

**Guide and Reference Book**

**on**

**Environmental Assessment and  
Environmental Safeguards Requirements**

**for**

**Earthquake and Tsunami Emergency Support Project  
(ETESP) in Indonesia**

**VOLUME I:  
MAIN DOCUMENT**

**Version 2, November 2006**



**Asian Development Bank**

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## **Foreword**

The first version of this reference guide was published in October 2005, and served as a guide and quick reference on the application of Environmental Safeguards in ETESP. This updated guide has been streamlined and takes into account new ETESP Subproject preparation and approvals processes, as well as harmonized environmental assessment agreements reached with provincial environmental agencies in Nanggroe Aceh Darussalam and Sumatera Utara.

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Comments and suggestions are welcome.

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Banda Aceh, November 2006

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## List of Abbreviations

|           |  |
|-----------|--|
| ADB       | Asian Development Bank   |
| AMDAL     | <i>Analisa Mengenai Dampak Lingkungan</i> (Environmental Impact Assessment)                          |
| ANDAL     | <i>Analisis Dampak Lingkungan</i> (Environmental Impact Assessment Report)                           |
| BAPEDALDA | <i>Badan Pengendalian Dampak Lingkungan Daerah</i> (Provincial Environmental Agency)                 |
| BAPPEDA   | <i>Badan Perencanaan Pembangunan Daerah</i> (Provincial Development Planning Agency)                 |
| BAPPENAS  | <i>Badan Perencanaan Pembangunan Nasional</i> (National Development Planning Agency)                 |
| CAP       | Community Action Plan  |
| EA        | Executing Agency   |
| EARP      | Environmental Assessment and Review Procedure  |
| EIA       | Environmental Impact Assessment  |
| EMP       | Environmental Management Plan  |
| ETESP     | Earthquake and Tsunami Emergency Support   |
| EMS       | Extended Mission in Sumatera (ADB)   |
| GIS       | Geographical Information System  |
| GOI       | Government of Indonesia  |
| GTZ       | German Corporation for Technical Assistance  |
| Ha        | hectare; 1 Ha = 10,000 square meters   |
| HWL       | Highest Water Level  |
| IA        | Implementing Agency  |
| IDP       | Internally Displaced Person  |
| IEE       | Initial Environmental Examination  |
| IP        | Indigenous People  |
| IPSA      | Initial Poverty and Social Assessment  |
| IRM       | Indonesia Resident Mission (of ADB), Jakarta   |
| KA        | Terms of Reference or Scoping Document for Environmental Impact Assessment ( <i>Kerangka Acuan</i> ) |
| KepMen    | Ministerial Decree   |
| km        | Kilometer  |
| M         | Meter  |
| MMAF      | Ministry of Marine Affairs and Fisheries   |
| MoE       | Ministry of Environment (KLH)  |
| MoU       | Memorandum of Understanding  |
| MPW       | Ministry of Public Works   |
| NAD       | Nanggroe Aceh Darussalam   |
| NGO       | Non Governmental Organization  |
| O&M       | Operation and Maintenance  |
| PMO       | Project Management Office  |
| PP        | Peraturan <i>Pemerintah</i> (Government regulation)  |
| PSA       | Poverty and Social Analysis  |
| RKL       | <i>Rencana Pengelolaan Lingkungan</i> (Environmental Management Plan)                                |
| RoW       | Right of Way   |
| Rp.       | Indonesian Rupiah  |
| RPL       | <i>Rencana Pemantauan Lingkungan</i> (Environmental Monitoring Program)                              |
| RRP       | Report and Recommendation of the President to the Board of Directors (ADB)                           |
| Satker    | <i>Satuan Kerja</i> (Working Group)  |
| SERD      | Southeast Asia Department (ADB)  |
| SIEE      | Summary Initial Environmental Examination  |

|      |   |
|------|---|
| TA   | Technical Assistance  |
| TOR  | Terms of Reference  |
| UKL  | <i>Upaya Pengelolaan Lingkungan</i> (Environmental Management Effort) |
| UNDP | United Nations Development Programme                                  |
| UNEP | United Nations Environment Programme                                  |
| UPL  | <i>Upaya Pemantauan Lingkungan</i> (Environmental Monitoring Effort)  |
| WB   | World Bank  |
| WHO  | World Health Organization   |

## **I. Introduction**

### **A. THE PURPOSE OF THIS GUIDE**

1. This is an environmental safeguards reference guide for the Asian Development Bank (ADB) Earthquake and Tsunami Emergency Support Project (ETESP) in Indonesia. It is an internal ETESP document, and is meant to provide practical advice on complying with ADB and Government of Indonesia (GOI) environmental requirements, with particular reference to environmental assessment and associated monitoring and reporting. It is intended to be used by ETESP Saters, consultants and ADB EMS (Extended Mission in Sumatera) Sector Advisors.

### **B. ADB'S ENVIRONMENTAL SAFEGUARD POLICIES**

2. ADB has three safeguard policies that seek to avoid, minimize or mitigate adverse environmental impacts, social costs to third parties or marginalization of vulnerable groups that may result from development projects:

- Environment Policy (2002);
- Involuntary Resettlement (IR) Policy (1995); and,
- Indigenous Peoples (IP) Policy (1998).

3. A key objective of the environment safeguards policy and related environment assessment procedures is to ensure that proposed projects are environmentally sound and sustainable and any potential environmental impacts are recognized early and taken into account in project design.

### **C. ADB'S ENVIRONMENTAL SAFEGUARD REQUIREMENTS AND ETESP**

4. ETESP represents a major undertaking by ADB in the rehabilitation and reconstruction program in the Tsunami affected areas of Nanggroe Aceh Darussalam Province (NAD) and Nias, North Sumatra (SUMUT). It is important that this major engineering and social undertaking be built around sustainable environmental planning principles. When efficiently integrated into the project development cycle environmental safeguards achieve their maximum potential for protecting the environment capital of the project/area/region while still allowing the project to achieve its economic and technical objectives.

***5. This guide will help users comply with the ADB's environmental safeguard policy as it applies to ETESP.***

### **D. GOVERNMENT OF INDONESIA ENVIRONMENTAL ASSESSMENT REQUIREMENTS AND ETESP**

6. ETESP also has to fully comply with the environmental laws and regulations of the Government of Indonesia (GOI), particularly with respect to AMDAL (environmental assessment) requirements. The Ministry of Environment (MOE) has introduced an amended AMDAL review process for reconstruction and rehabilitation projects in Aceh and Nias. Signed by the Minister on 28 September 2005, MOE Decree No. 308/2005 caters to the needs of the reconstruction effort and expedites the environmental assessment and review process.

***7. This guide will also help the user comply with GOI environmental assessment requirements.***

## E. HOW TO USE THIS GUIDE

8. The guide is presented in two sections:

### Main Document

- Chapter 1 Introduction  
*General introduction to environmental safeguard requirements and this guide.*
- Chapter 2 Backgrounder on Environmental Safeguards and ETESP  
*Background information on ADB's Environmental Policy and how it applies to ETESP; ETESP environmental principles; potential impacts associated with each ETESP Sector; and, key players.*
- Chapter 3 Overview of the ETESP Subproject Approval and Environmental Assessment Process  
*ETESP Subproject approval process (SPARs and SPPRs); environmental assessment in the Subproject approval process; and, GOI environmental assessment requirements.*
- Chapter 4 Environmental Assessment at the SPAR Stage: REA Checklists and Subproject Environmental Categorization  
*How to do a Subproject REA and environmental categorization at the SPAR stage.*
- Chapter 5 Environmental Assessment at the SPPR Stage: IEEs  
*How to do a Subproject IEE at the SPPR stage.*
- Chapter 6 GOI Environmental Approvals  
*How to obtain Government of Indonesia environmental approval.*
- Chapter 7 Environmental Responsibilities During Implementation  
*What to do once a Subproject is under implementation, including guidance on environmental monitoring and reporting.*

### Annexes

- 1 to 18 *Supporting documents, guidance materials, legislation, etc, to assist in complying with ADB's and GOI's ETESP related environmental safeguard requirements.*

## II. Backgrounder on Environmental Safeguards and ETESP

### A. WHAT IS IMPORTANT TO UNDERSTAND IN RELATION TO ETESP SAFEGUARDS?

9. In order for environmental assessment tools to achieve their potential in successfully integrating environment protection into ETESP's objectives and ultimately into Subproject implementation, it is important that ETESP *Satuan Kerja's* (Saters or Working Groups), Sector consultants and EMS Sector Advisors have an understanding of:

