

## Fact Sheet: ENVIRONMENTAL ASSESSMENT AND MONITORING FOR POST-DISASTER RECONSTRUCTION, ACEH and NIAS, INDONESIA

- The environmental assessment of large scale reconstruction projects in post-disaster situations poses significant challenges for development agencies.
- Strategies such as building local environmental assessment capacity and coordination with host country environmental authorities at an early stage can help ensure environmental assessment is implemented in a timely manner that contributes positively to the reconstruction process.

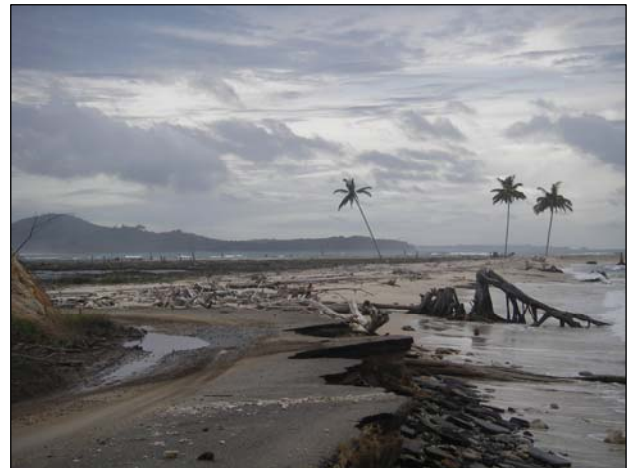
### Challenges:

The December 26, 2004 magnitude 9.1 earthquake and tsunami caused massive damage to infrastructure in the Indonesian province of Aceh, destroying hundreds of coastal villages and much of the city of Banda Aceh. Over 100,000 homes, thousands of kilometers of roads, and more than 2,000 schools were destroyed. The Government of Indonesia (Gol) and the international community responded by committing over six billion dollars to one of the largest post-disaster reconstruction efforts in history. The Asian Development Bank (ADB) was a major partner, contributing (among other grants) a \$291 million grant for the Earthquake and Tsunami Emergency Support Project (ETESP). The majority of ETESP's 12 components focused on rebuilding damaged infrastructure, including houses, roads and bridges, irrigation systems, health centers, schools, water supply and sanitation systems, and electricity distribution networks.

ADB, as with most international financial institutions (IFIs), requires proposed projects with the potential for adverse environmental impacts to undergo an environmental assessment to avoid, minimize or mitigate those impacts. However, in disaster response work where the rehabilitation or restoration of key infrastructure is an immediate priority and where local institutions and agencies have been severely weakened, ensuring compliance with environmental assessment requirements is a significant challenge. For ETESP the challenge was exacerbated in that most activities under the project's 12 components had not yet been developed in detail at the time of project commencement.

### Approach:

**Five main strategies were utilized to ensure that ADB's environmental requirements were applied under ETESP:**



Destruction of the main road along the west coast of Aceh, north of Calang. (Source: A. Bansgrove, 2005).

### 1) Overall environmental assessment at project outset:

ETESP was classified by ADB as Category B<sup>1</sup>, requiring an initial environmental examination (IEE) of the project as a whole at its outset. The IEE indicated that ETESP was expected to have a significant positive impact on the environment, and predicted that potential negative impacts would be localized, short-term, and controllable through implementation of appropriate mitigation measures and environmental monitoring.

### 2) Environmental assessment review procedure:

Given the emergency nature of ETESP most subprojects had not been developed in detail at project commencement, and subproject-specific environmental assessments were thus not prepared. To guide subproject assessments an Environmental Assessment Review Procedure (EARP) was agreed upon by ADB and the Gol. The EARP required the preparation of an environmental assessment for each ETESP subproject with physical works prior to its implementation. The EARP also required that the subprojects be in compliance with relevant Gol environmental requirements<sup>2</sup>.

**3) Enhancing coordination:** A comparative analysis found that the requirements of an ADB Category B IEE fully met or exceeded the requirements of the corresponding Gol environmental assessment.

