



AMAZON FUND

ACTIVITY REPORT 2019



MESSAGE FROM THE PRESIDENT

Since it was founded, BNDES has aimed to transform the lives of Brazilians, promoting sustainable development across the whole country for all its inhabitants. BNDES has always adapted its operations and instruments to meet the demands of society, without giving up its dedication to technical excellence and the public spirit that guides its commitment to the country.

Regarding the Amazon, it is our understanding that promoting sustainable development is a deeply complex affair due to the region's economic, social, and environmental characteristics, all of which must be considered in an integrated way.

BNDES's management of the Amazon Fund reflects the commitment of the Brazilian government – in partnership with society and the international community – to build a development model for the Amazon that is economically viable, socially fair, culturally accepted, and environmentally sustainable. The Amazon contains much wealth, including its enormous biodiversity; however, the region still has low rates of socioeconomic development and an undesirable level of illegal deforestation. Although the Amazon Fund does not act directly on all issues, BNDES is aware of this situation.

In 2019, the Amazon Fund completed an assessment of its effectiveness, which was up to international standards, covering its first ten years of operation. Using quantitative and qualitative methods, independent experts concluded that there is clear evidence that the fund has contributed to reduce deforestation in the Amazon.

The reformulation of the country's priorities and strategies by the Federal Government is a characteristic of the alternating power of a democratic state, and it has recently brought about changes in the governance of the Amazon Fund. It was within this context that the governments of Brazil and the donor countries began negotiations to harmonize each their visions to establish a new cycle of action for the fund in 2019.

At this moment when we present the *Annual Report of the Amazon Fund – 2019* to society at large, BNDES reiterates its intention to promote the sustainable development of the Amazon, stressing its commitment to continue working hard so that this magnificent region – in wealth, people and nature – can continue as a source of pride for Brazilians of all generations.

Gustavo Henrique Moreira Montezano

PRESIDENT OF BNDES

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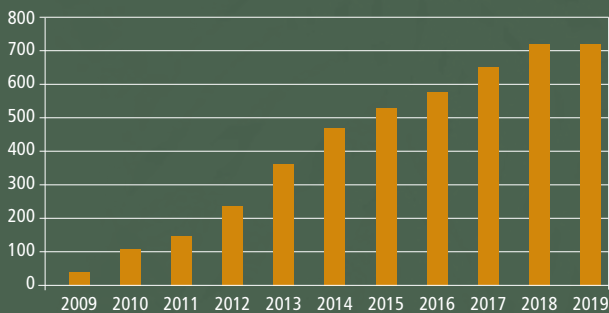


EXECUTIVE SUMMARY

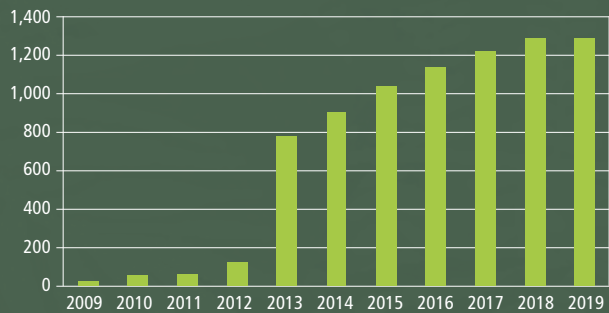
The **AMAZON FUND** applies nonreimbursable resources for actions to prevent, monitor and combat deforestation, and promotes the conservation and sustainable use of the Brazilian Amazon.

Up to 20% of the fund's resources can be used in the development of systems for monitoring and controlling deforestation in other Brazilian biomes and in other countries with tropical forests.

EVOLUTION OF THE AMAZON FUND'S SUPPORT (US\$ MILLION, CUMULATIVE)



EVOLUTION OF DONATIONS RECEIVED (US\$ MILLION, CUMULATIVE)



RESULTS ACHIEVED BY THE SUPPORTED ACTIONS:



1 million

rural properties registered in the Rural Environmental Registry (CAR)



1,236

environmental inspection missions carried out



338

institutions supported directly and through partners



193,000

people benefited from sustainable productive activities



190

protected areas supported



65%

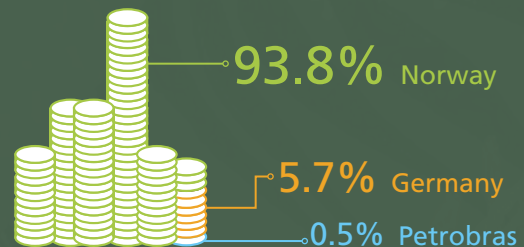
of the area of indigenous lands in the Amazon supported



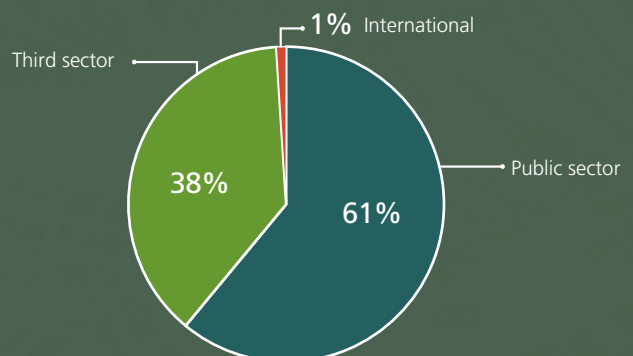
594

scientific or informational publications produced

DONATIONS ORIGIN



NATURE OF THE SUPPORTED INSTITUTIONS (% OF VALUE)



11 years of activity

Created on August 1st, 2008 (Decree No. 6,527), the fund started operating in 2009.

In 2019, it reached the total of:



103

SUPPORTED PROJECTS



US\$ **492** millions

IN DISBURSEMENT VALUE



US\$ **720** millions

IN TOTAL VALUE OF SUPPORT



US\$ **1.3** billion

IN DONATIONS RECEIVED

NUMBER OF PROJECTS SUPPORTED BY LOCATION



AMAZON FUND

MANAGEMENT AND GOVERNANCE

BRAZILIAN NATIONAL DEVELOPMENT BANK (BNDES)

The fund is managed by BNDES, the entity which is responsible for contracting and monitoring the supported projects, as well as for disclosing activities, outcomes and impacts.

The GOVERNANCE structure was composed,* until June 28, 2019, of two committees:

AMAZON FUND GUIDANCE COMMITTEE (COFA)

Integrated by representatives of the Federal Government, state governments, and civil society. COFA determined the guidelines and monitored the results obtained by the fund.

AMAZON FUND TECHNICAL COMMITTEE (CTFA)

Composed of independent experts, CTFA attested the reductions in greenhouse gas emissions from deforestation.

MONITORING AND EVALUATION

The MID-TERM EVALUATION REPORT ON THE EFFECTIVENESS OF THE AMAZON FUND was concluded by a team of independent consultants with the technical coordination of the Economic Commission for Latin America and the Caribbean (Eclac), of the United Nations (UN). This assessment covered the period from 2009 to 2018, corresponding to the first ten years of operations of the Amazon Fund.

TRANSPARENCY

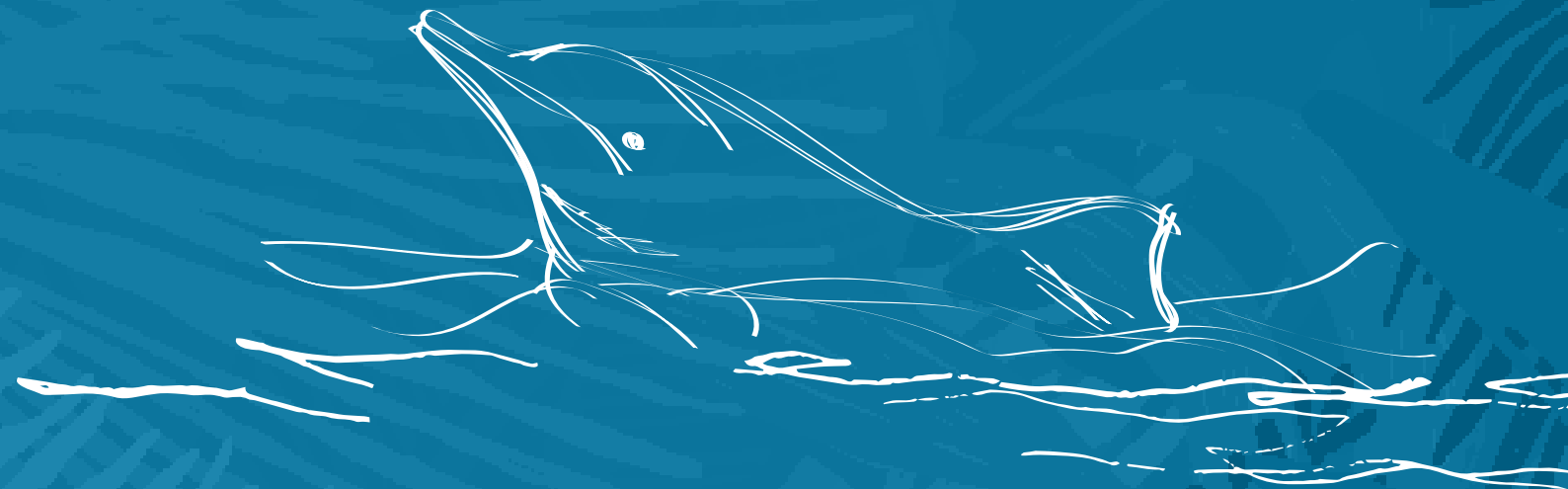
Publication of updated information on supported projects, donations received, fund governance, as well as monitoring and effectiveness assessments of the Amazon Fund.

WWW.FUNDOAMAZONIA.GOV.BR

* See the detailed explanation in the "Amazon Fund Governance" section of the "Governance, Fundraising and Communication" chapter of this report.



INTRODUCTION



Context

The Amazon Fund is a pioneering initiative to finance actions to Reduce Emissions from Deforestation and Forest Degradation (REDD+).¹ It was proposed by Brazil in 2007, at the 13th Conference of the Parties of the UNFCCC, and BNDES had its establishment authorized in 2008 by Decree No. 6,527 of the Presidency of the Federative Republic of Brazil.

Over the past 11 years, the fund has received voluntary donations for nonrefundable investments in actions to prevent, monitor and combat deforestation, as well as to promote the conservation and sustainable use of the Brazilian Amazon. In addition, up to 20% of the fund's resources may be allocated for deforestation monitoring and control systems throughout Brazil and in other countries with tropical rainforests.

With the promulgation of Decree No. 9,759, on April 11, 2019 that established rules for collegiate bodies of Brazilian federal public administration, the two committees responsible for the governance of the Amazon Fund – the Amazon Fund Steering Committee (COFA) and the Amazon Fund Technical Committee (CTFA) – were extinguished as of June 28.

The Amazon Fund has already received approximately R\$ 3.4 billion in donations, 93.8% of which from the government of Norway, 5.7% from the government of Germany – through KfW Entwicklungsbank – and 0.5% from Petróleo Brasileiro S.A. (Petrobras).

The Amazon Fund ends 2019 with a portfolio of 103 supported projects, 27 of which have been concluded. The funds assigned to these projects amount to approximately R\$ 1.9 billion. Of this amount, 63% have already been disbursed.

Amazon Fund objectives

The Amazon Fund supports projects aimed at preventing, monitoring and combating deforestation and at promoting the conservation and sustainable use of the Brazilian Amazon in the following areas, specified in Decree No. 6,527/2008:

- I. management of public forests and protected areas;
- II. environmental control, monitoring and inspection;
- III. sustainable forest management;
- IV. economic activities developed from the sustainable use of vegetation;

¹ REDD+ is an instrument developed under the United Nations Framework Convention on Climate Change (UNFCCC) to financially reward developing countries for the results of their efforts related to: (i) reduction of emissions from deforestation; (ii) reduction of emissions from forest degradation; (iii) conservation of forest carbon stocks; (iv) sustainable management of forests; and (v) increase in forest carbon stocks.

- V. Ecological and Economic Zoning (ZEE), land-use planning and landholding regularization;
- VI. conservation and sustainable use of biodiversity; and
- VII. recovery of deforested areas.

The decree also provides for the use of up to 20% of the fund's resources to support the development of systems to monitor and control deforestation in other Brazilian biomes, as well as in tropical rainforests in other countries.

Initiatives eligible for support from the Amazon Fund must comply with the Action Plan for Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm), ENREDD+, state plans for preventing and combating deforestation, COFA guidelines and criteria, as well as BNDES Operational Policies (OP).

The Amazon Fund at BNDES

BNDES, a federal state-owned company founded in 1952, plays a key role in financing several segments of the Brazilian economy, such as infrastructure, industry, micro- and small-sized companies, as well as fostering innovation, regional development and socioenvironmental good practices. In addition, one of the main BNDES strategic objectives is to help modernize the Brazilian public administration by improving the quality and efficiency of education, health and security services.

The mission of BNDES is to enable investment solutions aimed at the sustainable development of Brazil. Throughout its history, BNDES has built a legacy upon significant results in the development of Brazil.

The performance of its various activities requires the permanent training of staff, which is hired through nationwide public examinations. Decision making at BNDES is based on technical parameters and are subject to audit and control by external bodies.

For BNDES, social and environmental responsibility means valuing and integrating the social and environmental dimensions into its strategy, policies, practices, procedures and into all its activities, and into its relationship with stakeholders: employees, clients and users of its products and services; the communities impacted by its operations; and its suppliers and other partners. This definition, guidelines, and principles of socioenvironmental responsibility for BNDES are set forth in its Corporate Social and Environmental Responsibility Policy (PRSA), the most recent version of which was approved in 2019 by its Advisory Board.

BNDES has a broad portfolio of financial instruments to promote sustainable development, offering more attractive conditions to support sectors with positive environmental externalities, such as renewable energy, sanitation, urban mobility and forest restoration. In 2019, BNDES supported the green economy with investments in the amount of R\$ 8.9 billion, representing approximately 16% of total disbursements.

Given the risks and opportunities related to the socioenvironmental agenda, BNDES established action plans aimed at promoting progressive advances in its operations,

in line with the PRSA. These plans are approved by its Advisory Board and submitted to the Central Bank of Brazil, and their execution is monitored by the Social and Environmental Sustainability and Regional Development Committee (CSS) of BNDES, as well as by society at large, through reports published at the end of the execution period of each plan, detailing the achievements and difficulties in implementing the actions of each project.

The plan for the 2018-2020 triennium aims to strengthen the BNDES efforts to implement the sustainable development objectives (SDG) and the Nationally Determined Contribution (NDC) to achieve the goals of the Paris Agreement, improve the socioenvironmental risk management system, and increase transparency and dialogue with society regarding its performance in sustainability.

In 2019, BNDES was accredited by the Green Climate Fund (GCF), substantiating its commitment to remain a protagonist on the Brazilian green finance agenda. BNDES also plays a relevant role in the international scenario, through its efforts aimed at combating and adapting to the impacts resulting from climate change.

Recent developments, challenges and perspectives

The year of 2019 marked the beginning of a new political cycle, upon the election of new federal and state governments. Reforms were implemented, whereby strategies and policies were restructured, including environmental policy. Thus, new priorities were established aiming to adapt the instruments available to these new developments in the country. The Amazon Fund – as an instrument of the national climate policy and of the PPCDAm – was also influenced by this new agenda.

In view of the promulgation of Decree No. 9,759, on April 11, 2019 that established rules for collegiate bodies of Brazilian federal public administration, the two committees responsible for the governance of the Amazon Fund – the Amazon Fund Steering Committee (COFA) and the Amazon Fund Technical Committee (CTFA) – were extinguished as of June 28.

As a result of these changes in the governance of the Amazon Fund, negotiations have been opened between the Brazilian government and the governments of the donor countries to establish a common understanding of a new governance structure that would include the views of all parties involved. The analysis and approvals of new projects have therefore been suspended as of December 2019, and these negotiations are still in course.

Fundraising for donations to the Amazon Fund also underwent changes upon the publication of Decree No. 10,144/2019, of November 28, 2019, revoking Article 2 of Decree No. 6,527/2008, which authorized “BNDES to proceed with the raising of donations and issue a diploma recognizing the donor contribution to the Amazon

Fund.” Thus, as of the end of 2019, the possibility of BNDES raising new donations for the Amazon Fund has been terminated.

In 2019, the Amazon Fund did not approve support for new projects, maintaining 103 projects supported in the total amount of R\$ 1.86 billion. Projects approved in previous years followed their implementation schedule with disbursements of R\$ 109 million in 2019, accounting for a total disbursement of R\$ 1.17 billion in support for sustainable development and for efforts to combat illegal deforestation.

Six projects supported by the fund were completed in 2019, reaching a total of 27 concluded projects. The process of completing a project goes beyond the closure of field activities, since it also necessitates the presentation of a financial statement regarding all resources disbursed; the receipt of final reports, including aspects such as lessons learned and challenges faced during the project’s implementation; and the BNDES evaluation of results, which is available on the Amazon Fund website and in its activity reports (in the “Projects Concluded” chapter). The management of the Amazon Fund is thereby guided by continuous improvement in the best practices in monitoring projects, effectiveness and transparency.

Regarding the monitoring and evaluation of results, the year was very productive, with the publication of the “Mid-Term Evaluation Report on the Effectiveness of the Amazon Fund,” which covered the period from 2008 to 2018. Conducted by a team of independent consultants, coordinated by the UN agency Economic Commission for Latin America and the Caribbean (Eclac), this evaluation was composed of a study covering the four components of the Amazon Fund: (i) Sustainable Production; (ii) Monitoring and Control; (iii) Land-use Planning; and (iv) Science, Innovation and Economic Instruments; as well as two complementary thematic studies, on benefit distribution and on the fund’s support for the implementation of the Rural Environmental Registry (CAR).

The chapter “Monitoring and evaluation of results” of this report provides a summary of the main results and recommendations of the evaluation team, which, for example, concludes: “Although there is clear evidence that demonstrates how the Amazon Fund has contributed to a reduced deforestation in the Amazon, it is challenging to estimate this contribution quantitatively.”² In addition, the report states that although the Amazon Fund had not altered the trend of deforestation in recent years, deforestation would have been even more widespread without its implementation.

Particularly with respect to the Amazon Fund’s support for the CAR, it was evidenced that deforestation is lower in registered areas than in nonregistered areas and that the CAR projects supported by the fund contributed to prevent the deforestation of 8,571 km² in the Amazon and Cerrado biomes between 2014 to 2018. By way of comparison, this area in which deforestation was prevented is larger than the total area deforested in the Brazilian Amazon in 2018.

² See page 21 of the *Mid-Term Evaluation Report on the Effectiveness of the Amazon Fund*: <http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Mid-Term-Evaluation-Report-Effectiveness-Amazon-Fund.pdf>

Another important activity performed over the year was to carry out *ex post* effectiveness evaluations of six concluded projects, namely: Forest Assistance Program, implemented by the Amazonas Sustainable Foundation (FAS); and Biodiversity, Amazon Bioactive Compounds, Mangrove Forests, Belém Islands and Public Policy Incubator in the Amazon, all implemented by the Federal University of Pará (UFPA). These effectiveness evaluations were carried out by independent consultants and represent the state-of-the-art in monitoring and evaluation, having been conducted within the scope of technical cooperation with the German agency, GIZ. Both the fund's mid-term and project evaluations are available at the Amazon Fund website.

In order to increase transparency and robustness in the management processes of the Amazon Fund, a pilot project using blockchain technology³ was implemented in 2019, employing the TruBudget system to monitor the transfer of financial resources between BNDES and the institutions executing the projects. A result of a partnership with the German bank KfW, the use of TruBudget allows transactions between different institutions to be recorded on a shared platform, guaranteeing that the information is validated by the parties involved in the transaction.

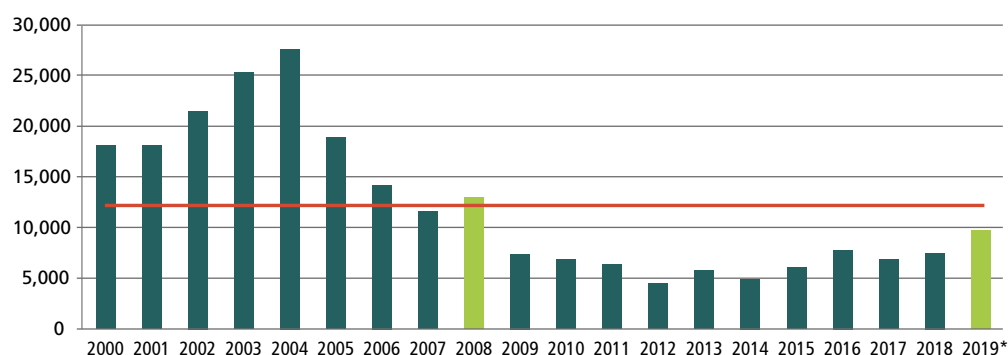
The Amazon Fund enters its second decade of existence having overcome many challenges on a positive trajectory since 2008, in which it has been nationally and internationally recognized as one of the main climate funds in the world. This is a relevant milestone for Brazil, the country that has in its territory most of the immense Amazon Forest, one of the most biodiverse forests on the planet.

Data on deforestation in the Brazilian Amazon

Since its lowest level in 2012, the annual rate of deforestation has fluctuated, reaching 9,762 km² of forests cleared in the Brazilian Amazon (preliminary data),⁴ an increase of 30% in comparison with the previous year. Since the creation of the Amazon Fund in 2008, this is the second highest rate recorded, surpassed only by the rate of 2008, which stood at 12,911 km². Considering a longer period, the last twenty years, the rate for 2019 is still 25% lower than the average for the whole period (Graph 1).

³ Blockchain (also known as “trust protocol”) is a distributed technology to record transactions that uses encryption and decentralization as security and reliability measures. Each connected computer in the network has the task of validating and distributing the records, so that each of them has a copy of all the information in the network, which in practice prevents fraud and unauthorized modifications.

⁴ The annual rates are estimated based on the deforestation increase identified in each satellite image that covers the Brazilian Amazon. Data are first presented for December of each year, as an estimate. The consolidated data are presented in the first half of the following year (available at: <http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes>).

GRAPH 1 | ANNUAL DEFORESTATION RATES IN THE BRAZILIAN AMAZON (KM²/YEAR)

* Preliminary data.

Table 1 presents 2019 deforestation rates in the states that comprise the Brazilian Amazon, compared to deforestation rates of the previous year.

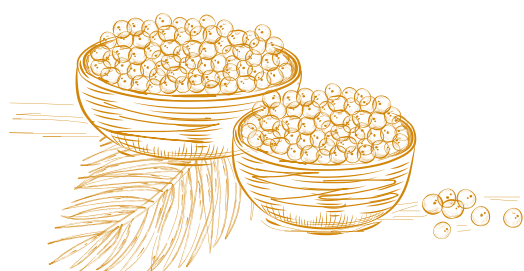
TABLE 1 | DEFORESTATION PER STATE

States	2018 deforestation (km ²)	2019 deforestation* (km ²)	Deforestation variation 2019/2018 (%)
Acre	444	688	55
Amazonas	1,045	1,421	36
Amapá	24	8	(67)
Maranhão	253	215	(15)
Mato Grosso	1,490	1,685	13
Pará	2,744	3,862	41
Rondônia	1,316	1,245	(5)
Roraima	195	617	216
Tocantins	25	21	(16)
Brazilian Amazon	7,536	9,762	30

Source: Prodes/Inpe.

* Preliminary data.

Compared to the previous year, 2019 presented a 2,226 km² (29.54%) increase in deforested area in the Brazilian Amazon (preliminary data). Deforestation increased in almost all states in the Brazilian Amazon, except Amapá, Maranhão, Rondônia and Tocantins.





GOVERNANCE, FUNDRAISING AND COMMUNICATION

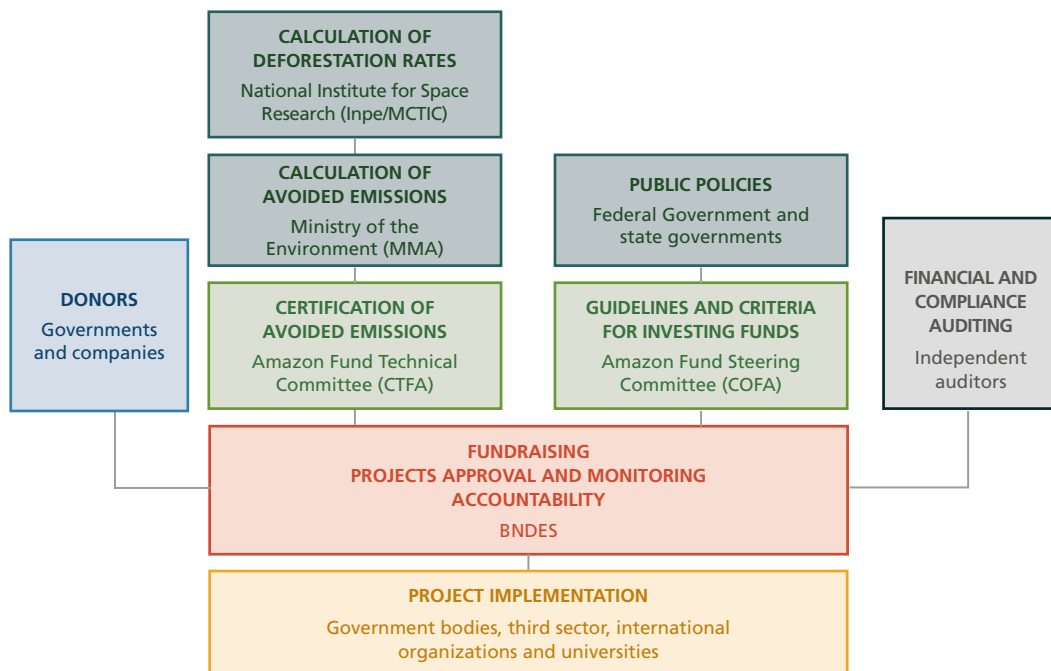


Governance of the Amazon Fund

Up to June 28, 2019, the Amazon Fund had a governance structure comprising two committees, with representatives from the Federal Government, state governments of the Brazilian Amazon, civil society and the scientific community, as shown in Figure 1. After the issuance of Decree N° 9,759/2019, which extinguished all collegiate bodies of the federal public administration (committees, commissions etc.) established before January 1, 2019, the technical and steering committees of the Amazon Fund were dissolved.

Throughout 2019, the Brazilian government and representatives of the donor countries' governments opened negotiations to reestablish the fund's governance structure, negotiations that have not been closed as of the preparation of this report.

FIGURE 1 | GOVERNANCE OF THE AMAZON FUND UP TO JUNE 28, 2019



Amazon Fund Technical Committee

Established by MMA Ordinance 345, dated October 22, 2008, the Amazon Fund Technical Committee (CTFA) was in charge of certifying carbon emissions from deforestation calculated by the Ministry of the Environment (MMA). To this end, it evaluated the methodology for calculating the deforested area and the amount of carbon per hectare used in emissions calculation.

CTFA met ordinarily once a year and comprised specialists renowned for their technical and scientific knowledge, who were appointed by the MMA after consultation with the Brazilian Forum on Climate Change. Since the creation of the Amazon Fund, the CTFA

has certified values for emission reduction as shown in Table 2. This committee did not meet in 2019.

TABLE 2 | ANNUAL MEETINGS OF THE AMAZON FUND TECHNICAL COMMITTEE

Meeting	Date	Year of reduction	Estimated total of reduced emissions (million tonnes of CO ₂)
1 st	11.10.2008	2006	200.0
		2007	303.0
2 nd	12.1.2009	2008	245.7
3 rd	12.13.2010	2009	445.9
4 th	10.20.2011	2010	462.9
5 th	11.14.2012	2011	490.2
6 th	11.26.2013	2012	580.2
7 th	9.10.2014	2013	516.1
8 th	11.5.2015	2014	558.8
9 th	11.8.2016	2015	500.8
10 th	10.4.2017	2016	12.0
11 th	10.9.2018	2017	58.0

Source: BNDES.

Amazon Fund Steering Committee

The Amazon Fund Steering Committee (COFA) was in charge of establishing guidelines and criteria for the application of the Amazon Fund's resources, as well as approving the *Amazon Fund Activity Report* and the information on funds' application.

COFA consisted of three groups of members: eight representatives from the Federal Government; nine representatives from the states of the Brazilian Amazon region; and six representatives from civil society. This committee did not meet in 2019.

Fundraising

Fundraising rules

Raising funds for the Amazon Fund is conditional on the reduction of carbon emissions from deforestation, that is, Brazil needs to demonstrate it has reduced deforestation in the Amazon region in order to receive new donations.

A simple, conservative method was established for calculating the Amazon Fund's annual fundraising limit, to ensure that emission reduction values are not overestimated. In short, calculating the reduction of carbon emissions from deforestation takes the difference between the average historical deforestation rate and the deforested area actually measured in the year of evaluation, then multiplying this result by the amount of carbon in the biomass, in tons of carbon per hectare. Thus, the value is given by the following equation:

$$ED = (TDM - TD) * tC/ha$$

ED = reduction of carbon emissions from deforestation, in tonnes of carbon (tC)

TDM = average rate of deforestation (in hectares)

TD = annual rate of deforestation for the period (in hectares)

tC/ha = tonnes of carbon per hectare of forest

The deforestation rate in the Brazilian Amazon is measured by the National Institute for Space Research (Inpe), a public agency linked to the Ministry of Science, Technology, Innovations and Communications (MCTIC). The MMA is in charge of defining the methodology for calculating the Amazon Fund's annual fundraising limit, while the CTFA's specialists, until the committee's extinction, were responsible for certifying the effective reduction of carbon emissions from deforestation in a given period, evaluating the methodology for calculating the deforested area and the amount of carbon per hectare used for calculating emissions.

Based on emission reduction data, BNDES was authorized to raise donations and issue diplomas acknowledging donors' contributions to the fund. However, Decree N° 10,144/2019, issued on November 28, 2019, revoked article 2 of Decree N° 6,527/2008, which authorized "BNDES to proceed with the raising of donations and issue a diploma recognizing the donor contribution to the Amazon Fund." Thus, the possibility of BNDES raising new donations to the Amazon Fund and issuing the corresponding diplomas is no longer regulated.

Formalized donations

Based on the annual funding limits certified by CTFA, the Amazon Fund has received donations from foreign governments and companies. As of December 2019, formal commitments to donate to the Amazon Fund had been made in three currencies: Norwegian krone (kr\$ or NOK) for donations from Norway; euro (€ or EUR) for donations from Germany/KfW; and real (R\$ or BRL) for donations from Petrobras, as detailed below. Of the total amount donated, R\$ 3,396,694,793.53 (US\$ 1,288,235,378.26) has already been deposited in the Amazon Fund account.⁴

The Norwegian government was the first – and is to date the largest – donor to the Amazon Fund, having effectively contributed the amount of kr\$ 8,269,496,000.00, equivalent to US\$ 1,212,378,452.36 or R\$ 3,186,719,318.40.

In addition, since 2010 the Amazon Fund has received support from the German government through the KfW Entwicklungsbank. As of December 2019, the German government had contributed a total of € 54,920,000.00, equivalent to R\$ 192,690,396.00 or US\$ 68,143,672.60.

⁴ The conversions of donation amount into USD and/or BRL in this chapter were based on the exchange rate of the respective dates on which the funds were effectively transferred to BNDES, according to information on the donation diplomas.

In 2011, the Amazon Fund started benefiting from a third donor, Petróleo Brasileiro S.A. (Petrobras), the first Brazilian company to contribute to the fund. By the end of 2019, Petrobras had contributed R\$ 17,285,079.13, equivalent to US\$ 7,713,253.30.

As provided for in Decree N° 6,527/2008, BNDES is obliged to keep separate accounting records of these donations, of which 3% is earmarked to cover operational costs and other expenses related to the Amazon Fund, including the hiring of auditing services.

Norwegian government

BNDES signed a donation agreement on March 25, 2009 with the Norwegian Ministry of Foreign Affairs that provided for a donation of up to kr\$ 700,000,000.00 to the Amazon Fund.

The agreement established that donations to be requested in subsequent years would be specified in amendments proposed by the donor. Five amendments have been made to the donation agreement, establishing the Norwegian government's commitment to make additional donations of up to kr\$ 2,850,000,000.00.

From 2009 to June 2013 the Amazon Fund received six donations from the Norwegian government in the total amount of US\$ 130,253,901.05 (R\$ 243,952,352.40).

Amendments and consolidation

On September 17, 2013, BNDES and the Norwegian government signed an amended and restated donation agreement to consolidate Norway's previous donations to the Amazon Fund and extend the term of this cooperation. This agreement provided for the possibility of a full transfer of resources hitherto donated by Norway, which was made possible by exempting Amazon Fund donations from PIS-Pasep and Cofins tax collection, instituted by Law N° 12,810, dated May 15, 2013, which amended Law N° 11,828, dated November 20, 2008. Thus, resources previously committed but not yet disbursed to the Amazon Fund, in the amount of US\$ 464,669,325.96 (R\$ 1,024,642,336.54), were transferred on October 4, 2013.

From 2013 to 2019, six amendments to the consolidated donation agreement were entered into, with a total donation of Norwegian kroner equivalent to US\$ 617,455,225.35 (R\$ 1,918,124,629.46).

The total amount donated to the Amazon Fund by the Norwegian government was R\$ 3,186,719,318.40 (US\$ 1,212,378,452.36).

