The Leuser Ecosystem REDD Project

Source(s): Project Summary: The Leuser Ecosystem REDD Project, Aceh, Indonesia

Leuser Public Private REDD Project (*2)

Global EcoRescue Article (October 2, 2009) (*3)

Note: As no project design document was available at the time of constructing this profile (June 2011), the information that can be provided is limited.

Project location

The Leuser Ecosystem is located in the province of Aceh, which is situated at the northern tip of Sumatra, Indonesia. The total area is 2,280,000 ha, containing forest land of 1,920,000 ha. (*2, p.4)



The forest in the Leuser Ecosystem is exceptionally rich in biological diversity. It is considered to be the last place in Southeast Asia that is of sufficient size and quality to maintain viable populations of many rare and charismatic species such as tigers, orangutans, rhinos, elephants, and clouded leopard (p.2).

Forest management and use context

The status of the Leuser Ecosystem is bound by Act No 26, 2007 regarding National Spatial Plans. In the implementation details of this Act, PP No 26, 2008, the Leuser Ecosystem was declared to be a Strategic Area - an area that is of national importance, especially for economic and environmental reasons. Consequently it is illegal to undertake any activities inside the Leuser Ecosystem that are not directly related to either the protection or restoration of the ecosystem, the strongest protection status possible under Indonesia law. Moreover, both provincial and district level spatial plans comply with the regulations articulated in Jakarta and the boundaries of the Leuser Ecosystem have been socialised to communities that live along its periphery. Recognising the need to protect the Leuser Ecosystem specifically, the Governor of Aceh, with the agreement of the Aceh Parliament, established a special body to manage the Leuser Ecosystem – Badan Pengelola Kawasan Ekosistem Leuser (BPKEL). (p.2)

Approximately 690,000 people live inside or adjacent to the Leuser Ecosystem. There are 8 ethnic groups. These are some of the poorest communities in Indonesia. (*2, p.7)

Rates and drivers of deforestation and degradation

The main threats that are driving deforestation in the Leuser Ecosystem include:

- Poorly controlled infrastructure development including, roads, transmission lines, and large dams
- Mining
- Conversion of forest to tree crop plantations, namely palm oil
- Settlement expansion
- Smallholder encroachment
- Illegal logging (p.2)

Since 2004 the threat of forest loss in Aceh has been heightened due to a number of fundamental changes. First, Aceh's 30-year period of civil conflict ended in August 2005, during which time there was political and economic uncertainty and investment was constrained. Second, the 2004 tsunami resulted in human and infrastructural damages, which lead to a massive reconstruction effort and a strong demand for timber. As a result, deforestation rates have increased dramatically in Aceh, rising from an average of 20,000 ha per year to an estimated 130,000 ha per year in 2005-2006, or a 3.66% rate of deforestation. (p. 2)

The deforestation rate of the Leuser Ecosystem was 5,500 ha/year (3 MtCO2e) for 2000-2009 (*2, p.5).

Project proponents

- Global Eco Rescue(GER)
- Government of Aceh (Badan Pengelola Kawasan Ekosistem Leuser (BPKEL) / Leuser Ecosystem Regional Management Agency)

Implementation timeframe 30 years (p. 2)

Project goals

Note: Not clearly stated

Implementation activities

The Project supports an "integrated landscape approach" with the following features:

- The Project is "nested" in a provincial wide REDD approach.
- The financial flows created by carbon credits will be used to fund sustainable development and conservation activities.
- The Project aims to address the root cause of deforestation: unsustainable approaches to economic development.
- An holistic land management strategy, employed in line with the Governor's Aceh Green vision, which calls for hard investments in electrification projects, agro-forestry and timber plantations, as well as soft investments in education, healthcare and community work.
- The aim is to refocus communities neighboring forests away from inefficient forest utilization and agricultural practices and employ them in higher value added and ecologically balanced economic activities. (*2, p.11)

Under the Project, sustainable timber plantations, community agro-forestry, renewable energy, and ecotourism are considered low carbon investment opportunities (*2, p.9).

Specific development activities are targeted on the basis of their ability to support development goals while at the same time providing incentives to local stakeholders to value conservation. Activities will be pursued through both sustainable commercial ventures and community development initiatives.

Two of the key sectors that GER will focus on in Aceh are power and the forest supply chain:

Power: On average, 70 percent of electricity related infrastructure in Aceh is in disrepair as a result of the 2004 tsunami, the 30-year civil conflict or lack of maintenance. The province faces a power deficit of approximately 220MW and is vulnerable to power shortages. GER has identified a number of renewable energy investments on the periphery of the Leuser Ecosystem.

