Amazon Fund

Project Document

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Content

1. Description of the Amazon Fund

Background

The purpose of the Amazon Fund is to provide an incentive for Brazil and other tropical-forested developing countries to continue and increase voluntary reductions of greenhouse gas emission from forest deforestation and degradation, as proposed by the Brazilian delegation to the 12th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) in Nairobi, Kenya, 2006.

Brazilian efforts to reduce deforestation, notably in the Amazon, are noted for its pioneering technology in continuously monitoring its forest cover, an activity performed by the National Institute for Space Research[1] since 1988. Its success in reversing the increment of annual deforestation rates is also widely recognized.

A remarkable effort has been spent by the Brazilian government to reduce deforestation in the Amazon. A strategic Plan started to be implemented in March 2004: the Action Plan to Prevent and Control Deforestation in the Brazilian Legal Amazon[2], in order to reduce deforestation, whereby 13 ministries of the federal government coordinated by the President's Chief of Staff Office (*Casa Civil*) develop several articulated actions for the reduction of deforestation rates. The Action Plan is organized in three strategies, as follow: (1) Agrarian and Territorial Planning, (2) Monitoring and Control, and (3) Fostering Sustainable Production Activities.

From 2012 until 2015, the federal government is going to invest roughly US$ 630 million in deforestation-reducing initiatives. Nevertheless, as deforestation rates drop, further reductions become more difficult and expensive, and requiring creative measures at all government levels.

Purpose

The creation of the Amazon Fund was authorized by the presidential decree nº 6,527 (August 1st 2008) to collect donations for non-reimbursable investments in preventing, monitoring and fighting against deforestation while promoting forest conservation in the Amazon biome.

Eligible projects must fall in the following categories:

i. Management of public forests and protected areas;
ii. Environmental control, monitoring and inspection;
iii. Sustainable forest management;
iv. Economic activities from the sustainable use of forests;
v. Economic and Ecological Zoning, territorial planning and land-title regularization ;
vi. Conservation and sustainable use of biodiversity; and
vii. Recovery of deforested areas.

The projects must also be in accordance with the Sustainable Amazon Plan and the Action Plan to Prevent and Control Deforestation in the Brazilian Legal Amazon – PPCDAm. Moreover, forest fires

[1] Instituto Nacional de Pesquisas Espaciais (INPE).

[2] Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal (PPCDAM). The Legal Amazon region includes nine states of the Brazilian federation: Acre, Amapá, Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima e Tocantins.

and degradation have become important issues to be considered in prevent deforestation. Thus, the Amazon Fund should support initiatives that will contribute for this purpose.

Additionally, twenty percent of the Amazon Fund resources may be used to support the development of forest monitoring or control systems in other Brazilian biomes, or the development of forest monitoring systems in other tropical countries. A monitoring system is the application of techniques that involve image processing (eg.: georeferencing, image enhancement and cataloguing) of terrestrial surfaces (from satellites or airborne sensors) for thematic mapping of land cover using the produced data (eg.: map elaboration, spatial and statistical analyses) as a subsidy to forest management and landscape planning. A control system is defined to support the development and/or enhancement of mechanisms to enforce law and control, direct or indirect, aiming legality, efficiency and transparency in the fight against illegal deforestation and fires. It also incorporates support for capacity development and equipment acquisition necessary for the implementation of such mechanisms. Mechanisms is defined as a set of means that allow an action, an assessment or obtaining results.

Fund Management

The Amazon Fund Steering Committee[3] is responsible for the guidelines and criteria for the fund's operation. This Committee is composed of representatives from three segments: the federal government (nine representatives), the Legal Amazon states (nine representatives), and civil society (six representatives).

It is also accountable for ensuring project adequacy to the fund's objectives, to follow the guidelines of the Sustainable Amazon Plan and the Action Plan to Prevent and Control Deforestation in the Legal Amazon - PPCDAm.

The meetings of the Steering Committee will only happen with the presence of the majority of its 24 members and with at least one representative of each segment. A decision will be considered approved by the Steering Committee if all three segments approve it; a decision will be considered approved by a segment if the majority of its representatives approve it. The committee shall be chaired by one of the federal representatives. Participation in this committee is considered to be of significant public interest, and no compensation shall be paid to its members.

The quantity of emissions avoided by reducing deforestation rates in the Brazilian Amazon rainforest, estimated by the Ministry of the Environment based on data supplied by the National Institute for Space Research and the Brazilian Forest Service, shall be certified by the Technical Committee of the Amazon Fund[4] (CTFA).

The Technical Committee is composed of six notables in science and technology, appointed by the Ministry of the Environment, based on a list submitted by the Brazilian Climate Change Forum. Participation in this committee is also considered to be of significant public interest, no compensation shall be paid to its members.

The Brazilian Development Bank[5], a financial institution fully owned and controlled by the federal government, is in charge of the Amazon Fund's operation, in coordination with Ministry of Environment. The Brazilian Development Bank's mission is to encourage the competitive and

[3] Comitê Orientador do Fundo Amazônia – COFA.
[4] Comitê Técnico do Fundo Amazônia – CTFA.
[5] Banco Nacional de Desenvolvimento Econômico e Social – BNDES.

sustainable development of the Brazilian economy, creating jobs and reducing social and regional inequalities.

The Brazilian Development Bank (BNDES) shall manage fund raising and negotiate with prospective donors in pursuance of the emission quantity agreed by the Technical Committee. BNDES shall manage the fund's finances, promote the fund's development, financial management and fund development, manage project selection, contracting, monitoring, and ex-post evaluation, among other activities.

The Brazilian Development Bank is also responsible for the release of biannual information on the fund's performance, for the preparation of the annual report and for the contracting of external auditing services to verify annually the adequacy of fund disbursements.

2. Deforestation dynamics in Brazil

Background

Emissions arising from deforestation in developing countries account for about 10% of global greenhouse gas emissions. Tropical forests still store 100 billion tons of carbon worldwide. Carbon storage is a recognized environmental service and countries holding tropical forests should receive financial incentives for their conservation.

Brazil, the most industrialized country in Latin America, is among the world's five biggest emitters of greenhouse gases. However, about 61% of its emissions result from deforestation and the burning associated with land-use change, mainly in the Brazilian Legal Amazon, due to a development model that requires review.

Contrary to general opinion when discussing the costs and benefits of climate change mitigation in Brazil, the reversal of this development model is as complex and expensive challenge as the move from fossil-fuel-based development in developed countries. With this understanding, Brazil finds that the international community can play a key role in addition to the own national efforts.

The logic of deforestation is essentially economic. Conversion of forests is done as a requirement for agriculture, ranching, and other activities that are more profitable to the producer than the maintenance of the forests.

Contemporary expansion of the agricultural frontier over the Amazon rainforest set off when regional infrastructure development and territorial occupation started in the 1960's. In the 1980's and early 1990's, this process receded as a result of long periods of economic recession.

Since the second half of 1990, deforestation has become the outcome of a complex interaction of factors operating in the region, from investments in infrastructure and credits that, in the absence of a clear sustainability policy lead to deforestation, up to the expansion of human settlements, mining, pig iron, farming, and unsustainable logging.

Expansive, low-productivity cattle-raising is the main cause of Amazon deforestation. Data provided by TerraClass Project showed that in 2008 around 62%[6] of the deforested areas in Brazilian Amazon were occupied with pasture. In the same year, the nine Brazilian Legal Amazon states amounted for

[6] Includes the categories: clean pasture (46.7%), dirty pasture (8.7%), regeneration with pasture (6.7%) and pasture with exposed soil (0.1%)

75 million heads of cattle, or 34% of the Brazilian herd[7]. Figure 1 shows that from 1990 to 2004, cattle in Brazilian Legal Amazon raised from 29 to 75 million heads. From 2004 to 2010, in the period of PPCDAm, the graphic shows a tendency to stabilize this value. In 2010 there were 81 million cattle heads in Brazilian Legal Amazon.

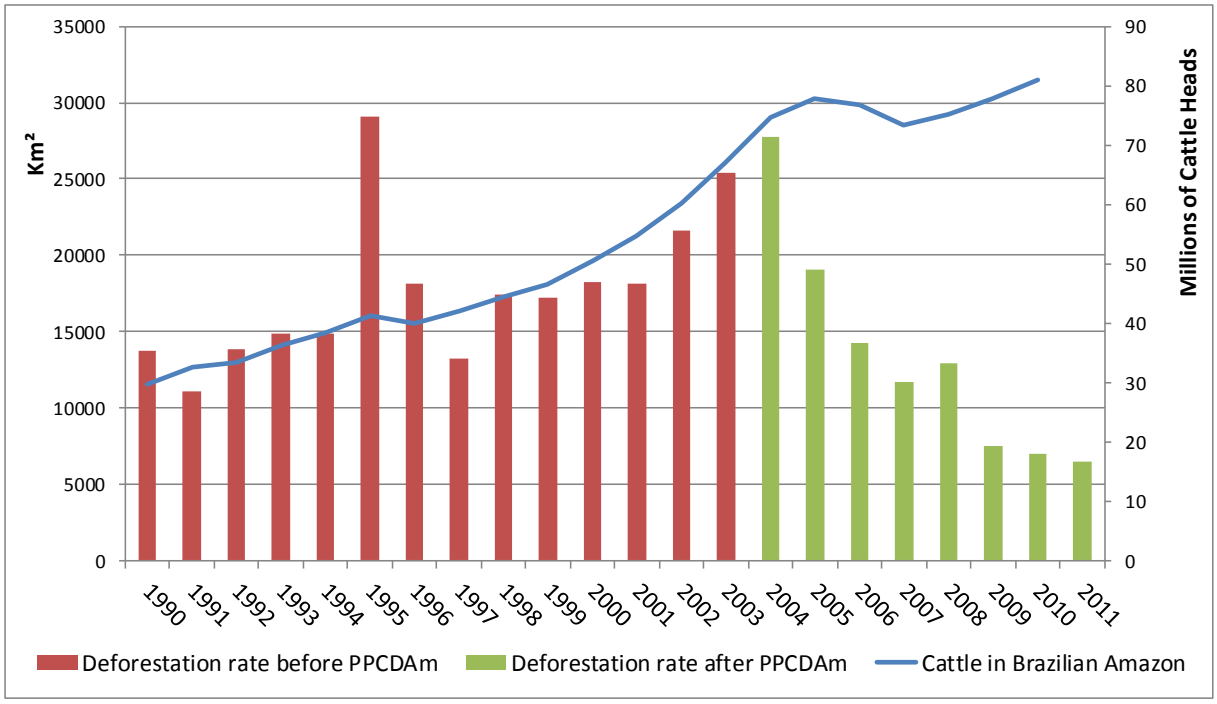

Figure 1 – Heads of cattle[8] in comparison with deforestation rate in Brazilian Amazon[9]

In 1990 decade, soybean production became one important economic vector of agricultural frontier expansion over the Brazilian Amazon rainforest. Figure 2 shows that between 1990 and 2004, soybean production in the Brazilian Legal Amazon has risen from 3 to 14 million ton/year. From 2004 to 2010, while Action Plan for the Prevention and Control of Deforestation in the Brazilian Legal Amazon, the graphic shows a tendency to stabilize soybean production and area occupied. In 2010 soybean production was 21.7 million ton in the Brazilian Legal Amazon.