German government

On December 7, 2010, within the framework of official financial cooperation between the governments of Germany and Brazil, an agreement for financial contribution to the Amazon Fund was signed between KfW Entwicklungsbank and BNDES in the amount of € 21 million (US\$ 28,323,207.40 or R\$ 60,697,500.00).

On November 14, 2017, a new agreement was signed between KfW Entwicklungsbank and BNDES in the total amount of € 33,920,000.00 (US\$ 39,820,465.20 or R\$ 131,992,896.00), received in full on December 12, 2017.

The amount donated to the Amazon Fund by the German government was R\$ 192,690,396.00 (US\$ 68,143,672.60).

Petróleo Brasileiro S.A.

As of 2019, BNDES signed, 29 agreements with Petrobras for donations to the Amazon Fund, totalling R\$ 17,285,079.13 (US\$ 7,713,253.30). The company's donation complies with the requirement of the Brazilian Institute of Environment and Renewable Natural Resources (Ibama), according to which Petrobras must implement projects to offset greenhouse gas emissions caused by its activities. These emissions are caused by burning of gas during the production and transportation of oil and natural gas performed by the company.

The donated resources are earmarked for financing projects within the Amazon Fund framework, in accordance with its norms, conditions, guidelines and criteria. BNDES is responsible for analyzing, approving and financing the projects, as well as monitoring, supervising and reporting on results.

As determined by the BNDES's Board of Directors (Board Decision N° 832/2012), donations to the Amazon Fund raised from public sources controlled by the Federal Government must have separate accounting to ensure they are not used in projects executed by the Federal Government.

Diplomas: acknowledgement of donors' contributions

When raising donations for the Amazon Fund, BNDES issues diplomas stating the amount of each financial contribution and its corresponding quantity in tons of carbon. These diplomas are nominal, nontransferable and grant no rights or credits of any nature. The diplomas thus identify the donors and the amount they contributed to reduce carbon emissions. Table 3 features data on previously raised funds. As mentioned above, with the publication of Decree N° 10,144/2019, dated November 28, 2019, and the revocation of article 2 of Decree N° 6,527/2008, the issuance of such diplomas by BNDES was suspended.

TABLE 3 | FUNDS RAISED

Donor	Installment	Date received	Original donation amount	Amount in R\$ (BRL)*	Amount in US\$ (USD)*	Tonnes of carbon dioxide (tCO ₂)	Tonnes of carbon (tCO)	Year of reduction
Norway	1 st	10.9. 2009	NOK 123,437,000.00	36,448,350.22	20,960,578.70	4,192,115.7	1,142,265.9	2006
Norway	2 nd	8.9.2010	NOK 169,262,000.00	49,600,536.48	28,283,364.59	5,656,672.9	1,541,327.8	2006
Norway	3 rd	3.23.2012	NOK 261,273,000.00	82,144,231.20	45,149,077.28	9,029,815.0	2,462,677.0	2006
Norway	4 th	10.2.2012	NOK 101,774,000.00	36,109,415.20	17,817,731.77	3,563,546.0	971,876.0	2006
Norway	5 th	6.26.2013	NOK 44,254,000.00	16,139,433.80	7,344,452.24	1,468,890.0	400,606.0	2006
Norway	6 th	6.26.2013	NOK 64,465,000.00	23,510,385.50	10,698,696.47	2,139,739.0	583,565.0	2009
Norway	7 th	10.4.2013	NOK 2,785,535,000.00	1,024,642,336.54	464,669,325.96	26,207,821.0	7,147,588.0	2009
						33,363,022.0	9,099,006.0	2010
						33,363,022.0	9,099,006.0	2011
Norway	8 th	12.23.2013	NOK 1,000,000,000.00	385,350,245.49	163,666,121.11	32,733,224.0	8,927,243.0	2012
Norway	9 th	15.12.2014	NOK 780,000,000.00	288,991,278.87	108,839,740.46	21,767,948.1	5,936,713.1	2013
Norway	10 th	3.12.2015	NOK 120,000,000.00	46,416,780.45	14,893,881.10	2,978,776.2	812,393.5	2013
Norway	11 th	4.12.2015	NOK 1,019,496,000.00	455,568,000.00	120,000,000.00	24,000,000.0	6,545,454.6	2014
Norway	12 th	12.16.2016	NOK 850,000,000.00	330,161,565.42	97,953,351.16	19,590,670.2	5,342,910.1	2015
Norway	13 th	12.14.2017	NOK 350,000,000.00	139,272,702.53	41,791,004.78	8,358,201.0	2,279,509.3	2016
Norway	14 th	12.17.2018	NOK 600,000,000.00	272,364,056.70	70,311,126.74	14,062,225.3	3,835,152.4	2017
KfW Germany	1 st	12.29.2010	EUR 3,000,000.00	6,644,100.00	3,952,500.00	790,500.0	215,395.0	2009
KfW Germany	2 nd	1.8.2013	EUR 6,000,000.00	15,954,600.00	7,864,832.89	1,572,967.0	428,991.0	2009
KfW Germany	3 rd	1.6.2014	EUR 8,000,000.00	26,180,800.00	11,120,181.53	825,407.0	225,111.0	2009
						1,398,630.0	381,444.0	2010
KfW Germany	4 th	7.22.2014	EUR 4,000,000.00	11,918,000.00	5,385,692.98	1,077,139.0	293,765.0	2010
KfW Germany	5 th	12.12.2017	EUR 33,920,000.00	131,992,896.00	39,820,465.20	7,964,093.0	2,172,025.4	2015
Petrobras	1 st	10.14.2011	BRL 1,765,983.70	1,765,983.70	1,016,335.00	203,267.0	55,436.0	2006
Petrobras	2 nd	10.14.2011	BRL 4,114,671.55	4,114,671.55	2,368,020.00	473,604.0	129,164.0	2006
Petrobras	3 rd	10.17.2011	BRL 1,435,257.60	1,435,257.60	826,000.00	165,200.0	45,054.0	2006
Petrobras	4 th	1.23.2012	BRL 156,626.00	156,626.00	88,750.00	17,750.0	4,841.0	2006

(Continued)

(Continuation)

Donor	Installment	Date received	Original donation amount	Amount in R\$ (BRL)*	Amount in US\$ (USD)*	Tonnes of carbon dioxide (tCO ₂)	Tonnes of carbon (tCO)	Year of reduction
Petrobras	5 th	4.26.2012	BRL 282,584.58	282,584.58	150,255.00	30,051.0	8,196.0	2006
Petrobras	6 th	7.13.2012	BRL 174,320.80	174,320.80	85,155.00	17,031.0	4,645.0	2006
Petrobras	7 th	2.20.2013	BRL 327,834.78	327,834.78	167,288.25	33,457.7	9,124.8	2006
Petrobras	8 th	3.25.2013	BRL 357,002.13	357,002.13	177,383.55	35,477.0	9,675.0	2006
Petrobras	9 th	9.25.2013	BRL 331,912.11	331,912.11	150,656.85	30,131.0	8,218.0	2006
Petrobras	10 th	1.23.2014	BRL 222,324.37	222,324.37	94,201.25	18,840.3	5,138.3	2006
Petrobras	11 th	2.25.2014	BRL 73,323.19	73,323.19	31,378.95	6,275.8	1,711.6	2006
Petrobras	12 th	5.6.2014	BRL 89,806.99	89,806.99	40,232.50	8,046.5	2,194.5	2006
Petrobras	13 th	5.8.2014	BRL 177,561.21	177,561.21	80,319.00	16,063.8	4,381.0	2006
Petrobras	14 th	10.2.2014	BRL 206,057.53	206,057.53	83,138.00	16,627.6	4,534.8	2006
Petrobras	15 th	10.10.2014	BRL 239,613.95	239,613.95	99,412.50	19,882.5	5,422.5	2006
Petrobras	16 th	12.26.2014	BRL 458,054.97	458,054.97	172,675.00	34,535.0	9,418.6	2006
Petrobras	17 th	1.19.2015	BRL 20,941.30	20,941.30	7,995.00	1,599.0	436.1	2006
Petrobras	18 th	3.13.2015	BRL 471,492.55	471,492.55	151,260.00	30,252.0	8,250.6	2006
Petrobras	19 th	3.27.2015	BRL 1,119,131.39	1,119,131.39	350,660.00	70,132.0	19,126.9	2006
Petrobras	20 th	7.3.2015	BRL 270,114.06	270,114.06	86,600.00	17,320.0	4,723.6	2006
Petrobras	21 st	7.30.2015	BRL 660,392.86	660,392.86	197,610.00	39,522.0	10,778.7	2006
Petrobras	22 nd	7.30.2015	BRL 288,021.65	288,021.65	86,185.00	17,237.0	4,701.0	2006
Petrobras	23 rd	5.10.2016	BRL 429,923.03	429,923.03	121,491.80	24,298.4	6,626.8	2006
Petrobras	24 th	5.10.2016	BRL 549,030.01	549,030.01	155,150.20	31,030.0	8,462.7	2006
Petrobras	25 th	4.6.2017	BRL 86,528.57	86,528.57	27,691.80	5,538.4	1,510.5	2006
Petrobras	26 th	4.6.2017	BRL 397,886.33	397,886.33	127,335.85	25,467.2	6,945.6	2006
Petrobras	27 th	7.31.2017	BRL 1,339,203.32	1,339,203.32	423,035.45	84,607.1	23,074.7	2006
Petrobras	28 th	5.16.2018	BRL 84,498.16	84,498.16	23,658.35	4,731.7	1,290.5	2006
Petrobras	29 th	5.16.2018	BRL 1,154,980.44	1,154,980.44	323,379.00	64,675.8	17,638.8	2006
			Total	3,396,694,793.53	1,288,235,378.26			

Source: BNDES.

* Historical amount as stated on the diplomas issued by the Amazon Fund.

Institutional coordination and technical cooperation

As manager of the Amazon Fund, BNDES keeps close contact with various stakeholders in order to be transparent in its activities, receive technical feedback for its performance and establish partnerships.

Prominent among these efforts is the technical cooperation agreement between BNDES and the German Agency for International Cooperation (GIZ – Gesellschaft für Internationale Zusammenarbeit), which, since 2015, has been co-funded by the Norwegian government, in addition to funds received from the German government. In 2019, several activities were carried out within the scope of this technical cooperation, and the most important are:

- Continuity of technical support for collaborative actions in projects whose planned actions present low execution rate, including activities related to management, monitoring and mapping of flows relevant to project execution within the scope of the Amazon Fund.
- Conclusion of evaluations of effectiveness of five projects within the Science, Innovation and Economic Instruments component, namely: Belém Islands, Biodiversity, Amazon Bioactive Compounds, Mangrove Forests and Public Policy Incubator in the Amazon. These projects were carried out by the Federal University of Pará (UFPA) and the Research Development and Support Foundation (Fadusp).
- Support for the conclusion of the *Mid-Term Evaluation Report* on the Effectiveness of the Amazon Fund, coordinated by the Economic Commission for Latin America and the Caribbean (Eclac). This evaluation was based on other environmental performance assessments that the Organization for Economic Cooperation and Development (OECD) carries out regularly in its member countries, aimed at analyzing to what extent the objectives of the Amazon Fund are being achieved through the results obtained in the period from 2008 to 2018. The report focused on actions and strategies to assess which ones should be strengthened and extended, in addition to identifying bottlenecks and challenges that must be faced, generating recommendations to subsidize future activities within the scope of the Amazon Fund.
- Support for the preparation of studies focusing on benefit distribution related to the Amazon Fund and on Rural Environmental Registry (CAR) projects supported by the Amazon Fund, within the scope of the aforementioned Mid-Term Evaluation Report. The elaboration of the CAR study also included meetings for exchanging information and experiences related to the supported projects.
- Conclusion of the study on gender equity in projects of sustainable productive activities supported by the Amazon Fund, titled “Equality between Men and Women in Sustainable Productive Activities Projects Supported by the Amazon Fund/BNDES.”

- Support for the participation of the Amazon Fund team in the 25th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 25/UNFCCC) in Madrid (Spain), at the Amazon Madrid event, held with the fund's donors;
- Elaboration of georeferenced maps of the projects supported by the Amazon Fund;
- Systematic support for the Amazon Fund team concerning the monitoring and evaluation of results.

Communication

Regarding instruments for transparency and dialog, the following stand out:

Website www.fundoamazonia.gov.br

Since 2010, BNDES runs a permanently updated website for the Amazon Fund, with an English version. In 2018, the website was completely renewed to offer a more modern, beautiful and friendly layout, including an interactive map, space for publications and dissemination of audiovisual material produced by the projects and a multicriteria system for projects search. In 2019, the Amazon Fund website received 127,471 accesses, an increase of 136% over the previous year. Around 76% of the users who accessed the site are from Brazil, mainly from state capitals in the Amazon region and from Rio de Janeiro, Brasília and São Paulo. International accesses come from many countries, especially the United States, the United Kingdom, Germany, Canada, India, Portugal and France.

Website content

Various items of information are available on the Amazon Fund website, such as guidelines on submitting projects, the approval process and documents required in each project phase. It also publishes updated information on the fund's governance, donations received and the monitoring and evaluation of results. Service to the public is provided through the Contact Us section (by e-mail), by phone or through the FAQ section.

The complete portfolio of projects supported is available at the website, including project names and the respective organization in charge, regional scope, beneficiaries, objectives, total cost, funding amount, project term, date of approval and date of contract. Data on disbursements and activities executed in each project are also available, as well as information on how each activity contributed to the four core themes that make up the Amazon Fund's Logic Framework. In 2019, as a means for improving transparency, contracts and amendments for all projects in the fund's portfolio became available at the website.

Annual reports

To ensure the transparency of its activities, the Amazon Fund publishes its annual reports online at its website. Besides being instruments of accountability, these reports document the Amazon Fund's activities and results, disclosing them to society.

Events in 2019

The BNDES team organizes and participates in various events with the purposes of disseminating the Amazon Fund's actions, qualifying its activities and demonstrating the results to donors and society. In 2019, the following events stood out:

25th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 25/UNFCCC) – December 2 to 13 – Madrid, Spain

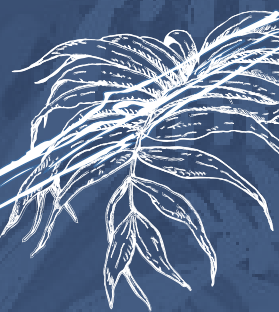
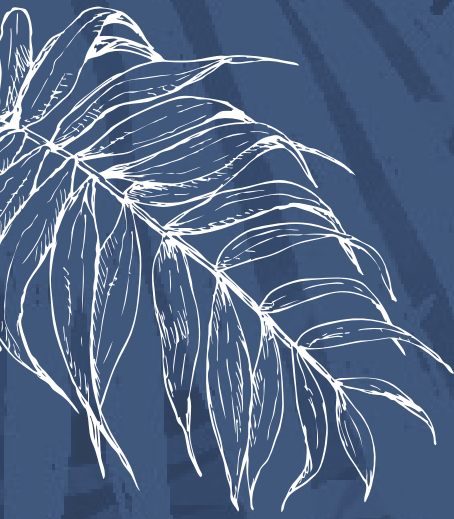
During COP 25 in Madrid, the Amazon Fund team participated in three events. At the Amazon-Madrid event, organized by the Amazon Governors Forum, BNDES director Petrônio Cançado underscored the Amazon Fund's 11 years of activities and the publication of the fund's effectiveness evaluation report. At the side event "Territories and Communities in the Brazilian Amazon: Towards Inclusive Development" promoted by Imaflora, the head of the Amazon Fund's Environment and Management Department, Nabil Kadri, highlighted the support of the Amazon Fund to the Origens Brasil system, which aims to strengthen sustainable production chains and develop a bioeconomy in the Amazon region. Finally, at the side event "Deforestation and Forest Code: How to Support Subnational Strategies," organized by the Life Center Institute (ICV), the Amazon Fund's manager, Angela Skaf, pointed out the important support of the Amazon Fund to the CAR.

Contact Us service

To provide greater transparency and security in information exchange, BNDES created the mailbox <fundoamazonia-faleconosco@bndes.gov.br> to answer questions sent by the public through the website. All incoming messages are registered and answered. Consultations made directly to BNDES technical staff and those sent through BNDES official communication channels are not included.

In 2019, around 300 contacts were made and answered, originated in the states in the Brazilian Amazon region, in other Brazilian states and also in other countries. The main subjects were related to requests for clarification on the Amazon Fund's governance and areas of operation, on how to submit projects and on who are eligible to donate to the fund.

OPERATIONAL PERFORMANCE



Portfolio of projects

In December 2019, the Amazon Fund supported 103 projects in its portfolio, totaling R\$ 1,859,577,029.65. The number of projects supported up to that date and the total amount of funds disbursed per year are presented in Table 4.

TABLE 4 | SUPPORTED PROJECTS, CANCELLED PROJECTS AND DISBURSEMENTS – 2009 TO 2019

Year	Number of supported projects	Total amount of support (R\$)	Total amount of support (US\$)	Total amount disbursed to projects (R\$)	Total amount disbursed to projects (US\$)
2009	5	70,339,010.00	38,052,441.96	-	-
2010	8	119,891,704.43	69,248,454.83	11,105,966.90	6,108,472.74
2011	10	70,499,580.47	41,239,084.67	59,740,091.61	34,203,707.19
2012	14	179,803,548.39	89,389,684.61	71,205,781.90	39,683,624.81
2013	14	332,003,810.00	149,855,879.94	80,903,376.47	43,190,858.95
2014	21	268,578,173.00	113,098,416.79	167,954,502.78	81,820,890.01
2015	11	195,510,972.31	60,919,816.61	127,509,195.78	56,437,936.37
2016	8	196,603,174.19	58,120,499.66	134,145,446.07	51,716,979.75
2017	12	234,886,684.03	72,538,764.24	223,760,804.23	81,606,404.82
2018	11	378,517,794.00	106,893,155.38	187,372,391.40*	63,939,370.40
2019	-	-	-	108,875,373.05*	33,023,938.10
Cancelled projects**	(11)	(147,921,929.16)	(60,653,143.24)	N/A	N/A
Reduced balance***		(39,135,492.01)	(18,723,061.51)	N/A	N/A
Total	103	1,859,577,029.65	719,979,993.93	1,172,572,930.19	491,732,183.14

Source: BNDES.

* These amounts differ from those presented in the audited financial statements (annexes) by R\$ 158,000. This amount refers to the receipt of remuneration return from the project account of the beneficiary to BNDES, improperly recorded in BNDES systems as main return in 2018. It should be noted that this discrepancy generated only a difference "between lines" and was duly raised by the independent auditors, who considered it irrelevant for the purpose of their opinion. The correction in BNDES systems was carried out in 2019.

** See Annex 4 of this report for a list of cancelled projects.

*** See Annex 4 for a list of projects with supplementation and whose amounts have been changed.

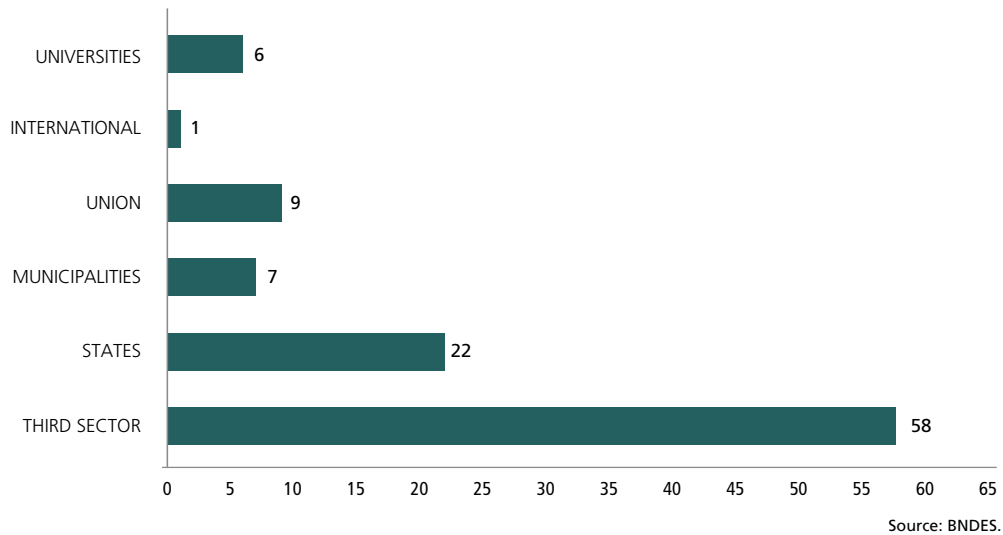
The disbursements for the supported projects occur in installments during their implementation and follow the deadlines (varying from one to six years) defined in the respective physical-financial schedules.

Table 4 shows that the total disbursed to projects, up to December 31, 2019, amounts to R\$ 1,172,572,930.19.⁶ Approximately 9.3% of this amount (R\$ 108,875,373.05) was disbursed in 2019. Of the funds disbursed in 2019, 47.7% were allocated to projects with the third sector and 52.3% to public sector projects (49.3% to projects with the Union and 3% to projects with state governments).

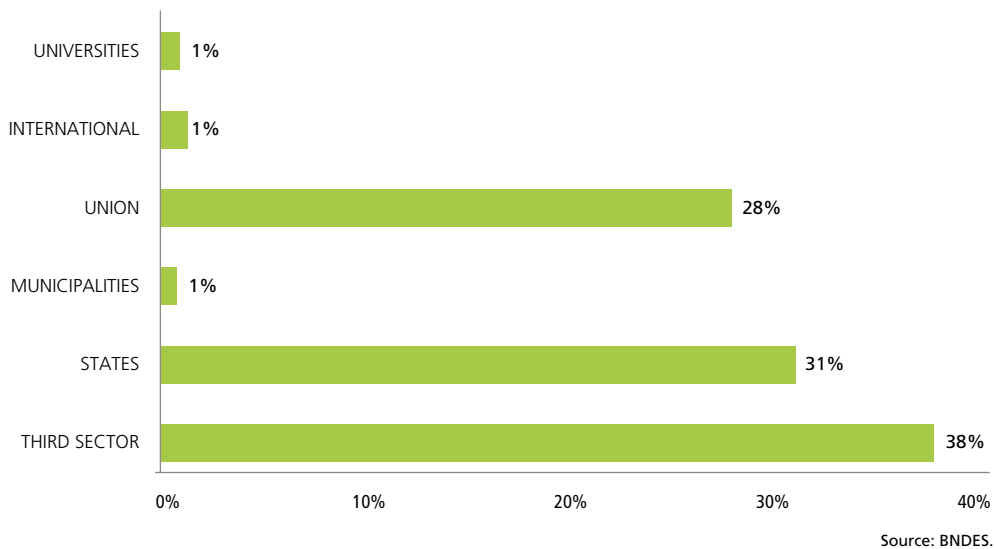
⁶ The list of projects that have already received funds is shown in Explanatory Note 5 of the financial statements of the Amazon Fund, Annex 1.

In addition to presenting projects that include varied actions at different stages of implementation, the fund's portfolio is also characterized by the varying legal nature of those responsible for the projects, as illustrated in graphs 2 and 3.

GRAPH 2 | NUMBER OF SUPPORTED PROJECTS, BY LEGAL NATURE OF MANAGING ENTITY



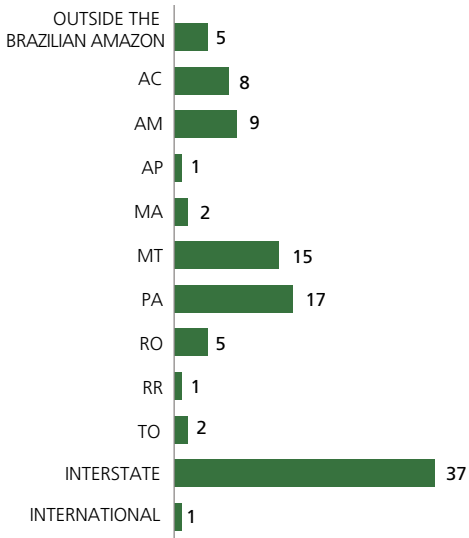
GRAPH 3 | PERCENTAGE OF TOTAL SUPPORT, BY LEGAL NATURE OF MANAGING ENTITY



Graphs 4 and 5 show the territorial scope of the supported projects and the percentage of support per state. As shown, all states of the Brazilian Amazon have projects with support from the Amazon Fund. Together, the four states with the highest participation in the total amount of financial support (Acre, Amazonas, Mato Grosso and Pará) cover more than 77% of the total area of the Brazilian Amazon⁷ and account for 69% of the fund's support.

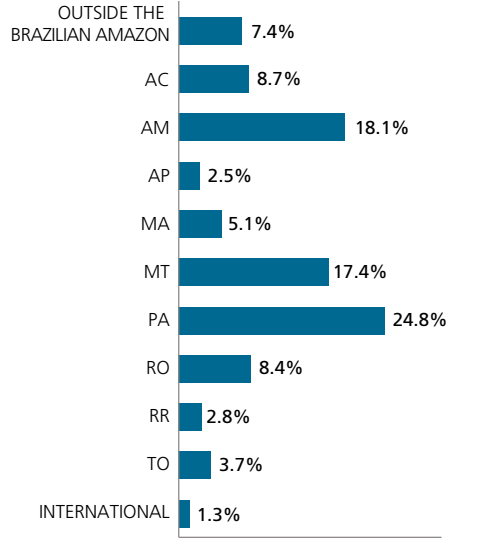
⁷ Information available at: <http://www.ibge.gov.br>.

GRAPH 4 | NUMBER OF SUPPORTED PROJECTS BY STATE



Source: BNDES.

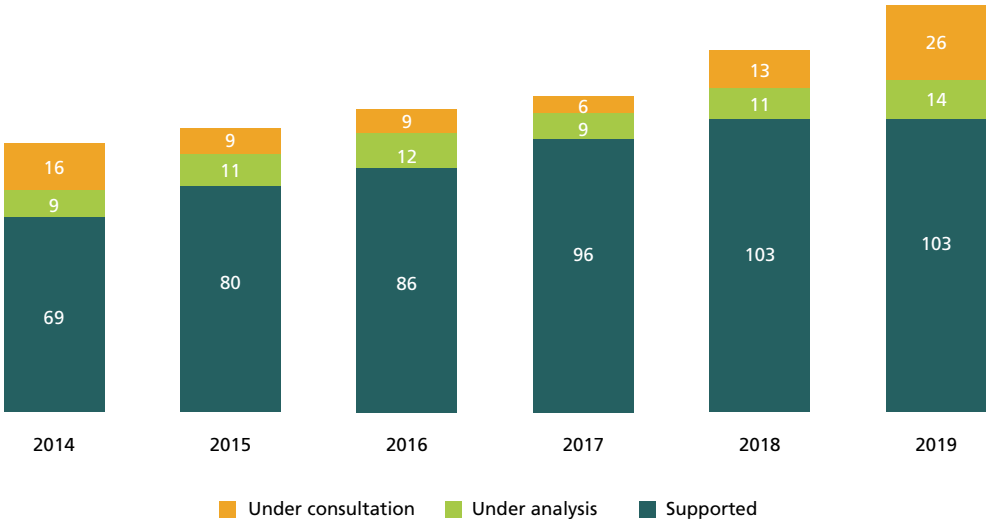
GRAPH 5 | PERCENTAGE OF TOTAL SUPPORT BY STATE



Source: BNDES.

The annual evolution of the Amazon Fund portfolio (projects in consultation, under analysis, and supported) is shown in graphs 6 and 7.

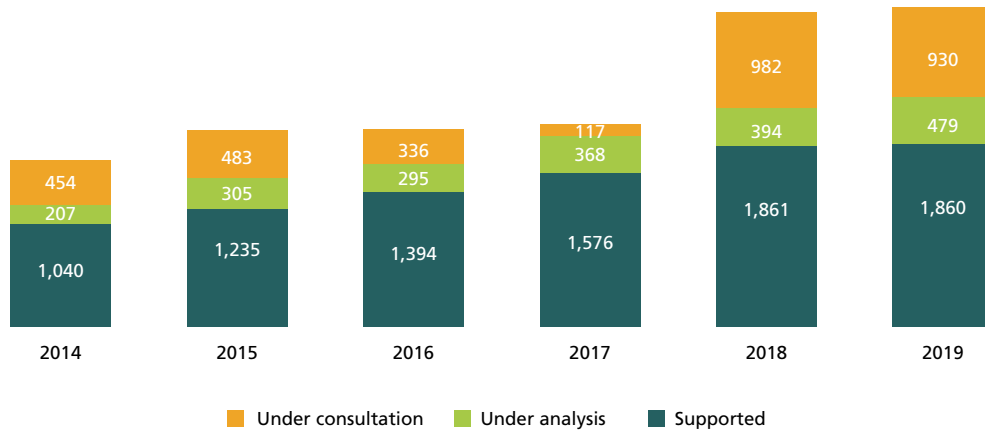
GRAPH 6 | EVOLUTION OF THE NUMBER OF PROJECTS, BY BNDES OPERATIONAL STAGE



Source: BNDES.

This graph shows the accumulated number of supported projects without cancellations. For this calculation, each canceled project was deducted from the accumulated number of projects in the year of its cancellation (not during the year of its approval). See Annex 4 for a list of projects: canceled; with supplementation, and whose values were altered.

GRAPH 7 | EVOLUTION OF THE TOTAL AMOUNT OF AMAZON FUND SUPPORT, BY BNDES OPERATIONAL STAGE (R\$ MILLION)



Source: BNDES.

This graph shows the accumulated amount of project support, without cancellations and changes in values. Reductions in project support and the funds of cancelled projects in a given year are discounted in that same year. See Annex 4 for a list of projects: cancelled; with supplementation, and whose values were altered.

As illustrated in graphs 6 and 7, in 2019 the accumulated number of supported projects remained the same with regard to what was accumulated up to 2018 (103 projects), whereas the total volume of financial collaboration to projects had a small reduction due to adjustments in the amounts of support to certain projects (from R\$ 1,860,881,542.00 to R\$ 1,859,577,029.65).⁸ As explained in Chapter 1, in 2019 no new projects were approved by the Amazon Fund and, until the moment this report was prepared, the governance of the Amazon Fund is in the process of negotiation between the Brazilian government and the governments of donor countries.

The total amount of funds available for investment in projects (97% of the total donations received + income generated over the years) is R\$ 4,754 million, with the amount of R\$ 1,860 million having been allocated to projects that are in progress or completed, of which R\$ 1,173 million were already disbursed.

Accounting and financial aspects

The accounting and financial transactions relating to the Amazon Fund are recorded and reported in accordance with current legislation and the principles and standards promulgated by the Federal Council of Accounting (CFC), an independent body that regulates the accounting and independent audit procedures that should be adopted in Brazil. Through its collegiate and working groups, the CFC seeks the convergence of the practices adopted in the country with international standards.

⁸ Perceived differences between current and previous portfolio positions are due to cancellation or alterations in project values (see Annex 4).

The following tables summarize the information contained in the audited financial statements and their explanatory notes for 2019. The full statements, together with the opinion of the independent auditors, are shown in Annex 1.

TABLE 5 | AMAZON FUND BALANCE SHEET ON 12.31.2019 (R\$ THOUSAND)

Assets		Liability	
Current		Current	
Cash and cash equivalents	3,581,776	Resources for projects	3,581,776
Prepaid expenses	89,490	Funding resources	89,490
		Net equity	
		Accumulated surplus	-
Total assets	3,671,266	Total liability	3,671,266

Source: BNDES.

Of the total current assets, R\$ 3,581,776 thousand corresponds to the amount available, as of December 31, 2019, for disbursements to already supported projects or to new projects. This amount is invested in the Gaia and Gaia II funds, managed by Banco do Brasil. These funds have a conservative profile (fixed income applications - Brazilian government bonds) and were contracted to offset inflation and remunerate the balances available for financial support to projects (see "Financial revenue" in Table 6).

The donated values are recorded as cash and cash equivalents of the Amazon Fund and are linked to project support. The resources for projects are recorded under liabilities. Thus, the donations received do not imply an increase in the fund's assets.

TABLE 6 | FINANCIAL STATEMENT FOR THE YEAR 2019 (R\$ THOUSAND)

Revenues	317,453
Revenue from donations for investments	109,034
Donation revenue for costs	605
Financial revenue	207,814
(-) Expenses	(317,453)
Expenses with donations for investments	(109,034)
Administrative expenses	(605)
Expenses with return on project resources	(207,814)
Year surplus/deficit	0

Source: BNDES.

While the balance sheet shows accumulated balances, the income statement considers only what occurred in a specific year. The total of R\$ 109,034 thousand presented under the headings "Donation revenue for investments" and "Expenses with donations for investments" refers to amounts effectively disbursed in 2019 to projects supported by the Amazon Fund.

The amount of R\$ 605,000 reported in Table 6 refers to the appropriation of the costs and expenses related to the Amazon Fund by BNDES in 2019.

Financial revenue of the Gaia and Gaia II funds in the amount of R\$ 207,814 thousand is considered revenue and expense because it corresponds to return on resources available for disbursements to projects presented in the balance sheet as balance of the items "Cash and cash equivalents" and "Resources for projects". According to the understanding of the Brazilian Federal Revenue Regional Superintendence of the 7th Tax Region, donations to the Amazon Fund should not integrate, at the date of their entry, the basis for calculating income tax (IR) and Social Contribution on Net Profit (CSLL). For the purpose of calculating these taxes, whenever there is a disbursement to a supported project, a revenue entry and an expense entry must be recognized on the same date and in the exact amount disbursed. Thus, the basis of calculation for the IR and CSLL for donations to the fund is always zero and there is no collection of these taxes to the treasury.