- *ADB Safeguard Policies*: it is important to know the requirements of ADB's safeguard policies and provisions such as the Environment Policy (2002), relevant sections of the Environmental Assessment Guidelines (2003), and the ETESP Environmental Assessment Review and Procedures (EARP). **These are discussed below and presented in the Annexes to this guide.**
- *ETESP Subproject Development and Approval Process*: ETESP has developed a two stage Subproject development, review and approval process. **This is discussed more in Chapter III.**
- *ETESP Environmental Assessment Approval Process*: Environmental assessment is integrated into both stages of the Subproject development, review and approval process. **This is discussed more in Chapters III to V.**
- *GOI Aceh AMDAL Process and Associated GOI-ADB Harmonization Agreements*: all ETESP Subprojects must comply with the GOI's environmental assessment requirements. ADB and the relevant provincial environmental agencies (BAPEDALDAs) have reached agreements on how both ADB and GOI approvals can be obtained in a harmonized process using a single Subproject assessment, rather than one report for ADB and another for GOI. **This is discussed more in Chapter VI.**

### B. HOW DOES THE ADB'S ENVIRONMENTAL POLICY APPLY TO ETESP?

10. Environmental sustainability is a prerequisite for economic growth and poverty reduction in Asia and the Pacific. ADB's Environment Policy (see Annex 1 of this guide) aims to:

- promote environmental interventions that reduce poverty directly;
- assist member countries to mainstream environmental considerations into economic growth and development planning;
- help maintain global and regional life support systems that underpin future development;
- build partnerships to maximize the impact of ADB lending and non-lending activities; and,
- integrate environmental safeguards across all ADB operations.

11. The environmental assessment requirements for projects depend on the significance of environmental impacts. At the categorization stage each proposed project is scrutinized as to its type; location; the sensitivity, scale, nature, and magnitude of its potential environmental impacts; and availability of cost-effective mitigation measures. Projects are assigned to one of the following four categories:

- (i) Category A. Projects could have significant adverse environmental impacts. An environmental impact assessment (EIA) is required to address significant impacts.
- (ii) Category B. Projects could have some adverse environmental impacts, but of lesser degree or significance than those in category A. An initial environmental examination (IEE) is required to determine whether significant environmental impacts warranting an EIA are likely. If an EIA is not needed, the IEE is regarded as the final environmental assessment report.
- (iii) Category C: Projects are unlikely to have adverse environmental impacts. No EIA or IEE is required, although environmental implications are reviewed.
- (iv) Category FI: Projects involve a credit line through a financial intermediary or an equity investment in a financial intermediary. The financial intermediary must apply an environmental management system, unless all Subprojects will result in insignificant impacts.

12. A project's environment assessment category is determined by the category of its most environmentally sensitive component, including both direct and indirect impacts.

13. ETESP was approved in April 2005. As per the requirements of the Environment Policy an Initial Environmental Examination (IEE) was undertaken during its design (see Annex 2), and the overall Project was classified as ADB Environmental Category "B"<sup>1</sup>. The IEE indicates that ETESP is expected to have a significant positive impact on the environment, including rehabilitating damaged coastal zones, mangroves, and coral reefs; reviving agricultural productivity; and reducing health risks by rehabilitating damaged water supply and sanitation facilities. In addition, spatial planning and environmental management activities will promote mainstreaming of environmental considerations into the planning process. The IEE also shows that none of the interventions under the ETESP, (at least as understood at the stage of ETESP approval) is anticipated to create any significant adverse impact on the environment, and that the potential negative impact in a limited number of cases will be localized, short-term, and can be mitigated. Given the emergency nature of ETESP Subproject-specific IEEs were not prepared, and instead will be developed as part of the detailed Subproject preparation process.

14. An Environmental Assessment Review Procedure (EARP) was included as part of the ETESP Grant Agreement<sup>2</sup>, and requires that a further environmental assessment be prepared for each ETESP Subproject, with the exception of Subprojects with "non-physical" interventions aimed at building up/reestablishing human resources capacities, fiduciary and governance framework, etc (see Annex 3). The policy also requires that the ETESP be in full compliance with relevant GOI environmental assessment legislation and process.

15. A basic assumption at the time of ETESP approval was that Category A Subprojects will be avoided during ETESP implementation. However, these Subprojects may be undertaken on a case-by-case basis if they are judged to be critical to the achievement of ETESP's objectives. If the environmental categorization process described in Chapters III and IV identify a potential category A Subproject, the Head of EMS should be consulted before taking further action. In such cases the Head of EMS will, in consultation with the EMS Environmental Safeguards Advisors and Sector Advisors, advise the Satker and consultants

<sup>1</sup> Based on the ETESP SIEE (Appendix 5, RRP) and IEE (Supplementary Appendix, RRP).

<sup>2</sup> Attachment 1 to Schedule 5 of the ETESP Grant Agreement.

on whether to proceed with the Subproject. If necessary, the Head of EMS will consult ADB headquarters staff for advice. No further action will be necessary if it is decided not to proceed with the Subproject. However, if it is decided to proceed, a full environmental impact assessment (EIA) will be undertaken in compliance with ADB and GOI guidelines and procedures.

16. Within each Sector of ETESP the environmental assessment approach has been tailored to the Subproject development approach taken within the Sector and to any unique needs or circumstances. Table 1 provides a summary of the approach taken by Sector to date.

**Table 1:** Summary of Subproject Development Approach and Associated Environmental Assessment Approach within each ETESP Sector

| Sector      | Subproject Development Approach   | Environmental Assessment Approach  |
|-------------|---|--|
| Fisheries   | <ul style="list-style-type: none"> <li>- Ten District level Subprojects presented through District SPARs and SPPRs</li> <li>- One Provincial level Subproject presented through a SPAR and SPPR for generic/Province-wide “soft” and/or “start-up” activities</li> </ul>  | <ul style="list-style-type: none"> <li>- Subproject REAs and Environmental Categorization at the SPAR stage</li> <li>- District Subproject environmental assessments<sup>3</sup> at the SPPR stage (provincial Subproject was soft activities and did not require an environmental assessment)</li> <li>- Environmental assessments includes detailed environmental screening criteria and review and approval processes developed for those village-level activities to be identified during the development of CAPs</li> <li>- Additional environmental assessments for any activities planned in the following years not covered in the initial environmental assessments.</li> </ul>   |
| Irrigation  | <ul style="list-style-type: none"> <li>- Scheme specific Subprojects presented through SPARs and SPPRs</li> </ul>   | <ul style="list-style-type: none"> <li>- Subproject REAs and Environmental Categorization at the SPAR stage</li> <li>- District environmental assessments at the SPPR stage covering one or more schemes (unless works/locations unique enough to require scheme specific IEEs)</li> <li>- Supplementary environmental assessments for any activities planned in the following years but not covered in the initial environmental assessments, unless the increase in scope is sufficient to require a full stand-alone environmental assessment</li> </ul>  |
| Agriculture | <p><i>RKA-KL 2005 program:</i></p> <ul style="list-style-type: none"> <li>- District and provincial level Subprojects presented through “batch” combined SPARs/SPPRs</li> </ul> <p><i>RKA-KL 2006 program:</i></p> <ul style="list-style-type: none"> <li>- District and provincial level Subprojects presented through “batch” combined SPARs/SPPRs</li> </ul> | <p><i>RKA-KL 2005 program:</i></p> <ul style="list-style-type: none"> <li>- Subproject REAs and Environmental Categorization at the SPAR/SPPR stage</li> <li>- District level environmental assessments produced covering activities with physical works, primarily focused on land rehabilitation (clearing of farmlands; clearing of canals; and, repairing earthen farm roads)</li> </ul> <p><i>RKA-KL 2006 program:</i></p> <ul style="list-style-type: none"> <li>- District and provincial activity-specific environmental assessments produced for subcomponents with physical works, including food crops (lining of tertiary irrigation channels), estate crops (rehabilitation/reconstruction of district facilities), and livestock (rehabilitation/reconstruction of district facilities)<sup>4</sup></li> </ul> |

<sup>3</sup> EIA for Environment Category A Subprojects; and IEE for Environment Category B Subprojects. To date ETESP has not undertaken any Environment Category A Subprojects.