[7] Source: Brazilian Institute of Geography and Statistics (IBGE – Instituto Brasileiro de Geografia e Estatística). www.ibge.gov.br
[8] Source: IBGE. www.ibge.gov.br
[9] Source: Monitoring of Brazilian Amazon Rainforest (Monitoramento da Floresta Amazônica Brasileira por Satélite – PRODES/INPE); http://www.obt.inpe.br/prodes/

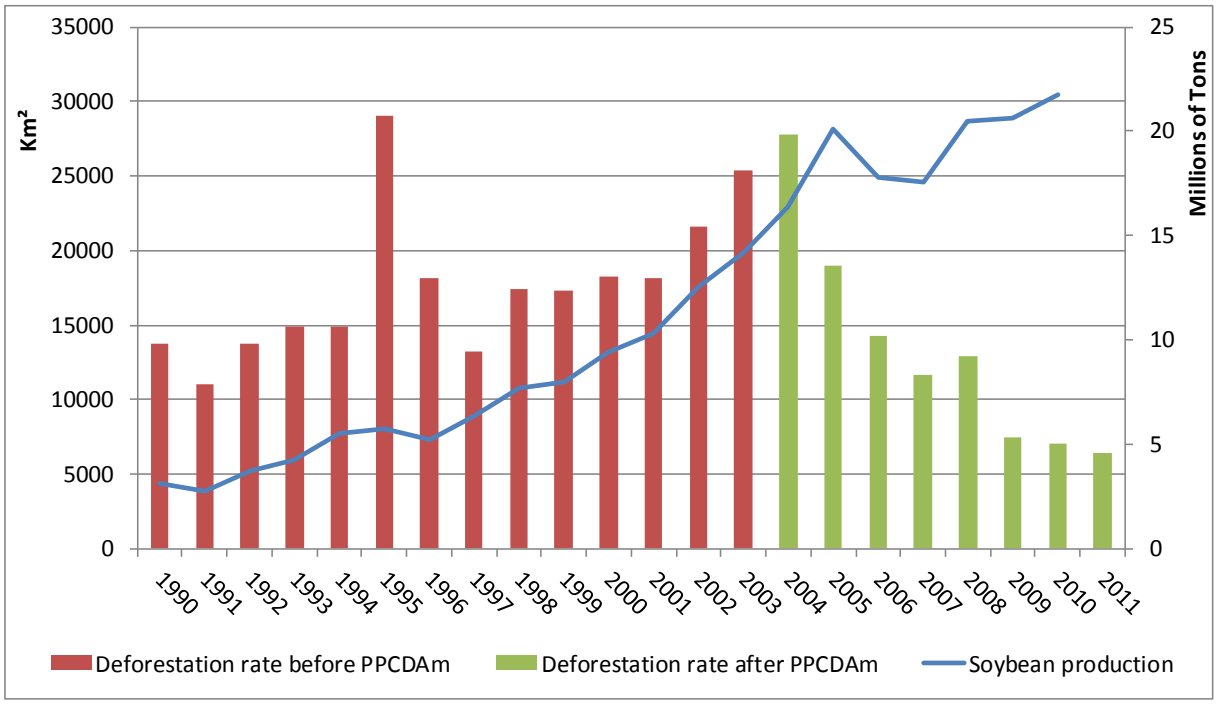

Figure 2 - Soybean production[10] in comparison with deforestation rate in Brazilian Amazon[11]

In 2004, the second largest deforestation rate on record took place: 27,772 km^2, shaping the third year in a row of growing deforestation rates. This rate coincided with the inauguration of the new administration, which retained deforestation reduction in its government plan. A new assessment of deforestation causes provided inputs for planning a set of actions for government and society.

The Action Plan for the Prevention and Control of Deforestation in the Brazilian Legal Amazon

The President of Brazil decreed the creation of a Permanent Inter-Ministerial Working Group with the objective of proposing measures to reduce deforestation rates in the Amazon. Its coordination was assigned to the Presidential Staff Office and its membership included 13 ministries. On March 15, 2004, this working group launched the *Action Plan for the Prevention and Control of Deforestation in the Brazilian Legal Amazon (PPCDAM)*, organized in three themes: (1) Agrarian and Territorial Planning, (2) Monitoring and Control, and (3) Fostering Sustainable Production Activities. In November, 2009, PPCDAm was updated for the period 2009-2011. Activities and goals were revised, included or excluded, and new strategies were adopted. Moreover, Federal Government strengthened articulation with Legal Amazon states (nine), stimulating and, if necessary, supporting the elaboration of state Plans for Prevention and Control of Deforestation in synergy with the Federal Plan.

The plan's main accomplishments are:

Agrarian and Territorial Planning

a) Ratification of 10 million hectares in indigenous lands;

[10] Source: IBGE. www.ibge.gov.br
[11] Source: PRODES/INPE. http://www.obt.inpe.br/prodes/

b) Creation of roughly 13.1 million hectares in sustainable settlement projects (extractive settlement projects, sustainable development projects and forest settlement);

c) Creation of 25.7 million ha of federal protected areas and 27.9 million of state areas;

d) Temporary suspension of all licensing in approximately 15.4 million ha of land along highway BR-319 highway in the Amazon until zoning had been completed and protected areas had been created; Demarcation and signalization of five Protected Areas along highway BR-319;

e) Squatter-fighting measures in the Amazon lead to the cancelation of over 66 thousand land documents and false claims;

f) Review of land possession regulation;

g) Supply of geographical data for use by government and society;

h) Execution, publication and institutionalization (through Federal Decree nº 7,378/2010) of the Ecological and Economic Macrozoning (MacroZEE) for the Brazilian Legal Amazon;

i) Planning and/or revision of the Ecological and Economic Zoning (ZEE) for the nine states in the Brazilian Legal Amazon;

j) Development and approval of an entire new legislation for Management of Public Forests;

k) Georeferencing of 48 thousand rural holdings in Federal public areas, and publication on internet[12].

These land use planning initiatives aims to affect the dynamics of deforestation in the Amazon since it regulates land use inside major parcels of Brazilian territory and ensures compliance with conservation priorities and the rights of local peoples while rendering inadequate land use illegal.

Environmental Monitoring and Control

Intensified environmental monitoring, control and enforcement measures, supported by novel geoprocessing systems for the detection of deforestation and selective timber exploitation, contributed to that actions along this thematic line achieved significant results in deforestation fighting strategy.

The development of the Real Time Deforestation Detection System[13] has provided capability to supply data on deforestation of the Amazon every 2 or 3 days. This has been fundamental for planning and monitoring by governmental entities. The publication of this data over the Internet has rendered social control over deforestation-fighting initiatives possible.

This technological tooling, together with new environmental law enforcement methods developed by the Brazilian Federal Police and the Public Ministry, has been determinant in the achievement of the deforestation rate reduction as detected by the National Institute for Space Research.

The following results are worth highlighting:

a) Apprehension of over 4.4 million m³ of illegal timber in the Amazon[14];

b) Embargo of 1,6 million hectares for disrespect of environmental law[15];

[12] http://i3geo.mda.gov.br/i3geo/interface/openlayers.htm?5pkdomtmq7j2qa4regm6qpeah0
[13] Sistema de Detecção do Desmatamento em Tempo Real – DETER.
[14] Source: Sicafi-Ibama accessed on September, 2012. Includes infraction acts from 2004-2012.
[15] Source: Sicafi-Ibama accessed on September, 2012. Includes infraction acts from 2003-2011.

c) Emission of more than 52 thousand environmental infraction acts, corresponding to more than 7 billion dollars (US$)[16];

d) Publication of Real Time Deforestation Detection System (DETER) data over the Web;

e) Development of the Selective Forest Exploitation Detection System (DETEX) in the Amazon;

f) Development of the Forest Degradation Mapping at Brazilian Amazon (DEGRAD) and publication of the data over the Web;

g) Development of the Mapping and Classification of Land Use Information at Brazilian Amazon (TerraClass project), and publication of 2008 and 2010 data;

h) Publication of Decree No. 6,514/08, raising the fine for illegal forest destruction in a Legal Reserve from R$ 1,000 to R$ 5,000 per hectare;

i) Implementation of the Rural Environmental Registry[17] (CAR) at state level in the Amazon;

j) Creation of a national System for Rural Environmental Registry[18], available for the inclusion of rural owners and rural holders through *Programa Mais Ambiente*[19];

k) Development of deforestation detection system with Advanced Land Observing Satellite (ALOS) images(radar images, for cloudy periods and regions);

l) Integration of environmental database (forest management plans, delimitation of Legal Reserve and Permanent Protection Areas, infraction acts, satellite images, forest guides, timber transport documents etc.) of five states in the Brazilian Legal Amazon with federal database;

m) Auditing Digital Control Systems for forest products in five states in Brazilian Legal Amazon;

n) Creation and implementation of Interministerial Commission for Combat of Environmental Crimes and Infractions – CICCIA[20].

o) Creation and implementation of the Environment Group within the National Force.

p) Public Credit restrictions for landowners connected to illegal deforestation (BACEN Resolution no 3,545/2008).

q) Establishment of the list of priority municipalities for Monitoring and Control (Decree 6,321/2007).

Fostering Sustainable Production Activities

The approval of the Public Forests Management Law has been this strategy's most significant result. In addition to land regularization and to land use regulation, it has contributed to the enhancement of command and control mechanisms. Results can already been observed in the granting of public forest concessions and in fostering community forest management along agrarian reform settlements and the forest population.

The most significant results of this strategy's implementation are:

[16] Source: Sicafi-Ibama accessed on September, 2012. Includes only flora infraction act from 2004-2012.
[17] Cadastramento Ambiental Rural – CAR
[18] Sistema de Cadastramento Ambiental Rural
[19] http://www.maisambiente.gov.br/
[20] Comissão Interministerial de Combate aos Crimes e Infrações Ambientais - CICCIA

a) Increase of the FSC-certified forest area to 3.4 million hectares from 300 thousand hectares[21];

b) Establishment of a legal framework for public forest concessions through law N°. 11,284 (March 2nd , 2006), regulated by Decree N°. 6,063/2007, that defines sustainable forest management;

c) Creation of the Brazilian Forest Service, responsible for the management of forest concession contracts; the development of the Public Forests National Register; planning and monitoring of public forests; management of the National Forest Development Fund – FNDF;

d) Concession of 144,8 thousand hectares of public forest[22], in Jamari National Forest (96 thousand hectares, in Rondônia) and Saracá-Taquera National Forest (48,8 thousand hectares, in Pará), through the legal framework established in Law N°. 11,284 (March 2nd, 2006);

e) Development of the nation's first Sustainable Forest District, located at BR-163 highway envelope of influence, measuring approximately 19 million hectares and consisting of a geographic area where federal, state, and local government policies must converge in order to foster sustainable forest management activities;

f) Halt the interest rate for the investment on sustainable forest activities and allowing the use of forest as a guarantee for loans on those activities;

g) Enhancement of a human resources development program in sustainable forest management and forest extraction, at the National Center of Support to Forest Management[23] (CENAFLOR), within the Brazilian Forest Service;

h) Research and development of sustainable production models for Brazilian Amazon;

i) Solicitation of 1,307 environmental licenses and 22,238 small landowners families attended by projects of natural resources management in agrarian reform settlements;

j) Implementation of sectorial agreements with productive sectors of soybean, logging and cattle-raising;

k) Development and implementation of Low Carbon Agriculture Program – Programa ABC[24];

l) Publication of Brazilian Central Bank Resolution no. 3,545/2008, that establishes the necessity of probative documentation for environmental regularization and other conditions for rural activity funding concessions.

Other initiatives have been held back by financial or institutional constraints but remain as fundamental strategies for sustainable agriculture and forest development policies. They are: the implementation of sustainable production chains, including sociobiodiversity product chains support, and the supply of technical assistance and rural extension for forest management.

Participation of municipalities

[21] Forest Stewardship Council – FSC.
[22] http://www.florestal.gov.br/concessoes-florestais/florestas-sob-concessao/duas-florestas-nacionais-abrigam-concessao-florestal
[23] Centro Nacional de Apoio ao Manejo Florestal – CENAFLOR.
[24] Programa Agricultura de Baixo Carbono

Integration of municipal governments in PPCDAm was determined by Federal Decree 6,321/2007, which establishes an obligation of the Ministry of Environment to periodically publish a list that identifies municipalities responsible for the greatest share of deforestation in the region. Once included in the list, municipalities become prioritized for environmental and land control actions executed by the states and federal governments. In addition to becoming subject to intense surveillance, these municipalities are prohibited from obtaining new land clearing authorizations, with the exception of special cases described by the decree.

To be removed from the list, the municipality must reduce deforestation in its territory, based on criteria that are updated annually to reflect observed deforestation dynamics, and have 80% of its area (with the exception of public protected areas and indigenous lands) of rural proprieties monitored through the Rural Environmental Register. Once these requirements are fulfilled, the Ministry of Environment officially recognizes that the municipality's deforestation is monitored and under control.

Presently, the list has 48 municipalities, other six municipalities have already left the list and their deforestation is being monitored and under control.

Operation Arco Verde

The suspension of new deforestation authorizations and the demand for land and environmental regularization of rural proprieties greatly affected the economies of priority municipalities for deforestation control. To facilitate regularization of proprieties and enable the adoption of sustainable production practices in these municipalities, the federal government launched Operation Arco Verde in 2009, which contained emergency actions to support the families most economically affected by the command and control actions of the PPCDAm, and structuring actions aimed at strengthening non-predatory socioeconomic initiatives.

The main strategy adopted by Operation Arco Verde is to facilitate activities of various federal government agencies, based on the demands and needs identified in these municipalities. Technical assistance and rural extension, land tenure regularization of legitimate claims, training of producers in a wide variety of topics related to production and management of natural resources, inclusion of forest products in the government's minimum price policy, incentives to family agriculture, technical and financial support for the recuperation of degraded productive lands and illegally deforested areas are all part of the list of executed actions.