Audits

Annually, the Amazon Fund goes through the following auditing processes:

- *Financial audit* to assess the accuracy of balances recorded in its financial statements, as well as the appropriate allocation of these balances in the BNDES's financial statements; and
- *Compliance audit* to assess whether the supported projects, in view of their objectives, products, services and planned actions, are in accordance with the determinations of Decree 6.527/2008, the guidelines and criteria of COFA, PPCDAm, and the national strategy of REDD+ (ENREDD+).

The financial audit procedures for the year 2019 were carried out by KPMG Auditores Independentes. The auditor concluded that the financial statements submitted by BNDES were appropriate. The compliance audit was carried out by BDO RCS Auditores Independentes, which concluded that the projects supported by the fund in 2019 complied with requirements.

The independent auditor's opinion and the report of the compliance audit are shown in annexes 1 and 2, respectively.

MONITORING AND EVALUATION OF RESULTS



For the Amazon Fund and Brazil, 2019 was a year of great changes, with the election of a new President of the Republic, new state governors and the renewal of a large part of the National Congress. In this new scenario, the Amazon Fund's governance bodies (COFA and CTFA) were extinguished and the governments of Brazil, Norway and Germany started negotiations to redefine the fund's governance.

In 2019, a mid-term evaluation of the effectiveness of the Amazon Fund was completed, covering the period from 2008 to 2018. In addition to this broad evaluation, independent evaluations of the effectiveness of a sustainable production project and of five scientific and technological development projects supported by the Amazon Fund were carried out (*ex post* evaluations).

This chapter begins with a brief contextualization of the main drivers of deforestation, the intervention logic (theory of change) of the Amazon Fund and its logical framework. The next section analyzes some regional indicators for monitoring the evolution of various topics in the Amazon, such as annual deforestation, plant extractive production and the capacity of environmental agencies in the Amazon to enforce environmental legislation.

The following sections present the output and outcome indicators for the supported projects; the safeguards adopted by the Amazon Fund to support projects; the Amazon Fund's contribution to the achievement of sustainable development objectives (SDG), the gender equality policy for sustainable production projects, in addition to highlighting some of the findings and recommendations of the mid-term evaluation of the Amazon Fund's effectiveness, which covered the period from 2008 to 2018.

The chapter concludes with an analysis of the risks (external factors) that can negatively affect project execution, the maintenance of achieved results and the functioning of the Amazon Fund. This year the risk analysis also includes an assessment of the expected impacts if some of these risks materialize.

In the cases where indicators for 2019 were not available, the latest available data were used.

Context

The Amazon Fund supports actions to prevent, monitor and combat deforestation and to promote the sustainable use of natural resources in the Brazilian Amazon. The fund supports initiatives in accordance with the National Strategy for REDD+ (ENREDD+)¹¹ and the Action Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm).

¹¹ National Strategy for Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Forest Management, and Increasing Forest Carbon Stocks (ENREDD+).

PPCDAm is based on a periodic evaluation of the extent, dynamics and vectors of deforestation. The Amazon Fund's Logical Framework – a tool for planning, managing, monitoring and evaluating results and impacts – was elaborated mainly by considering the evaluations made by this plan, which identifies the main causes of deforestation in the Amazon:

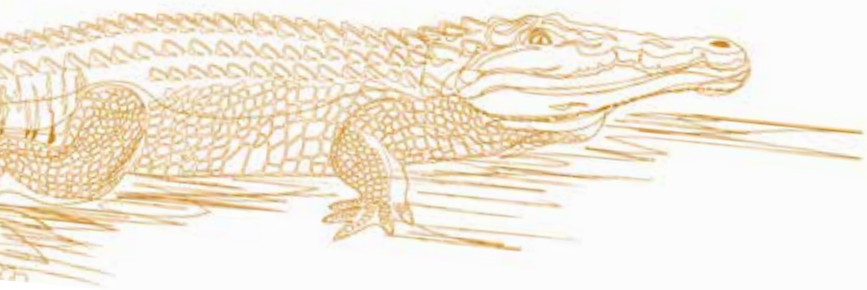
- the impunity for environmental crimes due to government agencies' low capacity for supervising and punishing such acts in a territory of continental dimensions;
- the existence of unused public lands and a lack of legal certainty regarding property rights in the region, which leads to illegal occupation of public lands, conflicts over land ownership and disincentive of private investments;
- the low economic incentive to keep the forest standing, due to lack of adequate infrastructure and economic incentives to promote sustainable production chains; and
- the expansion of agriculture, driven by the growing demand for commodities in a globalized market.

A great need for investments in innovation and scientific production for the monitoring and control of deforestation, land management and the sustainable use of biodiversity in the Brazilian Amazon was also identified.

In creating the Amazon Fund's Logical Framework, we also considered the seven thematic areas defined in Decree No. 6,527/2008, which regulates the fund's operation in the Brazilian Amazon, namely:

1. management of public forests and protected areas;
2. environmental control, monitoring, and inspection;
3. sustainable forest management;
4. economic activities based on sustainable use of vegetation;
5. ecological-economic zoning, land-use planning and land regularization;
6. conservation and sustainable use of biodiversity; and
7. recovery of deforested areas.

The decree authorizing the creation of the Amazon Fund establishes that up to 20% of its resources can be used for developing systems to monitor and control deforestation in other Brazilian biomes and in other tropical countries.



Logical Framework of the Amazon Fund

The Amazon Fund's Logical Framework was first released as a comprehensive document in 2010. In 2017, it was reviewed to address changes in deforestation dynamics and in the focus of public policies, especially due to the PPCDAm, which had its fourth phase released at the end of 2016.¹²

The logical framework is a methodology used to ensure that the actions supported contribute to the general objective of a given program (or project), and it can be viewed as a matrix containing, in an operational and ordered manner, the strategic decisions on the application of funds in a program, detailing the ends to be achieved (effects or objectives) and how these would be accomplished.

Figure 2 shows the logical sequence of cause and effect that leads from the direct and indirect impacts of various projects to the general objective of a program, as is the case of the Amazon Fund's Logical Framework.

FIGURE 2 | AMAZON FUND'S LOGICAL SEQUENCE



It was agreed that the general objective of the Amazon Fund would be concise and focused on the Brazilian Amazon, but the fund was also authorized to support the development of systems for monitoring and controlling deforestation in other regions of Brazil and in other tropical countries. The Amazon Fund's general objective was thus defined as the "reduction of deforestation with sustainable development in the Brazilian Amazon".

The indirect effects to be achieved by the Amazon Fund were established in terms of the seven thematic areas defined in Decree N° 6,527/2008 (listed in the previous subsection of this chapter). This decree also specified that, in projects carried out in the Brazilian Amazon, the guidelines of the PPCDAm and the ENREDD+ must be observed.

¹² As of 2016, with the promulgation of Decree N° 8,773, dated May 11, 2016, the Amazon Fund's territorial scope (for all the initiatives it supports) was also expanded from the Amazon biome to the Brazilian Amazon. The Brazilian Amazon covers an area defined by law, comprising the whole Amazon biome and areas between this biome and other Brazilian biomes, totaling about 5 million km².

Due to the Amazon Fund's large scope of action, its logical framework was structured into four components. The emphasis given to science, technology and innovation while preparing the logical framework is noteworthy, since they are strategic and cross-cutting issues, important to all of the Amazon Fund's components. Also noteworthy is the incorporation of the use of economic instruments from the fourth phase of the PPCDAm (2016 to 2020).¹³

More detailed information on the Logical Framework of the Amazon Fund can be found on the internet¹⁴ in the document entitled *Logical Framework of the Amazon Fund – 2017*. This document describes the indicators for measuring results, the main risks (assumptions) to successful outcomes and how the monitoring of the supported projects and of the Amazon Fund will occur.

Figure 3 shows the intervention methodology of the Amazon Fund's Logical Framework. The number next to the direct and indirect effects in this figure allows the identification in the reports of the projects concluded in 2019 (see specific section) of the effects specified in the logical framework to which these projects have contributed or will contribute.



¹³ PPDCAm is currently structured into four axes, which are: (i) "promotion of sustainable productive activities;" (ii) "monitoring and control;" (iii) "land-use planning;" and (iv) "normative and economic instruments."

¹⁴ See the section on monitoring and evaluation at <http://www.fundoamazonia.gov.br>.

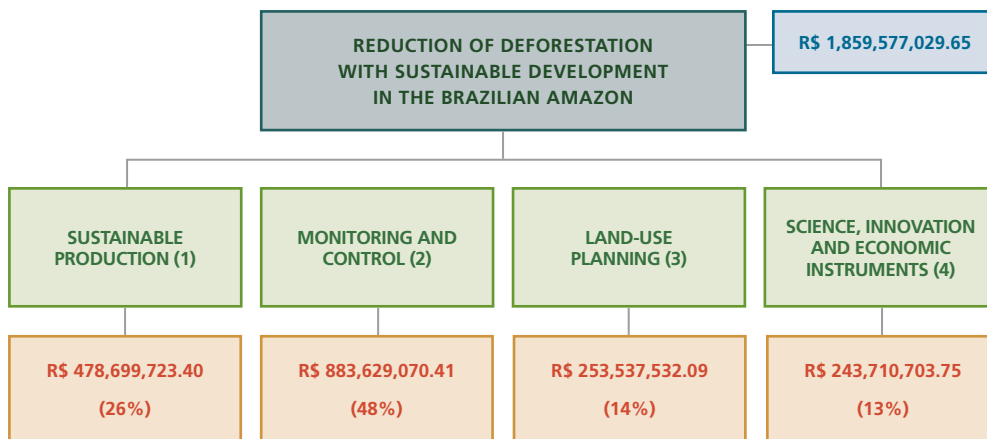
FIGURE 3 | LOGICAL FRAMEWORK OF THE AMAZON FUND



Distribution of funds by component of the logical framework

The Amazon Fund supported 103 projects up to 2019. These projects' actions and resources are distributed among the four components of the logical framework as follows:

FIGURE 4 | DISTRIBUTION OF FUNDS BY AMAZON FUND'S COMPONENTS



Some of the projects supported are carried out outside the Brazilian Amazon in Brazil and also in other countries with tropical forests, corresponding to R\$ 167 million in funds. This value is distributed across the components of the Amazon Fund's Logical Framework as follows: within the component "monitoring and control," R\$ 129 million refers to actions to develop deforestation monitoring capacity in other countries that are members of the Amazon Cooperation Treaty Organization (Acto) and to actions in Brazil outside the Brazilian Amazon to support the implementation of the Rural Environmental Registry (CAR) and deforestation monitoring in other biomes. Within the component "science, innovation and economic instruments," R\$ 38 million is earmarked for actions in other countries and in Brazil outside the Brazilian Amazon, aiming at creating and disseminating knowledge and technologies for the monitoring of the Amazon region in Acto's member countries and deforestation monitoring in other Brazilian biomes.



Monitoring of regional indicators

The Amazon Fund identified in its logical framework some regional or systemic indicators for public policies to which it aims to contribute through the projects it supports.

Monitoring these public policies helps to evaluate the progress made in reducing deforestation with sustainable development in the Amazon. This monitoring involves the analysis of the Amazon Fund's indicators in a comparative perspective at the level of the fund's general objective and indirect effects. The baseline for all indicators is the year 2009, when the first operations of the Amazon Fund were approved, although no funds were disbursed for these projects at the time.

The current year of evaluation is 2019. Whenever possible, a comparison with 2009 is made. In the cases where this information is not available, the latest data available are used.

It is worth mentioning that the Amazon Fund is not the sole contributor to the behavior of these indicators, although its contribution is already identifiable and relevant, as attested by the evaluation of the projects concluded with the fund's support. Other initiatives and actions carried out by various public and private agents that operate in the vast Amazon territory are also relevant.

General objective: reduction of deforestation with sustainable development in the Brazilian Amazon

Indicator: (1) Annual deforestation in the Brazilian Amazon

One of the indicators selected to measure the evolution of the general objective was "Annual deforestation in the Brazilian Amazon," as assessed by the National Institute for Space Research (Inpe).

Several climate modelling studies analyze the impacts of deforestation of tropical forests on the climate, pointing out that reducing these forests' area alters humid air flow and causes an increase in the temperature of the planet.

Preliminary data from Inpe indicate that deforestation in the Brazilian Amazon in 2019 was of 9,762 km². This area represents a third of the area deforested in 2004. However, when comparing the deforestation rate of 2019 with that of 2009 (baseline), we observe a 31% increase in the deforestation rate over this period. Another possible comparison is that of the average annual deforestation that occurred in the period from 2010 to 2019 with the Amazon Fund's baseline (2009), which shows a 10% decrease in the area deforested over that period.

TABLE 7 | EVOLUTION OF DEFORESTATION IN THE BRAZILIAN AMAZON – 2004-2019 AND 2009-2019 (KM²)

Brazilian Amazon deforestation				
2004	2009	2019*	Variation (%) 2019/2004	Variation (%) 2019/2009
27,772	7,464	9,762	(65)	31

Source: BNDES, based on data from Inpe.

*Preliminary data.

TABLE 8 | EVOLUTION OF DEFORESTATION IN THE BRAZILIAN AMAZON – 2009 AND 2010-2019 AVERAGE (KM²)

Deforestation 2009 (A)	Average 2010-2019 (B)	Variation (%) (B)/(A)
7,464	6,724	(10)

Source: BNDES, based on data from Inpe.

Note that the National Policy on Climate Change estimates a deforestation reduction of 80%, as of 2020, compared with the mean annual rate observed between 1996 and 2005. That is, the goal to be reached in 2020 by Brazil is a maximum of 3,925 km² of deforested area per year in the Brazilian Amazon. To achieve this goal, deforestation in the Amazon will have to be reduced by approximately 60% in a year, in relation to the rate verified in 2019.

Despite the fact that the average annual deforestation in the period from 2010 to 2019 is already 10% lower than the deforestation rate in 2009, there was a worrying increase in this rate in recent years, which is a challenge to be faced in order to achieve the Amazon Fund's general objective of "reduction of deforestation with sustainable development in the Brazilian Amazon."

Indicator: (2) Share of the Brazilian Amazon states' GDP in relation to the national GDP

The second indicator selected to measure the evolution of the Amazon Fund's general objective is the share of the gross domestic product (GDP) of all states of the Brazilian Amazon in relation to the Brazilian GDP. That is, the sum of the GDPs of the nine states of the Brazilian Amazon is compared with Brazil's GDP as a whole.

GDP is a basic indicator of economic behavior that shows the market value of all final goods and services produced in a particular region. However, it is not an ideal indicator for measuring sustainable development, since it does not include, for example, information such as the environmental liabilities generated.

Several international initiatives have been incorporating into national statistics the calculation of other variables of well-being and sustainability, aiming to determine the value, for example, of biodiversity loss or of the costs associated with climate change. In Brazil, Law No. 13,493, dated October 17, 2017, made the Brazilian Institute of Geography and

Statistics (IBGE) responsible for releasing the green gross domestic product (GGDP), whose calculation will include, in addition to the usual criteria and data, the national ecological heritage. Until a methodology is defined and measurements are fully adopted and validated at the global level, the conventional GDP indicator should be analyzed together with the deforestation reduction indicator.

The most current information available on the evolution of the GDP of each state is in the IBGE's System of Regional Accounts for the year 2017. Table 9 shows that the share of the Brazilian Amazon's GDP in relation to the Brazil's GDP has been gradually growing over the last eight years, reaching in 2017 a share approximately 0.8% higher than the share observed in 2009.

The Amazon states also showed resilience in managing to maintain their share in GDP during 2015 and 2016, when Brazil experienced a recession (when GDP dropped 3.5% and 3.3%, respectively). In 2017, a period of gradual economic recovery began, with an economic growth of 1.1%, the same rate seen in 2018. Throughout 2019, the economy maintained a recovery path, particularly led by household consumption and by investments.

TABLE 9 | BRAZILIAN AMAZON STATES' GDP (BA)/BRAZIL'S GDP (%)

2009	2010	2011	2012	2013	2014	2015	2016	2017
8.04%	7.98%	8.28%	8.29%	8.43%	8.41%	8.45%	8.71%	8.87%

Source: BNDES, based on data from IBGE.

Indirect effect: (1) Activities that maintain the forest standing are economically attractive (component "sustainable production")

Indicator: Plant extractivism and forestry

Indicator: Legal logging in the Amazon

The Amazon Fund prioritizes the structuring of sociobiodiversity production chains. This prioritization has been materialized in the fund's financial support to several projects aiming to expand and improve the collection and processing of extractive products by traditional communities and indigenous peoples.

The actions supported include the construction of sheds for storing products; the acquisition of trucks, vans, tractors and boats for product collection and distribution; the implementation or expansion and modernization of processing units for these products; and the technical and managerial training of the indigenous, extractive producers and family farmers involved in the projects.

The monitoring of this component uses an indicator of extractive and forestry production observed in the Brazilian Amazon states, which is based on an annual publication by IBGE;¹⁵ another indicator measuring legal logging in the Amazon was also developed.

Data on extractive production are obtained by IBGE in consultation with public and private entities, producers, technicians, and agencies directly or indirectly associated with the production, commercialization, industrialization and inspection of native vegetal products.

Extractive production comprises the process of exploiting native plant resources through the collection of plant products. The Amazon is an important source of the *açaí* berry, Brazil nuts, native rubber, almonds, as well as other oilseeds and various fibers, which are economically relevant and commercialized inside and outside the region. The evolution of these products' production and revenue is monitored by the Amazon Fund because of their economic relevance to the regional context.

Regarding oilseeds, the extractive production of, among other products, tonka bean (or *cumarú* almond), *souari* nut (or *pequi* fruit) and diesel tree oil is being monitored. The evolution of the babassu production chain, whose oilseeds are used mainly in the food industry, is also monitored. Since the babassu has a great importance to the regional extractive economy, it was monitored separately from the other oilseeds. Fiber production from piassava and moriche palms (among other fiber products) is also being monitored.

Table 10 shows the evolution of the extractive production (in tons) of these products in 2009 and 2018.

TABLE 10 | OUTPUT OF PLANT EXTRACTIVISM IN THE BRAZILIAN AMAZON STATES

Products	2009 (t)	2018 (t)	Variation (%)
<i>Açaí</i> berry	115,767	221,646	91%
Brazil nut	37,468	34,169	(9%)
Rubber (liquid and coagulated latex)	3,459	838	(76%)
Oilseeds*	1,240	983	(21%)
Babassu	103,359	47,544	(54%)
Fibers**	2,848	2,078	(27%)
Historical total	264,141	307,258	16%

Source: BNDES, based on data from IBGE.

*Include diesel tree (oil), tonka bean, *souari* nut and other products.

** Include moriche palm, piassava and other products.



¹⁵ Plant Extractivism and Forestry Production (Pevs), from IBGE, available at: <https://www.ibge.gov.br/estatisticas/economicas/agricultura-e-pecuaria/9105-producao-da-extracao-vegetal-e-da-silvicultura.html?=&t=resultados>

Table 11 shows the evolution of these same products from the perspective of the revenue generated.

TABLE 11 | OUTPUT OF PLANT EXTRACTIVISM IN THE BRAZILIAN AMAZON STATES (R\$ THOUSAND)

Products	2009	2009*	2018	Variation (%)
Açaí berry	160,312	270,993	592,040	118%
Brazil nut	52,261	88,343	130,910	48%
Rubber (liquid and coagulated latex)	7,597	12,842	3,614	(72%)
Oilseeds**	6,570	11,106	10,609	(4%)
Babassu	114,847	194,139	84,393	(57%)
Fibers***	4,495	7,598	4,538	(40%)
Historical total	346,082	585,021	826,104	41%

Source: BNDES, based on data from IBGE.

* Values for reals of 2017 updated by the variation of the Extended National Consumer Price Index (IPCA) from 2010 to 2018.

** Include diesel tree (oil), tonka bean, souari nut and other products.

*** Include moriche palm, piassava and other products.

The production of açaí berry, a fruit increasingly used in the manufacture of food and beverages, increased by 91% in the Brazilian Amazon between 2009-2018, and the revenue, in updated values, increased by 118% over this same period, reaching R\$ 592 million.

The Brazil nut is another product important to regional extractivism. The nuts are obtained from the fruit of the Brazil nut tree, which is one of the tallest trees in the Amazon rainforest. The volume of nuts produced decreased by 9% between 2009 and 2018. Annual revenue, however, grew 48% in the same period, reaching R\$ 130 million in 2018.

The production volume and revenue from oilseeds, babassu, fibers and rubber (both coagulated and liquid latex) decreased between 2009 and 2018. However, when considering all monitored products, there was an increase of 16% in the volume produced and of 41% in the revenue generated.

Indicator: Legal logging in the Amazon

The sole legal sources of raw material for timber production are sustainably exploited forests, through sustainable forest management plans (SFMP) or authorized deforestation. The monitoring of this indicator was made possible due to data on the transport of forest products registered through the Forest Origin Document system (DOF) systematized and made available by the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama) at its website.¹⁶

¹⁶ It is worth mentioning that the control of native wood exploitation in Brazil, although quite advanced, is not fraud proof in relation to the issuance of exploration permits. Therefore, part of the logs accounted for as legally extracted, based on information registered through the DOF system, may in fact have been illegally extracted due to frauds.

TABLE 12 | LEGAL LOGGING IN THE AMAZON (VOLUME)

State	2009 (m ³)	2017 (m ³)	Variation (%) 2017/2009
Acre	277,489	144,241	(48)
Amazonas	355,113	706,543	99
Amapá	64,189	227,743	255
Maranhão	10,359	4,052	(61)
Mato Grosso	2,043	41,610	1,936
Pará	9,041	235,186	2,501
Rondônia	0	1,611,337	100
Roraima	89,502	333,927	273
Tocantins	21,366	3,625	(83)
Total	829,102	3,308,266	299

Source: BNDES, based on data from Ibama.

TABLE 13 | LEGAL LOGGING IN THE AMAZON (R\$ THOUSAND)

State	2009	2009*	2017	Variation (%) 2017/2009*
Acre	10,095	16,448	6,319	(62)
Amazonas	19,633	31,988	90,557	183
Amapá	3,944	6,425	17,383	171
Maranhão	905	1,475	417	(72)
Mato Grosso	1,317	2,146	3,910	82
Pará	3,314	5,399	40,421	649
Rondônia	0	0	101,074	100
Roraima	4,153	6,766	21,612	219
Tocantins	7,314	11,916	15	(100)
Total	50,675	82,564	281,709	241

Source: BNDES, based on data from Ibama.

* Values updated to 2017 reais by the variation of the IPCA from 2010 to 2017.

Data analysis of legal logging suggests that the volume of timber production from 2009 to 2017 increased virtually four-fold (299%). The annual revenue, in turn, grew from R\$ 82 million in 2009 to reach R\$ 281 million in 2017 (241%).

Another positive fact is that more than 70% of the timber harvested in 2017 (3.3 million m³) was obtained through sustainable forest management (2.4 million m³). Sustainable forest management is managing the forest to obtain benefits, while respecting the self-sustaining mechanisms of the ecosystem being managed. That is, sustainable forest management does not allow clear cutting of forests in the Amazon.

The Amazon Fund has directly contributed to these results in two ways:

(i) direct support to projects of sustainable forest management or which support this

activity through scientific research or training of technicians; and (ii) repression of illegal logging activities that unfairly compete with sustainable forest management, which incur in higher costs, because it complies with the law, and lower returns, since it does not resort to predatory logging.

The analysis of the behavior of Amazon forest's mix of products, based on IBGE Pevs data, shows a 41% growth in the revenue generated by these products between 2009 and 2018. In turn, between 2009 and 2017,¹⁷ revenue from log extraction increased 241%. Therefore, the evolution of these indicators suggests that the indirect effect "activities that maintain the forest standing are economic attractive in the Brazilian Amazon" is being achieved.

Indirect effect: (2) Governmental actions ensure the conformity of human activities to the environmental legislation (component "monitoring and control")

Indicator: Number of state environmental agencies outposts (regional units)

Indicator: Number of municipalities capable of licensing activities with local environmental impact

Indicator: Number of environmental authorization or licenses granted annually by state environmental agencies

To monitor this component, indicators were created to measure the capacity of the Brazilian Amazon environmental agencies to enforce the current environmental legislation.

Two indicators measure the levels of deconcentration and decentralization in environmental management, namely: "number of state environmental agencies outposts (regional units)" and "number of municipalities capable of licensing activities with local environmental impact."

The decentralization of environmental management through the establishment of state environmental agencies outposts or regional units brings these agencies closer to the inhabitants and economic agents of the more remote regions, which promotes a more efficient environmental management.

In turn, municipalities are responsible for the environmental licensing of projects and activities that cause or may cause local environmental impacts, according to the typology defined by the respective state environmental councils, considering the size, pollutant potential and nature of the activity.¹⁸ The indicator that measures the number of municipalities capable of licensing activities with local environmental impact aims to

¹⁷ When this report was being written, the data for 2018 on the legal production of logs in the Amazon was not available.

¹⁸ Complementary Law No. 140, dated December 8, 2011.

assess the degree of participation of municipalities in the enforcement of environmental legislation in their territories.

A third indicator monitors the “number of environmental authorizations or licenses granted annually by state environmental agencies.” Licensing is an important instrument of the National Environmental Policy, and the increase in the number of licenses and other permits granted indicates the degree of control that environmental agencies have over human activities that interfere with environmental conditions.

Taking into account the lack of public disclosure of information to monitor these indicators’ behavior, Table 14 presents data obtained directly from state environmental agencies in the Brazilian Amazon.

TABLE 14 | REGIONAL INDICATORS FOR THE COMPONENT “MONITORING AND CONTROL”

State	No. of state environmental agencies outposts (cumulative)*		No. of municipalities able to license activities with local environmental impact (cumulative)**		No. of environmental permits or licenses granted (annual)***	
	2009	2019	2009	2019	2009	2019
Pará	4	6	10	124	3,259	1,485
Acre	5	5	1	1	2,239	500
Amazonas	0	4	2	1	2,723	4,652
Roraima	1	1	13	12	183	1,276
Tocantins	20	14	0	4	3,360	4,076
Mato Grosso	11	9	5	48	5,430	5,468
Rondônia	14	14	1	21	2,480	2,731
Maranhão	1	2	0	57	0	2,384
Total	56	55	32	268	19,674	22,572
Variation 2019/2009 (%)	(2)		738		15	

Source: BNDES, based on data provided by state environmental agencies.

* Consolidated number (cumulative) – set of all outposts of the state environmental agency.

** Consolidated number (cumulative) – all municipalities in the state able to license activities with local environmental impact.

*** Number of licenses: prior, installation, operation, rural property; renewal, rectification, declaratory, previous consent, and permits: environmental, deforestation, use of raw material, for exploitation of forest management, transit and commercialization of fish, and transportation of dangerous cargoes dispatched in the year.

A joint analysis of the indicators shows progress in two of the three dimensions monitored, highlighting a significant increase (738%) in the number of municipalities capable of licensing activities with local environmental impact.

The number of permits issued annually by environmental agencies also showed a 15% increase in the monitored period (2009-2019). It is worth mentioning that this indicator, despite showing a favorable growth compared with the baseline, was lower in 2019 than in 2018. This reduction is probably related to the virtuous process

of decentralization of environmental management, with a greater participation of municipalities in the enforcement of environmental legislation in their territories.

In turn, the number of outposts of state environmental agencies remained constant, showing no progress over the monitored period.

The Amazon Fund has been contributing to the improvement in environmental management by supporting projects aimed at strengthening state and municipal environmental agencies; improving the environmental licensing process; training public servants; strengthening environmental agencies regional units; and decentralizing and strengthening municipal environmental management.

Indirect effect: (3) The Brazilian Amazon is submitted to land-use planning (component “land-use planning”)

Indicator: Area of indigenous lands (TI) and protected areas (PA) in the Brazilian Amazon with territorial management instrument

Indicator: Deforestation in PAs in the Brazilian Amazon

Two indicators were created to monitor this component. The first measures the extent of federal PAs that have a territorial management tool in place and the second one tracks the deforestation rate in PAs (federal and state PAs and TIs in the Brazilian Amazon).

It is worth mentioning that Brazil, through Law No. 9,985/2000, established a National System of Nature Conservation Units (Snuc). The PAs participating in Snuc are divided into two groups, which have specific characteristics, the integral protection units and the sustainable use units.

The primary aim of integral protection PAs is to preserve nature, allowing only the indirect use of their natural resources; the primary aim of sustainable use PAs is to reconcile nature conservation with the sustainable use of part of their natural resources.

The indicator “area of indigenous lands and federal nature protected areas in the Brazilian Amazon with territorial management instrument” follows the progress of the preparation of territorial management instruments in federal TIs and PAs that have, respectively, territorial and environmental management plans (PGTA) and management plans. These instruments have contributed significantly to reducing deforestation in protected areas.

A PA's management plan is a document that, based on the general objectives of a PA, establishes the zoning regulation and other norms governing land use and the management of natural resources, including the implementation of the necessary physical structure for its management.

In turn, the PGTA's are tools for implementing the Brazilian Policy for Land Use and Environmental Management of Indigenous Lands (PNGATI), and are instruments aimed at the valorization of indigenous tangible and intangible heritage, and at the recovery, conservation and sustainable use of natural resources, ensuring the improvement in the quality of life

and full conditions of physical and cultural reproduction of current and future generations of indigenous peoples. These plans must provide for the protagonism, autonomy and self-determination of indigenous peoples in negotiating and establishing community agreements to allow the strengthening of the territorial protection and control, as well as being a guideline for public policies directed to these peoples.¹⁹

TABLE 15 | AREA OF FEDERAL PAS AND TIS IN THE BRAZILIAN AMAZON WITH TERRITORIAL MANAGEMENT INSTRUMENT (MANAGEMENT PLANS OR PGTAS)

PAs	Number of federal PAs and TIs with territorial management tool		Variation 2019/2009 (%)	Area (km ²) of federal PAs and TIs with territorial management tool		Variation 2019/2009 (%)
	2009	2019		2009	2019	
Federal PAs	28	84	200	160,742	431,284	168
TIs	33	98	197	75,741	564,912	646
Total	61	182	198	236,483	996,196	321

Source: BNDES, based on data from the Chico Mendes Institute for Biodiversity Conservation (ICMbio) and Funai.

Analysis of the data presented in Table 15 on protected areas with territorial management instrument between 2009 and 2019 shows a considerable growth both in the number of PAs and in the total area protected with these instruments in the Amazon.

In the period considered, the number of federal PAs and TIs with a land-use management instrument has tripled, from 61 to 182. In turn, the extent of the areas with territorial management instruments has more than quadrupled, reaching 996,000 km², an area larger than Norway and Germany combined.

The Amazon Fund has supported several projects to strengthen and consolidate the protected areas in the Amazon. A highlight are eight supported projects aimed at drafting and implementing PGTAs, which were selected through a Public Call for Supporting Territorial and Environmental Management of Indigenous Lands, promoted by the Amazon Fund.

Among other actions, these projects promote environmental management in TIs and the development of sustainable productive activities by indigenous peoples; the protection of isolated and recently-contacted indigenous peoples; the implementation of initiatives to monitor and control indigenous territories; as well as the strengthening of local community organization and of the culture and way of life of these populations. In addition to these projects exclusively aimed at indigenous peoples, other supported projects also include actions that benefit these groups.

¹⁹ Definition of PGTA based on the document *Guidelines for the preparation of territorial and environmental management plans for indigenous lands*, prepared by the National Indian Foundation (Funai), in 2013.

Note that, in supporting all projects directly aimed at indigenous peoples, the Amazon Fund ensures that the sociocultural systems and traditional knowledge of indigenous peoples have been considered and respected during project implementation. The fund also verifies that the communities to be benefited consent to the actions to be implemented.

There are 101 TIs benefiting from initiatives supported by the Amazon Fund, comprising about 65% of the area of all TIs in the Brazilian Amazon.

Table 16 shows the variation in deforestation rates in protected areas in the Brazilian Amazon (federal and state PAs and indigenous territories).

TABLE 16 | DEFORESTATION IN PROTECTED AREAS IN THE BRAZILIAN AMAZON

Protected areas	Number of protected areas	Deforested area in 2009 (km ²)	Deforested area in 2018 (km ²)	Variation (%)
Federal PAs	174	287	231	(20)
State PAs	179	320	694	117
TIs	379	247	277	12
Total	732	854	1,201	41

Source: BNDES, based on data from Inpe/Prodes.