Forest Supply Chain: Given the lack of clear title to land, it is difficult to secure large tracts of land to establish plantations. Developing community forestry is a crucial component of the optimization of the forestry supply chain. (p.3)

Actors' roles and responsibilities		
Global Eco Rescue(GER)	As a private project developer, GER is developing the Leuser REDD project in partnership with the Government of Aceh. It has operated in Indonesia since 2006 and has offices in Switzerland. (p.4)	
Badan Pengelola Kawasan Ekosistem Leuser (BPKEL)	A special body to manage the Leuser Ecosystem established by the Governor of Aceh (p.2).	
Leuser Development Corporation (Devco)	Undertake development initiatives that alleviate forest logging and forest conversion pressure on the Leuser Ecosystem (*3, p.2).	

The names and the roles of several organisations are listed for the analysis phase, as follows:

The Wood Holes Research Centre	Scientific expertise to develop a REDD+ baseline for Aceh
Casper Vandertak Consulting	Ensure the Project passes environmental standards and auditing
Environmental Accounting Services	Apply carbon stock methodologies to the Project
The Ata Marie Group	Indonesian forestry and spatial land mapping expertise for the Project
Forest Services Group	Designing and managing sustainable forest production concessions
Mitra Kolasis	Social and community assessment work

The names and the roles of several organisations are listed in relation to investment, as follows:

The International Finance	With GER, co-financing industrial plantation (HTI) and community agro-forestry
Corporation	(HTR) feasibility studies in Aceh
Samko Timber	Partners with GER to develop forest and agricultural assets
Balung (Saya House)	Partners with GER to develop distribution and export markets for community
	smallholders.
Govt. of Aceh	Licenses Incorporation of Companies Agreement with Communities

Community participation

N.D.

Project financing

N.D.

Benefit sharing

N.D.

Emissions and removals with and without project

The Leuser Ecosystem has a total current carbon stock of approximately 1,400 Mt CO_2e with a weighted average carbon stock of approximately 760 t CO_2e /ha. Preliminary assessments have estimated that approximately 30% of the Leuser is under threat from deforestation, with a yearly deforestation rate of roughly 2%. Under this scenario the project will deliver approximately 6-8 million Verified CO_2e Emission Reductions (VERs) annually for a minimum of 30 years (p.2).

Based on GER's definition of the project and baseline scenarios, combined with their assessment of the methodologies emerging from the Voluntary Carbon Standard double approval process, compatible methodologies were found to be:

- Methodology for Estimating Reductions of GHG Emissions from Mosaic Deforestation, developed by World Bank BioCarbon Fund
- Methodology for Estimating Reductions of GHG Emissions from Frontier Deforestation, developed by Amazonas Sustainable Foundation (*2, p.16)

These methodologies were selected as they meet the following key selection criteria:

- Allow assessment of both mosaic and frontier deforestation representative of deforestation trends in Aceh
- Are in the final stages of the first validation phase and are likely to achieve double approval within the next 3-6 months (*note: this statement was made in May 2010*)
- Accept a forward-looking baseline approach to developing the business as usual baseline map (*2, p.16)

The business as usual reference methodology selected is the Terrestrial Carbon Group's Three Filters approach. This meets the key criteria – forward-looking, spatially explicit, regional and national estimates, compatible in Indonesia, allows greatest flexibility in data requirements, and appears to be transparent in its application. (*2, p.16)

Leakage

The holistic land management approach adopted by GER calls for establishment of nurseries and tree plantations that will continue feeding the downstream pulp and paper industry and avert expansion of logging into areas surrounding the Ecosystem. Under the November 2008 VCS AFOLU guidelines, a leakage risk assessment for avoiding planned and unplanned (illegal) frontier deforestation and degradation will be undertaken. Depending on the results of the leakage risk assessment, 10-30% of carbon credits will be set-aside.

Monitoring

A local Acehnese company, Mitra Koalisi, has conducted a comprehensive Social and Community Assessment. The intention of the study is to fulfill the requirements of the CCB standards and to guide project decisions concerning community consultation, benefit-sharing and grievance mechanisms. (*2, p.17)

Reporting

N.D.

Verification

Emission offsets will be verified under Voluntary Carbon Standard (VCS) and Climate Community and Biodiversity (CCB) criteria (p.2).

Risks and risk management

Non-permanence risks

GER's holistic approach to manage non-permanence risks associated with the Project establishes environmentally, socially and financially sustainable development initiatives orientated towards improving local stakeholder respect for conservation values. (p. 3)

Progress and plans

Leading service providers have defined the baseline and project scenarios, identified the complexities posed by deforestation pressures; confirmed a compatible methodology that is as close to market ready as possible; selected a business as usual reference approach suitable for addressing the deforestation drivers in Aceh and developed a clear and definitive list of data parameters to complete the Project Design Document (PDD). (*2, p.15)

Project approval will be sought from the central government of Indonesia, through the Ministry of Forestry. (p. 4)

Links:

Project-related documents

Global Eco Rescue webpage

Others

• REDD, Tenure and Local Communities-A Study from Aceh, Indonesia

<u>Aceh Province REDD Progress Update(2010)</u>