

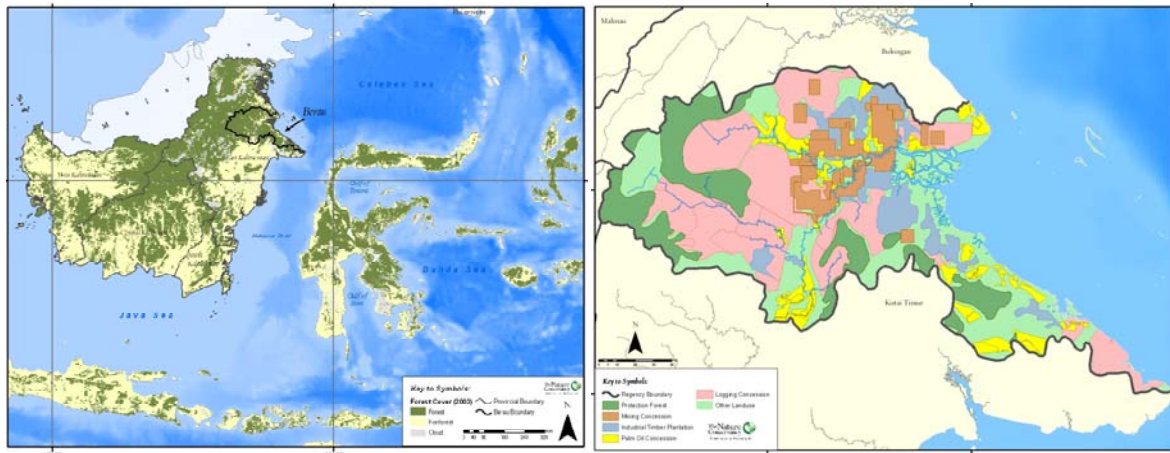
Berau Forest Carbon Program

Source(s): [The Nature Conservancy; Berau Forest Carbon Program](#)

[Berau Forest Carbon Program \(BFCP\) \(*2\)](#)

Project location

Berau District, East Kalimantan, Borneo, Indonesia



Forest area and types

(p. 1,7)

- Berau District has retained more than 75 percent of its forest cover (more than 1.6 million hectares), including one of the largest intact areas of lowland rainforest in the country.
- The lowland forests of Berau house one of the world's largest orangutan populations, including the rare black Bornean orangutan.
- More than 80 tree species that occur in the Berau District are listed as threatened by The World Conservation Union (IUCN).

Forest management and use context

More than 75 percent of Berau's 2.2 million hectares are forested, but only 17 percent is under formal protection. The remaining lands are allocated to commercial logging and timber plantations and non-forest use such as palm oil plantations, coal mines and settlements (p. 3).

More than 1.6 million hectares of forest covers the district of Berau and nearly half of those lands are designated for management as timber concessions.

Currently, 17% of the land in Berau is set aside for protection of hydrological function, and the area will rise to 25%, or approximately 550,000 hectares if the proposed spatial plan goes into effect. But virtually none of this area is managed, and the policy framework is unclear about government responsibilities. As a result, 14% of the forest carbon emissions in Berau from 1990-2005 came from technically protected forests (p. 7).

Land use in Berau (*2)

Land use	Forest	Non-forest	Total
7 protection forests	?	?	360,950
11 timber concessions	739,455	43,195	782,650

32 oil palm plantations	123,392	65,405	188,797
3 timber plantations	200,306	28,519	228,825
27 mining concessions	129,466	55,451	184,917
Others	?	?	811,974

Rates and drivers of deforestation and degradation

The forests face multiple threats from legal and illegal logging, clearing for oil palm and timber plantations and coal mining (p. 1).

More than 75 percent of all emissions associated from land use change are estimated to have come from forest degradation rather than from deforestation. However, as land use intensifies, this will change dramatically. Initial modeling by Winrock International predicted a 10-fold increase in forest loss in Berau over the course of a 10-year period. The forces that have led to clearing of forests throughout East Kalimantan are now focusing more and more on Berau, threatening its relatively high proportion of remaining good-quality forest (p. 3).