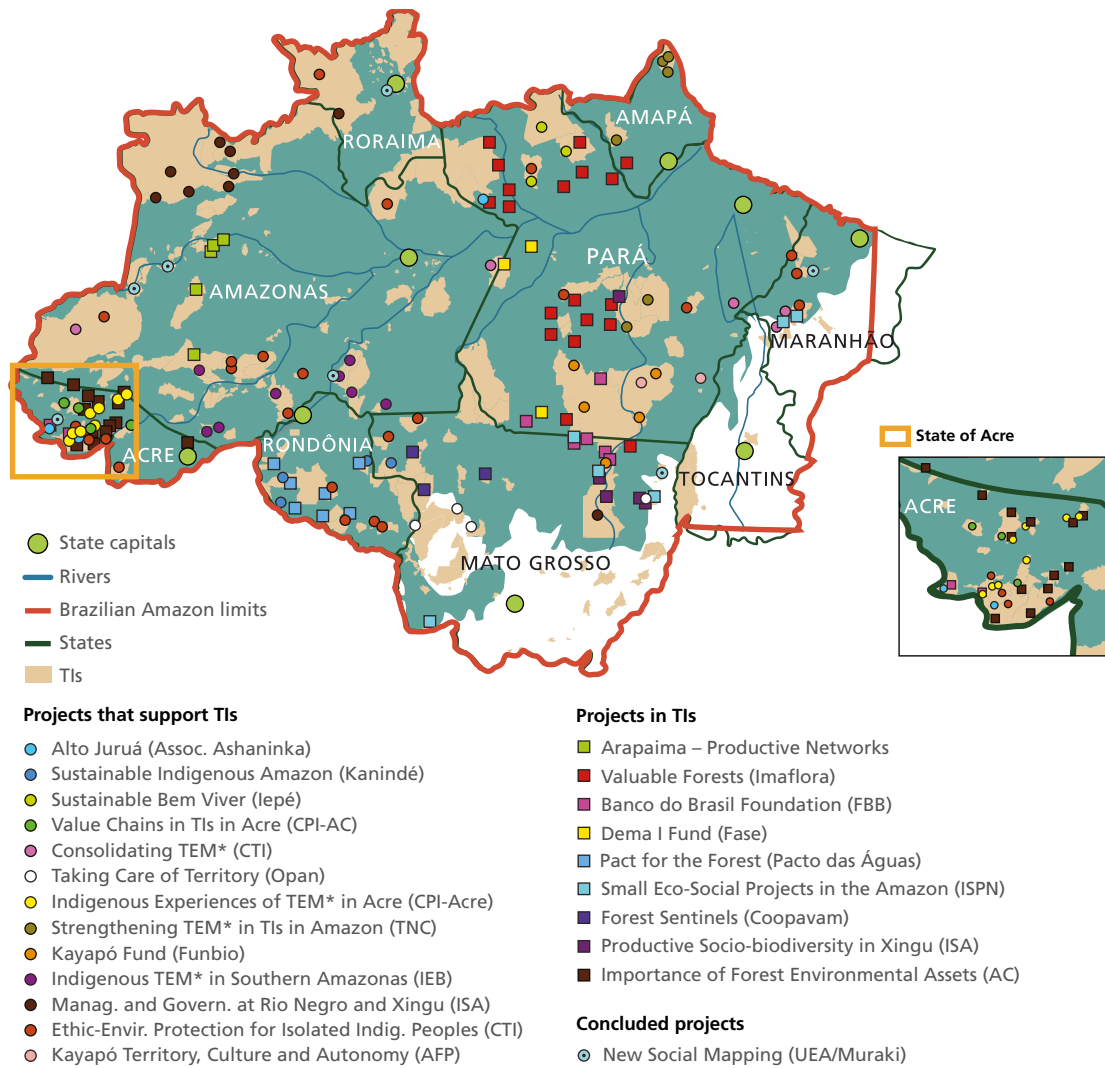
* Preliminary data.

Table 16 shows a 41% overall increase in the deforested area in these land categories from 2009 to 2018. It should be noted that this result is worse than the one observed from 2009 to 2017, which already showed an increase in deforestation in protected areas. Only federal protected areas presented a positive result, where deforestation was reduced by 20% when compared to the Amazon Fund's baseline (2009).

It is worth mentioning that the area deforested in federal and state protected areas in 2018, including in TIs, represented about 16% of the deforestation measured in the entire Brazilian Amazon in that same year. Furthermore, these protected areas account for more than 40% of the Brazilian Amazon's territory, underscoring the importance of these PAs and the relevant role played by traditional peoples, including indigenous peoples, in preventing deforestation and promoting forest conservation.

Nevertheless, this increase in the area deforested in PAs shows the urgency of supporting new initiatives to strengthen the management of these territories and the public entities in charge of their monitoring. The Amazon Fund already contributes to this aim by supporting projects related to land-use planning and the monitoring and control of deforestation.

FIGURE 5 | PROJECTS SUPPORTED BY THE AMAZON FUND IN TIS



Source: BNDES, based on data from IBGE.

* Territorial Environmental Management.



Indirect effect: (4) Economic instruments, science, technology and innovation contribute to the recovery, conservation and sustainable use of biodiversity (component “science, innovation and economic instruments)

Indicator: Number of patent applications filed at the National Institute of Industrial Property (INPI)

Two indicators were selected to monitor the component “science, innovation and economic instruments”: (i) “number of patent applications filed at the National Institute of Industrial Property” (INPI), which allows for an initial assessment of the strength of the regional innovation system; and (ii) “value of subsidy paid to extractivists for the promotion of sociobiodiversity production chains in the states of the Brazilian Amazon (PGPM-Bio),” which monitors the evolution of the economic incentives policy in the Amazon. Considering that as of 2019 the Amazon Fund did not support projects aimed at paying subsidies to sociobiodiversity production chains or other similar projects, the second indicator was not included in this report.

TABLE 17 | PATENT APPLICATIONS FILED AT THE INPI BY RESIDENTS OF BRAZILIAN AMAZON STATES

Brazil	2009	2018	Variation (%)
	7,709	6,790	(11.9)
Amazon states	2009	2018	Variation (%)
Acre	3	10	233.3
Amazonas	63	24	(61.9)
Amapá	3	12	300.0
Maranhão	24	61	154.1
Mato Grosso	29	40	37.9
Pará	25	46	84.0
Rondônia	13	76	484.6
Roraima	1	8	700.0
Tocantins	8	11	37.5
Total	169	288	70.4

Source: BNDES, based on data from INPI.

Patent applications filed at the INPI by residents in the states of the Amazon increased 70% between 2009 and 2018. For Brazil as a whole, there was a decrease of 12% in patent applications over the same period.

Despite the considerable growth in the number of patent applications in the period analyzed, the number of patent applications filed in the region in absolute numbers is relatively low (4% of all applications in Brazil). This shows the need to promote patent application, which is relevant to the knowledge and sustainable development of the

region's natural resources, improve the monitoring of deforestation and also to develop and enhance ways and methods for promoting land-use planning in the region.

The reasons for this scenario are complex and have historical roots. They comprise differences in levels of investment in higher education and research and factors such as the degree of industrial development in each one of these states or regions.

The science and technology projects supported by the Amazon Fund aim to face this challenge through initiatives such as the building, renovation or structuring of centers for advanced studies in biotechnology research; the survey and processing of georeferenced biological and socioeconomic data; and the development of models for estimating biomass and carbon sequestration in ecosystems.

Synthesis of the monitoring of regional indicators related to the Amazon Fund

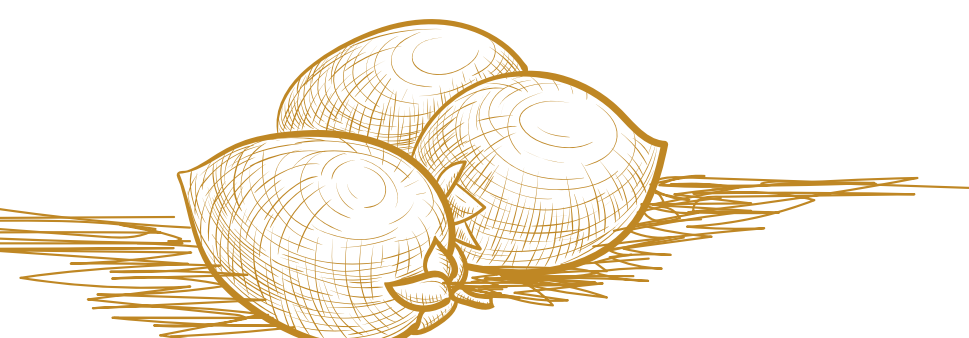
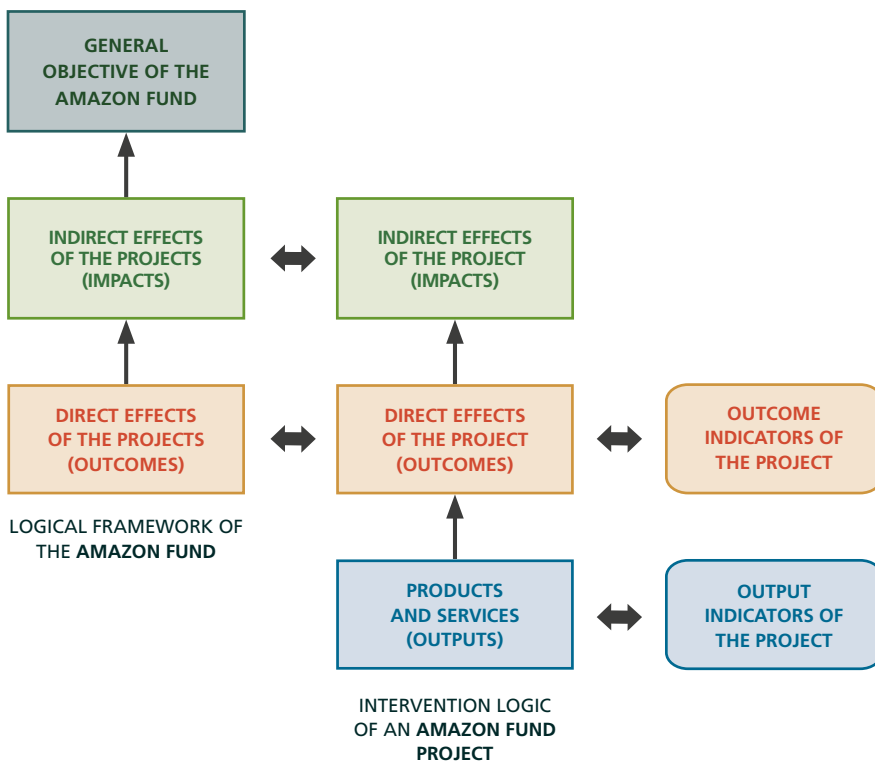
- Worsening of the indicator of the deforestation rate in the Brazilian Amazon, which showed a 31% increase in the area deforested between 2009 and 2019. On the other hand, when comparing the average annual deforestation from 2010 to 2019 with the deforestation in 2009 (Amazon Fund's baseline), there was a 10% drop in the deforested area, which is an overall positive result.
- Gradual growth in the share of the Amazon's GDP in the Brazilian GDP, which was almost 0.8% higher in 2017 than what was observed in 2009, which is a positive result.
- Growth of 16% in the volume produced and 42% in the revenue generated by the basket of extractive products monitored, according to data from IBGE Pevs (2009-2018), and a 299% increase in volume and 241% in revenue generated by legal logging (2009-2017).
- Expansion of the decentralization of environmental management to municipalities by 738% and of the number of permits issued by state environmental agencies by 15%; the number of outposts of environmental state agencies remained the same over the monitored period (2009-2019).
- A more than four-fold increase (321%) in the area of federal PAs and TIs with territorial management instruments (2009-2019) and a worsening of the indicator that monitors deforestation in protected areas, which indicates a 41% increase in deforestation in federal and state PAs, including TIs (2009-2018).
- Growth of 70% in the number of patent applications filed at INPI by residents of Brazilian Amazon states (2009-2018).

Project results chart

For each project, a specific results framework is built, in dialogue with the beneficiaries and integrated into the objectives defined in the Amazon Fund’s Logical Framework.

Figure 6 shows how project-level results and effects should contribute to the development of the four components and, thus, to the achievement of the Amazon Fund’s general objective.

FIGURE 6 | PROJECT INTEGRATION INTO THE AMAZON FUND’S LOGICAL FRAMEWORK



Monitoring of results of the Amazon Fund projects

In the monitoring of the projects supported by the Amazon Fund, in addition to monitoring the indicators of the results of each project, several procedures, described below, are executed in order to prevent or solve situations that pose risks to their implementation.

The monitoring period for each project starts at contract signing and ends at the completion of the obligations assumed. To subsidize the monitoring process, those in charge of executing the projects supported by the Amazon Fund must send performance reports containing: (i) a summary of the main activities carried out in the period; (ii) financial information referring to the amounts spent in the period; and (iii) documentation regarding compliance with contractual obligations.

BNDES's monitoring activities also include verifying the physical and financial execution of the project, including a visit to the project site, when necessary. Each disbursement of resources is also subject to verification of compliance with relevant contractual standards and clauses.

At project completion, the beneficiary submits an evaluation report of the results. The main objective of this report is to consolidate information about the implementation of the supported project and its results and impacts. The document must contain information about the progress of the project, the monitoring of its logical framework indicators, the future sustainability of its results, problems that emerged during its execution, as well as the knowledge obtained and the lessons learned.

Results of the projects supported by the Amazon Fund

The projects supported by the Amazon Fund are monitored individually. Project activities carried out during the execution phase are reported in the Amazon Fund's website,²⁰ which contains a specific section for each supported project, including, among other information, the name of the organization in charge of project implementation; the project's territorial scope and beneficiaries; the value of the project and of the Amazon Fund's financial contribution; the expected execution time; the amounts already disbursed and the dates of disbursements; the project's context and summarized information about it; its intervention logics; and a summary of the completed activities.

To monitor the results of the supported projects, a range of indicators common to them and aimed at providing a consolidated perspective of the products and services provided

²⁰ Available at: <http://www.fundoamazonia.gov.br/pt/carteira-de-projetos/>.

and of the impacts resulting from their actions was developed. Note that, in some cases, the results are qualitative in nature and require an individual analysis.

In addition to the projects' supervision during their execution, the Amazon Fund publishes an assessment of the results and impacts of each completed project. See the "Concluded projects" chapter of this report for information about the six projects completed this year, including an assessment of their results and impacts. To date, of a portfolio of 103 supported projects, 27 were already completed and had their assessment published in the Amazon Fund's annual reports. Whenever possible, an impact analysis is carried out concerning the concluded projects on the deforestation rate in their catchment areas.

In 2018, the Amazon Fund replaced the development of individual logical frameworks for the supported projects with a new tool developed by BNDES called the results framework (RF). This change aimed to align the Amazon Fund with the procedures followed by other BNDES operational units and will allow the digitization of this macro-process, generating efficiency and quality gains.

The RF of individual projects presents: (i) the objectives, in terms of direct results expected; (ii) the amount of financing associated with each objective; and (iii) the indicators of efficacy and effectiveness to be monitored. The RF taken as reference for the preparation of individual RFs is presented in Annex 5 of this report.

Tables showing the consolidated results and impacts measured on the basis of the indicators defined in the RFs of projects supported by the Amazon Fund are presented below. These tables adopt a color code to facilitate the identification of the indicators according to their nature (efficacy or effectiveness).

"Promotion of sustainable productive activities" component

By the end of 2019, support to sustainable productive activities represented 26% of the value of the Amazon Fund's portfolio of projects, i.e., R\$ 479 million. One of the objectives of PPCDAm is to promote a sustainable forestry economy by fostering the production of timber and nontimber products and the provision of environmental services, aiming to create economic alternatives that enable native forest conservation.

The set of projects supported in this axis comprises, for example, extractive activities, processing (industrialization) of extractive and family agriculture products, food security initiatives (food production for own consumption), handicraft production and community-based tourism. The products supported include: rubber, seeds, handicrafts, cassava flour, cocoa, tourism, timber, honey, resin, soaps, oils, babassu and açai berry.

TABLE 18 | INDICATORS OF THE “PROMOTION OF SUSTAINABLE PRODUCTIVE ACTIVITIES” (1)
COMPONENT – CUMULATIVE VALUES

Indicators of sustainable production (component 1)	Until 2017 (accrued)	Until 2018 (accrued)	Until 2019 (accrued)	Variation 2019/2018 (%)
Individuals trained to practice sustainable economic activities (total)	21,147	24,236	34,763	43
Individuals trained to practice sustainable economic activities (women)	791	878	4,384	399
Individuals trained to practice sustainable economic activities (indigenous)	1,020	2,544	3,966	56
Strengthened community organizations	391	434	491	13
Small projects (up to R\$ 150,000) supported by “agglutinator” entities*	2,627	2,659	2,815	6
Medium or large projects supported by “agglutinator” entities	58	70**	73	4
Rural properties with sustainable production projects	5,437	4,330	4,531	5
Rural estates (families) benefiting from technical assistance	7,370	7,801	9,576	23
Processing units for family agriculture and extractive products	142	357	379	6
Individuals directly benefited by the supported activities (total)	142,457	162,195	193,596	19
Individuals directly benefited by the supported activities (women)	20,187	34,146	45,888	34
Area of forest directly managed as a result of supported projects (hectares)	18,159,869	22,026,165	73,690,063	235
Recovered area used for economic purposes (hectares)	11,484	12,274	13,576	11
Individuals trained to practice sustainable economic activities effectively using the knowledge acquired (total)	7,661	9,679	14,783	53
Revenue obtained from the sale of <i>in natura</i> products (R\$ thousand)	89,161	98,369	122,832	25
Revenue obtained from the marketing of processed products (R\$ thousand)	33,649	44,084	92,029	109

Source: BNDES.

* The concept of project in this case includes, for example, the simple acquisition of an equipment for a productive activity that has been planned in the community. The “agglutinator” is the institution that coordinates and integrates an arrangement of subprojects from other organizations called “agglutinates”.

** Values adjusted as a result of revision/divergence of classification criteria or correction of material error.

Colors/legend code	Output indicator	Outcome indicator
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TABLE 19 | INDICATORS OF THE REVENUE OBTAINED FROM THE COMMERCIALIZATION OF PRODUCTS BY THE AMAZON FUND'S PROJECTS

Revenue from sustainable production activities					
In natura products			Processed products		
Baseline	Latest year	Increment	Baseline	Latest year	Increment
R\$ 23.8 million	R\$ 65.6 million	R\$ 122.8 million	R\$ 28.7 million	R\$ 59.2 million	R\$ 92.0 million

Source: BNDES.

The results of three projects completed in 2019 that supported sustainable production activities are presented in the “Concluded projects” chapter of this report. Carried out by the Pro-Indigenous People Commission of Acre (CPI-Acre), the Value Chains in Indigenous Lands in Acre project aimed to strengthen sustainable production and the culture and way of life in indigenous lands in the state of Acre, through the organization and promotion of agroforestry products’ value chains encompassing the establishment and enhancement of agroforestry systems (SAF), meliponiculture (beekeeping of native stingless bees), turtle and fish farming, small flour and sugarcane mills, and the promotion of indigenous crafts.

The Forest Sentinels project, implemented by the Vale do Amanhecer Farmer Cooperative (Coopavam), supported the Brazil nut production chain, from collection to processing and commercialization, increasing the income of extractive communities living in the northwestern part of the state of Mato Grosso. The project’s results, in terms of employment and income generation, were outstanding, including the implementation of extractive activities in indigenous lands and in an agrarian reform settlement, in addition to the expansion of the Brazil nut processing capacity of community industrial production units and the own brand creation, certification and commercialization of this production.

The Productive Sociobiodiversity in Xingu project, also reported in the chapter “Concluded projects”, carried out by the Socioenvironmental Institute (ISA), supported the structuring and strengthening of sociobiodiversity value chains in the Xingu Basin, covering the production of forest seeds and seedlings, rubber, Brazil nuts, *souari* nuts and fruits by indigenous and extractive communities and family farmers.

This project’s scope included the consolidation of the Xingu Seed Network in the states of Mato Grosso and Pará, and a pilot initiative aimed at establishing a certification of origin for local products, the “Brazil Origins” seal, which increased the opportunities of product commercialization for local communities. Partnerships with several companies were strengthened for the commercialization of diesel tree oil, latex, Brazil nut, babassu mesocarp and handicrafts, covering perfumery, natural products, rubber, food and handicraft companies.

“Monitoring and control” component

At the end of 2019, the support to monitoring and control actions represented 48% of the value of the Amazon Fund’s portfolio of projects, i.e., R\$ 883 million. About 90% of this amount was allocated to projects implemented by Brazilian government entities (federal, state and municipal administrations). The “monitoring and control” component has been recognized by independent evaluations of PPCDAm as the one that contributed the most for reducing deforestation in the Amazon since 2004.

Among the actions supported by the Amazon Fund, the following stand out:

(i) expansion and strengthening of the CAR as an instrument for environmental management and for monitoring deforestation in rural settlements; (ii) expansion and improvement of Inpe’s system of satellite environmental monitoring and implementation of a detection system of deforestation in the Amazon using orbital radar images undertaken by the Operational and Management Center of the Amazon Protection System (Censipam), of the Ministry of Defense; (iii) control of deforestation in the Brazilian Amazon with inspection procedures carried out by the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama); and (iv) prevention and combat of forest fires and unauthorized burn-offs, with the operational structuring of the region’s military fire brigades and actions to mobilize and train rural producers in fire prevention and combat techniques, including the formation of civilian brigades.

TABLE 20 | INDICATORS OF THE “MONITORING AND CONTROL” (2) COMPONENT – CUMULATIVE VALUES

Monitoring and control indicators (Component 2)	Until 2017 (accrued)	Until 2018 (accrued)	Until 2019 (accrued)	Variation 2019/2018 (%)
Strengthened environmental bodies (federal, state and municipal)	281	304	305	0
Civil servants trained (total)	5,428	6,091	6,295	3
Amount disbursed for projects to combat forest fires and illegal burnings (R\$ thousand)	62,972	74,349	74,349	0
Training in environmental management or deforestation monitoring technologies (number of individuals)	344	344	5,767*	1,576
Environmental inspection missions undertaken	466	687	1,236	80
Forest fires and unauthorized burn-offs fought by the Military Fire Brigade	14,643	23,630	24,684	4
Civil servants trained effectively using the knowledge acquired (total)	3,538	5,329	5,419	2
Rural properties registered in CAR (protocol)	530,430	746,905	1,036,949	39
Area of rural properties registered in CAR (protocol) (ha)	86,805,573	90,343,357	131,140,260	45

(Continued)

(Continuation)

Monitoring and control indicators (Component 2)	Until 2017 (accrued)	Until 2018 (accrued)	Until 2019 (accrued)	Variation 2019/2018 (%)
Area with vegetation cover recovered for conservation or environmental regularization (regeneration in progress)	13,276	13,420	13,622	2
Infraction notices issued for infractions against the flora	5,060	9,158	12,279	34

Source: BNDES.

* Indicator's definition was expanded in 2019 to cover training in environmental management.

Colors/legend code	Output indicator	Outcome indicator
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The “Concluded projects” chapter of this report presents the results of the project Strengthening Environmental Monitoring and Control to Combat Illegal Deforestation in the Brazilian Amazon, one of the two inspection projects executed by Ibama. This project contributed to reducing the deforestation rate in the Amazon by disbursing funds to rent trucks and helicopters used in field actions, thus enabling the undertaking of 691 environmental inspection missions, which resulted in 6,516 infraction notices and the imposition of fines totaling R\$ 3.1 billion.

In 2019, the Tocantins Forest Protection project carried out by the Tocantins State Military Fire Brigade was completed (see chapter “Concluded projects”). This project supported actions to monitor, prevent and combat deforestation resulting from forest fires and unauthorized burn-offs in the state of Tocantins, especially on its central-north region, through training activities, the structuring of integrated management mechanisms and the acquisition of materials and equipment for the Environmental Protection Platoon, located in the municipality of Araguaína. As a result of the Amazon Fund's support, the military fire brigade of the state of Tocantins expanded their forest fire fighting actions by 86% in the monitored period (2012 to 2018), which makes it clear that the corporation's response capacity has increased since the project was executed.

“Land-use planning” component

At the end of 2019, the support to land-use management represented 14% of the value of the Amazon Fund's portfolio of projects, i.e., R\$ 253 million. The occupation of the forest is inherent to the region's development process; however, this occupation needs to be planned. Among the instruments available, the Amazon Fund's support to the consolidation of the management of PAs and implementation of PNGATI stand out.

TABLE 21 | INDICATORS OF THE “LAND-USE MANAGEMENT” (3) COMPONENT – CUMULATIVE VALUES

Land-use planning indicators (Component 3)	Until 2017 (accrued)	Until 2018 (accrued)	Until 2019 (accrued)	Variation 2019/2018 (%)
PAs supported	129	190	190	0
TIs supported	96	101	101	0
Individuals trained in activities related to the management of public forests and PAs (total)	2,059	3,177	3,583	13
Individuals trained in activities related to the management of public forests and PAs (indigenous)	799	1,311	1,887	44
Indigenous people directly benefited by the support of the Amazon Fund	30,734	49,318	59,092	20
Individuals trained in activities related to the management of public forests and PAs effectively using the knowledge acquired	656	1,376	1,842	34
Area of PAs created (km ²)	7,083	7,083	7,083	0
Extent of protected areas with infrastructure, environmental management and/or control of its strengthened territory (km ²)	226,910*	241,262*	408,668	69

Source: BNDES.

* Adjusted values due to revision / divergence of classification criteria or correction of material error.

Colors/legend code	Output indicator	Outcome indicator
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Federal and state PAs and TIs together account for more than 40% of the total area of the Brazilian Amazon. These are territorial categories protected by law, which in itself inhibits the action of illegal deforesters and land grabbers. All three sustainable production projects completed in 2019 had indigenous peoples among their beneficiaries (see chapter “Concluded projects”).

“Science, innovation and economic instruments” component

At the end of 2019, the support to scientific and technological development and to the implementation of economic instruments aimed at the protection of the standing forest represented 13% of the value of the Amazon Fund’s portfolio of projects, i.e., R\$ 244 million. The support to this component has a strategic and cross-sectional character, benefiting the other components.

TABLE 22 | INDICATORS OF THE “SCIENCE, INNOVATION AND ECONOMIC INSTRUMENTS” (4) COMPONENT – CUMULATIVE VALUES

Indicators of science, innovation and economic instruments (component 4)	Until 2017 (accrued)	Until 2018 (accrued)	Until 2019 (accrued)	Variation 2019/2018 (%)
Total amount disbursed for scientific and technological research (R\$ million)	73.8	134.0	137.6	3
Researchers and technicians involved in scientific and technological research activities in the Amazon region during project execution	319	368	385	5
Families receiving payment for environmental services	1,902	1,902	1,902	0
Scientific, pedagogical or informative publications produced	390	465	594	28
Patents filed or granted	0	2	2	0

Source: BNDES.

Colors/legend code	Output indicator	Outcome indicator
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The main projects in implementation are: The National Forest Inventory – Amazon, carried out by the Brazilian Forest Service (SFB); the Amazon Integrated Project, executed by the Brazilian Agricultural Research Corporation (Embrapa); and the Inpe’s Satellite Environmental Monitoring of the Amazon Biome.

Amazon Fund’s safeguards

Decision No. 1/CP.16 of the United Nations Framework Convention on Climate Change (UNFCCC) defined safeguards for REDD+. The safeguards are a set of seven guidelines that seek to enhance positive socioenvironmental impacts and reduce the negative impacts related to REDD+ activities. The REDD+ safeguards are also known as Cancun safeguards because the Mexican city hosted the 16th Conference of the Parties (COP) in 2010.

These safeguards should ensure that REDD+ initiatives address properly sensitive issues such as the rights of indigenous peoples and traditional communities, social participation mechanisms, the preservation of natural ecosystems, the continuity of REDD+ results achieved, and the risk of deforestation and degradation spreading to other areas. REDD+ initiatives should promote and support:

- actions that complement or are consistent with the objectives of national forest programs and other relevant international conventions and agreements;
- transparent and effective forest governance structures, under the principle of national sovereignty and in conformity with national legislation;

- respect for the knowledge and rights of indigenous peoples and local communities, considering the relevant international obligations, national legislation and the United Nation’s Declaration on the Rights of Indigenous Peoples;
- full and effective participation of stakeholders, particularly indigenous peoples and local communities;
- actions that are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of Decision No. 1/ CP.16 are not used for the conversion of natural forests, but rather to encourage the protection and conservation of natural forests and their ecosystem services, and to contribute to other social and environmental benefits;
- actions to avoid the risks of reversals of the REDD+ results; and
- actions to reduce displacement of emissions.²¹

The Amazon Fund’s creation precedes the approval of the Cancun safeguards, but, since its creation, COFA has established a set of guidelines and criteria that, associated with the operational policies of BNDES, its manager, have been working as its safeguards. The Amazon Fund is prepared to adjust its processes to comply with the Cancun safeguards when the National REDD+ Committee (CONAREDD+) completes the systemization of these safeguards.²²

In 2015, Brazil started to develop its National REDD+ Safeguards Information System (SISREDD+), coordinated by the Ministry of the Environment. When in operation, SISREDD+ will make its information available to society.

While the SISREDD+ is being established, descriptive information on the implementation of Cancun safeguards by Brazil is available at the REDD+ Brasil website,²³ which also consolidates other information on how these safeguards are being addressed in Brazil, particularly data summaries on safeguards submitted to the UNFCCC.



²¹ <https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>

²² The National REDD+ Committee, established by Decree No. 10,144, dated November 28, 2019, is the executing and advisory body to the states, the Federal District and the Ministry of the Environment, in charge of formulating guidelines and issuing resolutions on the implementation of the REDD+ National Strategy and on the consideration and respect for REDD+ safeguards, among other matters.

²³ <http://redd.mma.gov.br/pt/>

Brazil submitted to UNFCCC the 1st Safeguards Summary in 2015²⁴ and the 2nd Safeguards Summary²⁵ in 2018, with information on how the Cancun safeguards were addressed and respected by Brazil throughout the implementation of actions to reduce emissions from deforestation in the Amazon biome since 2006. These two summaries also address how the Amazon Fund has been supporting and contributing to the compliance with these safeguards.

Amazon Fund's contribution to the Sustainable Development Goals

The Sustainable Development Goals (SDG) form a set of 17 global goals set by the UN General Assembly, covering issues of economic growth, social inclusion and environment protection. These SDGs were agreed upon at the UN by 193 countries, after extensive participation of global civil society, and entered into force on January 1, 2016.

Among the 17 SDGs, a subset of ten SDGs to which the Amazon Fund contributes are presented below:



SDG 1 – END POVERTY IN ALL ITS FORMS, EVERYWHERE

One of Amazon Fund's guiding criteria for supported actions is the prioritization of projects involving direct benefits to traditional communities, agrarian reform settlements and family farmers. In all of the actions supported by the Amazon Fund up to 2019, about a quarter of the funds went to the promotion of sustainable productive activities, which made the fund an important agent in the eradication of poverty.



SDG 2 – END HUNGER AND PROMOTE SUSTAINABLE AGRICULTURE

The Amazon Fund supports not only production for commercialization, but also projects aimed at ensuring food security (food production for own consumption) of traditional peoples. The fund also supports the implementation of SAFs, the signing of fishery agreements, the implementation of small industrial processing plants for sociobiodiversity products, certification of origin, training and preparation of business plans, as well as research to develop new products based on bioactive compounds from Amazon plants.

²⁴ "Summary of information on how the Cancun safeguards were addressed and respected by Brazil throughout the implementation of actions to reduce emissions from deforestation in the Amazon Biome between 2006 and 2010": http://redd.mma.gov.br/images/publicacoes/salvaguadas_1sumario.pdf.

²⁵ "Second Summary of information on how the Cancun Safeguards were addressed and respected by Brazil throughout the implementation of actions to reduce emissions from deforestation in the Amazon Biome": https://redd.unfccc.int/files/2sumariosalv_br_final.pdf.



SDG 5 – ACHIEVE GENDER EQUALITY

The results of economic projects supported by the Amazon Fund should prioritize collective or public benefits and contribute to gender equality and the empowerment of young people. Starting in 2012, the fund has demanded, in public calls, that projects indicate their strategy to incorporate women and young people into activities directly related to supported value chains and to foster the participation of women in leadership positions.



SDG 6 – ENSURE SAFE DRINKING WATER AND SANITATION

Projects supported by the Amazon Fund prioritize restoration of riparian forests, that is, wooded areas adjacent to streams, lakes, dams and springs. One kind of initiative supported by the fund prioritizes the recovery of springs through the implementation of reward programs that pay for environmental services such as the protection and preservation of springs that supply the water catchment for human consumption.



SDG 8 – PROMOTE DECENT WORK AND ECONOMIC GROWTH

One of the great challenges to be overcome by Brazilian society and the Amazon Fund is how to implement an economic model of production and land occupation in the Amazon that is environmentally sustainable, preserves biodiversity and promotes social well-being. To this end, the fund has supported dozens of sustainable production projects that promote sociobiodiversity productive chains, the building of capacities and skills to promote a viable, sustainable economic model and the transformation of agriculture into a fully sustainable activity, including an increase in its productivity.



SDG 11 – MAKE CITIES AND HUMAN SETTLEMENTS SUSTAINABLE

The Amazon Fund has contributed directly to safeguarding the world's natural and cultural heritage, in accordance with its objective of reducing deforestation with sustainable development in the Brazilian Amazon. To this end, the fund supports initiatives that directly or indirectly safeguard the natural heritage represented by forests, as well as providing an important source of financing to actions aimed at the valuing of the tangible and intangible heritage of indigenous peoples, including the recovery, conservation and sustainable use of natural resources in their territories.



SDG 12 – ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION

Environmental monitoring actions were strengthened with the fund's support, including support for improving satellite deforestation monitoring in Brazil and other South American countries bordering the Amazon, which are developing or improving their own monitoring systems. The fund's support has also included the expansion of environmental monitoring missions, as well as actions to prevent and combat forest fires, including the training of military firefighters, the establishment of civil fire brigades and the acquisition of specialized equipment.