Accomplishments and Continuation

The implementation of PPCDAM since 2004 has contributed to the deforestation rate reduction: 19,014 km² in 2005 to 14,286 km² in 2006 and 11,651 km² in 2007, which represented a reduction of more than 50% in three years. In 2008 there was a slight rise in the deforestation rate: 12,911 km², which impelled the Federal Government to come with new strategies to face it. As a result, in the following years, deforestation rates reduced even more: 7,464 km² in 2009, 7,000 km² in 2010 and 6,418 km² in 2011, the lowest rate since measurement began in the 1980's, accumulating a reduction of 77% since 2004.

In 2004, deforestation in the Brazilian Amazon had a significant number of large deforested areas (more than 65%). So, in order to reduce deforestation, the Federal Government focused their intervention on these large deforestation polygons. As a result (Figure 3), deforestation sites larger than 25 hectares suffered an impressive reduction of 87% from 2004 to 2011. On the other hand,

although deforestation polygons smaller than 25 hectares remained stable over the same period, proportionally it now represents more than 60% of deforestation in the Brazilian Legal Amazon.

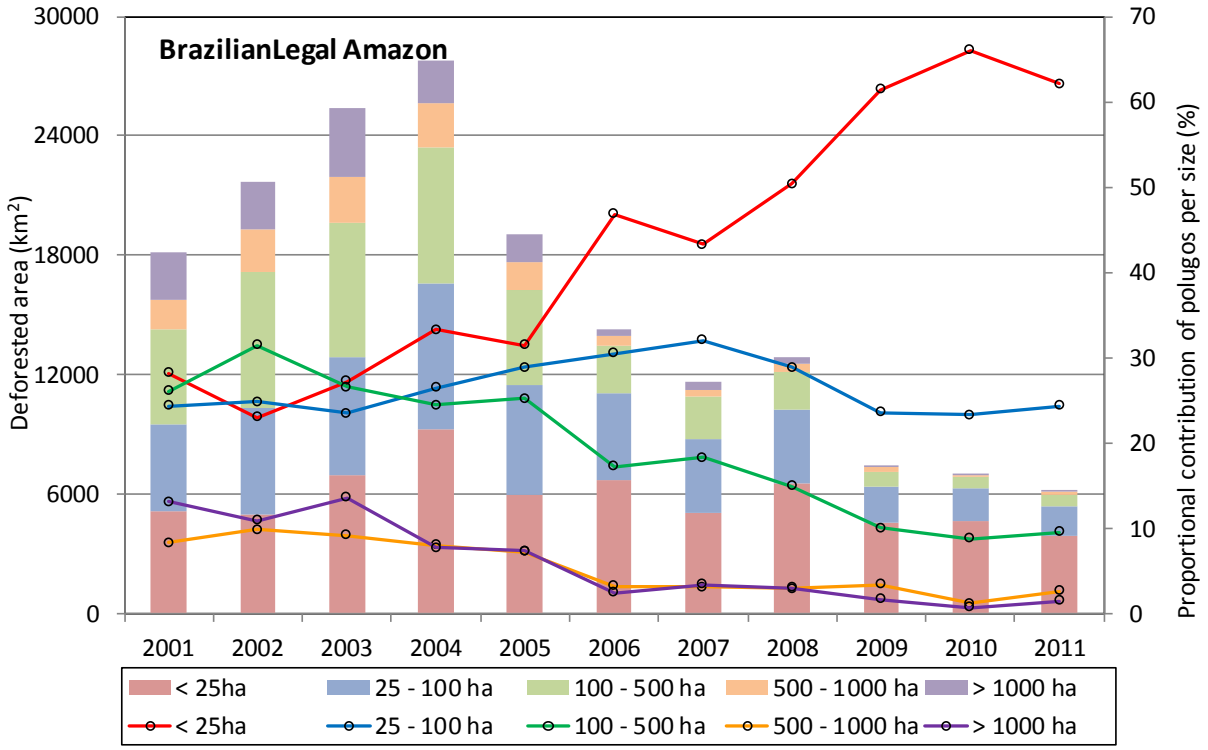

Figure 3 – Deforestation rate in the Brazilian Legal Amazon showing proportional contribution of the different polygon sizes[25].

Considering the pulverization of deforested sites and the increased complexity social relations, the challenge to reduce the Amazon deforestation further is, in relative terms, tantamount to that faced in 2003 or in 2008.

In order to promote a continuous and consistent deforestation reduction, the PPCDAM has been updated for the period 2012-2015. While maintaining ongoing efforts, the plan shall set forth policies to increase the worth of the standing forest when compared to cleared land.

National Plan on Climate Change

Even though Brazil's energy matrix predominantly comes from renewable sources, the country ranks as one of the five greatest greenhouse gas emitters due to deforestation and the burning associated with land-use change, which represents 61% of the national CO_2 emissions. From the average 10,371 Tg (10.3 billion tons) of CO_2 released to the atmosphere between 1994 and 2002 as a result of these activities, 67% originated in the Amazon.

Law 12,187/2009, has defined the National Plan on Climate Change, as the document that recognize the necessity to confront the problem with concrete adaptation and mitigation actions. The law establishes an ambitious commitment to voluntarily reduce between 36.1% and 38.9% of the total national emissions by 2020, using a growth trend scenario for the period baseline.

[25] Source: PRODES/INPE (http://www.obt.inpe.br/prodes/). Data analysis by MMA.

In the context of this commitment, the objective is to reduce deforestation rates by 80% in the Amazon during this period. The reference for assessing reduction targets is the average of the official deforestation rate calculated between 1996 and 2005, equivalent to 19.5 thousand Km² per year.

Figure 3 shows deforestation data in the Brazilian Amazon until present, with reference values that estimates the necessary annual reduction in order to accomplish the 80% reduction by 2020.

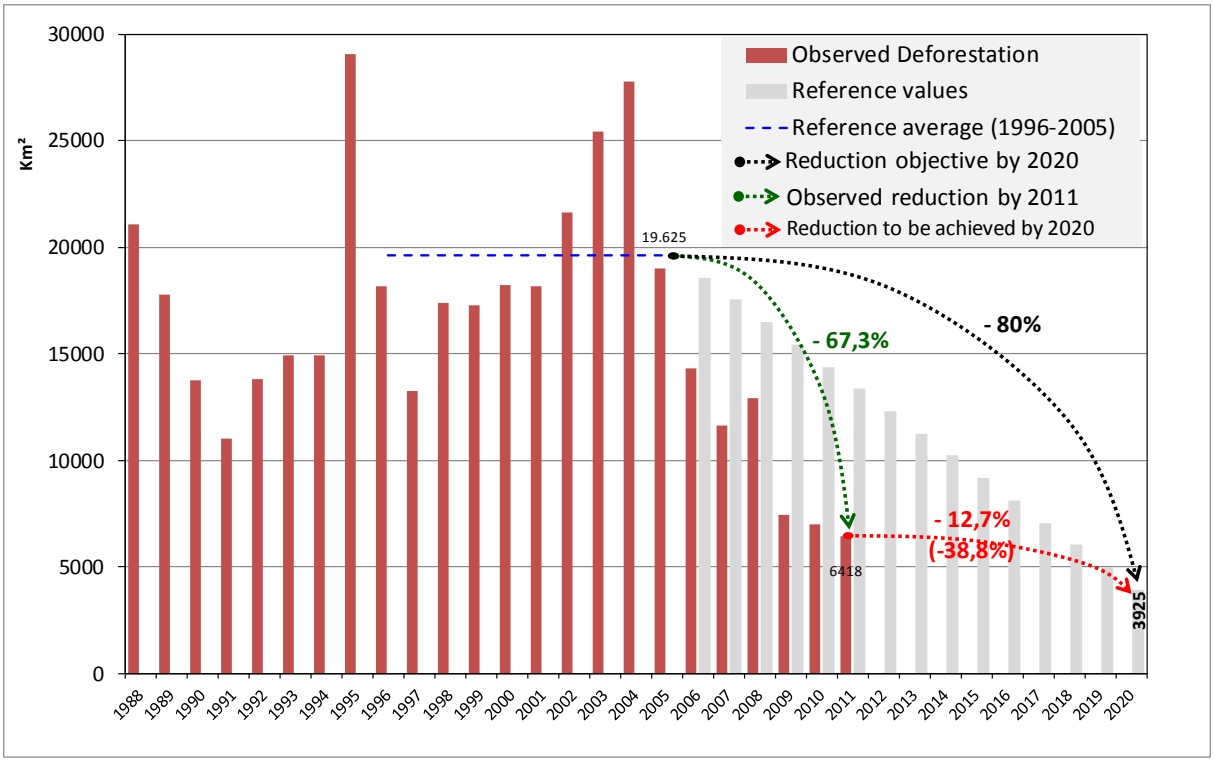

Figure 4 – Deforestation rates at Brazilian Amazon and reduction target by 2020[26]

Sustainable Amazon Plan

The Sustainable Amazon Plan[27] sets down strategic objectives and guidelines resulting from an updated diagnostic of contemporaneous Amazon and its respective challenges. It drives to a new development model where economic solutions are also environmentally sustainable.

The methodological principles for the plan's development were based on the participation of multitude of sectors of the national and regional society, and focused on sustainable production with advanced technology, on the implementation of a new financing standard, on environmental management and land use planning, as well as on social inclusion and citizenship, and the implementation of infrastructure.

These issues draw from the regional dimensions of the Brazilian Amazon, which recommend attention to local diversities, favoring local development potentials and creating objective employment and income opportunities.

The Sustainable Amazon Plan groups its strategies along four themes:

- ✓ Territorial Planning and Environmental Management;
- ✓ Sustainable Production with Innovation and Competitiveness;
- ✓ Infrastructure for Development;

[26] Source: PRODES/INPE (http://www.obt.inpe.br/prodes/). Reduction target estimation by year made by MMA.
[27] Plano Amazônia Sustentável (PAS).

- ✓ Social Inclusion and Citizenship.

PAS was also defined seven axis for action in the Brazilian Amazon:

- ✓ Rural and urban agrarian regularization;
- ✓ Deforestation control policies;
- ✓ Technological and economic emergence of non-timber extractive activities;
- ✓ Agriculture reorganization and cattle raising intensification on altered areas;
- ✓ Net of industrial centers;
- ✓ Environmentally sustainable infrastructure: intermodal transport;
- ✓ Science, technology and innovation.

These strategies stress the role of governments, increasing its presence in the Amazon, in order to enhance control of colonization and socio-economic change, by orienting land use and land use change and providing an adequate supply of public services.

Endeavors and perspectives

Even though the positive results in deforestation reduction in 2005 and 2006 may be partially influenced by the downturn in international prices of agricultural commodities, especially meat and soybean, and to the appreciation of the Brazilian real relative to the U.S. dollar in 2007, thereafter such commodities prices raised markedly, bringing some difficulties and challenges to the plan's implementation.

The slight rise in deforestation rate observed in 2008 probably was caused by this valorization of commodities, specially beef and soybeans. But the new strategies adopted to face it were effective, as can be seen in Figure 5.

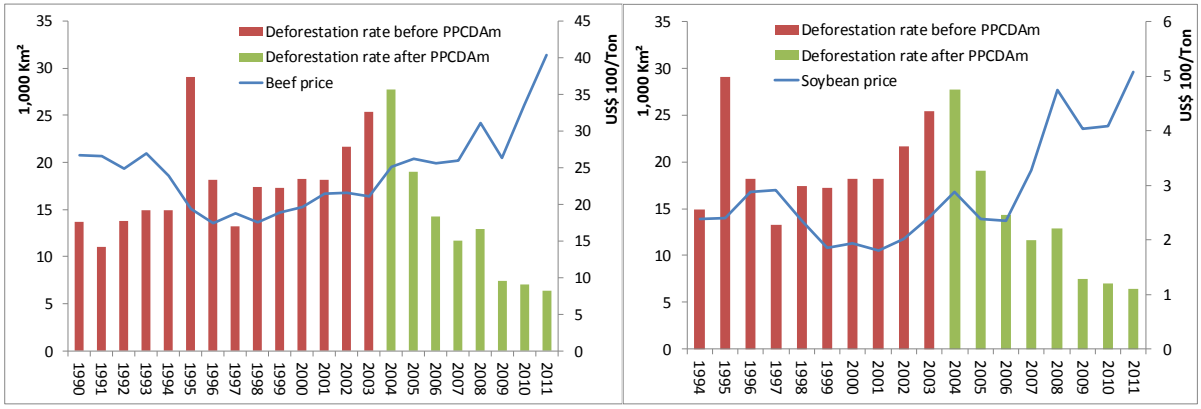

Figure 5 – Beef and Soybean prices, in comparison with deforestation rate in Brazilian Amazon

The continuity of the deforestation reduction process in the Amazon will require stronger application of each strategy's actions and improved coordination inside and among governments (Federal, states and municipal), as well with civil society.

