

Amazon Fund

- information from the internet-

AMAZON FUND

http://www.amazonfund.gov.br/FundoAmazonia/fam/site_en/

AMAZON FUND - Annual Report

http://www.amazonfund.gov.br/FundoAmazonia/export/sites/default/site_en/Galerias/Arquivos/Boletins/Rafa_2009_versxo_final_inglxs.pdf

2009 Real-Time Evaluation of Norway's International Climate and Forest Initiative
Contributions to National REDD+ Processes 2007-2010 Country Report: BRAZIL

<http://www.cmi.no/file/?1239>

In a nutshell

- In December 2008, Brazil announced its commitment to sustainable development **to reduce Amazon deforestation by 80% below its historic baseline over the next ten years.**
- To support this goal a decree (6527) was passed creating the **Amazon Fund.**
- The fund is aimed at raising donations for non-reimbursable investments in efforts **to prevent, monitor and combat deforestation, as well as to promote the preservation and sustainable use of forest in the Amazon Biome.**

Donations received

**Results-based
payments!**

Donor	Date (receipt of donation)	Donation (Million US\$)	Tons of carbon dioxide (CO2)	Tons of carbon (C)	Year of emissions	Factor to Convert Carbon (C) to CO2	Value per ton of CO2 (US\$)
Norway	Oct 9, 2009	20.9	4,192,115.7	1,142,265.9	2006	3.67	5.00
Norway	Aug 9, 2010	28.2	5.656.672,9	1.541.327,8	2006	3.67	5.00
Germany	Dec 29, 2010	3.9	790.500	215.395	2009	3.67	5.00

Calculation for the values of reduced carbon emissions from deforestation

- In order to facilitate understanding, the method was chosen based on **simplicity** and **precaution**
- Accordingly, **the estimates are conservative** to ensure that the values of reduced emissions are **never over-estimated**
- Values of reduced carbon emissions from deforestation
 - = emissions avoided in carbon tons
 - = the **difference** between historical average deforestation rate and the deforested area effectively verified in the year evaluated, **multiplying** this result by the amount of carbon present in the biomass, in tons of carbon per hectare
 - = **$ED = (TDM - TD) * tC/ha$**
 - ED – Reduced Carbon Emissions from Deforestation in tons of carbon (tC)
 - TDM – Average Deforestation Rate
 - TD – Annual Deforestation Rate for the period
 - tC/ha – Tons of carbon per forest hectare

Concepts for calculating reduced emissions from deforestation

- (i) **average annual deforestation rate** measured by the National Institute for Spatial Research (INPE);
- (ii) **historical average deforestation rate**; and
- (iii) **estimate of carbon contained in forest biomass**, obtained by the Brazilian Forestry Service (SFB)

(i) Annual deforestation rate measured by INPE

- Since 1988, the INPE has been using an efficient system to monitor forest coverage in the Brazilian Amazon, which enables estimating the annual deforestation rates in the region.
- Since 2002, **PRODES** system has generated data capturing all deforestation > 1 ha by a digital classification system of Landsat (and other) images.
- In 2004, INPE developed **DETER**, an almost real-time deforestation detection programme that uses the 250 x 250 m resolution data of the MODIS satellite to detect deforestation > 25 ha every 15 days. The results are published on INPE's website and sent to IBAMA (Brazilian Institute of Environment and Renewable Natural Resources) to intervene on the ground where illegal deforestation is detected. Data from this programme has allowed IBAMA to close more than 100 illegal operations.
- Since 2007, INPE has also developed **DEGRAD** (annual mapping of areas in process of deforestation) and **DETEX** (for selective logging detection)
- Data from INPE indicates that deforestation during August 2008 – July 2009, was approximately 7,000 km², the lowest deforestation rate (TD) held since this institute started monitoring the Amazon plant coverage, 21 years ago:
a reduction of close to 45% compared to the rate observed in the previous period, as well as a reduction of almost 75% compared with 2004, a period when there was the highest rate of deforestation.

(ii) Historical average deforestation rate

- The annual deforestation rates to be employed in the calculation of emission reductions are compared with the average deforestation rates for **10-year periods**.
- These 10-year numbers are **updated every five years**
 - Eg 2006-2011 annual deforestation rates will be compared with 1996-2005.

(iii) Estimate for carbon contained in forest biomass

- The Amazon Fund adopts a value of **100 tC/ha of biomass, equivalent to 367 tCO₂e/ha**. This is a **conservative value** in light of the data found in literature (between 130 and 320 tC/ha); however, it is appropriate to simplify the calculations and the understanding of the mechanism proposed.
- It is important to note that:
 - **estimate for carbon can vary according to location and features of the forest area in question**, and
 - **data related to degradation are not yet registered** by PRODES.

Thus, the result from reduced emissions could be altered with the implementation of these two variables, which will happen when data from the National Forest Inventory and future monitoring systems are operating

How the \$ of the Fund is used:
(PAMs/BDS...)

Eligible Projects

- Efforts to **prevent, monitor and combat deforestation**, besides promoting the **preservation and sustainable use** of the Amazon Biome.
- Eligible projects should **directly or indirectly contribute to reducing the deforestation** of the Amazon Forest.