<sup>4</sup> This approach for RKA-KL 2006 produced an unreasonably high number of IEEs focusing on small individual activities, and will be avoided in the future.

| Sector                          | Subproject Development Approach  | Environmental Assessment Approach  |
|---------------------------------|--|--|
| Housing                         | <ul style="list-style-type: none"> <li>- Lamdingin and Kampong Pande "pilot projects" presented through combined SPAR/SPPR</li> <li>- For all others (on and off-budget), Subprojects (either village or kecamatan level) presented through SPARs and SPPRs</li> </ul> | <ul style="list-style-type: none"> <li>- Lamdingin and Kampong Pande combined SPAR/SPPRs included both REAs and environmental assessments</li> <li>- For all other Subprojects: <ul style="list-style-type: none"> <li>▪ Subproject REAs and Environmental Categorization at the SPAR stage</li> <li>▪ As per guidance from BAPEDALDA NAD, Kecamatan level environmental assessments at the SPPR stage</li> </ul> </li> </ul>  |
| Roads & Bridges                 | <ul style="list-style-type: none"> <li>- Subprojects presented through SPARs and SPPRs</li> <li>- East Coast road divided into two Subprojects</li> </ul>  | <ul style="list-style-type: none"> <li>- Subproject REAs and Environmental Categorization at the SPAR stage</li> <li>- Subproject environmental assessment at the SPPR stage</li> </ul>  |
| Power                           | <ul style="list-style-type: none"> <li>- Two "regional" Subprojects to be presented through SPARs and SPPRs</li> </ul>   | <ul style="list-style-type: none"> <li>- Subproject REAs and Environmental Categorization at the SPAR stage</li> <li>- As per guidance from BAPEDALDA NAD, District level environmental assessment at the SPPR stage</li> </ul>  |
| Education                       | <ul style="list-style-type: none"> <li>- One overall SPAR and one overall SPPR</li> </ul>  | <ul style="list-style-type: none"> <li>- Subproject REAs and Environmental Categorization at the SPAR stage</li> <li>- Environmental assessment at the SPPR stage; three IEEs covering NAD, SUMUT, and the third for the island of Sabang which has both unique activities and receiving environment</li> </ul>  |
| Community Water Supply & Health | <ul style="list-style-type: none"> <li>- Subprojects to be presented through 7 District level SPARs</li> <li>- Detailed activities in each village to be determined through preparation of a Community Action Plan</li> </ul>  | <ul style="list-style-type: none"> <li>- Subproject REAs and Environmental Categorization at the SPAR stage.</li> <li>- District level IEEs prepared at the SPAR stage, with each including Environmental Standard Operating Procedures (ESOPs) to be implemented in all villages, and detailed environmental screening criteria and review and approval processes developed for village-level activities to be identified during the development of CAPs</li> </ul> |
| Health                          | <ul style="list-style-type: none"> <li>- No SPARs or SPPRs received to date</li> </ul>   | <ul style="list-style-type: none"> <li>- Environmental assessment requirements and issues discussed with team.</li> </ul>  |
| Livelihoods & Microcredit       | <ul style="list-style-type: none"> <li>- One overall SPAR prepared</li> </ul>  | <ul style="list-style-type: none"> <li>- Given the small scale of livelihood and microfinance activities, Sector is classified as "FI", and no environmental assessment is required</li> <li>- Environmental criteria for allowable on-lending developed and adopted.</li> </ul>   |
| Fiduciary Oversight             | <ul style="list-style-type: none"> <li>- Not applicable</li> </ul>   | <ul style="list-style-type: none"> <li>- Not subject to environmental assessment procedures (ETESP EARP)</li> </ul>  |

### C. ENVIRONMENTAL MANAGEMENT PRINCIPLES INCORPORATED INTO ETESP

17. The key underlying environmental impact management principles adopted in the ETESP design, and that are to be complied with by all Sectors, are presented in Table 2.

### D. ENVIRONMENTAL SCREENING OF ETESP SECTORS

18. As noted above an Initial Environmental Examination (IEE) of the overall ETESP Project was undertaken during its design. In April/May 2005 a mission was fielded to Aceh to obtain responses from different public Sectors so as to highlight environmental concerns, aspirations and safeguard issues to be taken into due account in ETESP implementation. The mission formulated - in more detail than in the ETESP IEE - potential impacts and possible

mitigation measures for each of the ETESP Sectors<sup>5</sup> (see Annex 4). Activities proposed in the RRP were screened, and potential environmental impacts and mitigation measures presented in tabular form to be used for further environmental assessment when Subprojects enter the detailed design stage.

**Table 2: Key Environmental Impact Mitigating Principles for ETESP**

- 
- Avoid or prohibit project siting in environmentally sensitive locations, unless aiming at environmental enhancement or protection;
  - Use available information for project siting to the extent possible;
  - Use best technical practices to minimize environmental impacts;
  - Build technical and institutional mitigation measures in the detailed design of the forthcoming Subprojects.
  - Apply relevant technical guidelines and standardized procedures. If not available, develop guidelines (e.g., guidelines for purchase of timber for construction activities).
  - Ensure that construction teams comply with the requirements and take measures specified in environmental assessment reports on water and soil erosion control, waste and noise reduction during construction period. This may include material recycling, appropriate use of soil and rock for ground leveling and lowland fill-up as well as appropriate disposal.
  - Raise public awareness of importance of environmental considerations for long-term sustainable development.
- 

**Source:** SIEE, App. 5 of RRP, March 2005.

19. As would be expected, ETESP Sectors show significant differences with regard to environmental safeguard implications. This holds particularly true for the Fisheries and Agriculture Sectors, and for interventions involving infrastructure rehabilitation and reconstruction works such as Roads and Bridges and Housing, while for other Sectors environmental issues play a relatively smaller role.

20. The screening presented in Annex 4 was completed over a year ago and is now somewhat dated. Nonetheless it still highlights issues that need to be addressed during the development of Sector Subprojects.

## **E. WHO ARE THE PLAYERS INVOLVED IN ETESP SAFEGUARDS?**

### ***PRIMARY PLAYERS***

- *BRR* – as the nodal institution set-up by GOI for Tsunami rehabilitation and reconstruction activities, and as the overall Executing Agency for ETESP, BRR is a key participant in the safeguard compliance process.
- *Implementing Agencies* – the Subproject implementing agencies (including Satkers and the supporting consultant teams) are the project proponents for the ETESP and thus are key to implementing the safeguard agenda. The implementing agencies are

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<sup>5</sup> In particular agriculture/irrigation, fisheries, rural water supply and sanitation, housing, roads and bridges.

responsible for carrying out the REAs and IEEs for their respective Subprojects and securing approvals from appropriate local agencies and ADB before award of Subprojects.

- *BAPEDALDA NAD and SUMUT* – as the custodian of the Tsunami reconstruction and rehabilitation related environmental assessment process in the provinces of NAD and SUMUT, these agencies are responsible for leading the implementation of GOI safeguard process and the approval of environmental assessments.
- *Asian Development Bank EMS* – responsible for review and approval of proposed Subprojects, including environmental categorization and associated IEEs, and monitoring of implementation of mitigation measures during construction and operation stages.

#### **OTHER PLAYERS**

- *Ministry of Environment* – as the author of the Aceh AMDAL decree MOE has a significant stake in the successful adoption of the GOI and ADB environment safeguards.
- *BAPPEDA* – as the leading planning agency at the province level BAPPEDA is responsible for providing spatial and land use planning.
- *International Donor Community* – other international donors who have been active in supporting GOI in developing safeguard documentation and technical resource material include GTZ, UNEP, and UNDP and World Bank. Key NGOs include Fauna and Flora International (FFI), Wetlands International, and the Worldwide Fund for Nature (WWF).

### **III Overview of the ETESP Subproject Approval and Environmental Assessment Process**

#### **A. ETESP SUBPROJECT DEVELOPMENT AND APPROVAL PROCESS**

21. In early 2006 ETESP formally adopted a two stage Subproject preparation and approval process. In general the process consist of a Subproject appraisal stage centered on the preparation, review and approval of a Subproject Appraisal Report (SPAR); and a detailed design stage centered on the preparation, review and approval of a Subproject Preparation Report (SPPR). In March 2006 EMS released a *Guide to SPAR and SPPR Preparation, Review and Approval* (Annex 5).