A strategy to change the current model is to reward producers and communities that employ good practices and promote sustainable forest management and preservation. For that matter costs tend to increase. A significant greater investment may be needed to reach comparable results.

The implementation of a REDD (Reduction of Emissions from Deforestation and Degradation) mechanism is an opportunity to raise funds to continue the deforestation reduction process.

3. Objectives of the Amazon Fund

The Amazon Fund is an initiative aimed at the consistent and continued reduction of deforestation rates in Brazil and at contributing to the reduction of greenhouse gas emissions caused by this process and the degradation of forests.

The Fund's purpose is to raise funds from voluntary donations earmarked for non-reimbursable financing of efforts focused on preventing, monitoring and combating deforestation and promoting conservation and sustainable use of the Amazon Biome.

Additionally, the Amazon Fund shall promote the implementation of deforestation monitoring and control systems in other Brazilian biomes and tropical countries.

The Amazon Fund will provide support to reach the international commitment assumed by Brazilian government during COP-15 and formalized by Federal Law n°. 12,187 (December 29th , 2009) which instituted the National Policy of Climate Change, and Federal Decree 7,390/2010:

> *80% reduction of Legal Amazon deforestation rates, comparatively with the average deforestation rate of the period 1996-2005, until 2020.*

Fund-raising for the Amazon Fund is based on the effective reduction of CO_2 due to deforestation in the Brazilian Amazon. Only when the deforestation rate declines will donations be accepted.

Integration between the support areas of the Amazon Fund and the public policies PAS and PPCDAm

The main governmental policies and strategies regarding deforestation reduction are based on the implementation and enhancement of actions set forth on the PPCDAm as well as on the development of prevention and deforestation-fighting plans at the state level. Federal and state policies must harmonize as set forth on the Sustainable Amazon Plan.

Therefore, the financing strategies for projects submitted to the Amazon Fund must observe the thematic categories laid down on Federal Decree No. 6,257/2008. Furthermore, they must integrate PPCDAm strategies and PAS objectives as shown below, as well as the policies of the Amazon State's Plans for Prevention and Control of Deforestation, the Guidelines established by the Steering Committee of the Amazon Fund and BNDES' Operational Policies:

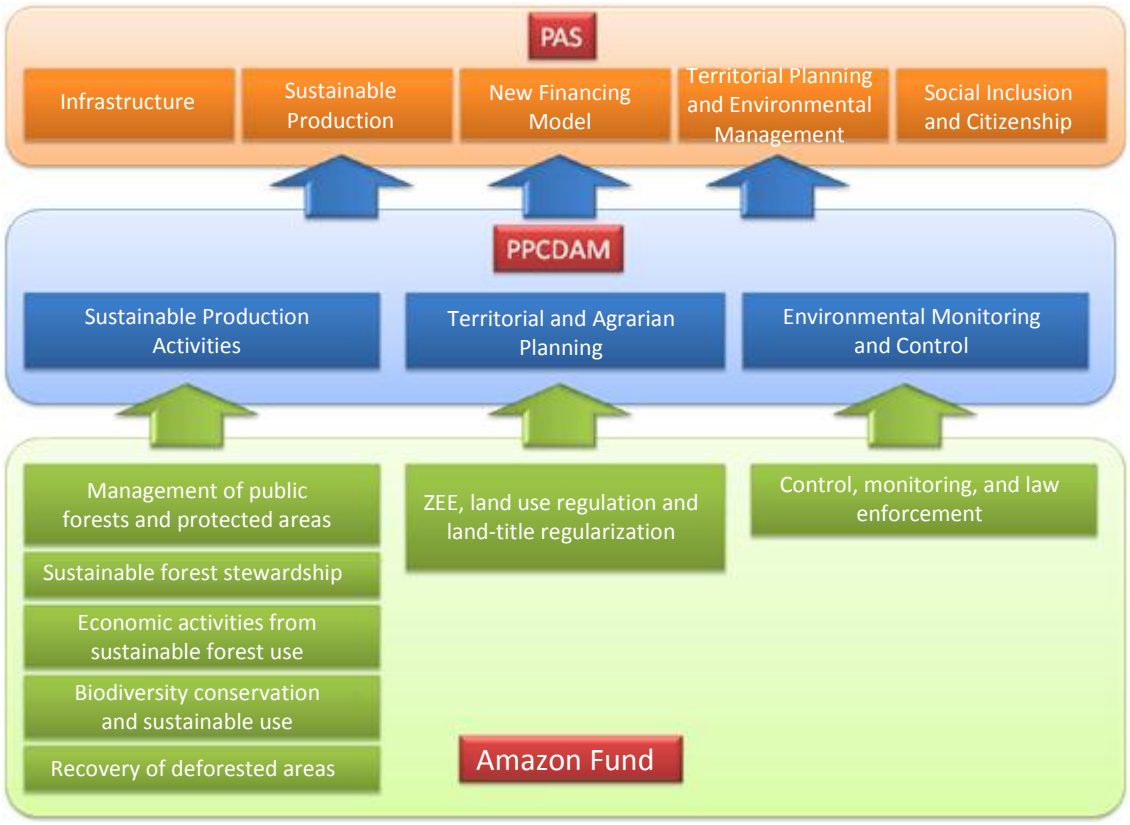

Figure 6: Integration among the Amazon Fund strategies, the Action Plan for the Prevention and Control of Deforestation in the Brazilian Legal Amazon – PPCDAM, and the Sustainable Amazon Plan – PAS.

4. Estimating emission reduction from deforestation

Deforestation reduction rates shall be estimated with a simple method, easy to understand and verify. Carbon emission reduction estimates are a function of (1) the annual deforestation rate measured by the National Institute for Space Research, (2) the average historical deforestation rate, and (3) estimates of the forest carbon stock determined by the Brazilian Forest Service.

These calculations will be validated annually by the Technical Committee of the Amazon Fund, composed of highly qualified notables from the scientific and technological community, appointed by the Minister of Environment upon indications from the Brazilian Climate Change Forum.

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.

4.1 Deforestation data in the Brazilian Legal Amazon

Brazil has one of the most efficient monitoring systems of forest cover in the Amazon. From 1988, the National Institute for Space Research (INPE) has provided annual estimates of deforestation rates in the Legal Amazon.

Since 2002, these estimates have been computed with a digital image categorization system, following the PRODES methodology.[i] This characteristic makes them more reliable and trustworthy. PRODES's main advantage lies on the precision in georeferencing deforestation polygons and on its multitemporal geographic image database.

The calculation method of PRODES is based on the deforestation increments found on each image. Deforestation rates are then annualized for one year periods beginning August 1 and ending July 31. Therefore the 2011 reference rates, for example, refer to the deforestation found in the period August 1, 2010 to July 31, 2011.

Given its reliability, PRODES has been chosen to provide deforestation estimates for the Amazon Fund.

Deforestation rates

The annual deforestation rates (DR) to be used in emission reduction computation shall be annually compared with the average deforestation rate for the past ten years. These ten-year periods shall be updated every five years, so that the annual deforestation rates from 2006 to 2010 will be compared to the average deforestation from 1996 to 2005 (Average Deforestation Rates – ADR 1996-2005). In the following period, 2011 to 2015, annual deforestation rates will be compared with the average deforestation rates from 2001 to 2010 and so on.

The following table shows the deforestation rates in square kilometers (km^2/year) acquired by PRODES from 1995 to 2011 and the values used in computing the two first average deforestation rates (ADR 1996-2005 and ADR 2001-2010) applied to the calculation of avoided emissions in the periods 2006 to 2010 and 2011 to 2015 respectively:

Reference year*	Deforestation rate – DR (km^2/year)
1995	29,059
1996	18,161
1997	13,227
1998	17,383
1999	17,259
2000	18,226
2001	18,165
2002	21,651
2003	25,396
2004	27,772
2005	19,014
2006	14,286
2007	11,651
2008	12,911
2009	7,464
2010	7,000
2011	6,418

Average deforestation rate ADR 1996-2005: 19,625 km^2/year or 1,962,540 ha/year

Average deforestation rate ADR 2001-2010: 16,531 km^2/year or 1,653,100 million ha/year

Table 1: Observation periods and values applied to the calculation of the first and second average deforestation rate (ADR 1996-2005 and ADR 2001-2010) of the Amazon Fund.

*** Deforestation rates refer to one-year periods from August of the previous year to July of the reference year.**[28]

By applying this method, one finds that the Average Deforestation Rate (ADR) for the fund-raising periods from 2006 to 2010 of the Amazon Fund is 1,962,540 hectares/year. Therefore, ADR 1996-2005 will be firstly compared with the annual deforestation rates (DR) from 2006 to 2010, as shown in the following figure:

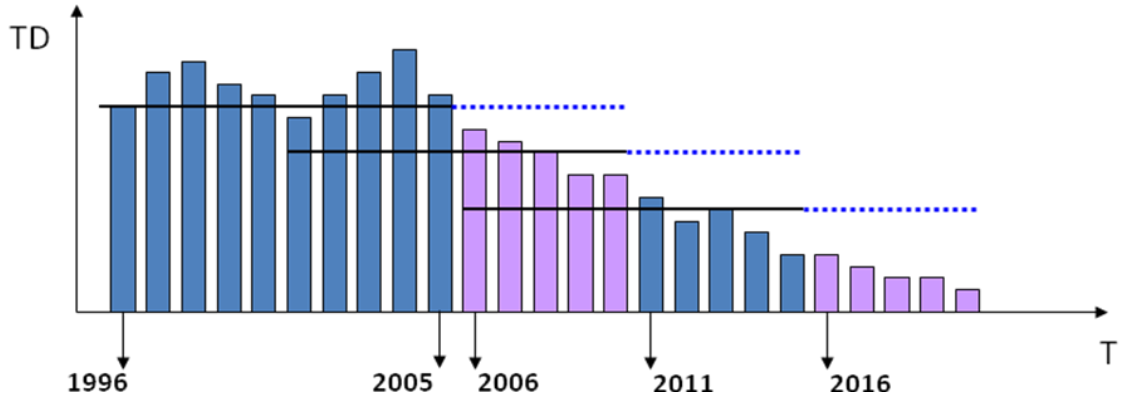

Figure 7: Chart showing the correspondence between calculation periods and average deforestation rates (ADR)

The ADR 1996-2005 for the first application year of the Amazon Fund was thus 1,962,540 hectares. As an example, the DR 2009 was 746,400 hectares. Therefore, the Amazon Fund was allowed to raise funds in proportion to the avoided emissions by saving 1,216,140 hectares in forest cover.

Whenever the annual deforestation rate (DR) fall above the average (ADR), the excess values must be added to the deforestation rates in the following years, thus reducing the fund-raising allowance:

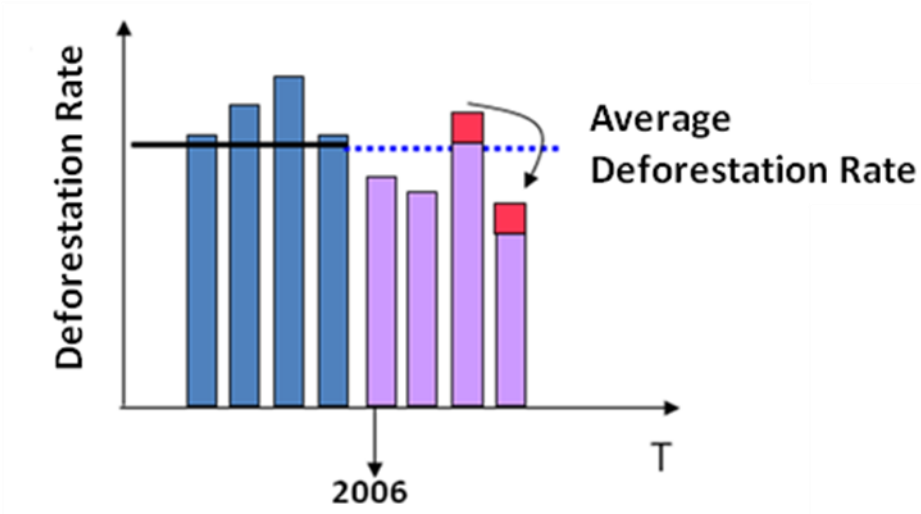

Figure 8: Illustrative charts of potential compensation model for the annual deforestation (DR) above the average period (ADR).