Besides this, up to 20% of the Fund's disbursements may support the development of systems for **monitoring and controlling deforestation** in other Brazilian biomes and in biomes of other tropical countries.

- The efforts of the Amazon Fund should abide by the guidelines of the Sustainable Amazon Plan (PAS) and by the **Action Plan for Prevention and Control of the Legal Amazon Deforestation (PPCDAM)**.

Areas of activity

1. Management of public forests and protected areas
2. Environmental control, monitoring and inspection
3. Sustainable forest management
4. Economic activities created with sustainable use of forests
5. Ecological and economic zoning, territorial arrangement and agricultural regulation
6. Preservation and sustainable use of biodiversity
7. Recovery of deforested areas

Modality	Purposes	Eligible Efforts	Clients
<p>Public Forests and Protected Areas</p> <p>(Environmental Management and Services)</p>	<p>To support the expansion and preservation of protected forest areas.</p>	<ul style="list-style-type: none"> •Creation and implementation of new Conservation Units (UCs); •Consolidation of existing UCs; •Monitoring the biodiversity in UCs; •Management of public forests and protected areas; •Preservation of genetic resources; •Payment for environmental services; and •Other efforts related to expansion and preservation of protected areas. 	<ul style="list-style-type: none"> •Bodies of direct and indirect federal, state and municipal public administration; •Institutions to support research; •NGOs and organizations of public interest; and •Private companies
<p>Sustainable production activities</p>	<p>To support sustainable production, trading and use of natural resources of the Amazon Biome.</p>	<ul style="list-style-type: none"> •Reforestation; •Forest Management; •Sustainable production chain of wood and non-wood forest products; •Recovery of deforested areas; •Integration between forestry, farming and cattle-raising; •Forest Certification; •Renewable energies; •Ecotourism; and •Other activities connected to the sustainable use of biodiversity. 	<ul style="list-style-type: none"> •Cooperative associations; •Direct and indirect federal, state and municipal public administration; •Institutions to support research; •NGOs and organizations of public interest; and •Private companies.
<p>Science & Technology Development applied to the sustainable use of biodiversity</p>	<p>To support the development of research, innovation and technology associated to sustainable production practices</p>	<ul style="list-style-type: none"> •Infrastructure, programs and projects connected to science, technology and innovation in the Amazon Forest, as well as biotechnology, renewable energies, forestry, genetic resources etc.; •Development of systems and methodologies for monitoring, image interpretation, georeferencing and reconciliation of real property registration, aiming to facilitate control of deforestation, rural territory arrangement and forest regularization in the Amazon Forest; • Qualification and furnishing of equipment for research institutes; and Information and communication networks. 	<ul style="list-style-type: none"> •Governmental and university research centers; •Cooperative associations; •Direct and indirect federal, state and municipal public administration; •Institutions to support research; •NGOs and organizations of public interest; •Private companies; and •Institutes of Technology & Science.
<p>Institutional development and improvement of control mechanisms</p>	<p>To support the environmental management, agricultural regulation, licensing, inspection and monitoring of the Amazon Biome.</p>	<ul style="list-style-type: none"> •Ecological and economic zoning and agricultural arrangement and regulation; •Systems for monitoring areas; •Qualification and training; •Systems for agricultural management; •Equipment and infrastructure; •Information and communication systems; and •Other efforts related to the institutional development and improvement of control mechanisms. 	<ul style="list-style-type: none"> •Federal, state and municipal environmental, agricultural and support entities; • Institutions to support research connected to public bodies conducting activities in the Amazon Region; •Entities for environmental control and combat against environmental crimes.

Relevant policies

- **PPCDAM (2004):** PPCDAM is organised to deal with: territorial and **land tenure** organisation; **monitoring and environmental control**; and fostering **sustainable productive activities**. Major accomplishments include the creation of 148 new protected areas covering 640,000 km² from 2003-2008; jailing over 700 people, including government employees, for illegal logging; and steps to restrict the market in illegally occupied public lands.
- **Public Forest Management Law (2006):** According to the law, contributory forest concessions i.e. **payment for sustainable use of forest products and services, is a form of indirect management that may be applicable to national forests and other public forests which have not been designated for community use or designated as full-protection conservation units. As a result of the law Brazilian public forest areas are in the process of being identified and registered by the Brazilian Forest Service.**
- **Public Forest Management Law:** created an important legal instrument allowing for integrated planning between infrastructure development, social sustainability and environmental protection. The idea of **Sustainable Forest District was established in order to identify priority areas for the implementation of public policies that encourage integrated forest-based development.** The aim is to develop public policies in various sectors of local government that promote forestry on a sustainable basis, including land policy, infrastructure, industrial development, management of public areas, technical assistance and education, in a coordinated manner. So far, only one forest district has been created.
- **Amazonas State Climate Change Policy (2007), and the State System for Protected areas (2007) :** These state laws establish the legal framework necessary for implementing a financial mechanism for the payment of environmental services and compensation for activities reducing emissions from deforestation and carbon sequestration. This mechanism is operated by a public-private institution. The Foundation initially received USD 10 million from the State government and an additional 40 million from the private sector.