SDG 13 – COMBAT GLOBAL CLIMATE CHANGE

The Amazon Fund is the world's largest REDD+ fund for forest conservation according to several criteria, such as donations received and amounts approved for projects.²⁶ All resources disbursed by the fund must contribute, directly or indirectly, to reduce deforestation. Brazil's total greenhouse gas (GHG) emissions were reduced from 3.7 billion tons of carbon dioxide equivalent in 2004 to 1.7 billion tons of CO equivalent in 2015.²⁷ This represented a significant contribution of Brazil to mitigate global warming and is due to the reduction of national GHG emissions resulting from changes in the use of land and forests, that is, it results mainly from the reduction in deforestation.



SDG 15 – PROTECT AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS

The Amazon Fund supported actions in 190 PAs and 101 TIs, covering protection and territorial surveillance activities, strengthening of management and promotion of sustainable productive activities in sustainable use PAs, that is, PAs aimed at reconciling nature conservation with the sustainable use of part of their natural resources.



SDG 17 – STRENGTHEN GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

The Amazon Fund was created by Brazilian society in dialogue with the international community, having entered into several partnerships, including with governments that donate resources to the Amazon Fund; a cooperation agreement with an international technical cooperation agency and the fund's support for an international project being implemented by the Amazon Cooperation Treaty Organization (Acto), aimed at monitoring forest cover in the entire Amazon region, that is, also beyond Brazil's borders.

Promotion of gender equality in sustainable production projects

Achieving gender equality, ending all forms of discrimination against women and ensuring equal opportunities is one of the sustainable development goals (SDG 5). The Amazon Fund aims to contribute to the promotion of gender equity through its support for projects that contribute to component 1 of its logical framework ("activities that maintain the forest standing are economically attractive").

Since 2008, BNDES, which is in charge of managing the Amazon Fund, has included in all of its financing contracts a social clause, which establishes the goal of fighting against race or gender discrimination and against child and slave labor in Brazil. The promotion of gender equity was introduced as a selection criterion into three public calls for projects supported by the fund.²⁸

²⁶ <https://climatefundsupdate.org/the-funds/>

²⁷ National System of Emissions Registration (Sirene) – https://www.mctic.gov.br/mctic/opencms/indicadores/detalhe/dados_setor_comunicacoes/SIRENE.html

²⁸ In 2012, in the public call for Sustainable Productive Activities Projects (APS); in 2014, in the public call for support to PGTAs; and, in 2017, within the scope of public calls for the consolidation and strengthening of sustainable and inclusive value chains and recovery of vegetation cover (APS II).

The fund also uses indicators on sustainable production projects for verifying the extent of women participation in the projects' activities and decision-making, including the monitoring of the number of women in management positions in the supported organizations and the number of women trained in new sustainable production technologies. Since 2015, the fund has also used independent external evaluations (*ex post* evaluations) to assess how the completed projects have contributed to gender equity promotion.

In 2019, the Amazon Fund website published a study entitled *Equality between men and women in sustainable productive activities projects supported by the fund*,²⁹ which aimed to systematize data on how component 1 projects ("sustainable production") contributed to promote equality between men and women, map the situation of women in projects visited in two Amazon states (Rondônia and Mato Grosso) and formulate recommendations to promote equality.

This study included visits to 61 properties, mostly located in agrarian reform settlements, characterized by family farming and family rural enterprises, in which women do the majority of domestic work, in addition to the raising of small animals, the keeping of vegetable gardens and agricultural work.

The result showed a very expressive number of women developing productive activities promoting deforestation reduction in small properties in the Amazon, contributing directly to the Amazon Fund's ultimate goal, with a prominent participation in this reduction and in the sustainable use of forest resources. The study also showed that when women's income increases, they acquire new skills, knowledge, rights and opportunities, improving their participation and visibility in different social spaces.

The study results enabled the identification of good practices related to gender equality in the projects and of lessons learned, as well as the development of recommendations to the Amazon Fund.



²⁹ http://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/biblioteca/GIZ_Estudo-genero.pdf

Evaluation of effectiveness

The Amazon Fund team had in 2019 a special year in terms of monitoring and evaluating effectiveness, with the conclusion of the mid-term evaluation of the effectiveness of the Amazon Fund, covering the period from 2008 to 2018.

The Amazon Fund's portfolio has 103 projects, of which 27 have been completed. The results and impacts of the completed projects are evaluated by the Amazon Fund's team and are disclosed in the Amazon Fund's activity reports (in the "Concluded projects" chapter) and also on the fund's website.³⁰

In 2016, with the technical support of the German agency GIZ³¹ the conceptual framework to be adopted in the effectiveness evaluations of the projects supported by the Amazon Fund was prepared and disclosed.³²

As of 2019, independent effectiveness evaluations were carried out on 11 completed projects (*ex post* evaluations), six of which were completed in 2019. The six projects evaluated in 2019 were the Forest Assistance Program, implemented by the Amazonas Sustainable Foundation (sustainable production project); and five scientific and technological development projects implemented by the Federal University of Pará (UFPA)/Research and Development Foundation (Fadesp), namely: Biodiversity, Amazon Bioactive Compounds, Mangrove Forests, Belém Islands and Public Policy Incubator in the Amazon.

These last five projects were evaluated together because of their common nature, since the five projects are related to component 4 of the Amazon Fund's Logical Framework, "science, innovation and economic instruments." They started between 2012 and 2014 and were completed between 2015 and 2018. The fund's support for each project varied between R\$ 1.1 million and R\$ 4.6 million, totaling R\$ 12 million.



³⁰ <http://www.fundoamazonia.gov.br/en/carteira-de-projetos/>

³¹ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

³² <http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Amazon-Fund-impact-evaluations-projects-supported-2016.pdf>

The independent effectiveness evaluations are available in full at the Amazon Fund's website.³³ The primary goals of these evaluations are as follows:

- assist the Amazon Fund in reporting to its donors the types of projects supported and their impacts;
- enable the project developers' and the fund's institutional learning, contributing to improve project quality and to investment prioritization, thus supporting decision-making processes;
- verify compliance by supported projects with the Cancun safeguards agreed upon under the scope of UNFCCC for REDD+ actions; and
- verify the projects' alignment with the PPCDAm, with the state plans for prevention and control of deforestation and with the National REDD+ Strategy.

The highlight of 2019 was the conclusion of the mid-term evaluation of the Amazon Fund's effectiveness, covering the period from 2008 to 2018. This evaluation was carried out by a team of independent consultants, with the technical coordination of the UN Economic Commission for Latin America and the Caribbean (Eclac).

This evaluation also included two complementary studies, one analyzing the distribution of benefits to the beneficiaries of the initiatives supported by the Amazon Fund and the other assessing the impact of the CAR implementation projects.

This mid-term evaluation of the Amazon Fund covered its first ten years of operation within a context where very few government programs complete the full cycle of planning, execution, monitoring and evaluation of impacts. This is now the case of the Amazon Fund, which was subjected to a world-class technical analysis of its effectiveness through this mid-term evaluation.

On August 7, 2019, a round of consultations with experts was held, as part of the mid-term evaluation, in which the preliminary report prepared by the independent team of consultants and the complementary studies carried out were discussed. This round with specialists was held in Brasília, with an expressive participation of environmental and forest conservation specialists, including representatives of the MMA and of the governments of Germany and Norway, directors of several institutions such as KfW and Eclac, and the Amazon Fund's team.

This broad evaluation of the effectiveness of the Amazon Fund made recommendations for improvements and concluded that there is clear evidence of the Amazon Fund's contribution to deforestation reduction in the Amazon. Both the evaluation and its complementary studies are available at the Amazon Fund's website.³⁴

³³ <http://www.fundoamazonia.gov.br/en/monitoramento-e-avaliacao/independent-evaluations/>

³⁴ Available at: (1) <http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Mid-Term-Evaluation-Report-Effectiveness-Amazon-Fund.pdf> (2) <http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Amazon-Funds-Benefits-Distributions-Study.pdf> (3) <http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Study-Projects-Supporting-the-Rural-Environmental-Registration-CAR.pdf>

Mid-term Evaluation of the Effectiveness of the Amazon Fund

Below are some highlights from the mid-term evaluation report on the effectiveness of the Amazon Fund, which covers the period from 2008 to 2018.

This evaluation was carried out by a team of independent consultants, with the technical coordination of UN's Eclac.

Findings and conclusions on the governance and effectiveness of the Amazon Fund:

- i. The fund's implementation over the ten years evaluated was a path of learning, of building trust between different actors and of continuous improvement of the strategies for providing project support.
- ii. The high qualification of BNDES employees, the soundness of operating practices and the transparency in the use of resources consolidated throughout these ten years a management model that can be replicated in other countries.
- iii. Working with third sector organizations has increased the capillarity of the Amazon Fund and also government presence in remote areas.
- iv. Although there is clear evidence that the Amazon Fund has contributed to reducing deforestation in the Amazon, it is a great challenge to estimate this contribution quantitatively.
- v. It was concluded that the fund has not altered deforestation trends in recent years, but also that without its establishment deforestation would have been greater.
- vi. Most of the sustainable production component projects evaluated showed reductions in deforestation in their areas of implementation.
- vii. A high point was the fund's learning process in building partnerships aimed at addressing the demands of indigenous communities while, at the same time, promoting forest conservation in the TIs.
- viii. The projects supporting fire brigades showed positive results in the prevention and combat of fires and contributed to the interstate coordination of state fire brigades.
- ix. One major problem to be addressed is the lack of information on the economic and social impacts of projects supported by the Amazon Fund, especially those related to sustainable productive activities.
- x. The projects that have already been completed and evaluated, and of which there are information on economic impacts, delivered improvements in the quality of life, increases in income (although sometimes of little magnitude), compliance with Cancun safeguards and progress in gender equality.
- xi. Amazon Fund's support for CAR demonstrates that deforestation is lower in registered areas than in nonregistered areas.

- xii. Analyzes carried out showed that the supported CAR projects contributed to prevent deforestation of 8,571 km² in the Amazon and Cerrado biomes from 2014 to 2018. This area is larger than the area deforested in the Brazilian Amazon in 2018.
- xiii. The structuring of the state environmental departments with physical and technological infrastructure, geospatial analysis systems and georeferenced environmental databases contributed directly to strengthen the states' control and monitoring capacity. CAR is used for environmental licensing in all states, and most also use it for inspection purposes and holding rural landowners accountable for environmental offenses.
- xiv. Projects within the scope of the science, innovation and economic instruments component helped to strengthen deforestation monitoring and related complementary analyses. In this respect, the Amazon Fund's support is important to the monitoring of other biomes, in order to obtain a comprehensive overview of deforestation in Brazil, as well as the fund's support to the Brazilian Forest Service (SFB) to carry out the National Forest Inventory.
- xv. There were also interesting experiences regarding environmental services payment as an economic instrument for forest conservation, especially those aimed at protecting springs.

Regarding unexpected results, the independent evaluators mention:

- xvi. Over these ten years, third sector organizations have learned to work in accordance with BNDES's requirements. BNDES's criteria for project selection and analysis promoted professionalism in these organizations' financial administration and project management, which increased their access to other more demanding sources of financing such as international funds. Some respondents mentioned that the access to the fund's resources conferred a "seal" attesting good governance.
- xvii. Although spaces for coordination and collaboration between states were already in place, participation in COFA also strengthened their cooperation and the exchange of experiences, as well as enhanced coordination in environmental management.
- xviii. The close cooperation between a large development bank and public and private entities promoting sustainability in the Brazilian Amazon is a positive indirect impact of the Amazon Fund, as it brings two relatively disconnected sectors to work together.
- xix. The fund has become a global benchmark for other climate, biodiversity and pay-for-results funds. The experience with the Amazon Fund helped Norway and its International Climate and Forest Initiative (NICFI) establish other funds and activities in several other countries. These other cooperation initiatives did not reach the Amazon Fund's scale, due to the lack of institutions with BNDES's size and capacity. In addition, NICFI's effort to include forests into the global climate agenda has resulted in the inclusion of this theme in the 2015 Paris Agreement.

Some challenges and recommendations pointed out by the independent evaluators:

- xx. The challenges and recommendations cover different areas, some of which are outside the scope of the Amazon Fund operation, such as infrastructure and logistical bottlenecks and the dissemination of communication and information technologies. In the current context, undertaking new business ventures requires adequate access to the internet throughout the Amazon region. Other technologies for product tracking should be tested and supported to reduce competition from illegal products, specifically in the timber and fishery sector.
- xxi. Encourage the submission of projects aimed at providing means and instruments for streamlining the land regularization process in the states; and establish more comprehensive, detailed guidelines for land regularization procedures to stimulate project submission.
- xxii. In order to extend CAR usage to other environmental management policies, it will be necessary to improve database analysis, which will require a significant effort by the states. Continuing support for CAR analysis is understood by the states as crucial for sustaining the results of the projects already supported.
- xxiii. The fund's governance and management face several challenges. The long-term sustainability of the fund requires diversification of donors, as well as establishing agreements with the private sector (Brazilian or international) and exploring opportunities for mixed financing.
- xxiv. The Amazon Fund's team at BNDES should be expanded to respond more quickly to project proposals and to the monitoring of approved projects. The time from approval to disbursement of resources can be reduced. To start, the pipeline of more than R\$ 1 billion for projects under analysis and under consultation could be approved quickly to increase the fund's impact.
- xxv. The physical distance between organizations in the Amazon and the BNDES team in Rio de Janeiro could be reduced with the establishment of a fund's representation office in the Amazon region.
- xxvi. The 3% of donations to the fund earmarked for operating costs and other fund's expenses should be renegotiated to strengthen management in the areas mentioned. Many of the organizations that manage similar resources apply percentages above 10% to this end.
- xxvii. COFA has played a crucial role in the Amazon Fund's governance. It is recommended to strengthen this body, maintaining a balanced representation of all stakeholders. COFA should be a space for dialogue and consensus building for the fund's guidance and support, which must be continually improved.
- xxviii. The positive results achieved by the projects and the Amazon Fund are not widely disseminated, which weakens their public image and reduces the potential for resource mobilization. The extensive communication effort already made through the website can be reinforced by other means of communication and events to disseminate these results.

- xxix. It is also necessary to improve project knowledge management since the lessons learned are not sufficiently systematized. Improving the exchange of experiences and mutual learning between the projects would help create opportunities for spillovers, increase the scale and/or replicability of projects with positive results and facilitate synergies between the actions developed. COFA's potential as a space for exchanging experiences, debate and collaboration should be used to enhance synergy between social actors.
- xxx. The reduction of gender inequality as a transversal criterion for supporting projects needs to be enhanced by encouraging women participation and support for gender equality.
- xxxi. Problems with public partners have arisen in the Amazon Fund's implementation. At the federal level, recent fiscal tightening (budget cuts) hindered the execution of Amazon Fund projects and federal policies, generating a risk of loss of additionality. At the state level, frequent political changes (electoral cycle) and a low number of permanent public employees lead to discontinuity in priorities and teams, generating risks of activity suspension, loss of memory and institutional learning and low sustainability potential. Projects managed by municipalities have showed widespread implementation problems, except for one project.
- xxxii. Public agencies (federal, state and municipal) are crucial in achieving the fund's objectives. Support for states and municipalities in project implementation is essential and cooperation between government, private sector and civil society should be established to allow agile and flexible project execution by states and municipalities.
- xxxiii. There are opportunities for intensifying efforts already initiated to involve the private sector and promote sustainable production chains in all the fund's operational areas.
- xxxiv. The Amazon Fund has made little progress in increasing public forestry concessions. Opportunities for providing the fund's support to expedite sustainable wood production in forestry concessions should be pursued. These are strategic investments that, with the fund's support at the beginning of operations, could attract more private investment.
- xxxv. In the science, technology and innovation component, knowledge of Amazon biodiversity and of its potential for commercialization is also strategic and the fund should participate in the support for applied research projects.
- xxxvi. Investments made in support for environmental regularization policies (mainly the CAR) need to be continued, as well as synergistic policies for achieving sustainable results.
- xxxvii. Finally, a percentage of the fund's resources should go to projects that allow experimentation and innovation, even if results are uncertain. Technological, commercial and management innovation could encourage new opportunities for the use of natural resources in the Amazon and promote new business models.

Amazon Fund's risk management




Risk management is an integral part of the Amazon Fund management and of the projects it supports. External factors that may negatively influence project execution or the maintenance of the results achieved by the fund are considered risks.

The following procedures were established for the Amazon Fund's risk management:

- presentation of the risks identified, based on the logical framework and the intervention logic stemming from the Amazon Fund's general objective and its indirect effects;
- evaluation of the probability of each risk identified; and
- definition of measures and provisions for their mitigation, when possible, to be adopted by the Amazon Fund or other relevant actors.

Risk management involves periodically reviewing the behavior of risks and effects of mitigation measures. The review carried out in 2019 reassessed from medium to high the risk "growth in demand for new land for cultivation and pasture," and a new medium risk was identified, "new governance and public policy priorities affect the development model."



GENERAL OBJECTIVE: Reduction in deforestation with sustainable development in the Brazilian Amazon		
Risk identified	Probability	Response/mitigation
Migration flows in the Amazon exert pressure on the environment		<p>The Brazilian Amazon has the highest fertility rates in the country and receives migratory flows associated with agriculture expansion and with the demand for labor for large infrastructure projects, such as hydropower and road projects.</p> <p>A noteworthy development is the resurgence in 2019 of Venezuelan immigration to the Amazon state of Roraima. According to United Nations data (February 2019), Brazil has already received 96,000 Venezuelan immigrants and refugees.³⁵</p> <p>These pressures reinforce the need to adopt measures to combat deforestation and promote a new sustainable model of orderly occupation of the Amazon. The Amazon Fund makes strong efforts to achieve this objective through all the components it supports: sustainable production, monitoring and control of deforestation, land-use planning and scientific and technological development.</p> <p>The Amazon Fund continues to assess risk as medium.</p>
New strategies and technologies are adopted by offenders to illegally deforest		<p>New monitoring and control technologies have been countered by offenders adopting geoprocessing technologies to select areas for illegal logging.</p> <p>Changes in deforested areas' size patterns are likely related to the use of these new technologies by environmental offenders. Areas larger than 100 hectares were found to represent 27% of the area deforested in the Brazilian Amazon in 2017,³⁶ increasing to 31% in 2018³⁷ and 35% in 2019 (data for 2018 and 2019 are still preliminary).</p> <p>The continuity of public land allocation in the Amazon region and the implementation of control instruments in private areas may help to contain deforestation, since these two land categories represent jointly about 61% of deforestation in the Amazon (preliminary data for 2018³⁸). The fact that CAR implementation is reasonably advanced in the states of the region underscores the importance of advancing the implementation of environmental regularization programs, as well as of environmental monitoring and deforestation control activities.</p> <p>The Amazon Fund has been supporting public agencies in CAR implementation and in developing and improving satellite monitoring and control systems (optical and radar) of the Amazon forest, besides supporting environmental inspection missions.</p> <p>The risk continues to be assessed as medium.</p>
Changes in Brazilian environmental laws reduce forest protection		<p>In October 2019, Law No. 13,887/2019 was enacted, amending two articles of the Forest Code (Law No. 12,651/2012) that regulate the Rural Environmental Registry (CAR) and the Environmental Regularization Program (PRA). The new legislation revoked the deadline for registering rural properties in the CAR, even though participation in PRAs is guaranteed only to owners registered in CAR up to December 31, 2020.</p> <p>Such measures may have effects such as increase in deforestation and the consolidation of illegally deforested areas in the Amazon.</p> <p>In view of the uncertainties regarding the immediate consequences of these developments, risk assessment remains as a medium.</p>

(Continued)



³⁵ <https://nacoesunidas.org/numero-de-refugiados-e-migrantes-da-venezuela-no-mundo-atinge-34-milhoes/>

³⁶ http://www.fundoamazonia.gov.br/export/sites/default/pt/_galleries/documentos/monitoramento-avaliacao/PPCDAm-PPCerrado_Balanco_2017.pdf

³⁷ http://combateaodesmatamento.mma.gov.br/images/Doc_ComissaoExecutiva/Balanco-PPCDAm-e-PPCerrado_2018.pdf

³⁸ http://combateaodesmatamento.mma.gov.br/images/Doc_ComissaoExecutiva/Balanco-PPCDAm-e-PPCerrado_2018.pdf

(Continuation)


GENERAL OBJECTIVE: Reduction in deforestation with sustainable development in the Brazilian Amazon		
Risk identified	Probability	Response/mitigation
New forms of governance and public policy priorities change the development model		<p>Throughout 2019, and up to the writing of this report, there have been changes in the composition of some collegiate bodies in charge of developing environmental programs and policies. The main modifications were introduced by the following regulations: (i) Decree No. 9,806, dated May 28, 2019 – substantially reduced the number of members of the National Environment Council (Conama); and (ii) Decree No. 10,224, dated February 6, 2020 – changed the composition of the deliberative council of the National Environment Fund (FNMA), which now is exclusively composed of Federal Government representatives.</p> <p>In turn, Decree No. 10,239, dated February 11, 2020, moved the National Amazon Council from the Ministry of the Environment to the Vice-Presidency of the Republic, which may signal an improvement in the coordination and monitoring of policies for the Brazilian Amazon.</p> <p>Changes in the composition of collegiate bodies can directly affect the control of deforestation, besides impacting development policies such as those carried out by the Amazon Fund.</p> <p>The risk is assessed as medium.</p>
Climate change causes periods of prolonged drought and forest fires		<p>Brazil's adherence to the Paris Agreement and the fulfillment of its goals contribute to climate change mitigation in Brazil and in the world. In 2019, already under a new government, Brazil's permanence in the Paris Agreement was confirmed under the free trade agreement between the Southern Common Market (Mercosur) and the European Union.³⁹ The association between Mercosur and the European Union will only be binding after the completion of the legal procedures necessary for its entry into force.</p> <p>Annual climate monitoring reports prepared by NASA and the National Oceanic and Atmospheric Administration (NOAA) show that the average temperature in 2019 was the second highest since 1880, with the five warmest years being exactly those since 2015.⁴⁰ In turn, the 2019 preliminary report prepared by the World Meteorological Organization (WMO), released at COP 25 in 2019, points out that the global average temperature in that year was 1.1° C above pre-industrial levels.⁴¹</p> <p>These results corroborate the projections on climate change in Brazil produced by the Brazilian Panel on Climate Change (PBMC), which foresees a decrease in rainfall in the Amazon and the consequent intensification of the dry period and increase in forest fires.</p> <p>In 2019, the largest number of forest fires and burn-offs in the Brazilian Amazon was recorded in August, according to data from the Inpe Queimadas program.⁴² The year ended with an overall increase of about 39% in the number of fires detected by satellite in comparison with 2018. The occurrence of hot spots varies due to climate changes and human activities, which range from the use of fire in agriculture to clean and prepare the soil to the removal of native vegetation by public land invaders.</p> <p>The Amazon Fund supports projects that contribute to achieving the goals of the Paris Agreement, including recovering and replanting 12 million hectares of forests by 2030; expanding the scale of sustainable systems for managing native forests; promoting compliance with the Forest Code; and achieving zero illegal deforestation in the Brazilian Amazon by 2030.</p> <p>The Amazon Fund continues to assess the risk as high.</p>


³⁹ Article 6, chapter "Trade and Sustainable Development" of the document describing the commercial pillar of the Agreement between Mercosur and the European Union. http://www.itamaraty.gov.br/images/2019/Comrcio_e_Desenvolvimento_Sustentavel.pdf

⁴⁰ https://data.giss.nasa.gov/gistemp/graphs/graph_data/Global_Mean_Estimates_based_on_Land_and_Ocean_Data/graph.txt

⁴¹ <https://public.wmo.int/en/media/press-release/wmo-confirms-2019-second-hottest-year-record>

⁴² http://queimadas.dgi.inpe.br/queimadas/portal-static/estatisticas_estados/

Component 1 – Sustainable production		
Risk identified	Probability	Response/mitigation
Economic slowdown hinders the development of a sustainable forest-based economy		<p>Economic activity in the Amazon improved in 2019. Northern Brazil's economic growth was estimated at 4.2% in the 12-month period ended in November 2019,⁴³ compared with 0.9% in Brazil as a whole in the same period.⁴⁴</p> <p>The annual production of the basket of forest-based extractive products followed by the Amazon Fund grew by 2% in volume and by 7% in nominal revenue in 2018 compared with 2017. A 30% increase in Brazil nut production stands out among basket products; on the other hand, there was a significant decrease of 26% in oilseed production.</p> <p>The Amazon Fund has supported the structuring and expansion of forest-based production chains and the environmental sustainability of small farmers. The integration of production, distribution and commercialization chains is a decisive factor in adding value to forest-based economic activities, especially regarding productive activities of populations living in remote regions with little access to public services.</p> <p>This risk is assessed as medium.</p>

Component 2 – Monitoring and Control		
Risk identified	Probability	Response/mitigation
Agrarian reform policy inconsistent with the environmental policy		<p>In 2019, Law N° 11,952, of 2009, regulating the regularization of occupied federal or Inca (National Institute for Colonization and Agrarian Reform) lands was amended by Provisional Measure (MP)⁴⁵ N° 910/2019, which was still being discussed in the Chamber of Deputies when this activity report was written.</p> <p>Among the changes introduced by MP N° 910/2019, the following stand out: (i) increase in the extent of the area (from 4 to 15 fiscal modules⁴⁶) that can be regularized by mere occupant statement without further verification and (ii) public areas occupied before 2014 (in the case of land purchases, up to 2018) are now eligible for regularization, compared with the previous time limit of 2008 for occupied public areas.</p> <p>The Amazon Fund supports as priorities CAR and PRAs implementation, support for sustainable production in agrarian reform settlements and support for public agencies' efforts to improve monitoring and control systems.</p> <p>The risk continues to be assessed as medium.</p>

(Continued)




⁴³ The Northern region of Brazil comprises seven of the nine states in the Brazilian Amazon.




⁴⁴ Data consolidated in the Central Bank's Regional Economic Activity Index (IBCR), which is a leading indicator of GDP behavior with regional breakdown: <https://www.bcb.gov.br/content/publicacoes/boletimregional/202001/br202001c1p.pdf>. Brazilian GDP increased 1.1% in 2019, according to IBGE data disclosed in March 2020.

⁴⁵ Provisional Measure (MP) is a legal act signed by the President of the Republic, with immediate force of law, without Congress participation, which must discuss and approve it after presidential sanction.

⁴⁶ Fiscal module is a land measurement unit used in Brazil, established by Law No. 6,746, of 1979. It is expressed in hectares and is variable, being defined for each municipality.

(Continuation)




Component 2 – Monitoring and Control		
Risk identified	Probability	Response/mitigation
Insufficient monitoring and repression of deforestation due to tax restrictions	  	<p>The repression of illegal logging – which has lower costs than legal activities – is essential for developing a legal and competitive logging production chain, as well as for preventing private occupation of public lands by land grabbers who conduct illegal deforestation.</p> <p>Although the economy has been showing a continuous recovery since 2017, including in tax revenues (in 2019, the Federal Government's total revenues grew 6.1%, in real terms, compared with 2018), the challenge of controlling public expenditure remains, which translates into budgetary constraints.</p> <p>To illustrate the scale of this challenge, it should be noted that budget allocation to Ibama, the main body of the Ministry of the Environment in charge of environmental licensing, monitoring and inspection, has not grown in recent years.</p> <p>The importance of deforestation monitoring and control for the Amazon Fund is evidenced by the fact that half of the ten largest projects supported (by value of support) were aimed at supporting satellite environmental projects and the monitoring and repression of environmental crimes by police forces.</p> <p>The challenge of balancing the public budget remains on the government's agenda and will probably be reflected in pressures to control expenditures, hampering the expansion of actions and requiring prioritization efforts and new forms of inspection and monitoring by public agents.</p> <p>In view of the large territorial scale of the Amazon and the persistence of fiscal restrictions, the Amazon Fund continues to assess the risk as high.</p>

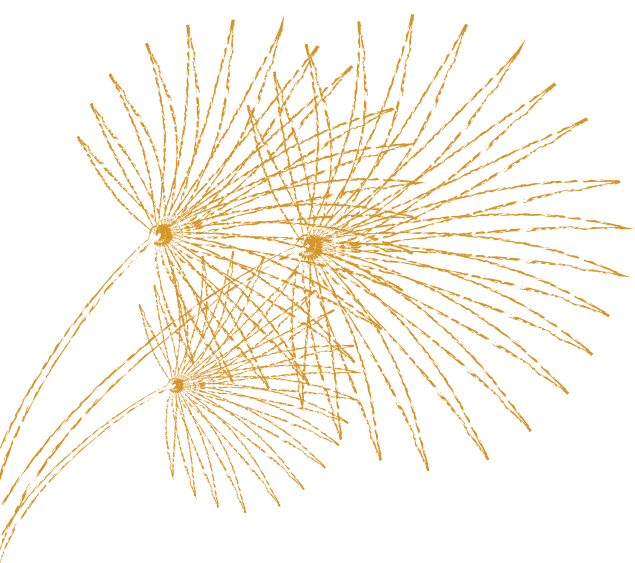
Component 3 – Land-Use Planning		
Risk identified	Probability	Response/mitigation
Growth in demand for new lands for cultivation and pasture	  	<p>Inpe' TerraClass project,⁴⁷ a partnership with Embrapa, mapped the use made of deforested areas in the Brazilian Amazon, over the ten-year period between 2004 and 2014. A thematic classification identified that 63% of deforested areas in the Amazon are being used as pasture and 6% for annual agriculture.⁴⁸</p> <p>The expansion of large-scale pastures and farming is one of the most relevant factors pressuring demand for land in the Amazon. Cattle herds in the Amazon increased 17% between 2009 and 2018, totaling 86.6 million animals.⁴⁹ In turn, soy cultivation in the Amazon grew 7% in area between 2009 and 2018, reaching 12.2 million hectares.</p> <p>Throughout 2019, two events may have a possible impact on the growth in demand for available land in the Amazon:</p> <p>i) the repeal of Decree No. 6,961/2009, which established the agroecological sugarcane zoning (ZAE Cana) and explicitly excluded, for the purpose of expanding production, the Amazon and Pantanal biomes, in addition to the Upper Paraguay basin, where Pantanal rivers are formed; and</p> <p>ii) some soy producers are demanding the withdrawal from the voluntary commitment entered into in 2006 by industries and the largest trading companies operating in the country, called the "soy moratorium," which is based on the noncommercialization of soy produced in areas that were deforested after 2008 in the Amazon biome. Estimates suggest that this sector pact has been able to limit deforestation aimed at agricultural expansion in the Amazon.</p> <p>The Amazon Fund supports projects undertaken by federal agencies such as Inpe, Censipam and Ibama, aimed at environmental monitoring and control; sustainable productive projects to promote low environmental impact agriculture; and environmental regularization projects, such as support for the CAR.</p> <p>The risk is now assessed as high.</p>

⁴⁷ http://www.inpe.br/cra/projetos_pesquisas/dados_terraclass.php

⁴⁸ <https://ainfo.cnptia.embrapa.br/digital/bitstream/item/152807/1/TerraClass.pdf>

⁴⁹ <https://sidra.ibge.gov.br/tabela/3939#resultado>

Component 4 – Science, Innovation and Economic instruments		
Risk identified	Probability	Response/mitigation
Qualified technical staff and researchers leaving the region	  	<p>Several indicators related to professional training and to research, development and innovation (RD&I) attest that the Amazon remains behind other regions of the country. Regional data from the Coordination for the Improvement of Personnel (Capes) for 2018 reveals that the Brazilian Amazon has only 10.7% of Brazil's graduate programs and 6.8% of the country's graduate scholarships.⁵⁰ In both cases, these percentages are below the region's participation in the national population and GDP.</p> <p>Equally low percentages are observed in the CNPq's (National Council for Scientific and Technological Development) support for research projects in the region and in the filing of all modalities of patents at the INPI. Given these numbers, the region continues to have low attractiveness for researchers and high risk of human capital flight.</p> <p>In 2019, activities of research funding institutions were affected by budget constraints, especially by a partial freeze of scholarship payments, which were regularized at the end of the year. This context of scarcity discourages local training and employment of researchers, particularly harming less consolidated Science, Technology and Innovation (ST&I) institutional ecosystems, such as those in the Brazilian Amazon.</p> <p>The Amazon Fund supports scientific and technological development, as well as local employment of researchers, by supporting specific research projects, which includes, among other activities, the construction and equipment of state-of-the-art laboratories and the granting of scholarships. An example is the training of around 2,000 people in sustainable forest management techniques, within the scope of a supported ST&I project carried out by the Tropical Forest Institute, which increased the adoption of this model in the region.</p> <p>The fund also released, in 2019, <i>ex post</i> effectiveness evaluations of five ST&I completed projects: Biodiversity, Amazon Bioactive Compounds, Mangrove Forests, Belém Islands and Public Policy Incubator in the Amazon, all implemented by the Federal University of Pará (UFPA). These evaluations helped systematize lessons learned that should enhance future support granted by the fund, thus improving this component results.</p> <p>The risk continues to be assessed as high.</p>



⁵⁰ <https://geocapes.capes.gov.br/geocapes/>

Risk impact assessment for the Amazon Fund in 2019

Based on the identified risks (see preceding section) that may negatively influence project execution or the sustaining of the results achieved by the Amazon Fund, some of these risks' impacts were evaluated, indicating how seriously they might hinder the achievement of the general objective of reducing deforestation.

1. Regarding the risk "changes in Brazilian environmental laws reduce forest protection," legal changes already in force and other proposals submitted to the National Congress may have a negative impact on forest protection, contributing to an increase in deforestation in the Amazon.

Should this happen, the Amazon Fund's fundraising capacity would be compromised, as well as the achievement of its general objective of reducing deforestation with sustainable development in the Brazilian Amazon.