Equivalence in tons of carbon per hectare of forest

The Amazon Fund has used the value of 100 tC/ha (tons of carbon per hectare)[29] of biomass corresponding to approximately 367[30] tCO_2e/ha (tons of carbon dioxide per hectare), an extremely conservative value when compared with literature data (from 130 to 320 tC/ha), but adequate to the

[28] http://www.obt.inpe.br/prodes/

[29] These values can be updated by CTFA

[30] 1 tC/ha corresponds to 44/12 tCO_2e/ha (or 11/3 tCO_2e/ha)

simplicity intended for the computation method and helpful to its understanding. In 2012 the Technical Committee, when attesting the data and calculation of the avoided emissions from the reduction of deforestation rates in the Brazilian Legal Amazon for the year of 2011 and based upon the second Brazilian inventory of anthropogenic emissions, decided to revise from then on the carbon density used in the these calculations from 100tC/ha to 132.2 tC / ha.

Because the agricultural frontier has been sliding toward forests containing larger amounts of biomass, a review of this reference value may be required. This can be done by crossing maps of the spatial deforestation distribution with those of the spatial biomass concentration. Both shall be supplied by National Forest Inventory[31] data. Each deforestation polygon can thus be associated with a different carbon density parameter measured in tons of carbon per hectare. This should permit greater accuracy in the annual estimation of avoided carbon emissions. Simulations performed with five-year data do not show significant changes in the average carbon mass per hectare for the purposes of initial estimations for the Amazon Fund.

The advantage of revising the estimation of biomass density is to allow a more precise estimation of the avoided carbon emission per unit area and the use of a parameter value less conservative than 132,2 tons of carbon per hectare. On the other hand, it renders the estimation method more complex and makes it more difficult to apply it when and where biomass data are not available. Moreover it is going to be very difficult to specify exactly where deforestation was avoided in order to use more specific values.

4.2 Estimation of the quantity of reduced emissions from deforestation

The formula for computing the quantity of reduced emissions from deforestation (ED), equivalent to the emissions avoided in tons of carbon, equals the product of the reduced deforestation area (the Average Deforestation Rate less the Annual Deforestation Rate) and the amount of carbon in the forest, in carbon tons per hectare:

RED = (ADR –DR) x EF

Where:

RED - Reduced Emissions of Deforestation in tons of Carbon (tC)

ADR - Average of Deforestation Rate (ha)

DR - Annual Deforestation Rate to the period considered (ha)

EF - Emission Factor in tons of Carbon per hectare of forest - tC/ha

Equation 1: Formula used in computing emissions avoided by reducing deforestation, in tons of carbon (tC).

As an example, using the 2010 Deforestation Rate and the 1996-2005 Average Deforestation Rate, the emission avoided amount to 126,250,000 tons of carbon (tC) or 462,916,666 tons of equivalent carbon dioxide (tCO_2e).

4.3 Validation

The validation of the amount of avoided emissions estimated by the Ministry of the Environment is fundamental to the transparency intended for the Amazon Fund and ensures that the funds raised correspond in fact to CO_2 emissions avoided by decreases in deforestation.

[31] Inventário Florestal Nacional.

Expert Panel – Technical Committee of the Amazon Fund - CTFA

The Technical Committee of the Amazon Fund is composed of six notables from the scientific and technical community assigned by the Ministry of the Environment upon indications of the Brazilian Climate Change Forum. The committee shall meet annually to:

- ✓ Check and certify that the method of quantification of the deforested area (PRODES) ensure consistent accuracy across time; and
- ✓ Review and attest that the mass of carbon per unit area (in tons per hectare) used in the estimation of avoided emissions is consistent and represents an unquestionable minimum average value.

The members of the Technical Committee will annually receive the deforestation data provided by the National Institute for Space Research and biomass carbon data from the Brazilian Forest Service, so that they may appreciate the methods and parameter values used, and issue an evaluation report.

The Technical Committee's report shall determine the quantity of reduced emissions by reference year and authorize the Brazilian Development Bank to raise the corresponding funds and issue diplomas, in the capacity of Amazon Fund Manager.

All data about the deforested data, parameter values, the computations and results, as well as the Technical Committee's report, are published on the Amazon's Fund webpage and in the Annual Report.[32]

5. Fund-Raising

Fund-raising for the Amazon Fund is going to be carried out by the Brazilian Development Bank (BNDES) (which also operates as Fund Manager). The collection limits shall be determined by the amount of emission reductions attested by the Technical Committee.

5.1 Donors

Any and all voluntary individual, company or institution, including foreign governments, interested in contributing to the reduction of carbon emissions from deforestation may donate to the Amazon Fund.

The benefits for the donors of the Amazon Fund are:

a) Warranty, by external auditors, that the fund's resources shall be applied in projects that contribute to the continuous reduction of future emissions.

b) Receipt of a diploma corresponding to the amount of the donor's contribution to the reduction of carbon emissions from deforestation of the Brazilian Amazon in a given reference period.

c) Reference of the name and amount of contribution on the annual donor roster and in the annual report of the Amazon Fund available on the Web[33];

d) Participation in the annual meeting of Amazon Fund donors, where performance reports of the fund and its projects are released.

The following information shall be included in the donation diploma:

[32] http://www.amazonfund.gov.br/FundoAmazonia/fam/site_en
[33] http://www.fundoamazonia.gov.br/FundoAmazonia/fam/site_pt/Esquerdo/Doacoes/

- ✓ Donor's name;
- ✓ Amount donated;
- ✓ Correspondence between the amount donated and the amount of avoided emissions from deforestation in tons of carbon;
- ✓ Donation date;
- ✓ Reference year regarding the emission avoided.

The diplomas issued shall be personal, nontransferable, nonnegotiable, and they shall grant no ownership rights or any kind of credit. The greenhouse gas emissions corresponding to the donation should not be negotiated in carbon markets. The diplomas issued and their amounts will be published on the Web.[34] The Brazilian Development Bank shall endeavor its best efforts to develop simplified contracting and diploma-issuance mechanisms, to facilitate fund-raising of small donations.

The funds donated to the Amazon Fund shall be deposited in a dedicated account kept by the Brazilian Development Bank and all transactions shall only be performed in compliance with financial laws, therefore conditioned to the full compliance to internal and external standards in order to avoid frauds and money laundering, full access to all operation records being guaranteed to external auditing.

Given that the Amazon Fund has more than one donor and that donations can be made through instant donations and deferred contracts, it became necessary to structure and agree with the donors an order for disbursement requests and also to establish criteria for using amounts available in the Gaia Fund. These agreed principles and rules are published on the Amazon Fund`s website[35].

The Brazilian Development Bank may promote adjustments in the donation terms to accommodate special needs of government or corporate donors.

5.2 Fund-Raising Mechanism

Relying on the emission reduction data annually provided by the federal government and attested by the Technical Committee of the Amazon Fund, the Brazilian Development Bank shall negotiate Donation Agreements with prospective donors to the Amazon Fund and issue the respective diplomas.

5.3 Carbon price and value

In the six first fund-raising periods, corresponding to emissions avoided in the reference years of 2006 to 2011, the price of USD 5.00/tCO_2 (five U.S. dollars per ton of carbon dioxide) were used.

Therefore, for example, a donation of USD 4 million (four million dollars) received during this period would have been acknowledged by a diploma stating its correspondence to an emission reduction of 800,000 tCO_2 (eight hundred thousand tons of carbon dioxide).

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

35 Rules applicable to BNDES for the use and request of financial resources from donations earmarked for the Amazon Fund

http://www.amazonfund.gov.br/FundoAmazonia/fam/site_en/Esquerdo/doacoes/regras_ingles

Future prices may change according to the fund dynamics, especially in what concerns the demand from projects in the pipeline, in order to ensure an adequate resource flow to further deforestation reduction initiatives.

5.4 Fund-raising estimates and perspectives

The annual fund-raising limit is given by:

PF = RED x $CF_{C\text{-}CO2}$ x US$ 5,00

where:
PF - Potential Annual Fund-raising
RED - Reduced Emissions of Deforestation in tons of Carbon (tC)

$CF_{C\text{-}CO2}$ - Conversion Factor from C to CO_2 = 11/3 CO_2/C

As an example, based on the deforestation reduction rates obtained in the Brazilian Legal Amazon in 2009, compared with the average deforestation rate 1996-2005, the limit for the first fund-raising period is roughly one billion dollars, as per the following calculation:

PF_{2009} = RED_{2009} x EF x $CF_{C\text{-}CO2}$ x US$ 5,00 = US$ 2,229,590,000.00
where:
RED_{2009} = 1,216,140 ha x 100 tC/ha x 11/3 CO_2/C = 445,918,000 tCO_2e
1,216,140 ha = $ADR_{1996\text{-}2005}$ - DR_{2009} = 1.962.540 ha - 746,400 ha
EF = 100 tC/ha
$CF_{C\text{-}CO2}$ - Conversion Factor from C to CO_2 = 11/3 CO_2/C

This corresponds to approximately 446 million tCO_2e (four hundred and forty six million tons of equivalent carbon dioxide).

It is estimated that the Amazon Fund has the potential to raise up to US$ 20 billion in grants by 2020. The following table shows partially this potential considering only the years 2006 to 2011. The Amazon Fund has received about US$ 128 millions in donations from a contracted total of approximately US$ 671 millions.

Year	Possible fund raising attested by Technical Committee (US$)	Donations received relative to forest years 2006 and 2009 (US$)	Reminiscent potential fund raising (US$)
2006	1,000,000,000.00	116,745,267.34	883.254.732,66
2007	1,515,000,000.00	-	1.515.000.000,00
2008	1,228,500,000.00	-	1.228.500.000,00
2009	2,229,590,000.00	11,817,332.89	2.217.772.667,11
2010	2,314,583,333.00	-	2.314.583.333,00
2011	2,314,583,333.00	-	2.451.054.100,00
Total	**10,738,727,433.00**	**128,562,600.23**	**10,610,164,832.77**

Observation: The donations received by the Amazon Fund although relative to years 2006 and 2009 were in fact received along the years 2009, 2010, 2011, 2012 and 2013.

6. Fund Governance

The Amazon Fund management basically involves the integration of procedures and decisions developed according to the three main bodies: the Technical Committee, the Steering Committee and the Fund Manager.

6.1 Technical Committee

The Technical Committee of the Amazon Fund has been constituted by the Ministry of the Environment to attest the data and calculation of the avoided emissions from the reduction of deforestation rates in the Brazilian Legal Amazon.[36]

[36] See section 4.3.1 – Experts Panel – Technical Committee of the Amazon Fund – CTFA.

6.2 Steering Committee

The Steering Committee of the Amazon Fund – COFA is responsible for the definition of strategic guidelines and criteria for the funds application. The committee[37] is constituted by representatives of governments and society, represented by nine agencies of the federal government, nine states of the Brazilian Legal Amazon and six representatives of civil society, as follow:

I – Federal government - A representative of the following agencies and entities:

a) Ministry of the Environment;

b) Ministry of Development, Industry and Foreign Trade;

c) Ministry of Foreign Affairs;

d) Ministry of Agriculture, Farming and Supply;

e) Ministry of Agrarian Development;

f) Ministry of Science, Technology and Innovation;

g) Presidential Staff Office;

h) Strategic Affairs Secretariat of the President's Office;

i) Brazilian Development Bank - BNDES

II – State governments – One representative of each Legal Amazon state with an official and valid plan for Prevention and Control of Deforestation:

a) State of Acre;

b) State of Amapá;

c) State of Amazonas;

d) State of Maranhão;

e) State of Mato Grosso;

f) State of Pará;

g) State of Rondônia;

h) State of Roraima;

i) State of Tocantins.

III – Civil society – One representative each of the following organizations:

a) Brazilian Forum of NGOs and Social Movements for the Environment and Development – FBOMS;

b) Coordination of the Brazilian Amazon Indigenous Organizations – COIAB;

c) Industry National Confederation – CNI;

d) National Forum of Forest Activities – FNABF;

e) National Confederation of Workers in Agriculture – CONTAG;

[37] The committee composition is defined by Decree No 6,527/2008.

f) Brazilian Society for Science Progress – SBPC.

COFA shall meet twice a year[38], and its meetings shall coincide with the presentation of fund performance reports by the Brazilian Development Bank.

In addition to proposing guidelines and monitoring the results achieved by the Amazon Fund, the Steering Committee may adjust annually the Fund Support Lines to the guidelines of the Sustainable Amazon Plan – PAS and the Action Plan for the Prevention and Control of Deforestation in the Brazilian Legal Amazon – PPCDAm.

Decisions of the Steering Committee shall be made by consensus of the three blocks represented, according to its internal bylaws.