#### ***SUBPROJECT APPRAISAL REPORT (SPARs)***

22. SPARs may be prepared either for an entire Sector, for batches of Subprojects, or for single Subprojects so as to fit the specific needs of each Sector. A Subproject is a localized intervention with an identified area, an identified beneficiary community, and sets of activities on the ground and features that are unique. A batch is a cluster of Subprojects gathered together based on geographical, administrative or technical rationale (i.e. a District, a scheme, a group of Subprojects with similar technical features.) Depending on the Sector there may be components entailing generalized activities which will not be implemented in a single place, will not have specific impacts on the ground or distinctive features based on locality and which cannot be referred as a "Subproject" (i.e. the Community Empowerment or Seed Distribution components under the Agriculture Sector).

23. To simplify SPAR preparation and reduce the number of documents to be prepared activities under components which do not entail "Subprojects" may be gathered into a General SPAR for the entire Sector. However, activities for components entailing "Subprojects" will be detailed in a Specific SPAR inclusive of a batch of Subprojects or a specific Subproject. SPARs based on batches of Subprojects will include at least minimal information for each included "Subproject", including: location, expected civil works, budget, type of participatory activities to be carried out, social and environmental classification, and whether RALAS (Reconstruction of Aceh's Land Administration System) activities have been carried out in the Subproject locality. Based on this information each SPAR will include in appendix an IPSA (Initial Poverty and Social Assessment) and a REA (Rapid Environmental Assessment) and Environmental Categorization Form. The role of the REA and Environmental Categorization Form is to either confirm the Subprojects initial environmental categorization (B) or to assign a new Subproject environmental categorization (A, C or FI).

24. Each SPAR will be reviewed and approved on a technical basis and in terms of social and environmental safeguards by EMS in order to trigger the allocation of ADB resources for detailed Sector preparation activities and the listing of Subprojects in the BRR official data base (RAN). From an environmental safeguards perspective the review of the SPAR is primarily associated with review and approval of Subproject REA checklists and associated environmental categorization (discussed in more detail below).

#### ***SUBPROJECT PREPARATION REPORT SPPRS***

25. The preparation and detailed design of activities/Subprojects covered by each General SPAR or Specific SPAR reviewed and approved by ADB will be further documented in a SPPR (Sub-Project Preparation Report). The SPPR will include detailed technical design, detailed social design, and the required environmental assessment.

26. To simplify SPPR preparation and reduce the number of documents to be prepared, activities and soft components detailed in a General SPAR may also be designated in a General SPPR. However, activities detailed in Batch or single Subproject SPARs will be designed in a Specific SPPR for each Subproject. Specific SPPRs may include the preparation of a LARAP (Land Acquisition and Resettlement Action Plan), of a CAP (Community Action Plan) involving land issues, and an IEE (Initial Environmental Examination) if category B or an EIA (Environmental Impact Assessment) if category A<sup>6</sup>.

27. Each SPPR will be reviewed by ADB in order to ensure the quality of Sector/Subproject design. LARAPs, CAPs, IEEs and EIAs will have to be approved by ADB to ensure compliance with the ADB safeguard policies. CAPs, LARAPs affecting up to 200 people (50 families) and IEEs will be approved at EMS<sup>7</sup>. CAPs and LARAPs affecting more than 200 people (50 families) and EIAs will be reviewed and approved at ADB HQ. Following the review and approval of ADB, civil works for SPPRs which do not require the implementation of a LARAP, IEE or EIA can be mobilized.

#### ***ADB PRIOR AND POST-FACTO SUBPROJECT APPROVAL***

28. Under the provisions of the ETESP Grant Agreement ADB approval is required for all ETESP Subprojects; however, **prior** approval is not necessarily required in all cases and Subprojects may be approved on a “post-facto” basis subject to the condition that ETESP funding will be withheld if ADB approval is not granted. Similarly, ADB approval is also required for all contracts for procurement of goods and services including civil works; however this can routinely be on a “post-facto” basis, again subject to the condition that ETESP funding will be withheld if ADB approval is not granted. The conditions pertaining to ADB approval of Subprojects and associated procurement contracts are summarized in Table 3.

### **B. ENVIRONMENTAL ASSESSMENT REQUIREMENTS IN THE ETESP SUBPROJECT DEVELOPMENT AND APPROVAL PROCESS**

#### ***ETESP ENVIRONMENTAL ASSESSMENT PROCESS***

29. The ETESP environmental assessment requirements, as presented in the EARP, have been integrated into the SPAR/SPPR process. The approach is based upon:

- Application of environmental assessment at the Sector Subproject level;
- Environmental categorization of Subprojects based on a Rapid Environmental Assessment (REA) checklist at the Subproject appraisal/SPAR stage, and formalized in a Subproject Environmental Categorization Form. The REAs and Categorization Forms are prepared by the Sector Satker/consultants and reviewed and endorsed by the ADB Environmental Safeguards Advisors.
- Environmental assessment (e.g. IEE or EIA) of Subprojects at the more detailed design/SPPR stage. Again, the IEEs are prepared by the Sector Satker/consultants and reviewed and endorsed by the Environmental Safeguard Advisors.
- In the case of EIAs review and approval will be done at ADB HQ<sup>8</sup>.

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<sup>6</sup> If the Subproject is re-categorized to C at the SPAR stage neither an EIA nor IEE will be required, through environmental issues should still be considered in the Subproject design.

<sup>7</sup> From an environmental safeguards perspective the review of the SPPR is primarily associated with review and approval of Subproject IEEs for Category B Subprojects; and review and approval of Subproject EIAs for any Category A Subprojects.

<sup>8</sup> ETESP Subprojects with physical works are typically Category B. Given the emergency nature of ETESP Category A Subprojects will be avoided due to the time taken to obtain all necessary environmental safeguard approvals. However, the inclusion in ETESP of Category A Subprojects that are considered to be important to achieving ETESP's goals will be considered on a case-by-case basis.

**Table 3: Conditions Pertaining to ADB Approval of Subprojects and Procurement Contracts**

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The conditions pertaining to ADB approval of Subprojects and contracts for procurement of civil works under the terms of the ETESP Grant Agreement are summarized as follows:

- a) Under the provisions of the ETESP Grant Agreement, ADB approval is required for **all** Subprojects to be funded under ETESP conditional on submission of both SPARs and SPPRs for the Subprojects. However **prior** ADB approval is required only for:
  - a. The first 3 Subprojects in a given Sector; and
  - b. Subprojects estimated to cost in excess of US\$ 500,000.
- b) ADB approval is required for **all** contracts for procurement of goods and services for ETESP Subprojects. However under the provisions of the ETESP Grant Agreement this may routinely be on a “**post-facto**” basis.
- c) Exceptions to the foregoing are Subprojects that have potential **LAR** (land acquisition and/or resettlement) impacts **requiring the preparation of a LARAP or CAP**. The ETESP Grant Agreement LARPPG guidelines stipulate that in such cases the award (signing) of civil works contracts shall be conditional on the approval of the requisite LARAP/CAP by Local Government(s), the EA, and the ADB;
- d) ADB and EA (BRR) approval notwithstanding, **under GOI regulations the mobilization of civil works is conditional on the approval of the requisite IEE by BAPEDALDA.**

Consequently, provided the first three Subproject in a Sector have been ADB approved, there is no CAP/LARAP required, and BAPEDALDA approval of the requisite IEE has been obtained, the implementation of ETESP Subprojects estimated to cost less than US\$ 500,000 may be undertaken subject to “post-facto” ADB approval of both Subprojects and procurement contracts. However this is subject to the condition that ETESP funding will be withheld if and where such ADB approval is not granted.

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**Source:** ETESP Grant Agreement (2005); ETESP Guide to SPAR and SPPR Preparation, Review and Approval Version 1, February 17, 2006; P. Seyler, ETESP Procurement Advisor 2006.

30. The environmental aspects of SPAR and SPPR approval were formalized in detail in an EMS *Guide to ETESP Environmental Assessment Procedures* released in March 2006 (Annex 6). The following summarizes the two stage ETESP Subproject approval process, including both environmental and social safeguard measures<sup>9</sup>:

- (i) **Subproject appraisal:** submission by the Satker/consultants to EMS and the ETESP Executing Agency (e.g. BRR) of a **SPAR** including, as appendices, an **REA**, **Environmental Categorization Form**, and **IPSA** (Initial Poverty and Social Assessment). From an environmental perspective, the **REA** is used to determine the appropriate Subproject environmental categorization<sup>10</sup>.
- (ii) **Subproject detailed design and approval:** submission by the Satker/consultants to EMS of an **SPPR** covering the detailed Subproject preparation and design including, as appendices, an **IEE** (Initial Environmental Examination) for category B Subprojects, and, where proven necessary due to land acquisition or resettlement aspects related to the Subproject, a **CAP** (Community Action Plan) or **LARAP** (Land Acquisition and Resettlement Action Plan). This document is the basis on which the ADB and BRR approval of the implementation of the Subproject, including the procurement of associated goods and/or services (the latter including civil works), will be determined.

