. Broadly analyze past and current crucial economic dimensions like sector contribution to gross domestic product (GDP), overall current and potential role of the private sector in the economy, agriculture and its interaction with the environment, major economic activities based on natural resource utilization and extraction, import-export of main sectors, importance of small and medium-size enterprises, major sector priorities, infrastructure constraints, income levels and main macroeconomic variables and implications for the environment, with specific reference to existing (Indonesian) significant environmental and natural resource policies.

17. Broadly assess basic economic, social and political dimensions, and their interface with the environment including specific interlinkages and cross-cutting issues like poverty and the environment, environment and population growth, economic growth and the environment, skewed income distribution and the environment, women and the environment, trade and the environment, and education and the environment.

18. Review the relevant (past and recent) environmental documentation, and broadly describe the natural resource base and the current state of the environment of the country. Broadly analyze key cause-effect relationships resulting in environmental degradation. Identify specific “hot spots” and environmentally problematic areas. In particular, discuss and assess key environmental issues in the following fields (a) environmental impacts of the agriculture sector, deforestation, land degradation, and biodiversity loss (including the need for protected areas management); (b) water, and coastal and marine resource degradation; (c) urbanization, sanitation, and waste management (including hazardous wastes if any); and (d) air and water pollution.

## **E. Reporting**

19. The consultant will submit 3 copies of the inception, interim, and draft final reports to ADB and 5 to UNTAET, as stipulated in the TA paper. After receiving the comments on the draft final report, the consultant will submit 5 copies of the final report to ADB and 10 copies to UNTAET. The consultant will organize and make presentations of the recommendations and the TA implementation at the tripartite meetings.