The President's Office Committee must be performed by one of the representatives designated by the federal government, where it has been performed by the Ministry of the Environment in the first two years[39]. The Brazilian Development Bank is responsible for the operational support of the respective activities and the Executive Secretariat. The participation in this Committee is considered of public interest, without any payments whatsoever.

6.3 Fund Manager - the Brazilian Development Bank

The management of the Amazon Fund is the responsibility of the Brazilian Development Bank (BNDES). This state-owned and state-controlled financial institution was created in 1952 to supply long-term financing needs of the Brazilian economy. The bank played and plays an important role in the modernization of the Brazilian industry and infrastructure, chiefly from the management of several public funds, but also from the international financial market.

BNDES is the financial agent for several funds, such as the Fund for Assistance to the Workers (FAT), the Social Integration Program and the Public Servant Program Fund (PIS-PASEP Fund), the Telecommunications Technological Development Fund (FUNTTEL), the Export Credit Guarantee Fund (FGE), the Merchant Marine Fund (FMM), the Guarantee Fund for Investments (FGI), and the National Fund on Climate Change (FNMC).

The operations developed in managing those funds make the Brazilian Development Bank an important agent in the nation's development and modernization. The bank's disbursements totaled R$ 1,39.7 billion in 2011, with total assets of R$ 624.8 billion and R$ 9.0 billion in net profits. The default rate is minimal, only 0.14% of the entire portfolio.

In 1994, the bank signed the International Declaration of Financial Institutions on Environment and Sustainable Development, and became a member of the United Nations Environment Program – Financial Initiative (UNEP-FI). As a result of its constant interchange with UNEP-FI and also on its own initiative, the Bank adopts updated environmental and sustainable development practices.

The bank is also a signatory of the Green Protocol, a declaration of principles for sustainable development agreed among official Brazilian banks in 2005. In 2008, the Protocol was revised and enhanced, resulting in a new Socio-Environmental Responsibility Protocol, representing a mutual effort of the public banks managed by the federal government to ensure socio-environmental responsibility in the financed projects.

By this protocol, the Brazilian Development Bank pledged to endeavor banking policies and practices that are pioneering, multiplying, demonstrative, or exemplary in terms of socio-environmental

[38] Defined by Decree No 6,527/2008
[39] Ibid.

responsibility and in harmony with a the objective to promote development that does not jeopardize the needs of future generations.

The five main principles of the Protocol are:

- ✓ Finance sustainable development by means of credit lines and programs that promote the population's life quality, natural resource sustainability and environmental protection;
- ✓ Consider socio-environmental impacts and costs in asset and risk management of clients and investment projects, based on the National Environment Policy.
- ✓ Promote sustainable consumption of natural resources and derived materials inside the signatories.
- ✓ Inform, sensitize and continuously engage the parties interested in the sustainability policies and practices of the signatories.
- ✓ Promote procedure harmonization, cooperation, and integration of efforts among the signatories.

The Brazilian Development Bank also has a support portfolio for environmental development projects, which must present special conditions for environmental projects that promote the sustainable development of the country, especially including the following areas:

- ✓ Basic Sanitation;
- ✓ Projects inserted in the Drainage Basin Committees Programs;
- ✓ Eco-Efficiency: Rational Use of Natural Resources;
- ✓ Reduction of the water resources use: Treatment, Reuse and Circuits Closing;
- ✓ Recovery and Preservation of Ecosystems and Biodiversity;
- ✓ Clean Development Mechanism;
- ✓ Planning and Management;
- ✓ Recovery of Environmental Risks.

With the beginning of the Fund Amazon operations in 2009, the Brazilian Development Bank structured an Environment area, which is responsible for the Fund operations and all businesses related to this subject. The Brazilian Development Bank is responsible for the fund's judicial and off-court representation.

7. Operational Management

7.1 Funds Collection

Governments and companies interested in making donations to the Amazon Fund must contact the Brazilian Development Bank, who will inform the procedures for that. As previously stated in Section 5, each donor will receive a diploma acknowledging such contribution to the Amazon Fund, signed by a representative of the Brazilian Development Bank.

These diplomas must be nominal and nontransferable, and they shall not grant neither ownership rights nor carbon offsets.

The Roster of Donors will be published on the Amazon Fund's web site[40].

[40] http://www.amazonfund.gov.br/FundoAmazonia/fam/site_en/Esquerdo/doacoes/

7.2 Operational Procedures

Guidelines

The funds of the Amazon Fund may be applied to projects related to the preservation, monitoring and deforestation-fighting, as well as to the promotion of conservation and sustainable use in the Amazon biome. Further, they may be also applied in the development of deforestation monitoring and control systems in other Brazilian biomes and tropical countries.

The projects must fit in the Amazon Fund support lines and may be submitted, among others, by public institutions, state-owned companies and nongovernmental organizations. The funds for the approved projects shall be transferred to the applying institutions, in accordance with the operational procedures of the Amazon Fund and of Brazilian Development Bank.

The setting of fund guidelines is the responsibility of the Steering Committee of the Amazon Fund.[41] The Committee shall periodically present a set of priorities for the fund's application.

These guidelines are related to *application modalities, restrictions, limits, and counterparts, and to the fund's priorities.*

Modalities include the transfer of funds to the beneficiary, in order to implement the initiatives proposed in the project, transfers to other funds, to promote the support to initiatives compatible with the thematic areas, guidelines and priorities of the Amazon Fund, as well as the payment of environmental services to support programs of forest preservation, among others that may be considered by the Steering Committee.

Restrictions may apply to rule out certain types of projects that the Steering Committee finds should be explicitly excluded from eligibility. They may rule out from the Amazon Fund certain types of expenses, even if they are permitted through the funds of counterparts offered for the projects implementation. Some examples of restrictions are payments to public servants, the payment of taxes not directly related to the project activities, and expenses that are legally prohibited.

As to the definition of priorities definition for the Amazon Fund, some examples are: project contribution to governmental policies and plans, such as PAS and PPCDAm; thematic, geographic, or any other criteria related to the nature of applying institutions, to the beneficiaries or to the results expected.

Preliminary Application[42]

Institutions interested in submitting projects to the Amazon Fund must formalize a preliminary application to the Brazilian Development Bank describing the basic characteristics of the institution and its project. This is regular procedure laid down in the bank's operational policies.[43]

One of the main advantages of submitting a preliminary application is that the applicant needs not to present at the outset all information needed for analysis. The preparation of the preliminary application is facilitated by the availability of information guides and forms. The applicant is thus able to fill them out objectively and concisely, without the assistance from an outside consultant.

[41] Defined by Decree No 6,527/2008

[42] Carta-consulta (literally, consultation letter).

[43] Políticas Operacionais.

Another advantage of the preliminary application is to enable the adequate project qualification in the thematic areas of the Amazon Fund, and to facilitate that the bank's project analysts provide recommendation and guidance regarding the project proposal.

Figure 9: Project Flow

The information required from the applicant may vary with the thematic areas, but usually includes:

- ✓ Information on the institution, economic and financial data, managerial capacity, its history of developed projects and its credit references;
- ✓ Information on the project, such as objective, goals and expected results;
- ✓ Table containing the project's main expenses and funding;[44]
- ✓ Estimate of the project's effects on the activity performed by the institution;
- ✓ Summarized description on the institutional environment;
- ✓ Environmental information on the project and on the environmental policy and practices of the applicant.

Application approval[45]

The applicants whose preliminary application has been approved will be requested by mail to contact the Brazilian Development Bank department assigned to carry out the project analysis.

Project Analysis

The technical area in charge of the financial collaboration request analysis will instruct the applicants regarding project proposal details and additional information and documents.

Project approval

After the analysis stage, the project proposal and the project analysis will be routed to the bank's executive board for deliberation.

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44 BNDES calls the project budget Quadro de Usos e Fontes, literally Table of Uses and Sources.

45 Enquadramento.

Contracting

Approved projects have their contracts prepared and signed.

Disbursements

After proper registrations and satisfaction of the conditions for funds disbursement, the first installment is paid according to the contract provisions. Further installments are subject to evidence of the project expenses and progress.

Follow up

There is a periodical project follow up by the Brazilian Development Bank aiming at proving its implementation. When the project is completed, a Project Completion Report is prepared and a project impact assessment is made about the results attained by its implementation.

Logical Framework

The Amazon Fund uses the logical framework for planning, management, monitoring and assessment. It aims to contribute to the fund's best performance, as it enables the consolidation of data from indicators that measure the supply and use of products and services from supported projects, as well as measuring the quality and quantity of results achieved.

The Logical Framework of the Amazon Fund was established in 2009 and consolidated in September 2010. Its construction was carried out internally at the BNDES and with the collaboration of several outside parties.

Given the range of operational areas in the Amazon Fund, its Logical Framework was structured in four components, which result in four specific logical frameworks that share the same overall objective. In the definition of general purpose (strategic target) of the Amazon Fund, a summarized proposition was put together, focusing on this biome, without preventing the Amazon Fund from providing support for monitoring in other (Brazilian) biomes and in other tropical countries.

General objective:

Reduced deforestation with sustainable development in the Amazon Region

Component 1: SUSTAINABLE PRODUCTION

Activities that maintain the forest standing are economically attractive in the Amazon Biome

Component 2: INSTITUTIONAL DEVELOPMENT

Governmental efforts ensure anthropic activities are adjusted to environmental legislation

Component 3: LAND-USE PLANNING

Amazon Biome area is organized geographically

Component 4: SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT

Activities in science, technology and innovation contribute to the recovery, conservation and sustainable use of the Amazon Biome

The complete Amazon Fund's Logical Framework is published on the Amazon Fund`s website[46]

7.3 Financial management

Aiming at providing the Amazon Fund (Fundo Amazônia) with the necessary transparency, its accounting is segregated from the bank's and all financial statements follow international financial standards. The Amazon Fund's Annual Reports for the years of 2009, 2010 and 2011 are available at Amazon Fund's website.[47]

Taxes on the donations received but yet to be disbursed, such as the Contribution to the PIS/PASEP (Social Integration Program/Public Servant Fund) and the Contribution to Social Security Financing (Financiamento da Seguridade Social – COFINS), are suspended for up to two years. After the donations are paid to the fund's projects, the tax rates will be reduced to zero. If the funds are not fully disbursed in this period, the Brazilian Development Bank shall bear the payment of those taxes, plus interest and fine, as determined by Federal Law no. 11.828 (November 20th , 2008).

The Amazon Fund availabilities, i.e., the donation amounts received but not yet paid to projects, are deposited in Fixed Income Investment Funds (Gaia Fund), managed by BB Gestão de Recursos - Distribuidora de Títulos e Valores Mobiliários S.A. - BBDTVM, a Banco do Brasil subsidiary. The Gaia Fund has the Brazilian Development Bank as single shareholder and operates only with the Amazon Fund.

BBDTVM is responsible for the portfolio management, control and custody of the Gaia Fund, and Banco do Brasil S.A. is responsible for the shares distribution, accounting records and treasury services.

The Gaia Fund purpose is to seek the valuation of its shares upon the application of its funds in financial assets and/or operational modalities available in the scope of the financial market, according to instructions of the Brazilian Securities and Exchange Commission (Comissão de Valores Mobiliários – CVM). The investment, risk management and information disclosure policies, as well as the remaining provisions about the Gaia Fund are described in its regulations.

The Brazilian Development Bank compensation to cover its operational costs and expenses, including those with the Amazon Fund, including those with the Technical Committee, the Steering Committee, and auditing services is three percent (3%) of the donation volume raised by the Fund, as per Decree 6,527 (August 1st, 2008).

8. Reports and auditing

Actions regarding the Brazilian Development Bank's support to sustainable development will be widely disclosed through several means of communication.

A friendly access through the Internet is available for the Amazon Fund donors, in order to allow *online* updates on projects in progress.

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[46] http://www.amazonfund.gov.br/FundoAmazonia/export/sites/default/site_en/Galerias/Arquivos/Publicacoes/LOGICAL_FRAMEWORK_September_2010.pdf

[47] http://www.amazonfund.gov.br/FundoAmazonia/fam/site_en

8.1 Reports and financial statements

Information about the funds application is presented to the Steering Committee, permitting the follow-up of the Fund's performance, each Support Line's demand and fund-raising progress, and all other information required.