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<sup>9</sup> There are also social safeguard measures that have been incorporated into the Subproject design and approval process. Ensuring compliance with these measures is the responsibility of the EMS Social Safeguards Team.

<sup>10</sup> It should be noted that Subproject categorization is an ongoing process, and can be changed at any time based on revised project scope, new information about environmental impacts, etc.

From an environmental perspective, the SPPR review and approval process is centered on the review of the IEE.

31. In the case of both SPARs (and associated REA and Environmental Categorization Forms) and SPPRs (and associated IEEs or EIAs), Satkers/consultants are strongly suggested to submit advance drafts for review and comment. This results in problems being identified and resolved prior to formal submission to ADB.

32. Figure 1 provides a conceptual overview of the Subproject environmental assessment process, including BAPEDALDA review and approval (the latter is discussed below in Section D and in Chapter VI).

#### ***ROLE OF EMS ENVIRONMENTAL SAFEGUARD ADVISORS IN THE ADB SPAR/SPPR REVIEW PROCESS***

33. The EMS Environmental Safeguard Advisors undertake an environmental safeguards review of each Subproject SPAR and SPPR that is submitted to EMS.

34. At the SPAR stage the Subproject environmental safeguards review is focused on:

- reviewing the REA and determining if all environmental issues have been identified;
- reviewing the Environmental Categorization form, and assessing the category assigned;
- identifying issues which should be prioritized in the subsequent environmental assessment (IEE or EIA);
- ensuring full compliance with ADB and GOI policies and requirements;
- providing a recommendation as to whether the Subproject SPAR should receive environmental safeguards endorsement; and if endorsement is denied, what additional work must be undertaken.

35. At the SPPR stage the Subproject environmental safeguards review is focused on:

- reviewing the environmental assessment<sup>11</sup>, and ensuring that all aspects of it meet acceptable standards;
- reviewing the environmental categorization in light of the IEE findings;
- providing a recommendation as to whether the Subproject IEE should receive environmental safeguards endorsement; and if endorsement is denied, what additional work must be undertaken.

36. The SPAR or SPPR environmental safeguard review findings are submitted by memo to the relevant ETESP Sector Advisor, located either at EMS for “delegated” Sectors, or at IRM or ADB HQ for “non-delegated” Sectors. The Sector Advisor then compiles the results of the environmental, social, community and technical reviews and prepares an overall recommendation for Subproject review which is submitted to the Head of EMS. The Head of EMS then sends a letter to BRR and the Sector Satker advising them of the results of the EMS review.

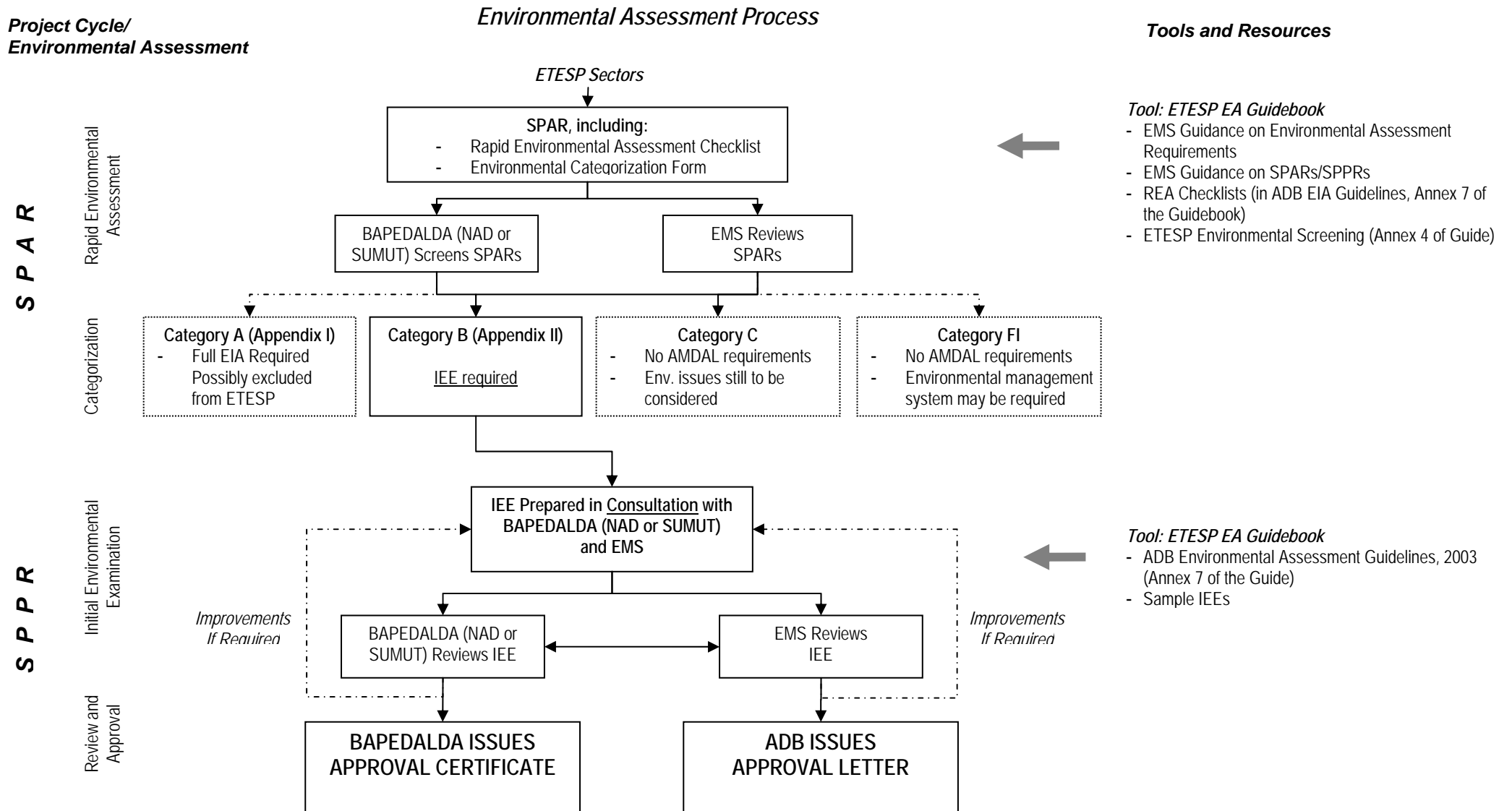
#### **D. GOI ENVIRONMENTAL ASSESSMENT REQUIREMENTS**

37. ETESP also has to fully comply with the environmental laws and regulations of the Government of Indonesia (GOI). To assist with the reconstruction and rehabilitation work that ensued in the aftermath of the Tsunami disaster of December 2004, the GOI has had to adopt practical measures and appropriate legislative processes to expedite the relief effort, including in relation to environmental assessment.

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<sup>11</sup> IEEs only. In the case of EIAs review and approval will be done at ADB HQ.

**Figure 1: Conceptual Overview, Typical ETESP Subproject Environmental Assessment Process**



38. The key decrees underpinning the conventional EIA (AMDAL) process in Indonesia include:

1. Government Regulation No. 27(1999) on Environmental Impact Assessment (EIA);
2. Decree of the State Minister of Environment No. Kep-17/MENLH/2001 on Types of Business and or Activities Requiring Mandatory Environmental Impact Assessment (AMDAL); and
3. Decree of the State Minister of Resettlement and Infrastructure (PU) No. 17/KPTS/M/2003 stipulating the need for and process of involuntary resettlement and the need to prepare an Environmental Management and Monitoring Plan ( UKL-UPL); and
4. Environmental Ministry Decree No. 86 (2002) stipulating UKL-UPL implementation guidance.

39. To streamline the environmental assessment process the MoE has introduced an amended AMDAL review process for Tsunami affected areas of Nanggroe Aceh Darussalam Province (NAD) and Nias, North Sumatra. Signed by the Minister of Environment on 28 September 2005, MoE Decree (KepMen) No. 308<sup>12</sup> caters to the needs of the reconstruction effort and suitable amendments to the process have been adopted to expedite the environments assessment and review process. The Decree assigns the BAPEDALDAs in NAD and North Sumatera with the responsibilities for reviewing and approving environmental assessments.<sup>13</sup> KepMen 308/2005 is presented in Annex 11.