2. With regard to the risk "new forms of governance and public policy priorities change the development model," various environment-related collegiate bodies had their composition altered in 2019. These changes aimed, among other goals, to rationalize decision-making by reducing the number of members of these collegiate bodies. At the beginning of 2020, while this activity report was being prepared, the National Amazon Council of the Ministry of the Environment was transferred to the structure of the Vice-Presidency of the Republic, signaling an additional high-level coordination effort involving various ministries in the implementation of public policies related to the Brazilian Amazon.

This new governance will face the challenge of sustaining Brazil's role as a global player in climate change, advancing the planning of initiatives aimed at the Paris Agreement implementation and the achievement of the voluntary goals proposed by the country.

3. With respect to the risk of "agrarian reform policy inconsistent with the environmental policy," it is important to pay attention to the effects of the eventual conversion into law of MP 910/2019, especially with regard to the extension of the time frame from 2008 to 2014 for the titling of occupied public lands and the increase, from four to 15 fiscal modules, of the extent of areas eligible to regularization through occupant self-declaration.

A positive contribution of these measures to land regularization, including in agrarian reform settlements in the Amazon, depends on environmental regularization efforts, the use of instruments for technical assistance and rural extension (Ater) and the promotion of forest sustainable productive activities; otherwise negative impacts resulting from new deforestation may occur.

4. Regarding the risk of “qualified technical staff and researchers leaving the region,” the scenario of low ST&I investment in the Amazon hinders the production and dissemination of knowledge and technologies that can contribute to the recovery, conservation and sustainable use of the forest. The medium-term impacts of such deficiency translate into reduced value added to sociobiodiversity chains and the perpetuation of unsustainable economic activities.

For the Amazon Fund, in addition, deficiencies in research and innovation negatively affect the supply of qualified human resources for the implementation of ST&I projects and the production of data and statistics necessary for developing high-quality public policies for the region.





CONCLUDED PROJECTS

* The concluded projects are those that: (i) performed the planned activities; (ii) have their accounts approved; and (iii) conducted an evaluation of their results.



Forest Protection in the State of Tocantins

PROJECT MANAGEMENT

State of Tocantins, having as executor the State of Tocantins Military Firefighters (CBMTO)

REGIONAL SCOPE

State of Tocantins, with emphasis on its north-central region, from the Environmental Protection Battalion, located in the municipality of Araguaína

BENEFICIARIES

Population of the state of Tocantins, in particular from its north-central region

OBJECTIVES

Support actions to monitor, prevent and combat deforestation resulting from forest fires and unauthorized burn-offs in the state of Tocantins, with emphasis on its north-central region, through capacity building, structuring of mechanisms, integrated management and the acquisition of materials and equipment for the Environmental Protection Battalion, located in the municipality of Araguaína

TOTAL COST OF THE PROJECT

R\$ 6,697,880.00
US\$ 3,691,715.81

AMAZON FUND SUPPORT

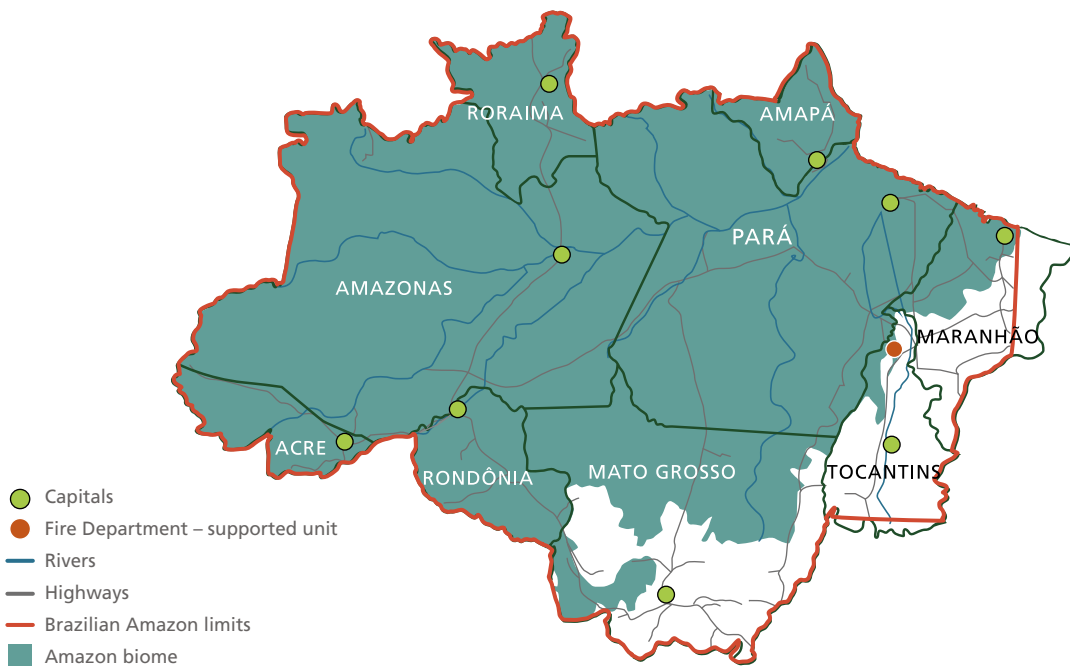
R\$ 4,958,910.00
US\$ 2,733,235.96

EXECUTION PERIOD

4th quarter 2012 to
2nd quarter 2019

PROJECT EVOLUTION

DATE OF APPROVAL	DATE OF CONTRACT	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
Mar 27, 2012	Aug 9, 2012	R\$ 4,958,910.00 US\$ 2,733,235.96	100%



Context

With an estimated population of 1.6 million inhabitants,⁵¹ the state of Tocantins occupies an area of 278,000 km², representing 3.3% of the Brazilian territory. The occupation of the state occurred through government programs for the development and integration of the Amazon in the national economy, carried out in the 1960s and 1970s; through the construction of the Belém-Brasília highway (BR-153); and through the creation of the state in 1988.

Currently, the state of Tocantins is part of the region of the great national agricultural frontier, called Matopiba, which comprises the Cerrado biome of the states of Maranhão, Tocantins, Piauí and Bahia and accounts for an important portion of the Brazilian grain and fiber production. In Tocantins, the three agricultural products of greatest economic relevance are, respectively, soybeans, meat and corn.

In the Amazon, fire is one of the most used instruments in productive activities, through the practice of cutting and burning vegetation for clearing swidden areas and transforming forest into pasture. Although the use of controlled fire in the Cerrado sometimes has ecosystemic functions, forest fires and unauthorized burn-offs impact soil fertility, destroy biodiversity, weaken ecosystems, destroy transmission lines, compromise air quality, increase the risk of road accidents and limit air traffic, among other negative effects.

Concurrently with the presentation of the Tocantins Forest Protection project in 2012, a broad state mobilization around the Tocantins Fire Fighting Action Program was announced, which brought together 24 government, private sector and third sector institutions.

The project

The project was carried out by the State of Tocantins Military Firefighters (CBMTO) and aimed to contribute to the reduction of greenhouse gas emissions from forest fires and unauthorized burn-offs.

The project supported actions to monitor, prevent and combat deforestation resulting from forest fires and unauthorized burn-offs in the state of Tocantins, with emphasis on its north-central region, through the training of managers, the structuring of integrated management mechanisms and the acquisition of materials and equipment for the Environmental Protection Battalion, located in the municipality of Araguaína.

⁵¹ Available at: <https://www.ibge.gov.br/apps/populacao/projecao/>

Intervention logic

The project is part of the “monitoring and control” component (2) of the Amazon Fund’s Logical Framework. Its direct effect was thus defined in the project’s logical framework: “State of Tocantins Military Firefighters (CBMTO) better structured for monitoring and combating deforestation caused by forest fires and unauthorized burn-offs.”

The occurrence of forest fires is related to the duration of dry seasons and to the use of fire in productive activities. Usually, it is also one of the stages of the process of illegal deforestation aimed at land grabbing,⁵² when, after the removal of larger (more valuable) trees, fire is used to open new areas for farming.

Structuring the CBMTO to expand actions aimed to monitor and combat forest fires and to train managers, civil firefighters and the community directly contributes to reducing the loss of vegetation cover due to forest fires and unauthorized burn-offs. This contributes to the Amazon Fund’s general objective of reducing deforestation with sustainable development in the Amazon.

Activities executed

The project was structured around four components and was fully executed. The main activities performed by component are detailed below:

- Strengthen activities to monitor, prevent and combat deforestation caused by forest fires and unauthorized burn-offs

Within this objective, an extensive list of equipment essential for the final activity of the CBMTO was acquired, with emphasis on three forest trucks with large-capacity (4,000 liters) and for the transport of firefighters to fight large forest fires, in addition to 13 4x4 type vehicles (trucks) for fast and initial actions of fire prevention and combat. Additionally, communication and location equipment was purchased, such as mobile radios, laptops and GPS devices, as well as mobile kits to combat fire and logistical support material and equipment: a truck with capacity to transport eight tons of material, two buses to transport military firefighters and civil firefighters, 264 flexible backpacks with back pumps and tents for up to 150 firefighters.

- Promote the training of managers of the main government agencies involved in managing the combat against forest fires and burn-offs and the training of the community in general

⁵² Land grabbing in Brazil is the illegal practice of taking possession of vacant (public) lands, often including the falsification of documents.

In the scope of manager training, there were workshops on the mapping of areas of risk, coordination of firefighting operations and analysis and interpretation of images. Since the beginning, there was a concern to involve the largest number of managers linked to agencies that are part of the Fire Committee,⁵³ which meets for the planning and execution of forest fire prevention and combat activities in the state. Thus, professionals of the following agencies were trained: CBMTO, Civil Defense, Tocantins Nature Institute (Naturatins), Department of Agriculture, Livestock and Supply (Seagro), State Department of Health (Sesau), Independent Environmental Police Company (Cipama), Department of Roads (Dertins), State of Tocantins Rural Development Institute (Ruraltins), State Public Prosecutor's Office (MPE), Department of Education and Culture (Seduc), Department of Public Security (SSP/TO), through the Environment Police (Dema), Department of Water Resources and Environment (SRHMA), the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama), Chico Mendes Institute for Biodiversity Conservation (ICMBio), Brazilian Army, National Institute of Colonization and Agrarian Reform (Incra), Metropolitan Guard of Palmas and the Federation of Agriculture of the state of Tocantins (Faet). In total, 466 public servants were trained.

The training in the community included workshops for the training of 1,626 civil firefighters and capacity building in forest fire prevention and combat. The events were held by CBMTO firefighters in spaces provided by the municipalities and enabled with the use of equipment and materials acquired with resources of the project.

- Structure the situation room of the State Fire Committee

The situation room is a technical unit responsible for the compilation and systematization of data on possible incidents and the occurrence of burn-offs and forest fires, generating information on the main characteristics of the affected area. Consisting of interdisciplinary teams, the situation room provided agility in the tracing of fire spots and immediate mobilization of responsible agencies. Among others, the project's activities consisted of the acquisition of five desktop computers, two laptops, a projector and a 52" LCD TV.

- Implement the actions provided in the Tocantins Fire Fighting Action Program, prepared by the State Forest Fire Combat and Burn-Off Control Committee, under the responsibility of the State Civil Defense Coordination

The activities associated with this objective promoted the sensitization and guidance of rural producers in the state through preventive notifications and information on soil management, construction of firebreaks and legal use of fire (authorization and controlled burn-off). Four education and awareness raising campaigns were carried out with advertising in various media, in addition to 93 actions in the municipalities with the highest rates of fires.

⁵³ The Fire Committee was established by the State Decree 645 of August 20, 1998, with the aim of improving fire control and prevention actions in the state of Tocantins.

Result and impact indicators

The project activities contributed to the results related to the “monitoring and control” component (2) of the Amazon Fund’s Logical Framework.

Direct effect 2.1: CBMTO better structured for monitoring and combating deforestation caused by forest fires and illegal burn-offs.

The main indicators agreed for the monitoring of this objective were:

- Number of servants effectively trained using the acquired knowledge (outcome indicator)

Goal: not set | Result achieved: 466

It was verified that 466 managers of CBMTO and partners, trained through workshops on mapping risk areas, coordination of firefighting operations and analysis and interpretation of images, are using the knowledge acquired.

- Number of citizens trained (output indicator)

Goal: 500 | Result achieved: 1,626

During the project, forest fire prevention and fighting techniques were disseminated through the training of 1,626 civil firefighters.

- Number of heat spots (outcome indicator)

Goal: not set | Result achieved: 7,108

In 2018, 7,108 heat spots were recorded in the state of Tocantins. As a baseline for this indicator, 14,132 heat spots were considered – an estimation based on the average of the period from 2003 to 2012 (ten years prior to 2013, first year of implementation of the project⁵⁴). Therefore, during the project execution period, the number of heat spots in the state of the Tocantins was reduced to about half.

It is important to note that the increase or reduction in the number of heat spots in the state of Tocantins are influenced by meteorological issues, varying greatly from one year to the next depending on the duration of the dry season. However, the project acted directly in preventing and fighting forest fires, which contributes to reducing heat spots. In this context, the on-screen indicator is not sufficient to assess the effectiveness of the project supported by the Amazon Fund, although it is a favorable sign and a reference for evaluating the other indicators of the project.

⁵⁴ The definition of the baseline of this indicator as an average of the years prior to the implementation of the project is due to the fact that the occurrence of heat spots varies significantly according to changes in the climate. That is, in some years there is substantial increase in heat spots that did not result directly from human action, but rather from climatic events, such as the atmospheric-oceanic phenomenon called El Niño. Therefore, the use of an average of years allows to mitigate these years with atypical variations.

TABLE 23 | HEAT SPOTS IN THE STATE OF TOCANTINS

Baseline	2013	2014	2015	2016	2017	2018
14,312	8,975	11,890	12,514	12,903	14,070	7,108

Source: BNDES, based on information from the Burn-off Database of the National Institute for Space Research (Inpe).

- Number of forest fires or unauthorized burn-offs directly fought by CBMTO (outcome indicator)

Goal: not set | Result achieved: 1,320

During 2018, a total of 1,320 forest fires and unauthorized burn-offs were fought, while in 2012 (project baseline) 710 forest fires or burn-offs had been fought, which shows an 86% increase in the capacity to fight forest fires and burn-offs. This variation clearly shows the increased response capacity of the corporation based on the project's interventions, which demonstrates that, through the Amazon Fund support, firefighters in the state of Tocantins have been expanding their activities in the fight against forest fires.

TABLE 24 | NUMBER OF FOREST FIRES OR UNAUTHORIZED BURN-OFFS DIRECTLY FOUGHT BY CBMTO

Baseline	2013	2104	2015	2016	2017	2018
710	734	861	1,003	1,115	1,415	1,320

Source: BNDES, based on information from CBMTO.

- Annual deforestation in the state of Tocantins

Goal: not set | Verified amount: 25 km²

The annual deforestation by shallow cutting in 2018 in the state of Tocantins was 25 km². Considering that, in 2012, this rate was 52 km² (baseline), there was a reduction of about 50% in the annual deforestation rate.

TABLE 25 | ANNUAL DEFORESTATION IN THE STATE OF TOCANTINS (KM²)

Baseline	2013	2014	2015	2016	2017	2018
52	74	50	57	58	31	25

Source: BNDES, based on data from Inpe/Prodes.⁵⁵

⁵⁵ Inpe's Prodes system performs the inventory of loss of primary forest through the use of satellite images of the Earth for the entire length of the Brazilian Amazon.

Institutional and administrative aspects

The experience of the state of Tocantins in the mobilization of partners took significant steps with the launch of the aforementioned Tocantins Fire Fighting Action Program in 2011, which involved several federal and state agencies around three axes of action: education and awareness raising; mobilization and prevention; surveillance and fight against forest fires and control of burn-offs.

The understanding that the prevention and fight against forest fires and deforestation depend on the integrated action of public agencies from various spheres of government and on the mobilization of civil society resulted in the creation, in 2016, of the Brazilian Amazon Protection Committee (Copal), a nonprofit civil entity created to coordinate and execute actions to monitor, preserve, conserve and protect the Amazon biome by the military fire brigades of the nine states that compose the Brazilian Amazon.

Based in Palmas, Copal represented a paradigm shift in the way military fire brigades of the States of the Brazilian Amazon operate, with the inversion from a predominantly reactive and isolated logic to a preventive and strategic approach, based on technical-operational cooperation between the different bodies.

Risks and lessons learned

In general terms, it can be said that the Tocantins Forest Protection project developed satisfactorily, having executed the planned activities and achieved good results. The “number of forest fires or illegal burn-offs directly fought by CBMTO” indicator showed favorable evolution throughout the project, as well as the action to train CBMTO managers, partners and citizens.

It is worth pointing out, with regard to the acquisition of project items, the occurrence of difficulties in the bidding processes, resulting in delay in their execution. As a solution to this problem, CBMTO opted for the mode of Price Registration Minutes, in the case of the acquisition of goods.

Another difficulty was the deficiency in monitoring the work performed by the existing fire brigades in municipalities in the state, as well as the recording of occurrences served by them. The solution found was to develop a smartphone application that provides greater agility in recording and scaling fire damage through photos with geographic coordinates.

The specific characteristics of the Amazon, with large territorial extension and areas of difficult access, make the actions of firefighters riskier and more complex, requiring a differentiated strategy in relation to fire. This perception led to the initiative of creating the aforementioned Copal, with the purpose of establishing a regime of close technical-operational cooperation between these states.

Sustainability of results

The long-term sustainability of the results achieved with the Amazon Fund support, given the nature of this project, depends mainly on the budgetary conditions of the state of Tocantins, which is responsible for maintaining the main equipment acquired under the project, as well as providing CBMTO with funding resources.

It should be mentioned that the capacity building and training of public servants, carried out as a result of the project, tend to produce lasting and expanded effects, considering the dissemination of knowledge that naturally occurs in organizations and is practically independent of new contributions of public resources.

The support of local civil firefighters in rural municipalities, trained for the prevention and fight against forest fires in their initial phase, is also an element that will contribute to the reduction of burned areas, and should be sustained even after the completion of the project.

Note that the Tocantins Forest Protection project was added to the projects of other military fire brigades in the states of the Brazilian Amazon (Acre, Mato Grosso, Rondônia and Pará), and to the Prevfogo project (Ibama), all implemented with the support of the Amazon Fund. The creation of Copal, consisting of all state military fire brigades in the Brazilian Amazon, represents a first step in the combination of efforts by these corporations to fight forest fires in the region.

Finally, despite the progress already made with the support of the Amazon Fund, it is understood that the response capacity of the CBMTO should be further expanded, so that it is structured to carry out actions to determine the nature of heat spots traced by monitoring systems and properly equipped, with human and material resources, to combat all forest fires and unauthorized burn-offs traced.



Forest Sentinels

PROJECT MANAGEMENT

Vale do Amanhecer Farmers Cooperative (Coopavam)

REGIONAL SCOPE

Eight municipalities in the northwest of the state of Mato Grosso (Aripuanã, Brasnorte, Castanheira, Colniza, Cotriguaçu, Juara, Juína and Juruena)

BENEFICIARIES

Four indigenous ethnic groups (Apiaká, Caiaby, Munduruku and Cinta Larga), family farmers and petty extractors from the Vale do Amanhecer settlement and the Cantinho da Amazônia Women Association (Amca)

OBJECTIVES

Strengthen the chain of Brazil nut, from collection to processing and commercialization, increasing the income of the extractive communities that live on forest products in the northwest of the state of Mato Grosso

TOTAL COST OF THE PROJECT

R\$ 6,528,000.00
US\$ 2,709,838.11

AMAZON FUND SUPPORT

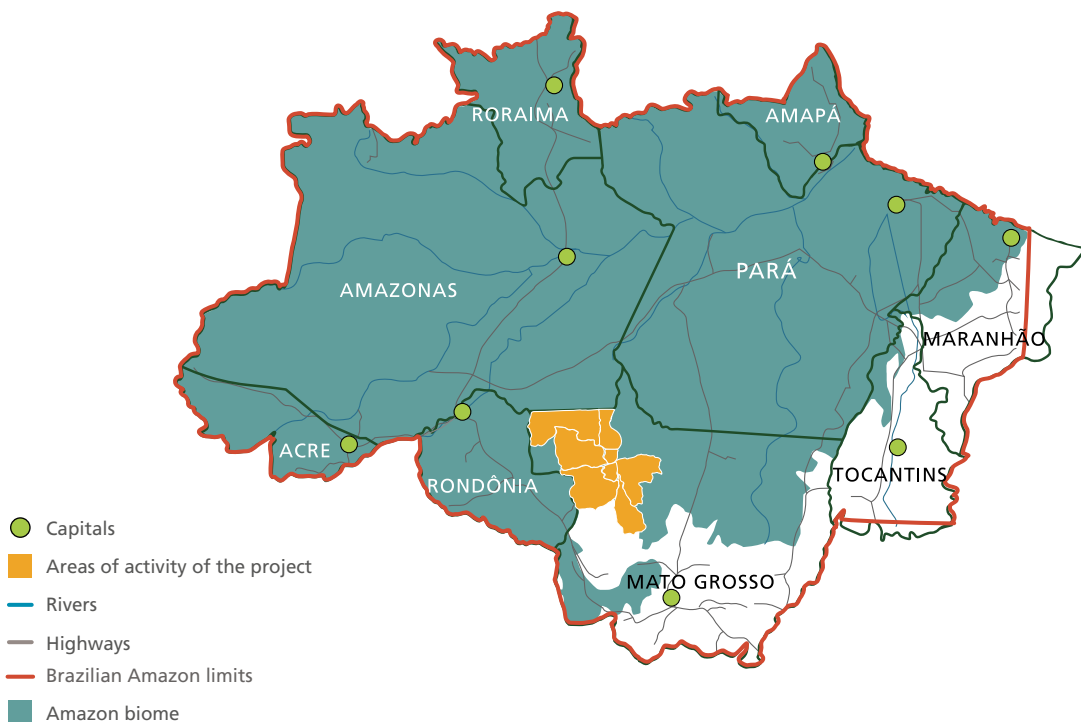
R\$ 5,175,522.50
US\$ 2,148,411.17

EXECUTION PERIOD

2nd quarter 2014 to
3rd quarter 2018

PROJECT EVOLUTION

DATE OF APPROVAL	DATE OF CONTRACT	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
Feb 4, 2014	Apr 17, 2014	R\$ 5,175,522.50 US\$ 2,148,411.17	100%



Context

The northwest region of the state of Mato Grosso is part of the so-called deforestation arc and is characterized as one of the forest frontiers that suffer the most pressure from deforestation due to diverse economic interests, such as the expansion of livestock production and the exploitation of ores and wood. Of the eight municipalities covered by the project, five were on the list of priority municipalities for actions aimed at prevention, monitoring and control of deforestation in the Amazon (Aripuanã, Colniza, Cotriguaçu, Juara and Juína).⁵⁶

In this region, there are also nature protected areas (PA), indigenous lands (TI) and agrarian reform settlements, which constitute stretches of biodiversity along the Arinos, Juruena, Aripuanã, Guariba and Roosevelt rivers. The conservation of these areas is strategic to prevent the degeneration of water resources and protect the biodiversity of the Amazon.

Brazil nut extraction and processing activities in this region, based on the richness of its chestnuts, are an economic alternative for maintaining the forest preserved, generating income for traditional populations and, at the same time, reducing the pressure for deforestation. Brazil nuts, also known as Pará nuts, are harvested from the fruit (bur) of the chestnut tree, which is one of the tallest trees in the Amazon rainforest.

The project

Selected in the framework of the public call for sustainable productive projects of the Amazon Fund, launched in 2012, the Forest Sentinels project aimed to strengthen the value chain of Brazil nuts in the northwest of the state of Mato Grosso, promoting social inclusion and gender equality. It worked in partnership with four indigenous communities – Mayrob Indigenous Village Community Association (Apiaká representative), Kawaiwete Indigenous Association (Kayabi representative), Munduruku Institute (Munduruku Representative) and Pasapkareej Indigenous Association (Cinta Larga representative) – and a women’s organization, Cantinho da Amazônia Women Association (AMCA).

The project aimed to improve the process of collecting Brazil nuts – with the construction of storage shacks and drying tables for Brazil nuts in extractive communities – and modernization of the productive capacity of nut processing units, expanding the factories of the Vale do Amanhecer Farmers Cooperative (Coopavam) and AMCA. A business plan for expansion of the market for Brazil nut derivatives was also prepared; in addition to technical training in management and good management practices for nontimber forest activity for indigenous peoples, petty extractors and workers of processing units.

⁵⁶ http://combateadodesmatamento.mma.gov.br/images/conteudo/lista_municipios_prioritarios_AML_2017.pdf

Intervention logic

The project is part of the “sustainable production” component (1) of the Amazon Fund Logical Framework. The effects expected by the project in this component were: (i) economic activities of sustainable use of forest and biodiversity conducted in the northwest region of Mato Grosso; (ii) chains of agroforestry and biodiversity products with increased added value in the northwest region of Mato Grosso; and (iii) expanded management and technical capacities for the conduct of good practices for the management of nontimber forest products, cooperativism and association management in the northwest region of Mato Grosso.

Thus, the project aimed to strengthen the value chain of Brazil nuts, promoting the productive inclusion of family farmers, female extractors and indigenous persons, encouraging productive models that preserve the forest.

Activities executed

To facilitate the work of collecting the nut, maps of the nut tree areas in TI Apiaká-Kaybi of Juara and the TI Aripuanã (Cinta Larga people) were prepared, together with the indigenous peoples, with access roads, location of the shacks built by the project, transport routes from the nut tree areas to the shacks and out of the forest. These actions aimed to reduce collection costs, increasing production capacity and improving working conditions.

For the stage of drying and storing *in natura* nuts, twenty shacks were built, distributed between TIs Apiaká-Kaybi and Aripuanã and the Vale do Amanhecer Settlement, which totaled a total built area of 1,120 m² with sufficient storage capacity to store, in all, 1,100 tonnes of *in natura* nuts.

The project acquired a set of vehicles to assist the logistics of nut production in the forest and processing units, including: three tractors with trailers, three 150 cc motorcycles, three boats, three small trucks and a truck with transport capacity of up to twenty tons per trip, to enhance the collection and transport of nuts. As a consequence, the cooperative reduced its transportation costs, as in the case of nut oil distributed to a Brazilian multinational cosmetics company, in Benevides (PA), transported with the truck purchased by the project.

Two new factories were also built, one of which was a nut processing plant for Coopavam and the other for the production of nut biscuits and pasta for AMCA, with a total area of 325 m².

During the project’s execution period, three organic certifications were approved by Ecocert⁵⁷ for the TIs Aripuanã and Apiaká-Kaybi and the Vale do Amanhecer Settlement, referring to 2015, 2016 and 2017. In these years, three inspections were carried out by

⁵⁷ Ecocert is a certification company created in France in 1991, which has been established in Brazil since 2001 and is dedicated to the inspection and certification of organic agriculture products.

the Ecocert certifier in the Coopavam plant and in the nut tree areas of the three areas certified, to evaluate the conditions of collection, storage and processing.

A new brand was created for nut derivatives called Aruí, a combination of the indigenous terms *aruanã* (guardians or sentinels) and *impuí* (forest). This brand considered the union of peoples who have been acting for so long as sentinels of a natural heritage that has been guarded for centuries.

Several events were held for the integration and training of project participants, including indigenous and nonindigenous persons, who moved from TIs to the cities of the municipalities of the region, to the state capital and to other states, such as Rondônia, Tocantins and Acre.

Three major solidarity economy seminars were held in Juruena, with topics related to the actions of the project, to the production chain of Brazil nuts and to the institutional strengthening of rural and indigenous women. These seminars were attended by more than 210 indigenous persons from the four ethnic groups, as well as representatives from Coopavam and AMCA. The project also organized an exchange of experiences with two other projects supported by the Amazon Fund – Reca,⁵⁸ in Rondônia, and Cooperacre,⁵⁹ in Acre – with the participation of forty indigenous and nonindigenous persons.

Two trainings were carried out with the indigenous people of the Cinta Larga ethnic group for the use of the rotary dryer, installed in the shack of the city of Aripuanã. Trainings were also conducted for extractors on good practices of management, collection, processing and drying of Brazil nuts using a rotary dryer, in addition to care in organic production to ensure Ecocert certification, involving participants of the project in the Vale do Amanhecer Settlement and TIs Apiaká-Kaybi and Aripuanã.

To facilitate the learning of all the topics addressed during the training with indigenous persons and family farmers, the *Manual of good practices of management, collection and processing of Brazil nut*⁶⁰ was prepared, which presents in detail all the information passed on, in addition to a general framework with the references of the legal aspects and the requirements of the health surveillance, fiscal and product origin agencies.

Concurrently, there was technical monitoring of the storage of nuts with shells, with guidelines for positioning the bags, as well as checking the conditions of the bags that contain the nuts, in order to reduce the possibilities of contamination. Such activity also aims to facilitate the monitoring of batch formation, control of nut production origin and traceability of all the production line of finished products at the plant.

⁵⁸ <http://www.fundoamazonia.gov.br/pt/projeto/Concretizar/>

⁵⁹ <http://www.fundoamazonia.gov.br/pt/projeto/Fortalecendo-a-Economia-de-Base-Florestal-Sustentavel/?contrato>

⁶⁰ <http://www.fundoamazonia.gov.br/export/sites/default/pt/galleries/documentos/acervo-de-projetos-cartilhas-outros/Coopavam-Manual-boas-praticas-Castanha.pdf>

Result and impact indicators

The project activities contributed to the results related to the “sustainable production” component (1) of the Amazon Fund Logical Framework. The results of the main indicators agreed for the monitoring of expected direct effects are presented below.

Direct effect 1.1: economic activities of sustainable use of forest and biodiversity conducted in the northwest region of Mato Grosso.

- Annual revenue from sustainable use economic activity – *in natura* products (R\$) (outcome indicator)

Goal: not set | Result achieved: R\$ 1.1 million/year

Revenue generation is one of the main effects expected from sustainable production projects. It is based on the assumption that environmentally sustainable production combined with income generation increases interest and support for use of land and biodiversity consistently with forest conservation. During the project execution period, annual gross revenue from the sale of *in natura* Brazil nuts increased from R\$ 559,000 (2013) to R\$ 1.1 million (2018).

Direct effect 1.2: chains of agroforestry and biodiversity products with increased added value in the northwest region of Mato Grosso.

- Annual revenue from sustainable use economic activity – processed products (R\$) (outcome indicator)

Goal: not set | Result achieved: R\$ 2.8 million/year

In the analysis of this indicator's evolution throughout project implementation, there was significant increase in annual revenue from the commercialization of products processed by Coopavam and AMCA, which grew from R\$ 441,000 in 2013 to R\$ 2.8 million in 2018, that is, it was multiplied by six. With support from the project, a total revenue increase of R\$ 5 million was observed. This increase is calculated by comparing annual revenue in a given year with the baseline revenue. This annual increase is added over the years of project execution and, when consolidated, represents the revenue increase resulting from the project.

It can be affirmed that the results of this project, as to the generation of occupation and income, are differentiated, having comprised the implementation of extractive activities in TIs and in an agrarian reform settlement, in addition to expansion of Brazil nut processing capacity by community industrial units, certification, creation of own brand and successful commercialization of this production.

- Number of individuals directly benefited by the activities supported by the project (outcome indicator)

Goal: 1,500 individuals | Result achieved: 2,767 individuals

A total of 2,767 people participated and benefited directly from the Forest Sentinels project, of which 999 were women and 1,195 were indigenous persons, in addition to family farmers.

Direct effect 1.3: expanded managerial and technical capacity for the conduct of good practices for management of nontimber forest products, cooperativism and management of associations in the northwest region of Mato Grosso.

- Number of individuals trained in good practices for management of nontimber products, cooperativism, management of associations and processing of nuts effectively using the knowledge acquired (outcome indicator)

Goal: 100 individuals | Result achieved: 697 individuals

- Number of community organizations strengthened (outcome indicator)

Goal: six organizations | Result achieved: six organizations

Two nonindigenous organizations (Coopavam and AMCA) and four indigenous organizations – (i) Mayrob Indigenous Village Community Association (Acaim); (ii) Kawaiwete Indigenous Association; (iii) Munduruku Institute; and (iv) Passapkareej Association – participated in and were directly benefited by the project. In addition to the community organizations directly involved in the project, three other indigenous ethnic groups were strengthened with the partnership for commercialization of the nuts with Coopavam, namely: Surui Paiter and Zoró, from the states of Rondônia and Mato Grosso, and Kayapó (Mebêngôkre), from Novo Progresso, in the state of Pará.

- Improvement in the quality of the *in natura* nuts (outcome indicator)

Goal: 0% aflatoxin index | Result achieved: 0% aflatoxin index

Brazil nuts are tasty and have high nutritional value, being rich in selenium, proteins, vitamins and unsaturated fatty acids. Despite being a quality food, there is a risk of contamination by mycotoxins (toxins produced by fungi) with harmful effects on human health.⁶¹ The project provided trainings on good practices for hygiene and management of the Brazil nut production chain, which presented the possible sources of contamination of nuts by aflatoxins and the ways to avoid contamination and proliferation of fungi. During the project execution, laboratory analyses were performed to identify aflatoxins in Brazil nuts that did not identify the presence of fungi at a higher level than allowed.