The Amazon Fund Annual Report[48] publishes the roster of donors and amounts donated, the fund's guidelines and priorities, the results achieved by the supported projects and the fund's financial and operational performance. The annual report includes the following topics:

1) Message from the President of the Brazilian Development Bank
2) Roster of Donors
3) Composition of the Amazon Fund Guiding and Technical Committees
4) Data about deforestation and the corresponding carbon emissions
5) Fund purposes, guidelines and priorities for the period
6) Amazon Fund material performance
    a) Performance of the Amazon Fund Support Lines
    b) List of supporting projects containing information summary, comprising:
        - Description of purposes, beneficiaries and main expected results
        - Project contribution for the Fund purposes
        - Project amount, support amount, disbursed percentage
        - Estimated deadlines for project completion and dates of critical events
7) Amazon Fund financial performance
    a) Fund-raising statistics;
    b) Fund availabilities and disbursement perspectives
    c) Gaia Fund performance
    d) Financial and statistical tables
8) Amazon Fund prognostics
9) Appendices:
    a) Financial audit report
    b) Material audit report
    c) Annual summary of the Steering Committee's deliberations
    d) Carbon emissions resulting from deforestation attested by the Technical Committee
    e) Other

Other elements may be incorporated to the Annual Report, according to specific demands identified needs.

[48] Relatório Anual do Fundo Amazônia.

8.2 External audit

For the sake of transparency and confirmation of the effective application of the Fund resources, an external audit will be contracted with an institution of acknowledged international competence, in order to verify the proper funds application and the Fund implementation. To facilitate auditing, the compliance and financial audits will be separated while jointly comprehending the annual audit requirement to which the Amazon Fund is subject.

The financial audit will inform the opening balance, the donations received by the Fund describing the amount of donation and the relevant donors, the financial income earned by the Fund, the amount disbursed for projects and the amount retained by Brazilian Development Bank pursuant First Clause, 3rd Paragraph of Decree 6,527/2008 and includes a report about the fund's financial statements.

All financial statements will follow the International Standard on Auditing (ISA) rules in force and effect at the time of preparation of the financial audit, with special regard to the terms provided in ISA rule nº 800 or any other ISA rule that replaces this from time to time.

The compliance audit aims at checking if the application of the Amazon Fund resources correspond to its purposes and the guidelines established by the Steering Committee, as well as if the project results conform with the Sustainable Amazon Plan and with the Plan for Deforestation Prevention and Fighting in the Amazon.

9. Activities expected in each area[49]

Beyond the contribution to reduction in greenhouse gas emission, the projects supported by the Amazon Fund will also contribute to the implementation of public policies for deforestation prevention and fighting, and to the promotion of sustainable development in the region.

Economic activities from the sustainable use of forests

The importance of support profit activities based in a sustainable use of forests one of the majors goals to implement a new development model to the Amazon region, based at the endogenous perspective.

These activities have capacity to involve all the Amazon Fund areas, but are stressed based on the *Sustainable forest management*, *Recovery of deforested areas* and *Conservation and sustainable use of biodiversity.*

Management of public forests and protected areas

Public forest regulation was introduced into the Brazilian legal system by Law 11.284 of March 2nd, 2006, and includes the creation of protected areas, the granting of forests to local people, and its management through forest concession agreements. The paramount objective of public forest management is to assure that those forests remain under the control of the State while preventing its change to alternative land uses and assigning destinations for forest resources, either as reserves or as production areas under community or business management.

[49] See Decree No 6,527/2008 for the areas of interest

Sustainable forest management

The development of sustainable forest management, as a strategy for forest conservation with income generation from its sustainable timber or non-timber exploration, demands intensive initiatives in knowledge and management, in order to become viable as an option for alternative soil use and to the farming expansion onto forest areas.

Environmental control, monitoring and enforcement

The immediate target of environmental control, monitoring and enforcement initiatives is to ensure the integrity of natural resources, seeking to avoid criminal and predatory practices associated to irregular access, and to set strategies for its organization and sustainable exploitation.

The use of monitoring and control practices with intense use of remote sensing in the Brazilian Amazon has been increasing and allowing governments to effectively follow human and natural disturbances, even if in a small scale.

Recovery of deforested areas

The performance of adjustments in the properties which develop farming and ranching activities in the Amazon forestland represents a challenge that demands major investments. However those investments reduce the pressure on new forest areas and warrant their reforestation and restoration.

Economic and ecological zoning, territorial planning and agrarian regulation

The initiatives of territorial planning and agrarian regulation, both in public and private lands, are intended to reaffirm the planning of land occupation and resource destination, seeking to reverse the fragility of the State's presence, squattering, and other forms of illegal land occupation, and the consequent predatory exploitation of natural resources and impunity for environmental crimes.

With these initiatives governments expect to reach important social and economic results, capable of refraining and receding the aggravation of conflicts arising from land dispute, as well as inadequate soil uses and non-conformity to the environmental legislation and the rest of the environmental licensing and management standards.

Conservation and sustainable use of biodiversity

Direct the initiatives of biodiversity conservation and sustainable use to the implementation of national conservation goals and to increasing the perceived worth of the vast economic potential represented by the biological diversity encountered in the region. Promote regional development, from the valuation local knowledge and the development of products with a strong technology base and high added value.

10. Criteria and priorities for Amazon Fund Allocation Resources

As describe in section 6.2, the Steering Committee of the Amazon Fund – COFA is responsible for the definition of guidelines and criteria for the funds application.[50] These guidelines and criteria have

[50] Defined by Decree No 6,527/2008

been modified by COFA along the years. The present guidelines have been published on the Amazon Fund's webpage.[51]

These guidelines and criteria address to five majors topics involving: *guidelines, minimum requirements for projects, modalities for resource allocation, restrictions on use of resources, equity criteria for resource allocation and limitations on resource allocation* as showed in the following tables .

10.1 Guidelines

A1 – Geographical Criteria
Projects carried out in priority municipalities to prevent, monitor and combat deforestation (the selection of the municipalities is in accordance with Art. 2 of Decree Nº. 6,321/2007); Projects carried out in municipalities over areas under the influence of large Growth Acceleration Program (PAC, in Portuguese) projects; and Projects carried out in municipalities/regions with more conservation of the forest coverage.
A2 – Thematic Criteria
Efforts to keep the forest standing (conservation and sustainable use) a) Promoting and increasing the production scale of timber and non-timber forestry products resulting from the sustainable forest management, including management plans, research, innovation, scientific and technological dissemination, market development, training and capacity-building; b) Implementing payment systems for environmental services associated to the upgrading and/or maintenance of the forest coverage and/or forestry and agroforestry systems; c) Developing and implementing models for the recovery of Permanent Preservation Areas (PPAs) and Legal Reserves emphasizing the economic aspects; - The economic use of PPAs shall receive support only if in accordance with current legislation. d) Consolidating protected areas, especially the Sustainable Use Protected Areas and Indigenous Lands. **Efforts to foster land-use planning and land tenure regularization** e) Allocating non-earmarked Public Forests, prioritizing community forests; f) Repressing land grabbing as well as supporting land-title regularization and land-usage planning, preferably in areas with greater concentration of temporary possession and/or conflicts; Land-title regularization includes regularization processes and the follow-up of such processes by society. **Effort to structure and integrate control, monitoring and environmental inspection systems in the Amazon** g) Supporting the structuring of state institutions responsible for local environmental management; h) Supporting the implementation of local monitoring and environmental inspection systems; i) Structuring and integration of forest management control systems, of rural properties environmental licensing, and of agricultural, cattle-raising and forest products chain of custody tracking; j) Increasing and intensifying the monitoring systems for deforestation and forest degradation.
A3 – Diversity of Stakeholders and Shared Governance
Projects involving articulation between stakeholders from the public, private and third (NGO) sectors as well as local communities with shared governance structure.
A4 – Target Audience

[51] http://www.amazonfund.gov.br/FundoAmazonia/export/sites/default/site_en/Galerias/Arquivos/diretrizes_criterios/Diretrizes_e_Criterios_ing.pdf

Projects involving direct benefits for traditional communities, land settlements and family farmers.
A5 – Relevance
Projects with higher potential for replicability. Projects with higher potential for impact (e.g. R$ / hectare of protected forest or sustainably managed).
A6 –BNDES Allocation Lines
Prioritize projects that include (a) sustainable production activities and (d) scientific and technological development. The BNDES will make efforts to allocate funds in priority areas, including instruments to induce demand.

10.2 Minimum Requirements for Projects

B1 – Results indicators
The project will include measurable result indicators directly related to the objectives of the Amazon Fund.
B2 – Applicants / Executors
The project will include the consent of all partners and co-executors.
B3 – Social Participation
Projects involving traditional communities and indigenous people will necessarily present a document that proves previous consent from communities or from their representative institutions. The involved communities should be mentioned in the project. Projects related to the duties of public institutions, or to the establishment of public policies do not necessarily require consent from beneficiaries.
B4 – Coherence with the Thematic Areas of the Amazon Fund
The project will conform to at least one area of Decree Nº. 6,527/2008.
B5 - Coherence with the Federal and State Plans for Prevention and Combat of Deforestation
The project will clearly comply with policies established in the PPCDAm and in the State Plans for Prevention and Control of Deforestation.
B6 - Coherence with the Sustainable Amazon Plan (PAS, in Portuguese)
The project will clearly comply with PAS guidelines.
B7- Contribution to REDD
The project will directly or indirectly contribute to achieving REDD.
B8 - Additionality of Resources
The projects will present additionalities to public budgets earmarked for allocation areas in the Amazon Fund.
B9- Counterpart
The project will present a counterpart and/or non-financial contributions, showing additionalities to the funds borrowed from the Amazon Fund and producing a multiplying effect for the Fund's investments. The counterparts may be financial resources directly invested in the project or the supply of infrastructure, personnel or other indirect methods. The following aspects may be considered when applying this criterion: o Average budget allocated during the previous two years in the public budget invested in the proposed action; o Level of limitations on the release of funds within the public budget to execute the action; o Foresight in the government's current pluriannual plans (PAPs).

B10- Territorial Base
The project will describe its allocation territorial base (state and, where applicable, municipality).
B11- Publicity and Transparence
Projects will have a mechanism to disclose implementation over the Internet. The BNDES will make a standardized tool available for integrating and disclosing updated information concerning the implementation of all projects.
B12- Project Sustainability
Strategies to sustain the project's results after implementation will be presented.
B13- Deconcentration of Resources
The amount allocated in each of the four operational modalities will not be less than 10% or higher than 40% of the available budget in the year. Equality requirements will be observed.
B14- Benefits of Collective Use
The results of the projects with economic purposes will be for collective or public use, and will be related to: o Production infrastructure of Collective Use; o Studies and surveys with results available to the public; o Training and qualification open to the public; o Technological development with results; open to public, whenever feasible; o Replicable and practical application innovations o Other collective benefits identified during the assessment process of the projects.
B15- Non-substitution of Other Financing Sources
The Amazon Fund resources will not substitute other available financing sources.

10.3 Modalities for Resource Allocation

C1 – Direct Allocation – Investment
Allocations made directly by projects' executors, including through third-party contracting. This includes investments in construction, equipment, training and capacity-building to establish initiatives. The projects can make use of more than one modality.
C2 – Direct Allocation – Funding
Allocations made directly by projects' executors, including through third-party contracting. This includes travel expenses/field work, individual or legal entities consulting services, field tools and instruments, communication among others. The projects can make use of more than one modality.
C3 – Payment for Environmental Services
Payments made to environmental service providers. The projects can make use of more than one modality.
C4 – Continued Long-term Services
Services that will be executed on a long-term basis to obtain long-term results, such as deforestation or forest degradation monitoring, forest inventory, among others. The projects for continued services can last up to 10 years and will have mechanisms for the continuous follow-up of implementation and public disclosure of results. The projects can make use of more than one modality.
C5 – Indirect Allocation

Indirect allocations made by aggregating initiatives for small projects, including funds and other organizations that carry out projects.

10.4 Restrictions on Use of Resources

D1 – Daily expenses
Daily expenses will not be paid for public servants (this restriction does not apply to research activities involving public research institutions).
D2 – Payment of Individuals
Wages or any other type of remuneration will not be paid to public servants working exclusively in the three government branches (this restriction does not apply to the payment of scholarships or research specifically related to the project).
D3 – Taxes and Fees
The funds will not be used to pay taxes and fees that are not inherent and/or part of the costs or investments carried out within project (this restriction does not apply to taxes related to the projects' activities, such as tax charged on products and services (ICMS) included in the products' prices; social security tax (INSS) paid on individuals' services etc).

10.5 Equality Criteria for Resource Allocation

E1 - Equity in resource allocation per country
The concentration of project resources in one country will be avoided.
E2 - Equity per applicant type
The concentration of resources in certain types of applicants will be avoided, such as public entities, research institutions and Civil Society Organizations (CSOs). Within the context of the Amazon Fund, civil societies are: nongovernmental organizations, labor unions, corporations and other private institutions.