40. One concern that was raised early in the ETESP process was that satisfying both the ADB and GOI environmental approval processes could lead to delays in the implementation of critical ETESP Subprojects in areas such as housing, roads and bridges, and livelihoods. An analysis of ADB and GOI (Decree 308/2005) requirements indicated that ADB Category B IEEs meet or exceed the requirements for UKL/UPLs (environmental management and monitoring plans). This was used as the basis for negotiating environmental assessment harmonization agreements with both BAPEDALDA NAD (for Subprojects in Aceh province) and BAPEDALDA SUMUT (for Subprojects in Nias). The agreements harmonize the two environmental assessment processes in relation primarily to Category B Subprojects; ADB format IEE reports, submitted simultaneously to both organizations, form the basis of the Subproject environmental review process, thereby avoiding time-consuming duplicate reporting processes and reducing approval delays.

41. Under the harmonized process IEEs are submitted by the ETESP Sector Satker simultaneously to both ADB EMS and BAPEDALDA (BAPEDALDA NAD for Subprojects in NAD province, and BAPEDALDA SUMUT for Subprojects in Nias). Both agencies attempt to complete the review and approval process within 2 weeks or less.

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<sup>12</sup> Ministry of Environment Decree No. 308/2005 on Implementation of Environmental Impact Assessment, Environmental Management Measures and Environmental Controlling Measures for Rehabilitation and Reconstruction Activities of Nanggroe Aceh Darussalam and Nias Islands of North Sumatra.

<sup>13</sup> Since the introduction of regional autonomy laws in January 2001 local authorities (districts and cities) have significantly greater responsibility for environmental management within their areas of jurisdiction. Environmental assessment studies (AMDALs) in Indonesia are now largely reviewed and approved at local government level. KepMen 308 recognizes that as a result of the Tsunami this capacity does not necessary exists at the District level, in Aceh and Nias, and it centralizes decision making authority at the provincial level.

## IV. Environmental Assessment at the SPAR Stage: REA Checklists and Subproject Environmental Categorization

### A. SUBPROJECT CATEGORIZATION

42. At the SPAR stage the environmental assessment is focused on Subproject environmental categorization, which is based on a Rapid Environmental Assessment (REA) checklist and formalized in a Subproject Environmental Categorization form.

### B. REA CHECKLISTS

43. ETESP is a Category B project, and Subprojects under it are initially assumed to also be Category B. The role of the REA and Environmental Categorization form is to either confirm the Subprojects initial environmental categorization (B) or to assign a new Subproject environmental categorization (A, C or FI).

44. REA checklists have been developed for many Sectors, as presented below. Checklists highlighted in bold are those relevant or potentially relevant to ETESP.

- (i) **Irrigation**
- (ii) **Fisheries**
- (iii) **Forestry**
- (iv) Hydropower
- (v) Thermal Power Plants
- (vi) **Power Transmission**
- (vii) **Agro Industrial Projects**
- (viii) Chemical-based Industrial Projects
- (ix) Petrochemical Industrial Projects
- (x) **Urban Development**
- (xi) **Water Supply**
- (xii) **Solid Waste Management**
- (xiii) **Sewage Treatment**
- (xiv) Airports
- (xv) **Ports and Harbors**
- (xvi) **Roads and Highways**
- (xvii) **Governance and Finance**

45. The REAs should be completed by the Sector Satker/consultants and included in the SPAR submission. They are reviewed and endorsed as part of the EMS review of the SPAR.

46. It should be noted that Subproject categorization is an ongoing process, and can be changed at any time based on revised project scope, new information about environmental impacts, etc.

47. The REA checklists are presented in Annex 7.

### C. ENVIRONMENTAL CATEGORIZATION FORM

48. An Environmental Categorization form should be completed for each Subproject along with the REA Checklist. The form should be prepared and signed by the Satker/consultant environmental specialist, Team Leader or Satker Head. An ETESP-specific environmental categorization form has been developed and is presented in Annex 8. A WORD version of the file is available from the EMS Safeguards Specialists.

#### **D. ADB APPROVAL OF CATEGORIZATION**

49. Saters/consultants are strongly suggested to submit advance drafts of both REA checklist and Environmental Categorization forms for review and comment. This results in problems being identified and resolved prior to formal submission to ADB.

50. Once submitted as part of a SPAR, the REA Checklists and Environmental Categorization forms for each Subproject will be reviewed and, if the proposed categorization is acceptable, endorsed by the EMS Safeguards Specialists.

#### **E. BAPEDALDA APPROVAL OF CATEGORIZATION**

It is also important at this point to consult with BAPEDALDA NAD (for Subprojects in Aceh) or BAPEDALDA SUMUT (for Subprojects in Nias) to ensure that the relevant BAPEDALDA agrees with the Subproject categorization. The EMS Environmental Safeguard Advisors can assist with this. See Chapter VI for more information.

## V. Environmental Assessment at the SPPR Stage: IEEs

51. At the SPPR stage the environmental assessment is focused on the preparation, review and approval of the required environmental assessment report, which for ETESP to date is typically an IEE report<sup>14</sup>.

### A. THE INITIAL ENVIRONMENTAL EXAMINATION (IEE)

#### *WHAT IS AN IEE?*

52. An Initial Environmental Examinations (IEEs) is required for all Category B ETESP Subprojects. An IEE is a form of simplified Environmental Impact Assessment (EIA) which is carried out for Subprojects likely to have minor or limited impacts which can easily be predicted and evaluated, and for which mitigation measures are prescribed easily. However, the IEE is also used to confirm whether this is indeed the case, and if not whether an EIA is required as a follow up.

53. The general objectives of an IEE study are to:

- (i) provide information about the general environmental settings of the project area as baseline data;
- (ii) provide information on potential impacts of the project and the characteristic of the impacts, magnitude, distribution, who will be the affected group, and their duration;
- (iii) provide information on potential mitigation measures to minimize the impact including mitigation costs;
- (iv) assess the best alternative project at most benefits and least costs in terms of financial, social, and environment. It is not always necessary to change location of the project, but it can be changed in project design or project management; and
- (v) provide basic information for formulating management and monitoring plans.

#### *IEE OUTLINE*

54. The ADB's Environmental Assessment Guidelines (2003) describe in detail the layout and content of an IEE (the relevant sections are presented in Annex 9 of this report). Table 4 presents a typical IEE outline, while Annex 10 presents sample templates for IEE environmental management Plan (EMP) and monitoring tables. **Please note that for IEEs submitted to BAPEDALDA SUMUT, the Screening Checklist presented in Chapter 3, Annex II of Decree 308 also needs to be completed in Bahasa Indonesia and included as an appendix of the IEE.** This is a requirement of BAPEDALDA SUMUT, not ADB. A full English translation of Decree 308 is presented in Annex 11, while the Screening Checklist is presented in Bahasa Indonesia in Annex 12.

#### *KEY STEPS IN IEE DEVELOPING AN IEE*

55. There is a variety of approaches to an IEE study; however, all of them should contain the following essential steps:

- Project Review: A fundamental requirement for all environmental assessment techniques is to understand the project. This includes information such as: (i) type of project, (ii) need for project, (iii) location and site layout, (iv) size of operation, and (v) proposed schedule of operation.

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<sup>14</sup> As noted above a basic assumption at the time of ETESP approval was that Category A Subprojects shall be avoided during ETESP implementation. If Subprojects shall be pursued that are characterized with features of "A", those Subprojects will have to be recategorized. In such cases please contact EMS/PMO at the earliest possible stage.

**Table 4: Outline of an IEE Report**

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**A. Introduction**

This section should include the purpose of the report, extent of the IEE study and brief description of any special techniques or methods used.

**B. Description of the Project**

This section should include the type of and need for the project; and project location, size or magnitude, operation, and proposed schedule for implementation.

**C. Description of the Environment**

This section should include the physical and ecological resources, human and economic development, and quality of life values.

**D. Forecasting Environmental Impacts and Mitigation Measures**

This section should identify "no significant impacts" from those with significant adverse impacts and should discuss the appropriate mitigation measures, where necessary. Please Note:

**E. Institutional Requirements and Environmental Monitoring Plan**

This section should describe the impacts to be mitigated, and activities to implement the mitigation measures, including how, when, and where they should be implemented. The environmental monitoring plan should describe the impacts to be monitored, and when and where monitoring activities should be carried out, and who should carry them out.