<sup>1</sup> ADB categorizes projects with physical works as category A, requiring a full environmental impact assessment; category B, requiring an initial environmental examination; category C, no assessment required.

<sup>2</sup> Ministry of Environment Regulation No. 308/2005

Based on this, agreements were negotiated between ADB and the provincial environmental authorities (BAPEDALDAs) for the harmonized review of subprojects. An “ADB format” subproject IEE report, submitted simultaneously to both ADB and the relevant BAPEDALDA, formed the basis of the environmental review process by both parties, thereby avoiding duplicate reporting processes and reducing approval delays.

**4) On the ground environmental assessment capacity:** ADB’s project management office attached to its Extended Mission (EMS) for Sumatera included international and domestic environmental safeguard advisors with the responsibility for overseeing the environmental assessment process and undertaking monitoring during implementation. Furthermore, EMS had the authority to issue environmental clearance for the ETESP subprojects. This on ground capacity and authority significantly enhanced the ability to identify issues and make decisions in a timely and responsive manner.

**5) Supporting government partners:** It was recognized that reviewing, processing and ultimately monitoring the large number of ETESP subprojects would impose a considerable workload on BAPEDALDAs that, at least in the case of Aceh Province, had suffered significant human resource losses resulting from the earthquake and tsunami. To address this, the services of a long-term environmental advisor were provided to the BAPEDALDAs. Although financed by ETESP, the advisor was administratively independent from ADB and was considered to be government staff. The presence of the advisor was a significant factor in the provincial governments’ successfully handling the assessment and monitoring workload generated by ETESP, and later by other donors and NGOs as they also began to comply with Gol requirements.

**Results:**

**All ETESP subprojects with physical works underwent environmental assessments – there were no exceptions.** In total 164 IEEs were produced covering 247 subprojects. The environmental assessments needed to be reviewed and approved by both ADB and the BAPEDALDAs before the subproject could proceed.

**The harmonized ADB-GOI environmental review process and the support to the BAPEDALDAs was instrumental in expediting the environmental review process.** The process for obtaining either comments or approval from ADB and BAPEDALDAs in most cases took less than two weeks from receipt of the IEE, and in no case was a subproject’s implementation delayed as a result of conforming to the environmental assessment requirements of ADB and the Gol. The assessment findings generally indicated positive social, economic and environmental benefits; negative impacts that were

identified could be adequately mitigated.

**ETESP played a leadership role in fully incorporating environmental assessment into the reconstruction of Aceh,** and through outreach activities such as workshops on environmental assessment, the ETESP experience was disseminated and emulated. In 2006, of the 84 IEEs or equivalent assessments undertaken of reconstruction projects in Aceh, 92% were done by ETESP; in 2007 of the 84 IEEs or equivalent undertaken, 21% were done by ETESP, 63% by other international supported projects, and 17% by the Gol’s Rehabilitation and Reconstruction Agency; and by 2008 of the 27 IEEs undertaken, only 11% were done by ETESP while 89% were undertaken by the Rehabilitation and Reconstruction Agency.

**The environmental assessment process also encouraged mainstreaming of environmental considerations into the design and implementation of ETESP subprojects.** For example, in the fisheries sector emphasis was placed on rehabilitation of the coastal zones and improved environmental management of fish landing sites and fuel depots; in the agriculture sector works included ecologically sensitive rehabilitation of tsunami affected agricultural land; in the health sector activities included the collection and environmentally sound disposal of over 200 tons of unused donated pharmaceuticals; and in the housing sector considerable emphasis was placed on ensuring that houses were equipped with sustainable sanitation systems, including a follow-on subproject to remediate systems where monitoring indicated that they were not built according to Gol standards.

**Conclusions:**

Despite numerous challenges the ETESP experience has shown that **environmental assessment can be effectively undertaken by IFIs in post disaster situations, and can help ensure adequate environmental protection during the reconstruction process.** To be effective attention needs to be paid to streamlining the assessment process and ensuring there is sufficient capacity to undertake, review and approve the assessments. Close coordination with relevant host country environmental authorities can help ensure compliance with national assessment requirements in a manner that avoids duplication and delays.