- Number of women in management or coordination positions at Coopavam and AMCA (outcome indicator)

Goal: 15 women | Result achieved: 34 women

Since its conception, the project sought to enhance the women's role in the nut production process, and one of the institutions that are part of the project is a women association

⁶¹ <https://www.embrapa.br/amazonia-ocidental/busca-de-noticias/-/noticia/1482203/pesquisas-tentam-livrar-castanha-do-brasil-da-contaminacao-por-fungos>

(AMCA). From a baseline of ten women in management or coordination positions at Coopavam and AMCA, a total of 34 women with these positions was achieved, having exceeded the number expected for this indicator (15 women).

Institutional and administrative aspects

The Forest Sentinels project was conceived in partnership with the Association of Rural Development of Juruena (Aderjur) and by a group of organizations that already worked in network developing the local Brazil nut production arrangement in the northwest of Mato Grosso and, therefore, composes the institutional arrangement of this project, namely: Coopavam, as an agglutinating institution responsible for the implementation of the project with the Amazon Fund (BNDES) and five partner (“agglutinated”) institutions: (i) Mayrob Indigenous Village Community Association (Apiaká Representative); (ii) Kawaiwete Indigenous Association (Kayabi representative); (iii) Munduruku Institute; (iv) Pasapkareej Indigenous Association (Cinta Larga representative); and (v) AMCA.

The project execution had the consent of the National Indian Foundation (Funai) to carry out commercial activities between Coopavam and the indigenous peoples. With regard to the capacity building and training of people, the project established partnerships with the Brazilian Service for Support to Micro and Small Enterprises (Sebrae) and with the National Service of Industrial Learning (Senai), through the SebraeTec Program, a national program to bring innovation to small enterprises.

Training was developed to train people in associativism and cooperativism, preparation of business plans, development of a new brand for products, considering the indigenous origin of products and the socioenvironmental appeal, in addition to production of a new label for the cereals bar of Coopavam and for the nut candy of AMCA, in addition to the registration of Coopavam in the Integrated Foreign Trade System (Siscomex), the national agency responsible for the control of exports of products to other countries.

The project also had partnership with the State University of Mato Grosso (Unemat), with the publication of doctoral student research, master’s student research and undergraduate program conclusion work on the project, and one of the studies resulted in the publication of a book on actions of good practices of collection and processing of Brazil nuts for distribution to project participants.

Another important partner was the National Supply Company (Conab), with financial support for the formation of Brazil nut stocks and with the Food Acquisition Program (PAA) through the acquisition of processed nut products for the institutional market, which reached 40,000 people in eight municipalities of Mato Grosso.

Throughout the project, a partnership was also established with the Climate and Land Use Alliance (Clua)⁶² for the creation of a solidary revolving fund to support the working capital of the Brazil nut of the Forest Sentinels network. Finally, the Forest Sentinels network was included in the Produce, Conserve and Include Initiative (PCI) of the state of Mato Grosso government, whose objectives, among others, are expanding and increasing the efficiency of agricultural and forestry production, through the control of deforestation and the development of a low-carbon economy.

Risks and lessons learned

The Forest Sentinels project had a management board that brought together representatives of the various organizations participating in the project. The existence of this board allowed the difficulties encountered during the implementation of the project to be overcome more quickly and more amicably between the different populations and ethnic groups.

Another important aspect was the presence *on site* of a technical team contracted by the project to assist the indigenous persons in improving the process of collecting and storing the nuts. The direct contact of technicians with the communities strengthened the relationship of trust between the extractors and the cooperative. In addition, Coopavam adopted the strategy of establishing, at the beginning of the harvest, contracts between extractors and the cooperative with agreed prices and volumes of nuts, which streamlined the collection work and improved the planning of field activities, reducing unnecessary travel costs, with higher volumes of product to be transported on each trip, increasing the profit of extractors.

As Brazil nut is a product derived from sociobiodiversity, its productivity is impacted by climatic conditions over time. In particular, during the project, there was a decrease in the production of nut trees in the 2016-2017 crop throughout the Amazon, which led to reduction in Coopavam's nut stocks and difficulty in signing contracts with customers due to lack of raw materials. This problem was compounded by the presence of middlemen that spread throughout the territory, increasing competition for the acquisition of raw material. In the following year, there was a strong recovery of the production capacity of the nut trees, which led to a production above normal throughout the Amazon.

The asymmetry between supply and demand caused large variations in nut price, which, in the case of Coopavam, could be reduced due to the creation of a financial mechanism that functioned as a solidary revolving fund and that allowed financing the acquisition of a portion of the nuts with subsidized interest, enabling the acquisition of a larger volume of nuts than originally planned for the formation of stocks. Another important factor to make the crop viable was the diversification of products derived from nut, especially nut oil.

⁶² Collaborative alliance of foundations dedicated to the preservation of forests and biodiversity. It was created by the Ford, Gordon & Betty Moore, David & Lucile Packard and Climate Works foundations.

Sustainability of the results

The sustainability of the results is related to the viability of the Brazil nut value chain remaining as the main source of income and improvement of life of traditional populations that inhabit the forest, constituting an alternative to deforestation.

Capacity building actions, with the adoption of good practices for the collection and management of the nuts, contribute to the continuation of the actions, by raising awareness and engaging extractive populations in the conduct of sustainable activities. In addition, the dissemination materials prepared within the scope of the project are permanent sources of information, in addition to contributing to attract new customers and supporting partners to the region.

Throughout the project, a business plan was also structured, which presents Coopavam's vision, mission and values, comprising a market analysis for products derived from nuts with potential customers, competitors and suppliers. Among other pieces of information, this plan comprised a financial analysis, with estimates of fixed investments and working capital; an operational analysis, addressing production capacity, operational processes and the need for personnel; and planning of marketing actions for each of the products derived from Brazil nut.

The project was successful in strengthening the value chain of Brazil nuts and the definitive consolidation of these results will depend on the continuation of investments of this nature, especially by obtaining new supporters and partners. One of these new partners is Clua, which, between 2017 and 2018, supported the creation of a revolving fund with working capital for the purchase of nuts from indigenous persons, with a total amount of R\$ 800,000.

A new partnership with Partnerships for Forests was also established, which aims to improve Coopavam's sales and marketing strategies, as well as to strengthen forest protection through plans for indigenous territorial management.⁶³ Among these and other minor supports, the Forest Sentinels project has been attracting investments that contribute to the continuation of the development of the Brazil nut value chain in the Amazon.



⁶³ <https://partnershipsforforests.com/partnerships-projects/coopavam-untapping-the-green-power-of-brazil-nuts/>

Productive Sociobiodiversity in the Xingu

PROJECT MANAGEMENT

Socioenvironmental Institute (ISA)

REGIONAL SCOPE

The basin of the Xingu River with activities in three sub-regions: (i) Xingu Indigenous Park (PIX); (ii) Headstreams of the Xingu/ BR-158; and (iii) Terra do Meio; comprising 11 municipalities in the state of Mato Grosso and two municipalities in the state of Pará

BENEFICIARIES

Indigenous peoples, small farmers and extractive communities.

OBJECTIVES

Support the structuring and strengthening of the value chains of sociobiodiversity in the Xingu Basin, comprising seeds and forest seedlings, rubber, nuts, *pequi* and fruits with indigenous populations, extractors and family farmers, aiming at increasing the quality of life of these populations and at sustainable, agroforestry and extractive production

TOTAL COST OF THE PROJECT

R\$ 8,915,396.00
US\$ 3,802,036.76

AMAZON FUND SUPPORT

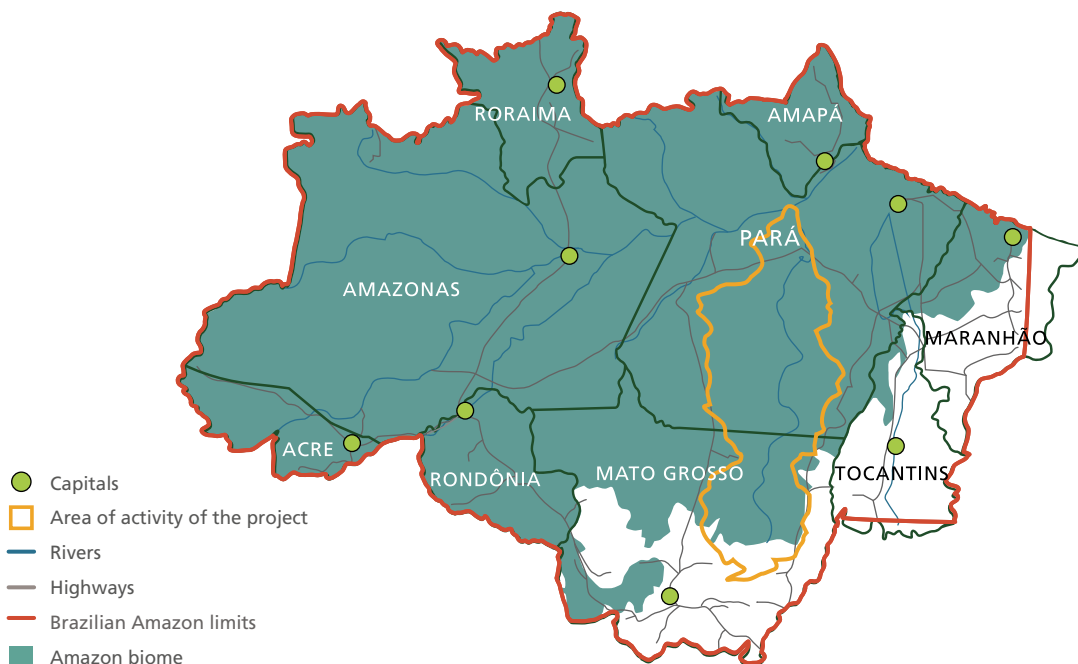
R\$ 8,023,856.00
US\$ 3,421,832.91

EXECUTION PERIOD

2nd quarter 2014 to
1st quarter 2019

PROJECT EVOLUTION

DATE OF APPROVAL	DATE OF CONTRACT	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
Dec 3, 2013	Feb 20, 2014	R\$ 8,023,856.00 US\$ 3,421,832.91	100%



Context

The Xingu River basin is a territory very representative of the socioenvironmental and cultural diversity of the Brazilian Amazon. Among the traditional peoples, there are 26 indigenous peoples whose territories add up to 39% of the basin, which, together with the Terra do Meio PAs, make up one of the largest mosaics of protected areas of the Amazon, covering 28 million hectares (ha), about 60% of the total Xingu river basin. PAs play a key role⁶⁴ in containing deforestation in the Amazon region, in addition to promoting the maintenance of environmental services, such as supplying the hydrological cycle, protecting biodiversity and maintaining carbon stocks.

Seeking to strengthen this environmental function performed by PAs and promote the quality of life of their populations, several initiatives aimed at the sustainable production of nontimber forest products from extraction and agroforestry practice have been undertaken, associated with a growing demand from domestic and foreign markets on the origin of products.

Although growing in recent years, and of significant importance to traditional communities, the products of sociobiodiversity occupy little space in the formal economy. Distance from major markets, limited access to capital and information, poor infrastructure and shortage of qualified personnel are some of the challenges. Improvements are also needed in the technologies of planting, management, processing, storage, quality control and regarding regulatory and legal aspects, in addition to the social factors related to community production, such as social organization and administrative management.

The project

The Productive Sociobiodiversity project in the Xingu proposed by the Socio-Environmental Institute (ISA) was selected through the public call for Sustainable Productive Projects of the Amazon Fund, carried out by BNDES in 2012. This call followed the agglutinating model in which a unifying institution coordinates an integrated arrangement of subprojects from other organizations, called agglutinates. This project involved 12 agglutinates, of which eight community associations (indigenous, extractive and rural) and four NGOs from the socioenvironmental area.

The main objective was the development of agroextractive institutional and productive arrangements around the value chains of seeds and forest seedlings, rubber, Brazil nuts, *pequi* and tropical fruits. These expanded arrangements allow the construction of more robust solutions aiming to combine economic production and environmental conservation. The project also aimed to increase the income and quality of life of traditional populations and family farmers, through sustainable agroforestry and extractive production.

⁶⁴ SOARES-FILHO, B. *et al.* Role of Brazilian Amazon protected areas in climate change mitigation. *Proceedings of the National Academy of Sciences of the United States of America*, [s.l.], n. 107, v. 24, June 15, 2010. DOI: 10.1073/pnas.0913048107.

Intervention logic

The project is part of the “sustainable production” component (1) of the Amazon Fund Logical Framework.

The direct effects expected by the project in the Xingu River basin are: (i) the strengthening of activities for the sustainable use of forest and its biodiversity; (ii) the addition of value in the chains of agroforestry products; (iii) the expansion of the managerial and technical capacities in the implementation of agroforestry systems, in the agroextractive production and in the processing of agroforestry products; and (iv) the recovery of deforested and degraded areas and their use for economic and environmental conservation purposes.

The project sought to create conditions so economic activities that keep the forest standing gain more value, viability and attractiveness in the Xingu River basin and, thus, contribute so the populations living in forests and rural areas of this region continue to fulfill their role in the conservation and recovery of forests.

Activities executed

The project was carried out in three sub-regions with distinct socioenvironmental characteristics, namely: (i) Xingu Indigenous Park (PIX) sub-region; (ii) Xingu headstreams and BR-158 sub-region; and (iii) Terra do Meio sub-region.⁶⁵ The following actions were carried out throughout the project:

- Structuring of the forest seed production chain in the PIX: production chain strengthened with the participation of 150 indigenous persons, with four seed houses built and a publication on the subject organized.
- Recovery of degraded pasture through the *pequi* consortium; pastures and fruits; and organization of the production and commercialization of *pequi* oil in the PIX: recovery of 60 ha of degraded pasture and production and commercialization of *pequi* oil, with acquisition of agricultural equipment such as tractor, plowing grid and distributor of seeds and agricultural fertilizers.
- Structuring and strengthening of agroforestry production, seeds and seedlings of the Xavante people: a water collection system, a seed house and a seedling nursery were built.
- Support for the production, storage and commercialization of frozen fruit pulp in São Félix do Araguaia (MT), with the restructuring of the fruit pulp plant, renovation and acquisition of equipment, and acquisition of a vehicle to provide ongoing support to settled families. For commercialization, 14 freezers were purchased and sale support materials were produced.

⁶⁵ Terra do Meio is a mosaic of protected areas, located right in the center of the state of Pará, formed by the extractive reserves (Resex) of the Iriri River and Anfrísio River, the Triunfo do Xingu environmental protection area (APA), the Terra do Meio ecological station (Esec), the Médio Xingu Resex, the Serra do Pardo National Park (Parna), and the TIs Cachoeira Seca, Xypaia, and Curuaia, covering an area of 8.48 million ha.

- Structuring of the forest seed production chain in São Félix do Araguaia (MT): the house of seeds of São Félix do Araguaia was built, with the acquisition of equipment and inputs, in addition to adaptations in the processing room.
- Structuring of the forest seed production chain and production of seedlings for the planting of agroforestry systems in Porto Alegre do Norte (MT) and Canabrava do Norte (MT) through: (i) improvements in the seed house and adaptation of the seedling nursery structure; and (ii) training and integrative events with seed collectors.
- Production, storage and commercialization of frozen fruit pulps in the Brasil Novo settlement in Querência (MT): the pulp plant was renovated and a seedling nursery was built, which allowed the production of about 3,000 seedlings/year, which were planted in the plots of farmers in the Brasil Novo settlement.

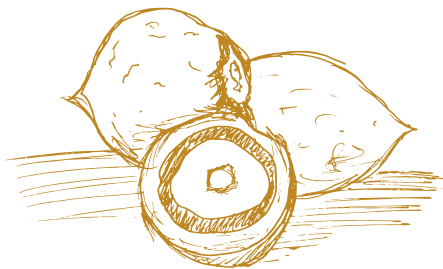
The following actions were carried out jointly in the Terra do Meio sub-region, according to a territorial strategy shared by the extractive associations – Sementes da Floresta Agroforestry Association (Aasflor), Association of Extractive Residents of the Iri-Maribel River (Aerim), Association of Residents of the Xingu Resex (Amomex), Association of Residents of the Anfrísio River Resex (Amora) and Association of Residents of the Rio Iri Resex (Amoreri), which involved the structuring of mini-plants and canteens with the corresponding working capital system, managed by the communities, in addition to the promotion of commercial partnerships for the sale of the production.

- Three miniplants were built in the communities of Praia Grande (Amora), Baliza (Amomex) and São Lucas (Amoreri), and the necessary pieces of equipment for their operation were acquired. Several training processes were carried out, which enabled the community to start the production of Brazil nuts, babassu mesocarp flour and vegetable oils.
- Twenty canteens were set up with the corresponding working capital system in the three extractive reserves in the region, which sold nine products. This system allowed freedom of choice as to the activities to be carried out by the communities, providing income generation options throughout the year.
- The process of structuring the Origens Brasil seal increased the possibilities of negotiation for the communities of the region. Partnerships were initiated or strengthened with several companies for the commercialization of *copaíba* oil, latex, Brazil nuts, babassu mesocarp and handicrafts.



Among the transversal actions of the project, the following stand out:

- The consolidation of the Xingu Seed Network in the states of Mato Grosso and Pará, working in 17 municipalities in the Xingu/Araguaia region with six hundred associated collectors, including indigenous persons and family farmers.
- The implementation of a pilot project for certification of origin in the Xingu Basin, with structuring of the Origens Brasil initiative.⁶⁶ The Origens Brasil seal aims to generate transparency and awareness about the origin of production, shedding light on the value of the history of individuals, territories and responsible connections between those who produce and those who buy. This type of seal generates added value for certified products.
- The establishment of partnership with the State University of Mato Grosso (Unemat), Nova Xavantina campus, in setting up a laboratory for analysis of native seeds, which resulted in improved quality of seeds collected and marketed.
- The improvement of technical aspects in the production and commercialization of forest seeds in the Xingu, through annual meetings of the Seed Network, exchange events, expeditions and workshops of specialist collectors, as well as the preparation of graphic materials, books and booklets targeted at collectors of the network, in addition to providing guidance for collectors of other networks of native seeds.
- The establishment of new commercial partnerships and the preparation of a guide with criteria for negotiation between traditional populations and businesses, with the creation of a database to better organize and prospect new business contacts, with information about the potential market and available production of extractive communities. During the project, meetings and conversations were held with companies with potential for partnership, highlighting the commercial partnership established with a large company that produces bread and food in general, which started to acquire Brazil nuts from the Terra do Meio extractive reserves and put the “Origens Brasil” seal in the breads that it produces with this input.



⁶⁶ <https://www.origensbrasil.org.br/>

Result and impact indicators

The project activities contributed to the results related to the “sustainable production” component (1) of the Amazon Fund Logical Framework.

Direct effect 1.1: activities of sustainable use of forest and biodiversity strengthened in the Xingu River Basin.

Direct effect 1.2: agroforestry product chains with increased added value in the Xingu River Basin.

The main indicators agreed for the monitoring of this objective were:

- Annual revenue from sustainable use economic activity – *in natura* products (R\$) (outcome indicator)
Goal: not set | Result achieved: R\$ 483,000/year
- Annual revenue from sustainable use economic activity – processed products (R\$) (outcome indicator)
Goal: not set | Result achieved: R\$ 189,000/year

Analysis of the evolution of these indicators throughout the project implementation showed an increase of 53% in the revenue from all products sold, and the revenue from processed products more than quadrupled when comparing the baseline (2013 – prior to project actions) with the last year measured (2017). With the project support, there was a revenue increase of R\$ 682,000, and this increase is calculated by comparing annual revenue in a given year with the baseline revenue. This annual increase is added over the years of project execution and, when consolidated, represents the revenue increase resulting from the project.

- Number of farmers who accessed the institutional markets – Food Acquisition Program (PAA), National School Feeding Program (Pnae) or the Minimum Price Guarantee Policy for Sociobiodiversity Products (PGPM-Bio) (outcome indicator)
Goal: 30 | Result achieved: 2

This indicator did not achieve its goal, with much lower performance than desired. Nevertheless, two of the agglutinates that participated in the project (Aasflor and Ansa) entered a partnership with the National School Feeding Program (Pnae). Four other extractive associations that participated in the project were, at the end of the project, in the process of accessing the Pnae and supplying babassu flour to municipalities in the region.

- Number of business partnerships established (outcome indicator)
Goal: 2 | Result achieved: 6

This indicator presents the result of an innovative initiative that included the implementation of the certification of origin of the chains of sociobiodiversity products supported by the project with the prospection and establishment of new commercial partnerships that value the social and environmental services provided by traditional populations. The commercial partnerships established covered companies of perfumery,

rubber products, bakery, natural products, commercialization of handicrafts and one of the largest supermarket chains (retail) of the country.

Direct effect 1.3: expanded managerial and technical capacities in the Xingu Basin for agroforestry system (AFS) implementation, agroextractive production and agroforestry product processing.

The main indicators agreed for the monitoring of this objective were:

- Number of individuals trained in native seed management, forest management activities and agroextractive production effectively using the knowledge acquired (outcome indicator)

Goal: 980 | Result achieved: 1,327

- Number of families benefiting from technical assistance (output indicator)

Goal: 480 | Result achieved: 1,642

These two indicators demonstrate good results in a central topic for the success of sustainable production initiatives in the Amazon, which are training and provision of technical assistance. They seek to determine the handling of two challenges in this topic, which are the effective use of acquired capacities and the continued provision of technical assistance to families during the project execution. These are aspects that, when met, promote the economic and environmental sustainability of these initiatives.

Direct effect 1.4: deforested and degraded areas recovered and used for economic and conservation purposes in the Xingu Basin.

The main indicators agreed for the monitoring of this objective were:

- Area reforested with seeds and seedlings sold by the Xingu Seed Network (outcome indicator)

Goal: 60 ha | Result achieved: 2,046 ha

- Number of seedlings produced (output indicator)

Goal: 12,000 | Result achieved: 19,200

Reforestation and seedling production activities can have productive and environmental recovery purposes and, in addition, are important for the promotion of native species seed and seedlings production chains. The initial goal of 60 ha of reforested area included only the reforestation carried out directly within the scope of the project, with the planting of *pequi* for the recovery of a pasture abandoned by the Kisêdjê indigenous people, which was carried out adequately. The difference in relation to the final result of 2,046 ha refers to the estimated area reforested with seeds and seedlings sold by the Xingu Seed Network under the project. More important than the final result in reforested hectares is the strengthening of the chain of production and sale of seeds, the main input for reforestation activity.

The good result in seedling production is also a reflection of the investment in expansion and improvements of nurseries, which creates an important production base for the expansion of reforestation activities in the region, either by projects like this or also by municipalities and rural owners.

Institutional and administrative aspects

The Socioenvironmental Institute carried out part of the project's activities and also coordinated the field activities of the Productive Sociobiodiversity in the Xingu project through a set of 12 institutions, as shown in the table below.

TABLE 26 | INSTITUTIONS AGGLUTINATED BY THE PROJECT

	Partner organizations	Main activities	Sub-region
1	Association of Residents of the Iriri River Resex (Amoreri)	Forest seeds, seedlings, oils, Brazil nuts and rubber	Terra do Meio, Altamira (PA)
2	Association of Residents of the Anfrísio River Resex (Amora)	Forest seeds, seedlings, oils, nuts and rubber	Terra do Meio, Altamira (PA)
3	Association of Residents of the Xingu Resex (Amomex)	Forest seeds, seedlings, oils, Brazil nuts and rubber	Terra do Meio, Altamira (PA)
4	Association of Extractive Residents of the Iriri-Maribel River (Aerim)	Oils, Brazil nuts and rubber	Terra do Meio, Altamira (PA)
5	Sementes da Floresta Agroforestry Association (Aasflor)	Oils, Brazil nuts and rubber	Terra do Meio, Altamira (PA)
6	Estrela da Paz Agroecological Community Association (Acaep)	Forest seeds, seedlings and fruit pulps	Xingu Headstreams/BR-158 (MT)
7	Terra Viva Alternative Agriculture and Environmental Education Association (ATV)	Forest seeds and seedlings	Xingu Headstreams/BR-158 (MT)
8	Nossa Senhora da Assunção Education and Social Assistance Association (Ansa)	Forest seeds, seedlings and fruit pulps	Xingu Headstreams/BR-158 (MT)
9	Native Amazon Operation (Opan)	Forest seeds and seedlings	Xingu Headstreams/BR-158 (MT)
10	Kisêdjê Indigenous Association (AIK)	Forest seeds, seedlings, oils, nuts and rubber	PIX – Mato Grosso
11	Moygu Indigenous Association Ikpeng Community (Aimci)	Forest seeds and seedlings	PIX – Mato Grosso
12	Forest and Agricultural Management and Certification Institute (Imaflora)	Certification, business partnerships and monitoring	All

Considering the wide territorial scope and the large number of participating institutions, the Productive Sociobiodiversity in the Xingu project involved a high demand for its administrative management and institutional coordination. As the project conducted several of its activities in PAs and TIs, there was a recurrent need to consult the agencies that manage these protected areas (Funai, ICMBio, Ibama and others), in addition to partnerships with the governments of some municipalities. As the implementing

institution had already worked in partnership with the institutions in previous projects, the management of this project was benefited, because there was already a prior experience that favors the establishment of a relationship of trust. One of the challenges of the project was to seek exchange of experiences between communities with different profiles, such as indigenous people, extractors and small farmers, since, generally, socioenvironmental projects work only with one social group.

Another relevant institutional aspect in the project concerns actions conducted by one of the agglutinated institutions, the Imaflora. Because it is an institution specializing in forest certification with experience in good practices of forest management and traditional populations, its participation in the project, differently from the other agglutinates that acted more focused on field activities, had a transversal character in support for strengthening productive chains through the creation of mechanisms that value local production respecting its particularities. The scope of the pilot project for certification of origin from the Xingu region comprised all subregions of the project with greater focus on the PIX and in the Terra do Meio sub-region, where there were more developed sustainable production chains.

Risks and lessons learned

The partnerships between the institutions that were part of the project were already underway before its execution, which was positive for the shared management of a complex project with so many players, in addition to enabling the expansion of a strategy that was already underway. Advancing in the consolidation of bioeconomy product chains in isolated territories takes a time that usually exceeds the duration of a project, requires a continuous process of coordination, the establishment of partnerships and constant search for improvements in the conditions of the territories.

With the indigenous communities participating in the project, one of the challenges was the coordination of processes that were carried out separately in several localities of different ethnic groups. To address this issue, a dynamic relationship was established with representatives of each community that enabled greater communication between the parties.

In the Terra do Meio sub-region, there was an important experience with the establishment of a basket of products with clear marketing processes through the creation of community canteens, with working capital to provide liquidity and commercial partnerships that provided security in the destination of extractive production. This allowed greater freedom of choice for the community as to the activities to be prioritized, with options for generating income throughout the year and alternatives in case of low productivity of a given product.

An important bottleneck that was traced, especially to the Brazil nut chain, is the need for working capital for early purchase of the crop. At the time of the project, the volume commercialized was dependent on the working capital made available by the institutions that support the communities. This is a point that needs to be addressed and resolved to ensure the consolidation of these production chains.

Another lesson learned stems from the fact that the Xingu seed network works in several municipalities in the region, allowing that species that are having production difficulties in one locality are supplied by other localities, ensuring stability in seed delivery, since one of the planting methods for recovery of degraded areas uses the technique called “seeds *muvuca*”, which involves the joint direct planting of a wide variety of seeds by employing the techniques and concepts of agroecology.

Sustainability of the results

Sociobiodiversity product chains have competitive disadvantages when compared with contemporary commercial plantations and synthetic products. This fact leads to the need for innovative actions to add value to products of the forest, and the project supported initiatives such as the Origens Brasil seal, which allows to add value to social and environmental services associated with the products, as well as the development and implementation of technologies such as mini-oil plants, which adopt technological solutions compatible with the context and knowledge of the communities benefited, thus contributing to enable their economic sustainability.

It is worth mentioning that the structuring of long-term relationships in the value chains of sociobiodiversity products generate learning throughout the chain: (i) in the management and social organization of communities at the local and territorial levels through integrated territory management; and (ii) in the companies' greater understanding about their inputs and suppliers, as they come to better understand the dynamics of the forest, of extraction and of the traditional and indigenous populations. Thus, a gain in management and responsibility is promoted throughout the chain, enabling innovative initiatives to remain competitive in relation to the various challenges to be overcome.



Value Chains in Indigenous Lands in Acre

PROJECT MANAGEMENT

Comissão Pró Índio do Acre (CPI-Acre)

REGIONAL SCOPE

Humaitá River Kaxinawá Indigenous Land (TI) and TI Rio Gregório (municipality of Tarauacá), TI Upper Purus River (municipalities of Santa Rosa do Purus and Manoel Urbano) and TI Humaitá Igarapé Arara (municipality of Porto Walter), in the state of Acre

BENEFICIARIES

Indigenous populations inhabiting the four TIs supported by the project

OBJECTIVE

Strengthen the sustainable production, culture and way of life of the Humaitá River Kaxinawá, Humaitá Igarapé Arara, Gregório River and Upper Purus River, in the state of Acre, through organization and promotion of the agroforestry products value chain and indigenous technical assistance

TOTAL COST OF THE PROJECT

R\$ 3,091,111.21
US\$ 885,476.87

AMAZON FUND SUPPORT

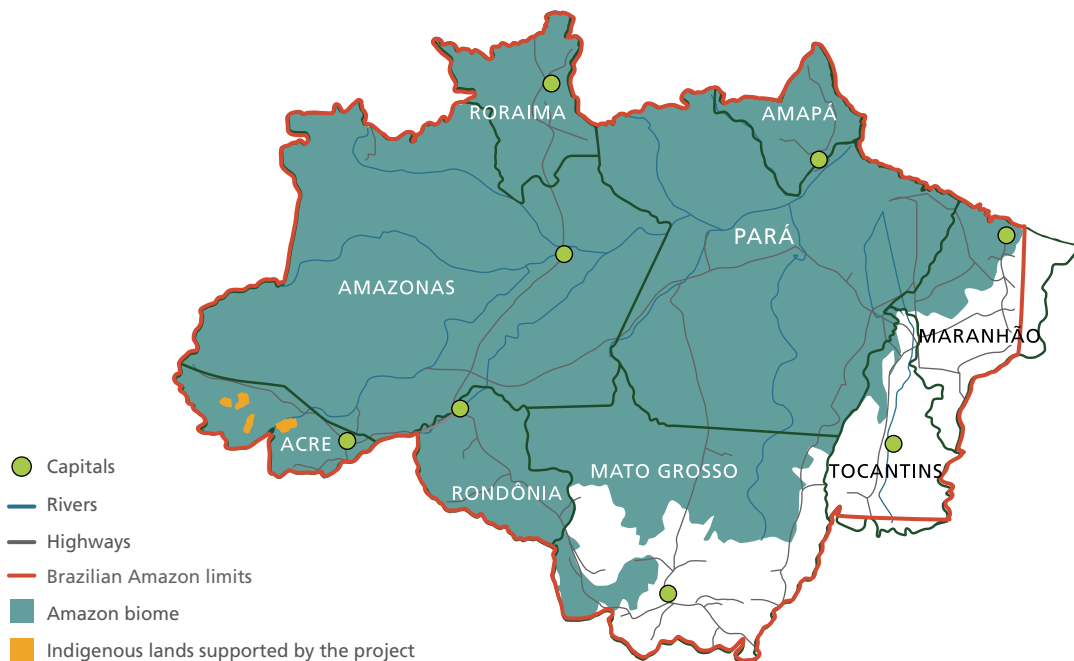
R\$ 3,091,111.21
US\$ 885,476.87

EXECUTION PERIOD

1st quarter 2016 to
2nd quarter 2019

PROJECT EVOLUTION

DATE OF APPROVAL	DATE OF CONTRACT	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
Aug 11, 2015	Dec 29, 2015	R\$ 3,091,111.21 US\$ 885,476.87	100%



Context

The history of deforestation in the Brazilian Amazon, when analyzed by land categories (according to Inpe data released by MMA⁶⁷), shows that TIs and integral PAs are the land categories with the lowest rates of deforestation. It is, therefore, notorious the centrality of the protected areas, in particular the TIs, in the strategy to control deforestation. In order for TIs to remain vectors of forest preservation, it is strategic that they have a support structure that protects the integrity of these lands, reducing deforestation pressures in favor of the conservation of biodiversity and the climatic functions of their forest resources.

The Comissão Pró Índio do Acre (CPI-AC), responsible for the project, is a civil association created in 1979 that stands out for its performance in the formulation and promotion of state and national public policies related to indigenous peoples, especially with regard to the territorial and environmental management of TIs and intercultural and bilingual education. Since 1997, CPI-AC has maintained the Forest Peoples Training Center in the rural area of Rio Branco, where it conducts training activities, with two curricula approved by the State Council of Education of the State of Acre, training teachers and indigenous agroforestry agents.

The project

The Value Chains in Indigenous Lands in Acre project was selected under the Support for Sustainable Productive Projects Public Call, launched by the Amazon Fund in 2012. This call aimed to promote the formulation and presentation of projects aimed at the development of economic activities for sustainable use of forest and biodiversity that would bring together small initiatives with traditional communities and family producers.

The project covered four TIs in the state of Acre and was implemented in partnership with local indigenous associations representing their inhabitants. It aimed to organize and promote the value chain of agroforestry products, covering: (i) the implementation and enrichment of agroforestry systems; (ii) the implementation of meliponiculture (keeping wild stingless bees); (iii) the implementation of the rearing and management of chelonians and fish; (iv) the implementation of flour plants and a sugarcane mill; and (v) the improvement of indigenous handicrafts.