**F. Public Consultation and Disclosure**

This section should describe the process undertaken to involve the public in project design and recommended measures for continuing public participation; summarize major comments received from beneficiaries, local officials, community leaders, NGOs, and others, and describe how these comments were addressed; list milestones in public involvement such as dates, attendance, and topics of public meetings; list recipients of this document and other project related documents; describe compliance with relevant regulatory requirements for public participation; and summarize other related materials or activities, such as press releases and notifications.

**G. Findings and Recommendations**

This section should include an evaluation of the screening process, and recommendation should be provided whether significant environmental impacts exist needing further detailed study or EIA. If there is no need for further study, the IEE itself, which at times may need to be supplemented by a special study in view of some small significant impacts, becomes the completed EIA for the project and no follow-up EIA should be needed. If further additional study is needed, then this section should include a brief terms of reference (TOR) for the needed follow-up EIA, including approximate descriptions of work tasks, professional skills required, time required, and estimated costs. The ADB's Environment Guidelines provides a guide for preparing the TOR for different projects.

**H. Conclusions**

This section should discuss the result of the IEE and justification if any of the need for additional study or EIA. If an IEE or an IEE supplemented by a special study is sufficient for the project, then the IEE with the recommended institutional requirements and monitoring program become the completed EIA.

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– Environmental Review - This involves obtaining sufficient information to provide a brief but clear picture of the existing environmental resources within the geographical scope associated with and affected by the project. All potentially affected environmental resources, including physical resources, ecological resources, economic development resources, and quality-of-life values should be examined. Review should be limited to the collection of existing or easily obtainable data (i.e., within project scope and budget).

- Screening of Environmental Impacts – this step assesses potential impacts of the projects on the environmental resources defined in the previous step. It includes:
  - Identifying Environmental Issues - The most straightforward method is the use of an environmental screening matrix, in which each project component and activity is paired with environmental resources that may be affected. Each pair of activities and impacts constitutes a potential significant environmental issue.
  - Prioritizing Environmental Issues - It is important to prioritize the issues for review within the available time and budget. Criteria to be followed includes: (i) *Importance*: the value that is attached to a specific environmental resource in its current condition; (ii) *Affected Area*: the area affected by the disturbance that is anticipated to occur from the project; (iii) *Duration & Frequency*: the continuous time in which the disturbance-causing activity will occur and the frequency of occurrence; (iv) *Risk*: the probability of an unplanned incident caused by the project that would result in significant adverse impacts; and (v) *Reversibility*: the ability of the environmental resources to recover their value after a disturbance has occurred.
  - Assessing Environmental Issues – Asses the extent and magnitude of the impacts. The following grades may be given depending on the outcome of the evaluation: (i) *No effect*: environmental issue has no effect on environmental resources for the project in question; (ii) *Insignificant effect*: the impact on environmental resources is so small, or reversible, or improbable, or the resource has so little value that the impact is insignificant and can be ignored; (iii) *Unknown significant effect*<sup>15</sup>: effect may be significant, but due to a lack of baseline information on the environmental resources, or a lack of understanding of the mechanism of impact, it is not possible to accurately assess the magnitude of effect for grading; (iv) *Significant effect, resolution within the IEE*: effect is quantifiable with the information available and environmental protection measures can be developed within the time and scope of IEE<sup>16</sup>; (v) *Significant effect, resolution outside the scope of the IEE*: issues are too complex to be resolved within the scope of the IEE, or require information that is not available during the time frame of IEE. This type of issue will require further assessment in a full scale EIA or other additional study.
  - Environmental Mitigation Measures - Many environmental impacts can be eliminated or minimized to acceptable levels through the application of easily implementable environmental protection or mitigation measures.
- Environmental Management & Monitoring Plan – The IEE should include an environment management plan (EMP) that clearly defines what mitigations will be put in place, who is responsible for their implementation, and how this will be monitored. The EMP should be written to cover all project stages including design, construction and operation stages. Implementation arrangements including the involvement of key stakeholders, government and non-governmental agencies, the affected population, etc., should be presented. Financial resources including staffing requirements, environmental quality monitoring, analysis and reporting costs should be estimated.
- Public Consultation & Disclosure – Should be designed to: (i) provide sufficient relevant information on the project to stakeholders; (ii) allow sufficient time for them to read and discuss; (iii) allow sufficient time to present views to project proponent and decision-makers; (iv) provide responses to issues/problems raised and (v) choose venues and times of events

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<sup>15</sup> This type of issue will require further assessment in a full scale EIA or other additional report.

<sup>16</sup> In this case the IEE report will serve as the completed environmental assessment of the Subproject.

to suit stakeholders. Efficient and timely public consultation will allow for (a) maximizing project benefits and their ownership by the local population; (b) integrate local knowledge in project design; (c) increase public confidence; (d) better transparency and accountability in decision-making and (e) less conflict.

– IEE Conclusions & Recommendations - The results of the IEE should be tabulated and assessed in a summary fashion and the following points should be addressed:

- Results of the IEE: After applying the environmental mitigation measures will there still be residual uncorrected environmental damage that merit further study? If so, how serious are these residual impacts? Or, can the IEE be deemed to be the completed environmental assessment?
- General review of environmental constraints: The IEE should confirm the rationale of all project planning criteria, including siting, design criteria, constraints required during the construction phase, observance of environmental standards during project operations, and requirements for monitoring.
- Justification of the need for full-scale EIA: If there are environmental impacts which require a follow-up study beyond the scope of the IEE, then these issues should be described as completely as possible. This description should include suggested environmental management measures.
- Preparation of Terms of Reference for full-scale EIA: If the IEE indicates the need for a full-scale EIA and the regulating body overseeing the IEE process agrees with the recommendations, then detailed Terms of Reference should be developed. These include identification of important impacts, information collection requirements, general approach for the design of mitigation measures, general approach for overall environmental assessment methodology, and general requirements for an environmental management plan and monitoring program. They should also indicate approximate budget, staffing, and schedule requirements.

#### **WHAT IS EASY TO OVERLOOK**

- Timing & Scoping – It is critical to have the environmental assessment process commenced alongside project development cycle to allow for full integration of the projects' design features with environmental components. At each step of project development (design, construction and operation), environmental safeguard measures should be implemented.
- *Project Siting* - *Site location* may be the single most important factor contributing to a project's positive or negative potential significant environmental issues and impacts. **Please make use of the NAD Environmental Sensitivity Map (Annex 18) as a key resource in helping to identify if Subprojects are sited in environmentally sensitive areas.**
- *Study Duration* – it is important that each stage of the IEE (or EIA) study is devoted appropriate time and sub-component studies (air, water quality studies etc.) are given enough time for data collection, analysis and reporting in order to arrive at an appropriate result.
- *Data and Information Needs* – *appropriate* baseline data that can establish the ambient setting for assessment is important for an accurate prediction of impact scenarios.
- *Funds* – allocation of *appropriate* budget for studies and IEE (or EIA) reporting team is essential to get a good report.

- *Budgeting/Costing for Environmental Assessment/Management Plan* – Sufficient financial allocation needs to be made for undertaking the environmental monitoring and management tasks during the *life* of the project including institutional support for the environment management office (EMO) of the project.
- *Environmental Monitoring* – It is very common to neglect compliance monitoring activities post approval of the IEE (or EIA). It is *critical* that the compliance monitoring schedules specified in the environment management plan are strictly complied with and the local government regulator sanctions any violations (see Table 5).
- *Lack of Public Participation* – In many cases public participation is neglected with reasons cited including that it is too early in the project cycle; it will take too long and will cost too much; it will stir up opposition; only the articulate will respond; expectations will be raised or people won't understand, etc. If not carried out in time with appropriate support lack of public participation can cost the project much more in the long term.

### ***INCORPORATING MITIGATION MEASURES INTO CONSTRUCTION CONTRACTS***

Environmental safeguard compliance depends upon ensuring that the provisions of the EMP are included in the construction contractor's contract documentation making it legally binding upon him to comply with the EMP safeguards. ETESP has developed generic standard environmental clauses to be incorporated into the Particular Specifications of all ETESP Subprojects contracts with physical works implemented by contractors (Annex 15). The EMPs and monitoring plans from the IEEs are also included in the contract specifications, and provide Subproject specific mitigations and monitoring requirements.