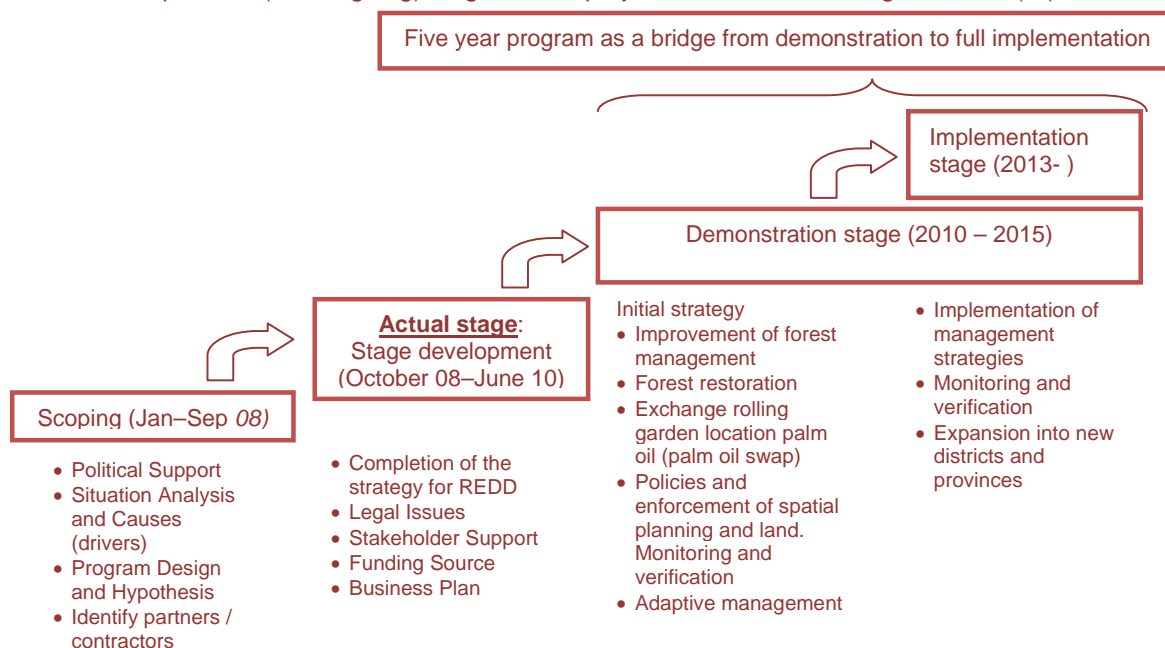
Project proponents

- Ministry of Forestry, Indonesia
- East Kalimantan Province
- Berau District
- The Nature Conservancy (TNC)
- United States Agency for International Development (USAID)
- Responsible Asia Forestry and Trade (RAFT)

Implementation timeframe

2008 - 2015

The different planned (and ongoing) stages of the project are shown in the figure below (*2):



Project goals (p. 1)

The goal in Berau is to develop a district-wide carbon accounting framework that captures emissions from a range of strategies and land types, which will dramatically reduce concerns about leakage (shifting activities to other locations).

By 2015 the project aims to:

1. Bring at least 800,000 hectares under effective management;
2. Avoid emissions of 10 million tons of carbon dioxide over five years;
3. Protect critical watersheds and areas of high biodiversity value (including habitat of 1,500 orangutans);
4. Create improved economic outcomes and opportunities for communities living near forests.

Implementation activities

At 2.2 million hectares, nearly the size of Belize, Berau offers a microcosm of the challenges, and potential solutions, of “scaling up” REDD. These include:

- Producing a baseline of estimated historic and anticipated emissions under “business-as-usual” activity;
- Implementing a comprehensive set of mutually-reinforcing strategies for sustainable land use management that align with economic development aspirations;
- Developing legal mechanisms for conservation-based payments to land users that forego legal economic opportunities;
- Integrating communities into overall program decision-making, site-based incentive agreements, and more broadly directed low-carbon development strategies;
- Supporting improved spatial and natural resources planning and decision-making, including mechanisms for data coordination by different levels of government;
- Measuring avoided emissions from multiple strategies in different sites under a unified carbon accounting framework;
- Bundling of carbon rights from individual project-scale emission-reduction strategies or land use categories to achieve transactional efficiency;
- Developing mechanisms to share revenue from carbon credits equitably with all relevant stakeholders (p. 2).

The Unique Approach in Berau (pp. 4-6)

Given the trends and concerns about REDD implementation, the Berau Forest Carbon Program is being designed with the following distinctive components:

- ***District-scale program***

That takes a comprehensive land use view:

Clarifying and reaching agreement over responsibilities of different agencies in a single district is likely to be the most replicable model and would yield the most lessons for development of a national program in Indonesia.