10.6 Limitations on Resource Allocation

F1 – Projects with economic purposes
Maximum participation in the Amazon Fund: 90% for projects involving micro and small enterprises, cooperatives and producers' associations with annual gross operating revenue less than or equal to R$ 10.5 million; 70% for projects involving medium-sized enterprises, cooperatives and producers' associations with annual gross operating revenue higher than R$ 10.5 million, and less than or equal to R$ 60 million; 50% for projects involving large companies, cooperatives and producers' associations with annual gross operating revenue higher than R$ 60 million; Observation: in the case that activities start in the same calendar year, the aforementioned limits will be proportional to the number of months in which the legal entity has performed the activity, not considering the parts thereof (weeks, days etc). In the case that enterprises are being implemented, the annual sales projection used in the enterprise will be considered, taking into account the total installed capacity. When the enterprise is controlled by another enterprise or belongs to an economic group, the classification of the size of the enterprise will consider the consolidated gross operating revenue.
F2 - Projects with economic purposes supporting social groups in need

Maximum participation of the Amazon Fund in duly justified cases: 100%. The economic results coming from support projects for social groups in need will be distributed to the people who are part of it, no matter who the Applicant is.

F3 - Projects with economic purposes of Local Productive Arrangements (APLs) for collective use

Maximum participation of the Amazon Fund: 90%

F4- Projects with economic purposes of scientific and technological research developed in cooperation with Technological Institutions (ITs) and entities with economic purposes

Maximum participation of the Amazon Fund:

90% for projects involving micro and small enterprises, cooperatives and producers' associations with annual gross operating revenue less than or equal to R$ 10.5 million;

80% for projects involving medium-sized enterprises, cooperatives and producers' associations with annual gross operating revenue higher than R$ 10.5 million, and less than or equal to R$ 60 million;

70% for projects involving large companies, cooperatives and producers' associations with annual gross operating revenue higher than R$ 60 million – please check observation in item F1;

- The beneficiaries of the Amazon Fund's financial resources will be Technological Institutions (TIs) and/or Support Institutions (Sis);
- Technological Institutions (TI): publicly-owned company, or entity directly or indirectly controlled by said company, or non-profit private company that aims at performing activities of basic or applied, scientific or technological research, as well as technological development.
- Support Institutions (Sis): non-profit institutions created with the purpose to support research, educational and extension projects as well as institutional, scientific and technological development projects of interest to higher education institutions, scientific and technological research institutions, and institutions created under Law Nº. 8,958 of 12/20/1994, which present this same purpose;
- The enterprises and/or other entities with economic purposes and strategic interest in research will not be direct beneficiaries of the resources. They will be intervening parties in the financing operations and will present a financial counterpart to complement the resources of the Amazon Fund;
- Investments made to benefit the Technological Institution (TI), with a specific purpose to accomplish the objectives of the project, are provided support.
- Participation in the intellectual property and in the economic results from exploring the project's creations will comply with Innovation Act (Law Nº. 10,973 of 12/2/2004). This way, the parties will establish, in the contract, the intellectual property ownership and proper participation in results, which shall be assured, provided they are mentioned in the contract, in the amount equivalent to that of the aggregated value of knowledge already existing in the beginning of the partnership and as well as the human, financial and material resources allocated by the contracting parties of the project.
- During the analysis phase, the BNDES will verify aspects related to the intellectual property rights resulting from the research, development and innovation project with the objective of avoiding, when applicable, restrictive practices of use and assignment of these rights. Besides the aforementioned aspects, the BNDES will also verify, during the analysis phase, the criteria for divvying up the financial results of the project.

10.7 Guidelines and Criteria for the Allocation of Resources from the Amazon Fund for the Development of Projects for Monitoring and Control Systems of Deforestation in Other Brazilian Biomes

Allocation Area	Allocation limit of the total resources available in the year	Tables
Projects in other Brazilian biomes and	20%	G and H

in other tropical countries		

Guidelines

G1 – Diversity of Stakeholders and Shared Governance
Projects involving the articulation of stakeholders from the public, private and third (NGO) sectors as well as local communities with shared governance structure.
G2 – Relevance
Projects that develop and implement long-term monitoring methodology for REDD.
G3 – Priority
Within the scope of other Brazilian Biomes, priority will be given to monitoring system projects of permanent nature, per biome, that contribute to monitoring in a national scale and to deforestation, burn-offs and forest burns control systems, according to prevention and control plans.
G4 – Scope
Rural Environmental Registration (CAR, in Portuguese) projects will be considered as part of environmental control systems.

Minimum Requirements for Projects

G5 – Result Indicators
The project will include measurable result indicators directly related to the implementation of a deforestation or forest degradation monitoring system.
G6 – Applicants / Executors
The project will include the consent of all partners and co-executors.
G7 – Social Participation
The project will have a follow-up activity that necessarily involves the participation of the government, as well as civil society. Communities involved will be mentioned in the project. Projects related to the duties of public institutions or to establishing public policies do not necessarily need consent from the beneficiaries.
G8 – Contribution to REDD
The project will directly or indirectly contribute to achieving REDD.
G9 – Additionality of Resources
The projects will present additionalities to the public budget earmarked for the allocation areas in the Amazon Fund.
G10 – Counterpart
The project will present a counterpart and/or non-financial contributions, showing additionalities to the funds acquired with the Amazon Fund and producing a multiplying effect for the Fund's investments. The counterparts may be financial resources directly invested in the project or the supply of infrastructure, personnel or other indirect methods. The following aspects may be considered when applying this criterion: average budget allocated during the previous two years in the public budget invested in the proposed action; level of limitations on the release of funds within the public budget to execute the action; and prevision in the government's current pluriannual plans (PPAs).
G11 – Territorial Base
The projects will necessarily and completely discuss the monitoring of the forests of at least one biome.

G12 – Publicity and Transparence
Monitoring systems supported by the Amazon Fund shall be constituted based on platforms that allow broad publicity, transparency and access to data produced over the Internet. The BNDES will make a standardized tool available for integrating and promoting updated information concerning the implementation of all projects.
G13 – Project Sustainability
Proof of capacity to economically sustain the project after implementation will be presented.
G14 – Deconcentration of Resources
The amount applied in each of the four operational modalities will not be less than 10% or higher than 40% of the resources available in the year. Equity requirements will be observed.

Modalities for Resource Allocation

G15 – Direct Allocation – Investment
Allocations made directly by the projects' executors, including through third-party contracting. This includes investments in construction, equipment, training and capacity-building to establish enterprises. The projects can make use of more than one modality.
G16 – Direct Allocation – Funding
Allocations made directly by the projects' executors, including through third-party contracting. This includes travel expenses/field work, individual or legal entities consulting services, field tools and instruments, communication, among others. The projects can make use of more than one modality.

Restrictions on Resource Allocations

G17 – Daily expenses
Daily expenses will not be paid for public servants (this restriction does not apply to research activities involving public research institutions).
G18 – Payment of Individuals
Wages or any other type of remuneration shall not be paid to public servants working exclusively in the three government branches (this restriction does not apply to the payment of scholarships or research specifically related to the project).
G19 – Taxes and Fees
The funds will not be used to pay taxes and fees that are not inherent or part of the costs or investments made by the project (this restriction does not apply to taxes related to the projects' activities, such as tax charged on products and services (ICMS, in Portuguese) included in the products' prices; social security tax (INSS, in Portuguese) paid on individuals' services etc.

Equality Criteria for Resource Allocation

G20 – Equity in resource allocation per state
The concentration of project resources in one biome will be avoided.

10.8 Guidelines and Criteria for the Allocation of Resources from the Amazon Fund for the Development of Projects for Monitoring Systems of Deforestation in Other Tropical Biomes

Allocation Area	Allocation limit of the total resources available in the year	Tables
Projects in other Brazilian biomes and in other tropical countries	20%	G and H

Guidelines

H1 - Diversity of Stakeholders and Shared Governance
Projects involving the articulation of stakeholders from the public, private and third (NGO) sectors as well as local communities with shared governance structure. Projects that entail regional articulation.
H2 – Relevance
Countries with greater forest coverage.
H3 – Scope
In other tropical countries, Amazon Fund support will be limited to projects which contribute to the creation and improvement of forest cover monitoring systems. Forest cover monitoring systems are understood as the application of techniques that involve image processing (eg.: georeferencing, image enhancement and cataloguing) of terrestrial surfaces (from satellites or airborne sensors) for thematic mapping of vegetation using the produced data (eg.: map elaboration, spatial and statistical analyses) as a subsidy to forest management.

Minimum Requirements for Projects

H4 – Result Indicators
The project will include measurable result indicators and directly related to the implementation of a deforestation or forest degradation monitoring system.
H5 – Applicants / Executors
The project will be submitted by the central government as the recipient country, by mutilateral rsor brazilian governmental institutions. Projects from these institutions require consent from the country´s central government which will benefit from the actions to be developed by the project.
H6 – Social Participation
The project will have a follow-up activity that necessarily involves the participation of the government as well as civil society. Projects related to the duties of public institutions or to the establishment of public policies do not necessarily need consent from the beneficiaries.
H7 – Contribution to REDD
The project will directly or indirectly contribute to achieving REDD.
H8 - Counterpart

The project will present a counterpart and/or non-financial contributions, showing additionalities to the funds acquired with the Amazon Fund and producing a multiplying effect for the Fund's investments. The following aspects may be considered: average budget allocated during the previous two years in the public budget invested in the proposed action; level of limitations on the release of funds within the public budget to execute the action; and foresight in the government's current pluriannual plans (PPAs). The counterparts may be financial resources directly invested in the project or the supply of infrastructure, personnel or other indirect methods.
H9 – Publicity and Transparency
Monitoring systems supported by the Amazon Fund will be based on platforms that allow broad publicity, transparency and access to the data produced over the Internet.
H10 – Project Sustainability
Proof of capacity to economically sustain the project after implementation will be presented. The BNDES will make a standardized tool available for integrating and promoting updated information concerning the implementation of all projects.
H11 – Deconcentration of Resources
The amount applied in each of the four operational modalities will not be less than 10% or higher than 40% of the recourses available in the year. Equality requirements will be observed.
H12 – Preliminary Stage
As a step to the consideration of international projects, BNDES will request, prior to its eligibility process, a formal assessment of the Ministry of Foreign Affairs (MRE, in Portuguese) on priority and impacts of the project regarding Brazil´s external relations.

Modalities of Resource Allocation

H13 – Direct Allocation – Investment
Allocations made directly by the projects' executors, including through third-party contracting. This includes investments in construction, equipment, training and capacity-building to establish enterprises. The projects can make use of more than one modality.
H14 – Direct Allocation – Funding
Allocations made directly by the projects' executors, including through third-party contracting. This includes travel expenses/field work, individual or legal entities consulting services, field tools and instruments, communication, among others. The projects can make use of more than one modality.

Restrictions on Use of Resources

H15 – Daily expenses
Daily expenses will not be paid for public servants (this restriction does not apply to research activities involving public research institutions).
H16 – Payment of Individuals

Wages or any other type of remuneration will not be paid to public servants working exclusively in the three government branches (this restriction does not apply to the payment of scholarships or research specifically related to the project).
H17 – Taxes and Fees
The funds will not be used to pay taxes and fees that are not inherent or part of the cost of investments made by the project.

Equality Criteria for Resource Allocation

H18 – Equality in resource allocation per country
The concentration of funds in one country will be avoided.

Notes:

[i] Fearnside, P. M. 1993. Deforestation in the Brazilian Amazonia: the effect of population and land tenure. AMBIO - A Journal of the Human Environment 22:537-545.

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[ii] Alencar, A., D. Nepstad, D. McGrath, P. Moutinho, P. Pacheco, M. D. C. Vera-Diaz, and B. Soares. 2004. Desmatamento na Amazônia: indo além da emergência crônica. Instituto de Pesquisa Ambiental da Amazônia, Belém, Brazil.

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[iii] O Fórum Brasileiro de Mudanças Climáticas foi instituído pelo Decreto nº 3.515/2000, visando a conscientizar e mobilizar a sociedade para a discussão e tomada de posição sobre os problemas decorrentes da mudança do clima por gases de efeito estufa, e é composto por Ministros de Estado e representantes da sociedade civil, com notório conhecimento sobre mudanças climáticas (http://www.forumclima.org.br).

[iv] Câmara, G., D.M. Valeriano & J.V. Soares, 2006. Metodologia para o Cálculo da Taxa Anual de Desmatamento na Amazônia Legal. INPE (Instituto Nacional de Pesquisas Espaciais). 24 p. Disponível em http://www.obt.inpe.br/prodes/metodologia.pdf

[v] Trabalho desenvolvido pelo Serviço Florestal Brasileiro em parceria com IMAZON, ainda não publicado.