#### ***B. ADB REVIEW AND APPROVAL***

56. The IEE should be submitted to EMS for review and approval, either as an appendix to the Subproject SPPR or as a stand alone document. The submission should be by the relevant Sector Satker, and should include a transmittal letter.

57. As noted above, Satkers and Sector consultants are strongly encouraged to consult with the EMS Safeguards Advisors at all stages in the IEE development process, including submitting drafts of the IEE prior to formal submission. In this way potential problems or issues can be addressed prior to formal submission. EMS will advise the Satker by letter of the results of the EMS review of the SPPR, including the IEE.

**Table 5: Considerations in Environmental Monitoring**

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**Why do we do Environmental Monitoring**

Environmental monitoring is undertaken to:

- (i) provide feedback on the extent and severity of the environmental impacts against the predicted impacts;
- (ii) ensure that mitigations are being appropriately implemented; and
- (iii) assess the overall effectiveness of the project environmental protection measures.

**Types of Environmental Monitoring**

In general terms, there are two types of environmental monitoring: compliance or inspection monitoring, and ambient monitoring.

Compliance monitoring is primarily aimed at determining if the contractor is meeting the contract requirements in terms of mitigation implementation. Ambient monitoring supports this by assessing either the quality/extent of pollutant generation (effluent), or the quality of the receiving environment (air, water, noise).

ETESP will primarily be doing compliance monitoring, supported by ambient monitoring as needed.

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## VI. GOI Environmental Approvals

58. In addition to conforming to the environmental safeguard requirements of the ADB, ETESP also has to fully comply with the environmental laws and regulations of the Government of Indonesia (GOI).

### A. GOI ENVIRONMENTAL ASSESSMENT LEGISLATION

59. As noted in Chapter III, KepMen Decree 308/2005 provides the legal framework for the environmental assessment of rehabilitation and reconstruction projects in Aceh and Nias. The Decree assigns the BAPEDALDA's in NAD and North Sumatera with the responsibilities for reviewing and approving environmental assessments. KepMen 308/2005 is presented in Annex 11.

### B. HARMONIZING GOI AND ADB ENVIRONMENTAL ASSESSMENT PROCESSES

60. ADB has reached environmental assessment agreements with both BAPEDALDA NAD (for Subprojects in Aceh Province) and BAPEDALDA SUMUT (for Subprojects in Nias). The agreements harmonize the two environmental assessment processes in relation, primarily, to Category B and C Subprojects (see Annexes 13 and 14).

61. For Category B Subprojects ADB format IEE reports, submitted simultaneously to both organizations, form the basis of the Subproject environmental review process, thereby avoiding time-consuming duplicate reporting processes and reducing approval delays.

62. IEEs should be submitted in English to ADB and in Bahasa Indonesia to the BAPEDALDAs, if possible. For BAPEDALDA NAD this is a recommendation; however for BAPEDALDA SUMUT it is a requirement. In addition, as noted above, for IEEs submitted to BAPEDALDA SUMUT, the Screening Checklist presented in Chapter 3, Annex II of Decree 308 also needs to be completed in Bahasa Indonesia and included as an appendix of the IEE<sup>17</sup>. This is a requirement of BAPEDALDA SUMUT, not ADB.

63. Sector Satkers and consultants are encouraged to consult directly with BAPEDALDA staff during the IEE preparation process to ensure that the IEEs address issues of particular importance to the environmental agencies. Again, the EMS Environmental Safeguards Advisors can assist with this process. Once the IEE is received ADB and the relevant BAPEDALDAs attempt to complete the review and approval process within 2 weeks or less.

64. For Category C projects, no review or approval is required by either BAPEDALDA, though it is important at the Subproject categorization stage to ensure that the relevant BAPEDALDA endorses the C categorization.

### C. IEE REVIEW AND APPROVAL PROCESS

65. Under the harmonization agreements Satkers should submit IEE reports simultaneously to both ADB EMS and the relevant BAPEDALDAs.

66. BAPEDALDA NAD and SUMUT have two weeks in which to provide comments on IEEs submitted for their review and approval. Satkers are encouraged to meet with the BAPEDALDAs during this review period to make a presentation if desired and to answer any questions. After this period the IEE may be considered to be “defacto” approved if no comments are received. If comments are provided, either verbally or in writing, the IEEs will

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<sup>17</sup> The Screening Checklist is presented in Annex 12 of this Guide.

need to be revised to address those comments and resubmitted. The two week review period begins again once the revised IEE has been submitted. This process continues until final BAPEDALDA approval is obtained, though in practice it is rare for more than one round of revisions to be required before approval is granted.

## **VII. Environmental Responsibilities During Implementation: Mitigation Implementation and Environmental Monitoring**

67. At time of the revision of this guide (November 2006) ETESP is transitioning from Sector Subproject planning and approvals to Subproject implementation. It is critical to note that the ETESP environmental safeguards process **does not end with the approval of Subproject IEEs**. During implementation there are several key environment related activities that require ongoing attention and action in order to operationalize the environmental strategies presented in the IEEs.

### **A. IMPLEMENTATION OF MITIGATION MEASURES**

68. The environmental mitigation measures presented in the relevant Subproject IEEs and in the ETESP Standard Environmental Clauses (for construction contracts implemented by contractors) should be appropriately implemented as part of the overall Subproject implementation.

### **B. ENVIRONMENTAL MONITORING**

69. Environmental monitoring and reporting also needs to be undertaken to ensure that mitigations are being implemented effectively. This is a requirement of ADB as well BAPEDALDA NAD and BAPEDALDA SUMUT.

#### ***SUBPROJECT ENVIRONMENTAL INSPECTIONS AND MONITORING***

70. The environmental monitoring plan presented in the relevant Subproject IEEs should be implemented. This will typically consist of regular environmental compliance inspections to ensure that mitigations are being applied effectively and that significant environmental impacts are not occurring. Inspections may also involve or be supported by ambient monitoring. The IEEs define who is responsible for undertaking the inspections and/or monitoring. It varies from sector to sector, but typically the monitoring plans in the IEEs call for monthly compliance inspections. Annex 16 presents a template inspection form that can be adapted for use by each sector.

71. It is critical that appropriate action be taken to address any serious environmental problems identified in the inspections. If a problem is observed requiring action a copy of the Inspection Report detailing the required actions should be given to the contractor, and copies should be sent immediately to the relevant Satker, ADB EMS, the relevant district BAPEDALDA, and BAPEDALDA NAD or SUMUT (as relevant). The EMS Environmental Safeguards Advisors should also be immediately notified if serious environmental problems are identified.

72. The inspector should follow up within a reasonable time period (e.g. one week) to certify that the action has been taken. If the action(s) have been implemented satisfactorily, the follow-up portion of Section 5 should be completed. If action has not been taken satisfactorily the Satker, EMS Environmental Safeguards Advisors and the relevant BAPEDALDA should be immediately informed, and a decision will be made as to what further action is required.

### **C. ENVIRONMENTAL REPORTING**

73. The results of the environmental monitoring needs to be reported on a regular basis to key stakeholders.

### ***SUBPROJECT INSPECTION REPORTS***

74. The inspection reports should be submitted to the relevant Satker, ADB EMS, the relevant district BAPEDALDA, and BAPEDALDA NAD or SUMUT (as relevant) as part of the quarterly sector reporting process (see below). However, as noted above, if a problem is observed requiring action a copy of the Environmental Inspection Report detailing the required actions should be given to the contractor, and copies should be sent immediately to the relevant Satker, ADB EMS, the relevant district BAPEDALDA, and BAPEDALDA NAD or SUMUT.

### ***QUARTERLY SECTOR PROGRESS REPORTS***

75. The progress of each sector in terms of overall environmental safeguard compliance should also be reported on, preferably as part of the overall sector progress reporting which is typically done on a quarterly basis<sup>18</sup>. A sample sector environmental progress and monitoring report which can be adapted for use by each sector is presented in Annex 17. The subproject Environmental Inspection Reports should be included. The reports should be concise as possible, and presented as part of, or as an annex to, the main sector quarterly progress report.

76. ETESP Satkers, Team Leaders and EMS Sector Advisors are requested to give the above issues sufficient priority during ETESP construction implementation. For further information please contact the EMS Environmental Safeguard Advisors listed in Annex 18.

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<sup>18</sup> BAPEDALDA IEE approvals typically require quarterly reporting.