And an integrated approach to carbon accounting:

The goal in Berau is to develop a district-wide carbon accounting framework that captures emissions from a range of strategies and land types, which will dramatically reduce concerns about leakage (shifting activities to other locations).

- ***An inclusive partnership approach***

Between levels of government:

Between all stakeholder groups:

Between scientific, academic, and charitable institutions:

- **A “No regrets” strategy for all participants**

The Berau Forest Carbon Program is focused on aligning its efforts with existing goals and programs that are consistent with long-term sustainable development. As such, the program will pursue several strategies (e.g., Reduced Impact Logging and maximizing use of degraded land for oil palm) that can achieve multiple environmental and economic benefits.

Emission reduction programs (pp. 7-8)

- **Improve forest management within timber concessions:**

Sustainable forest management is a vital tool in lowering emissions and improving forest health in Berau. The Nature Conservancy has been working since 2006 to promote sustainable harvesting practices through the Responsible Asian Forestry and Trade Program (RAFT), funded by USAID. So far, eight of the district’s 13 timber concessions are working with the Conservancy to improve their forest management by setting aside High Conservation Value Forests, adopting Reduced Impact Logging techniques, and tracking their timber. These efforts will be significantly expanded upon through educational and training initiatives, including an existing Reduced Impact Logging Learning Network.

The Berau program will develop additional financial incentives and contractual arrangements for concessionaires to move towards improved management, certification, and marketing of sustainably harvested wood. These approaches may include multi-party agreements, purchasing guarantees, and /or government policies that would grant preferential access to credit and markets for the best-performing concessions.

- **Develop incentives for improved management of protection forest:**

The program will pursue a two-track approach of supporting policy development while also piloting incentive agreements with managers of highly threatened protected forests – either communities or companies. Restoration of degraded and cleared lands within protected forests provides an additional opportunity within a REDD+ mechanism. Lesan Community Forest, an 11,000 hectare protected area long prized as home to a substantial orangutan population and recently zoned as protection forest, will serve a perfect case study for development of incentives for ongoing management and protection.

- **Create a model for redirecting oil palm development to degraded lands:**

The areas in Berau’s spatial plan that are slated for “conversion” to non-forest uses, including to oil palm, are still more than 50% forested, indicating a significant opportunity to prevent forest loss through better siting of oil palm. The World Resources Institute and Sekala have found that a number of companies appear motivated to distinguish themselves from the overall oil palm sector and eager to cooperate in the program if it helps improve the sustainability of their production systems and, thus, their image. The key is to provide incentives to the district government and private companies for lost opportunities. This program will require significant legal work with government and communities to resolve any land tenure issues in degraded areas, scientific work to optimize strategies for reclaiming degraded land, and mobilization of local communities to ensure that they have the chance to benefit from the economic opportunity that oil palm represents. This work may be coupled with strategies to increase yields on oil palm plantations, thereby maintaining or increasing outputs while minimizing the impacts.

- **Paying for environmental services from High Conservation Value Forests and other special management areas within concessions areas planned for non-forest uses:**

The Berau Program is exploring options to create such a mechanism as conservation easement using the existing framework for environmental services licenses, or IUPJL. The program will then identify target areas with high carbon, biodiversity or social value within timber concessions, and find a fair way to

compensate concessionaires for set-asides or special management beyond legal compliance.

Information for decision-making

The program will address:

1. **Data generation:** Gathering improved data on carbon stocks, land suitability for agriculture and forestry, High Conservation Value Forest mapping, opportunity costs of land uses, and macro-economic impacts of large-scale forest carbon program.
2. **Data integration:** Working with University of Queensland's Spatial Ecology Laboratory to develop an optimization tool for district decision-makers so they can easily see the trade-offs between different land use decisions, as well as the return on investment from different strategies to reduce carbon emissions.
3. **Data use and sharing:** Developing systems for ongoing data collection, protocols for sharing data between and across levels of government, and processes for factoring appropriate data into decisions, such as allocation of oil palm permits.

Actors' roles and responsibilities (p. 5)

The Nature Conservancy	TNC has played a significant role in the program design and development, but plans to play a smaller role in implementation, focusing on areas of expertise. TNC's main roles during the design phase have been: (1) convening key parties, (2) supporting the Joint Working Group to design the program and (3) supporting negotiation of the overall program agreement.
USAID	See the section 'Implementation activities'
Providers of technical, socioeconomic, and other critical knowledge to the program	Many institutions are lending technical, socioeconomic, and other critical knowledge to the program, including: ICRAF (The World Agroforestry Center), Sekala, the World Resources Institute, Universitas Mulawarman, Winrock International, The University of Queensland, World Education.
REDD Working Group	In April 2008, the Bupati of Berau created a REDD Working Group — which includes government, private sector, and civil society representatives — to explore opportunities for developing a REDD pilot program in Berau. The Berau REDD Working Group is now formally linked through a Joint Working Group with Ministry of Forestry representatives (p. 4).
All stakeholder groups	The Berau program will engage communities and people living in and near forest areas; private sector investors and employees; government officials and agencies at all levels; and a range of civil society organizations through a variety of activities and governance mechanisms (p. 5).

Community participation (p. 8-9)

To have long-term success at protecting Berau's forests while providing economic development for its people, it is critical to link communities more effectively to land use planning, management, and governance, while ensuring that the benefits of effective management are shared equitably. The Berau Forest Carbon Program will build on site-level experiences, and work with a range of stakeholders to create a more systematic approach across Berau. These efforts will include:

- (1) Establishing governance structures and consultative mechanisms to include communities in overall program decisions;
- (2) Strengthening community institutions to facilitate effective participation;
- (3) Investing in alternative livelihoods programs in target areas to support low-carbon development strategies.

Project financing

Funding in the order of \$50 million over five years will be required for successful implementation of the programs and strategies anticipated during the demonstration phase in Berau (p. 2).

Given uncertainties about future forest carbon markets, the program is focused on attracting financial support for program design and institutional development that are critical foundations for any form of

carbon finance. Since the regulatory framework for carbon rights has not yet been finalized in Indonesia, it is unclear what benefits could accrue to a private investor from a REDD project in Indonesia at this time. Therefore, during the pilot phase, the program will seek support for performance-based incentive programs primarily from public and private donors. Depending on the emergence of frameworks for carbon markets within and outside Indonesia, the program may be able to generate genuine rights to carbon offsets and seek financing from carbon-interested investors. The Nature Conservancy does not seek to own carbon rights from the program (p. 6).

A financial mechanism (such as a trust fund) will be created to collect and manage program funding (p. 11).

Benefit sharing

- Working across the entire district will de-emphasize the importance of property rights, which are often contested, to REDD and create diverse forms of benefit sharing that are not tied to land ownership (p. 9).
- Once market rules are clarified, verified emissions reductions from the program will be bundled for marketing and proceeds will be shared with stake-holders as determined by the oversight body through its participatory planning process (p. 11).

Emissions and removals with and without project

TNC, ICRAF, Winrock International and others have been developing a program approach that will:

- Synthesize carbon stock and land use change data from existing sources; assess the uncertainty levels of different components of emissions baseline data; and undertake targeted research to reduce uncertainty to acceptable levels;
- Develop a Reference Emission Level that effectively incorporates planned deforestation and degradation, and unplanned deforestation and degradation;
- Work closely with the Ministry of Forestry and international experts to develop an integrated methodology for REDD+ carbon monitoring and accounting that nests within national and international accounting systems and is verified with leading standards.

Monitoring

No data

Reporting

No data

Verification

No data

Risks and risk management

A “No regrets” strategy for all participants (p. 6)

Progress and plans (p. 12)

- Until June 2010 the project will aim at completing the strategy for REDD in the area, clear legal issues, obtain support from different stakeholder and secure funding sources.

- The demonstration stage is expected to take place between 2010 – 2015. In 2013 full implementation is envisaged

Links:

Project-related documents

[*The Nature Conservancy; Berau Forest Carbon Program*](#)

[*Berau Forest Carbon Program \(BFCP\)*](#)

[*Berau REDD Pilot Program*](#)

[*Indonesia Introduces BFCP Innovative Initiatives*](#)

Others

[*JakartaGlobe December 15,2009 'Delegates on REDD Alert to Protect Forests and Indigenous Peoples'*](#)

[*Innovative Initiative in Indonesia Brings Developing and Developed Countries Together on Climate Change*](#)