Within the scope of the project, technical assistance was also provided, and indigenous agroforestry agents were trained, with the support of the Association of the Movement of the Indigenous Agroforestry Agents of Acre (Amaaiac). Indigenous agroforestry agents play an important role in territorial and environmental management in their communities, carrying out technical assistance and rural extension work in the

⁶⁷ Available at: <https://www.mma.gov.br/informma/item/616-preven%C3%A7%C3%A3o-e-controle-do-desmatamento-na-amaz%C3%B4nia>

villages, helping indigenous communities in the protection, recovery, conservation and sustainable use of natural resources.

Coordination action was also conducted to provide products from TIs for school meals under the PAA and Pnae.

Intervention logic

The project is part of the “sustainable production” component (1) of the Amazon Fund Logical Framework, which combines production efforts with ecological conservation. Three direct effects expected from the project implementation were defined, namely: (i) economic activities of sustainable use of forest, agroforestry and biodiversity developed; (ii) chains of agroforestry and biodiversity products with increased added value; and (iii) indigenous agroforestry agents strengthened and trained for the provision of technical assistance and rural extension in economic activities of sustainable use of forest, agroforestry and biodiversity.

The project sought to contribute so activities that keep the forest standing have economic attractiveness and constitute an alternative to deforestation in TIs. With the actions carried out, environmentally sustainable production chains were strengthened, generating food, occupation and income, as well as sequestering carbon with the expansion of vegetation cover through the implementation and enrichment of agroforestry systems, which contributes to the Amazon Fund’s general objective of “reducing deforestation with sustainable development in the Amazon.”

Activities executed

A total of 42 ha of agroforestry systems were implemented in deforested areas and other 196 ha of agroforestry systems were enriched, totaling 238 ha of recovered area in use for economic purposes. Agroforestry systems associate sustainable economic activities with forest reconstitution in degraded areas, resulting in a productive forest.

The agroforestry system implementation and enrichment action included the provision of technical advice in the communities of the four TIs, to support the activities of planting, enrichment and management of these areas. Also as part of this action: (i) agroforestry tool kits and brush cutters were distributed to 41 villages; (ii) 31 nurseries were built and 13,000 seedlings of 21 fruit species were produced; and (iii) five boats were purchased and delivered for production transportation.

The implementation of meliponiculture comprised workshops for the training of indigenous peoples in this productive activity. A total of 201 bee boxes (130 already in production) were installed, and there were practical activities of capture, swarm transfer, swarm multiplication and installation of meliponaries.

To implement the management of chelonians and fish, three weirs were built collectively in the TI Humaitá River Kaxinawa and one weir in the TI Upper Purus River. These four new weirs and the six existing weirs in the TI Upper Purus River were structured with the supply of fingerlings of four Amazonian species, initial feed for the rearing of fingerlings and chelonians and 14 kits for feed production. Thus, at the end of the project, the result of ten weirs with managed rearing of chelonians and/or fish was achieved.

A total of 118 flour plants were installed in three of the four TIs benefited by the project and a sugarcane mill was installed in the TI Humaitá Igarapé Arara. Flour production aims to ensure the food security of indigenous communities, allocating the surplus to trade through government school meal programs and sale in neighboring communities and municipalities.

Originally, the plan was to install a smaller number of flour plants (total of twenty); however, by proposal of the indigenous leaders, it was decided to replace the construction of the masonry houses centralized in the villages with kits of flour by demand of each community, directly serving a larger number of families. Thus, the families were responsible for making a traditional structure for the flour plant and the project provided the tools and machinery installed in these traditional structures.

To improve indigenous handicrafts, a handicraft and seed processing workshop was held, lasting five days in the TI Gregório River, to enhance the work that the Yawanawa women already performed. This workshop, with the participation of 42 indigenous persons, was mediated by three specialists in the areas of seed processing and technology, stamping, weaving, handicraft design and product development. Tools and machines were also provided to process seeds for the manufacture of handicrafts.

For the provision of technical assistance, four indigenous agroforestry agents were hired on a permanent basis, in partnership with Amaaiac, and consultants were hired when more specific technical knowledge was needed. These indigenous agroforestry agents, in addition to technical assistance activities, participated in seedling production, planting and agroforestry system management, as well as supported the planning and monitoring of project activities.

For the training of indigenous agroforestry agents, two technical courses were taught, one with 39 participants (with a workload of 250 hours) and another with 30 participants (with 312 hours). The participants came from nine indigenous peoples from 17 TIs. These courses provided knowledge on agroforestry; rearing and management of animals – chelonian rearing and meliponiculture; organic vegetable garden; indigenous ecology; indigenous history and archaeology; mathematics; information technology and others.

The project promoted the coordination to supply products from TIs for school meals under the PAA and Pnae programs, through diagnosis of the production of villages and of the situation of school meals in the TIs, in addition to meetings with the municipal governments and efforts to raise awareness of the communities as to the need to organize production (planning and predicting what they could provide throughout the year). The main result obtained was in the TI Upper Purus River, which has four schools with regionalized school meals that are being supplied with local food production.

Result and impact indicators

The project activities contributed to the results related to the “sustainable production” component (2) of the Amazon Fund Logical Framework.

Direct effect 1.1: economic activities of sustainable use of forest, agroforestry and biodiversity developed

Direct effect 1.2: chains of agroforestry products and biodiversity with increased added value

The main indicators agreed for the monitoring of this objective were:

- Annual revenue from sustainable use economic activity – *in natura* products (outcome indicator)

Goal: not set | Result achieved: R\$ 78,500.00

- Annual revenue from sustainable use economic activity – processed products (R\$) (outcome indicator)

Goal: not set | Result achieved: R\$ 409,121.00

Agroforestry products were commercialized as a result of the project’s actions, namely: banana, pineapple, coconut, orange, watermelon, *açaí* berry, cassava and corn. However, the main revenue was generated by activities that added some value to *in natura* products, such as the commercialization of cassava flour. The baselines of the *in natura* and processed products (2015) were, respectively, R\$ 20,000.00 and R\$ 84,500.00. The results achieved refer to 2017. It is worth mentioning that the portion of the production that is consumed by the indigenous persons themselves (food security) was not measured by this indicator, because it is not commercialized.

- Recovered area used for economic purposes (outcome indicator)

Goal: 170 ha | Result achieved: 238 ha

Deforested areas recovered by the implementation or enrichment of AFSs contributed to diversify the food of indigenous families, ensuring their food security by means of food production and income generation with the commercialization of surpluses.

Direct effect 1.3: expanded managerial and technical capacities for the implementation of economic activities of sustainable use of forest and biodiversity

- Indigenous persons trained to practice and manage sustainable economic activities that effectively apply the knowledge acquired (outcome indicator)

Goal: not set | Result achieved: 88

The result achieved – 88 trained – covers individuals who effectively apply the acquired knowledge, who were trained in the two training courses of indigenous agroforestry agents and in the other training activities promoted by the project (exchanges and advisory).

Institutional and administrative aspects

Partnerships were established with four indigenous associations, representatives of the indigenous peoples of the four TIs benefited by the project, namely: (i) Upper Purus River Huni Kuin Indigenous People Organization (Opiharp); (ii) Yawanawa Sociocultural Association (Ascy); (iii) Humaitá Igarapé Shawadawa People Association (APSIH); and (iv) Humaitá River Indigenous People Association (ASPIRH).

The representatives of these associations participated in the planning and part of the execution of project activities in their TIs. These representatives also participated in their monitoring, following the work of the indigenous agroforestry agent hired for each TI and participating in the monitoring and evaluation of the project throughout its implementation. Holding project monitoring and assessment meetings at each new stage of its implementation also contributed to develop the organizational capacity of partner indigenous associations.

A partnership was established with the Department of Agroforestry Extension and Production (Seaprof) of the state of Acre to support the transportation between municipalities of the materials to be taken to the TIs and to provide a technical specialist in fish farming and a technical specialist in meliponiculture who mediated thematic workshops within the project.

Risks and lessons learned

Despite the relevant results achieved by the project, some challenges faced are highlighted whose corrective measures can be understood as lessons and recommendations for similar projects.

To implement the rearing and management of chelonians and fish, four weirs were built in two of the four TIs benefiting from project actions. The planned activities were carried out late, because of the time-consuming process to obtain response from the competent environmental agency on their environmental licensing.

The lesson learned is the recommendation that when a project provides for activities that need to start an environmental licensing process (even if it is to be exempted from this licensing), it is important to start the coordination with the competent agencies as soon as possible so as not to compromise the execution of the activity.

The objective of developing the honey value chain was partially achieved, as the project concentrated greater efforts on the training and installation of meliponaries, that is, in some of the stages of the chain, however, it did not delve into the development of the product for commercialization.

The prospect is that bee keeping and honey production will evolve, due to the great interest shown by the indigenous people and their ease to learn how to manage native bees. The major challenge will be the commercialization of honey, as there are specific sanitary standards for it to be marketed. Nevertheless, indigenous families and children benefited from the theme of food security, because, with the project, their access to this nutritious and medicinal food was expanded.

The team responsible for the project execution realized the need to further involve the administrative team in the planning of their activities, so they had a better understanding of the materials to be acquired for executing the planned activities.

A positive practice adopted by the project, motivated by the precarious logistics of the Amazon, is to create conditions so the performance of activities depend minimally on external inputs. In the implementation of the AFSs, one of the measures adopted was to invest in the production of seedlings in the TIs benefited by the project, thus reducing the need to bring seedlings from afar.

This strategy circumvented the difficulty of finding fruit seedlings in the municipalities near the TIs, as well as shortened the path between the nurseries and the AFS areas, reducing the challenge of river transport, which needs to respect several variables, such as the weight in the vessels, the water level in the rivers and the damage caused to the seedlings by the sun and wind during their transport.

It is also important to include and maintain constant dialogue with representatives of the beneficiary communities, consulting them and considering joint strategies to overcome challenges and/or make any proposal more efficient. For example, the activity with the AFSs took place differently from what was expected, with regard to the size of planting by TI, due to the observance, throughout the project, as to the vocation of each community and the corresponding demonstration of commitment to a given activity, which was unveiled with the evolution of the activities. This is an important and sensitive perception that projects of this nature must foster, seeking the balance between the promotion of new practices and respect for the characteristic designs of each community.

Regarding the government procurement programs PAA and Pnae, it was not possible to perform, comprehensively, the registration of indigenous producers interested in marketing. To access these programs it is necessary to obtain a Pronaf Fitness Statement (DAP). And the DAP was not issued for most TIs due to operational difficulties, such as availability of system and technicians trained by the municipalities to serve the indigenous population, in addition to the minimum requirements not adhering to the local reality. The issuance of DAP was possible only in the municipality of Santa Rosa do Purus, for some of the beneficiaries of the project, allowing the commercialization of production for school meal.

Sustainability of the results

The project had the merit of directly benefiting 974 indigenous people, of which 362 were women. Among the main impacts observed, we highlight the increase in agroforestry production, the expansion of cassava processing, the commercialization of these products, the training of indigenous families for new productive activities and the training of indigenous agroforestry agents. It is estimated that these positive impacts are sustainable, because in addition to ensuring food security they also provide an economic alternative.

The initial investment in inputs, tools and machines enhanced agroforestry production and other productive activities supported by the project, which were also benefited by technical assistance and training.

Efforts were also made so that indigenous associations and families benefited understood the importance of being responsible for all material goods granted to them, ensuring their proper use and proper maintenance. One of the challenges is that they realize, over time, the need to reinvest resources in the tools and inputs needed to continue with the strengthened production, ensuring the sustainability of these productive activities and their economic autonomy.



Empowering Environmental Monitoring and Control in order to Combat Illegal Deforestation in the Brazilian Amazon

PROJECT MANAGEMENT

Brazilian Institute of Environment and Renewable Natural Resources (Ibama)

REGIONAL SCOPE

The entire Brazilian Amazon

BENEFICIARIES

The entire population of the Brazilian Amazon

OBJECTIVES

Support Ibama's environmental inspection and deforestation control activities in the Brazilian Amazon

TOTAL COST OF THE PROJECT

R\$ 56,295,964.63
US\$ 17,662,033.20

AMAZON FUND SUPPORT

R\$ 56,295,964.63
US\$ 17,662,033.20

EXECUTION PERIOD

4th quarter 2016 to
2nd quarter 2019

PROJECT EVOLUTION

DATE OF APPROVAL	DATE OF CONTRACT	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
Oct 19, 2016	Nov 3, 2016	R\$ 56,295,964.63 US\$ 17,662,033.20	100%



Context

Since the creation of the Action Plan for Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm), Brazil has managed to considerably reduce deforestation rates in the Amazon. Its preparation, in 2004, had the collaboration of several ministries, in addition to representatives of civil society and the Amazonian states, and its implementation was coordinated by the Ministry of Environment (MMA).

According to the evaluation of the second phase of the PPCDAm, it was concluded that the drop in deforestation was mainly due to the actions carried out in the environmental monitoring and control axis, among which the environmental inspection actions carried out by Ibama stand out.

Environmental inspection activities require appropriate means of transport for this type of operation in the Amazon region, such as: 4x4 pick-up trucks for land activities and helicopters for aerial activities.

Historically, Ibama had these resources and carried out its inspection activities with considerable success. However, in recent years the budget of this environmental agency has been reduced by the Federal Government, due to the fiscal situation of the country resulting from the economic recession.

The project

Ibama is an independent federal agency, with administrative and financial autonomy, linked to the Ministry of Environment (MMA). The institute has as one of its main tasks the environmental supervision, monitoring and control and the exercise of the power of environmental police.

The project aimed to ensure the execution of inspection activities by Ibama. The resources from the project were used to pay for the rent of trucks and helicopters to be used in field inspection activities. The activities were concentrated in the regions that suffer the greatest deforestation pressure, according to alerts issued by the Deter system,⁶⁸ 18 among others.

Intervention logic

The project is part of the “monitoring and control” component (2) of the Amazon Fund Logical Framework. Its expected direct effect was thus defined: “Ibama structured to conduct activities to suppress environmental crimes in the Amazon.”

Ibama’s structuring through the provision of vehicles and helicopters for environmental monitoring and inspection activities in the Amazon directly contributes to reduce the loss of vegetation cover due to illegal deforestation,

⁶⁸ The Deter is a quick survey of alerts of evidence of alteration of the forest cover in the Amazon, made by Inpe using satellite images.

directly impacting the Amazon Fund's general objective of "reducing deforestation with sustainable development in the Amazon."

Activities executed

The project goal of "strengthening environmental control and monitoring to combat illegal deforestation in the Amazon" aimed to increase the Federal Government's capacity to prevent environmental crimes and lead to a reduced rate of deforestation in the Amazon. Such strengthening occurred with the leasing of vehicles and aircraft for monitoring and transport.

The vehicle leasing and aircraft chartering activities were carried out as provided in the project. From October 2016 to May 2018, 175 vehicles were used per month and there were 3,796 hours of flights in the Brazilian Amazon.

Result and impact indicators

The project activities contributed to the results related to the "monitoring and control" component (2) of the Amazon Fund's Logical Framework.

Direct effect 2.1: Ibama structured to conduct activities to suppress environmental crimes in the Amazon.

The main indicators agreed for the monitoring of this objective were:

- Number of environmental inspection actions carried out (output indicator)
Goal: 166 (annual) | Result achieved: 415 (annual)

A total of 691 environmental inspection actions were carried out during the period of approximately one and a half year of project execution (from October 2016 to May 2018). The baseline of this indicator was 166 annual actions, and the goal established aimed to ensure the execution of this same number of inspection actions, considering the conjuncture of budgetary constraints of the Federal Government resulting from economic recession in 2015 and 2016. The number of inspection actions carried out was significantly higher than the expected goal.

- Number of infringement notices filed by Ibama (outcome indicator)
Goal: 4,650 (annual) | Result achieved: 3,910 (annual)

The 691 inspection actions carried out by Ibama with the support of the Amazon Fund resulted in 6,516 infringement notices. The baseline of this indicator was 4,650 infringement notices (annual), and the goal set was to achieve that same number. The annualized achieved result was slightly below the expected value.

- Amount of fines imposed by Ibama for infractions against flora (outcome indicator)
Goal: R\$ 1.6 billion (annual) | Result achieved: R\$ 1.9 billion (annual)

The inspection actions resulted in the filing of fines totaling R\$ 3,180,226,402.00. The baseline of this indicator was R\$ 1.6 billion (annual) and the goal set aimed at achieving this same amount, which was surpassed by the project.

- Annual deforestation in the Brazilian Amazon

Baseline: 7,893 km² (2016) | Result achieved: 7,536 km² (2018)

The annual shallow cutting deforestation rate in 2016 (the year prior to the start of the project actions⁶⁹) was 7,893 km², while in 2018 this rate was 7,536 km² (year in which the actions supported by the Amazon Fund were completed). There was, therefore, a reduction of approximately 5% in the deforestation rate when compared with baseline and 2018, which indicates that the project actions were effective in containing deforestation in this period.

TABLE 27 | DEFORESTED AREA IN THE BRAZILIAN AMAZON

Year	Area (km ²)
2016	7,893
2017	6,947
2018	7,536

Source: BNDES, based on Inpe/Prodes.

Institutional and administrative aspects

Throughout the project execution period there were changes in the Planning, Administration and Logistics Board, in the Environmental Licensing Board, and in the General Coordination of Supervision. However, such changes had no impact on the implementation of the project since it was under the responsibility of the Environmental Protection Board (Dipro) of Ibama.

Risks and lessons learned

The Amazon Fund does not pay the daily expenses and salaries of public servants. In the supported project, there was no actualization of the risk of Ibama having budgetary insufficiency to pay, with its own resources, other costs involved in the inspection actions, such as daily expenses for servants in the field.

There was a slight delay in project execution due to the sporadic unavailability of aircraft due to corrective and preventive maintenance or because they were not employed because of unfavorable weather conditions for flight.

⁶⁹ Annual deforestation rates have been calculated by Inpe for the periods from August to July every year, uninterrupted, since 1988.

Sustainability of the results

The sustainability of the results achieved with the support of the Amazon Fund, given the nature of this project, depends mainly on the continuation of activities to monitor, inspect and suppress illegal deforestation.

In 2018, a new Ibama project was approved by the Amazon Fund, in the amount of R\$ 140 million (Profisc I – B project), with the same objective of funding its environmental inspection and deforestation control activities in the Brazilian Amazon.

This new project also aims to provide resources for payment of proper means of transportation for environmental inspection activities of Ibama, through the leasing of trucks and helicopters to be used in field actions. The execution period of this new project extends until 2020.



Jacundá – Green Municipality Economy

PROJECT MANAGEMENT

Municipality of Jacundá

REGIONAL SCOPE

Municipality of Jacundá

BENEFICIARIES

The entire population of the municipality of Jacundá

OBJECTIVES

Support the strengthening of municipal environmental management through the physical and operational structuring of the Municipal Department of Environment and Tourism

TOTAL COST OF THE PROJECT

R\$ 199,352.05
US\$ 107,201.58

AMAZON FUND SUPPORT

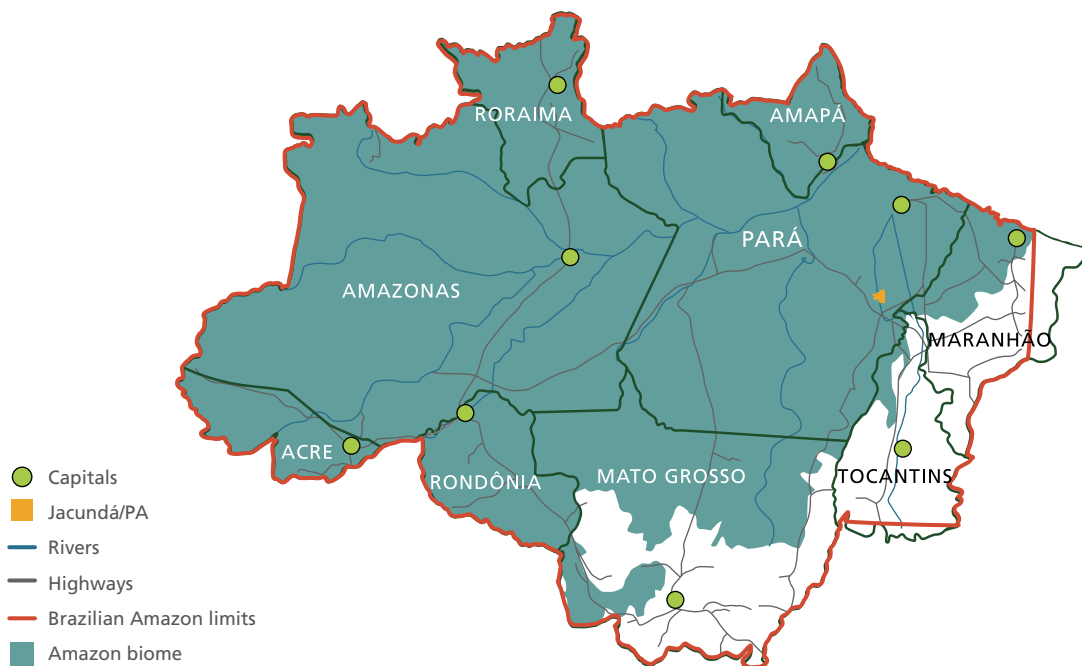
R\$ 199,352.05
US\$ 107,201.58

EXECUTION PERIOD

2nd quarter 2014 to
3rd quarter 2019

PROJECT EVOLUTION

DATE OF APPROVAL	DATE OF CONTRACT	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
Nov 29, 2011	Aug 31, 2012	R\$ 199,352.05 US\$ 107,201.58	100%



Context

The municipality of Jacundá is located in the state of Pará, approximately 430 km from Belém (by highway). It has a territory of 2,008 km² and a population of about 51,000 inhabitants (according to 2010 IBGE estimates).

Jacundá is not included in the list of priority municipalities in the Ministry of Environment for actions to prevent and combat deforestation in the Brazilian Amazon. However, it is located in the vicinity of an area considered as the largest focus of deforestation in the Amazon, known as the “arc of deforestation.”

The main economic activities of the municipality are centered on extensive livestock farming and plant extraction. In addition to these activities, the production of fruits, vegetables and grains, both in permanent and temporary crops, is also very relevant, according to the 2009 Municipal Agricultural Production (IBGE 2010).⁷⁰

The project

The project originally aimed to support the strengthening of municipal environmental management, through: (i) physical and operational structuring of the Municipal Department of Environment and Tourism (Sematur); (ii) expansion of the production capacity of the municipal nursery; and (iii) preparation of a study for characterization of the municipal territory. However, during its implementation, the scope of the project was reduced exclusively to the physical and operational structuring of Sematur.

Intervention logic

The project is part of the “monitoring and control” component (2) of the Amazon Fund Logical Framework. Its expected direct effect was thus defined: “Municipal Department of Environment and Tourism of the municipality of Jacundá structured and modernized.”

In seeking to strengthen the municipal environmental management through the physical and operational structuring of Sematur, the project aimed to contribute to the achievement of the Amazon Fund’s general objective of “reducing deforestation with sustainable development in the Amazon.”

Note that the project included the preparation of the initial phase of municipal ecological-economic zoning (EEZ), having as direct effect the organization of the municipality territory defined by means of EEZ approved by law.

The project also included the expansion of the nursery’s production capacity aiming to promote the recovery of deforested and degraded areas for economic and ecological conservation purposes in this municipality.

⁷⁰ Report published in 2010 by IBGE, available at: https://biblioteca.ibge.gov.br/visualizacao/periodicos/66/pam_2009_v36_br.pdf

Activities executed

The Jacundá – Green Economy Municipality project contributed to the physical and operational structuring of Sematur through the completion of the renovation and expansion of the building of this department, with its entry into regular operation. Sematur carries out, in its administrative competence, environmental licensing, inspection, and rural environmental registration activities.

Result and impact indicators

The project activities contributed to the results related to the “monitoring and control” component (2) of the Amazon Fund’s Logical Framework.

Direct effect 2.1: Municipal Department of Environment and Tourism of the municipality of Jacundá structured and modernized.

The indicator agreed for monitoring this objective was:

- Annual deforestation rate in the municipality of Jacundá
Baseline: 1.8 km² (2013) | Result achieved: 2.7 km² (2018)

The annual shallow cutting deforestation rate in 2013 (the year prior to the beginning of the project actions⁷¹) was 1.8 km², while in 2018 this rate was 2.7 km², that is, there was a 50% increase in the deforestation rate when compared with the baseline and 2018. This increase in deforestation is not a good result, but it should be put into perspective: the deforestation rate in the six years prior to the baseline (2007 to 2012) had been 5.3 km²/year, almost double the deforestation rate in 2018. In 2004 and 2005, 42.5 km² and 26.4 km² were deforested, respectively, in the municipality of Jacundá.

TABLE 28 | DEFORESTED AREA IN THE MUNICIPALITY OF JACUNDÁ

Year	Area (km ²)
2013	1.8
2014	1.8
2015	3.3
2016	2.1
2017	2.0
2018	2.7

Source: BNDES, based on information from Prodes/Inpe.⁷²

⁷¹ Annual deforestation rates have been calculated by Inpe for the periods from August to July every year, uninterruptedly, since 1988.

⁷² Inpe's Prodes system performs the inventory of loss of primary forest through the use of satellite images of the Earth for the entire length of the Brazilian Amazon.

Institutional and administrative aspects

The project scope was reduced due to the difficulties of the municipality of Jacundá to meet its tax obligations, since the legislation only authorizes the release of funds by BNDES to public or private entities that are compliant with the Federal Revenue Service of Brazil (RFB) and the Attorney General's Office of the National Treasury (PGFN).

Due to this circumstance, the total amount of the Amazon Fund support was reduced from R\$ 792,200.00 to R\$ 199,352.05, used for the renovation and expansion of the Sematur building, and there was no financial consideration of the municipality. Nevertheless, it was verified that Sematur provided the structuring of the new facilities of this department satisfactorily, with the allocation of its own furniture and equipment. Finally, it is worth mentioning that the Amazon Fund does not pay the daily expenses and salaries of public servants.

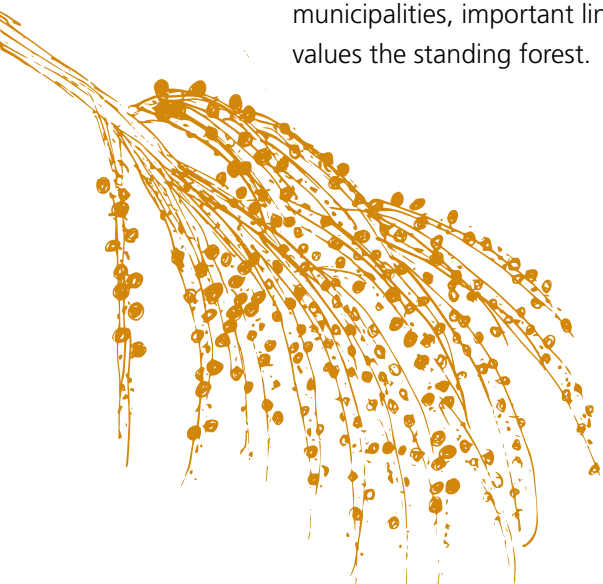
Risks and lessons learned

The Amazon Fund approved a total of ten projects for nine municipalities. Of this set, four were completed by 2018, two of which were of larger scale and with positive evaluation. Three other projects were cancelled, and the present project had its scope significantly reduced after the contract.

The causes that motivated the cancellations or reduction in scope of projects in the municipalities are varied, such as delays by difficulties in meeting the preconditions to contract, supervening of municipal elections with disinterest of new administrations in carrying out projects and difficulty of the municipalities to prove, even during the period of implementation of the projects, their tax compliance with the RFB and PGFN.

Most of the municipal administration projects supported by the Amazon Fund were also characterized by small investments. Based on this set of findings, the Amazon Fund Steering Committee (COFA) discontinued, in 2013, the approval of new direct support from the Amazon Fund to municipalities. The new strategy defined by the COFA began to provide indirect support to municipalities, through larger projects, coordinated by institutions of reference or states of the Federation.

This new strategy established by the COFA did not significantly expand the support to municipalities to contain deforestation, thus remaining the challenge of engaging municipalities, important links of society, in an agenda of sustainable development that values the standing forest.



Sustainability of the results

The project contributed to the physical and operational structuring of Sematur in the municipality of Jacundá, in the state of Pará, and the new facilities of the department, implemented with the support of the Amazon Fund, in addition to contributing to better accommodation of employees, materials and documents, provided the population of this municipality with better service with regard to public services related to the environment.

The sustainability of the results achieved with the support of the Amazon Fund depends on the continued allocation in the budget of the municipality of Jacundá of sufficient resources for Sematur to carry out its activities of environmental licensing, inspection and regularization of municipal competence.



Projects concluded by 2018

In addition to the projects concluded in 2019, another 21 projects supported by the Amazon Fund ended by 2018, which are listed below. Detailed information on these projects, as well as their results and impacts, can be found in the Amazon Fund's activity reports from 2013 to 2018 and on the website <funcaoamazonia.gov.br>.

Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Biodiversity Federal University of Pará (UFPA) and Research Development and Support Foundation (Fadesp)	State of Pará	Expand UFPA's research infrastructure focused on the study of biodiversity, comprising: (i) construction and structuring of the Advanced Biodiversity Studies Center (Ceabio); and (ii) renovation of the Drug Planning Laboratory and the Molecular and Cellular Neurochemistry Laboratory, and acquisition and installation of equipment for research in biotechnology	10.2.2012	2018	R\$ 4,639,706.98 US\$ 2,459,556.29
Amazon Bioactive Compounds Federal University of Pará (UFPA) and Research Development and Support Foundation (Fadesp)	State of Pará	(i) Install a pilot plant in the UFPA food laboratory to produce and characterize extracts rich in bioactive compounds; and (ii) develop new products and technological applications using bioactive compounds extracted from native plants and fruits from the eastern Amazon	8.21.2012	2018	R\$ 1,352,368.48 US\$ 723,849.75
Mangrove Forests Federal University of Pará (UFPA) and Research Development and Support Foundation (Fadesp)	Municipality of Bragança, state of Pará	(i) Construction and equipment of a laboratory for research on mangrove ecology on the UFPA <i>campus</i> in the municipality of Bragança (PA); (ii) research and development of knowledge and techniques related to the recovery of degraded mangrove areas in the North region; and (iii) development of models for estimating biomass, carbon sequestration and assessing carbon stocks in mangrove forests	7.17.2012	2018	R\$ 1,982,143.00 US\$ 1,130,843.79

(Continues)

(Continuation)

Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Sustainable Fishing WWF-Brasil	Municipalities of Feijó, Tarauacá and Manoel Urbano, in the state of Acre	Promote the adoption of management measures combined with the establishment of fishing agreements to reduce the degradation of aquatic ecosystems, in order to constitute a sustainable economic alternative to deforestation, in the state of Acre	4.17.2014	2018	R\$ 3,205,943.00 US\$ 1,362,028.63
Reforestation in the Southern Part of the State of Amazonas State of Amazonas	Municipalities of Boca do Acre, Lábrea, Apuí and Novo Aripuanã in the state of Amazonas	Support the strengthening of environmental management in the state of Amazonas in areas under intense pressure for deforestation, in the municipalities of Boca do Acre, Lábrea, Apuí and Novo Aripuanã, by: (i) strengthening environmental management, with a focus on the Rural Environmental Registry (CAR); and (ii) recovering deforested areas by reforestation with species with economic and ecological function, through agroforestry, silvicultural and agricultural-forestry-pasture systems.	12.17.2010	2018	R\$ 17,575,286.19 US\$ 9,963,879.01
Amazon's Water Springs – Phase II Municipality of Alta Floresta	Municipality of Alta Floresta, state of Mato Grosso	Support the recovery of degraded areas and the conduct of sustainable productive activities aiming at the environmental regularization of family farms in the municipality of Alta Floresta	9.5.2013	2018	R\$ 7,146,563.54 US\$ 3,323,055.68
Forest Firefighters of Mato Grosso State of Mato Grosso/Fire Brigade of the State of Mato Grosso (CBMMT)	State of Mato Grosso	Support actions to monitor, prevent and combat deforestation resulting from forest fires and unauthorized burn-offs in the state of Mato Grosso, through training and acquisition of aircrafts, vehicles and support equipment for the Air and Ground Operations Base of the Military Fire Department of the state of Mato Grosso, located in the city of Sorriso	1.17.2012	2017	R\$ 12,518,230.09 US\$ 7,407,675.06

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Recovering Marcelândia Municipality of Marcelândia	Municipality of Marcelândia	Support the strengthening of municipal environmental management and the recovery of degraded areas around fifty springs in the sub-basin of the Manissauá-Missu River, located near the urban area in the municipality	5.24.2011	2017	R\$ 551,556.98 US\$ 320,021.46
Semas Pará State of Pará	State of Pará	Support the strengthening of environmental management in the state of Pará by improving the process of issuing the Rural Environmental Registry (CAR), decentralizing and deconcentrating the activities of its State Department of Environment and Sustainability and improving the legal process of environmental licensing	10.6.2010	2017	R\$ 15,923,230.00 US\$ 9,020,637.89
Acre: Zero Forest Fires State of Acre/ Military Fire Department of the State of Acre	State of Acre	Support actions to monitor, prevent and combat deforestation resulting from forest fires and unauthorized burn-offs in the state of Acre, through training and acquisition of vehicles and support equipment for the education, protection and forest firefighting battalions of the Military Fire Department of the State of Acre	7.5.2012	2016	R\$ 13,280,709.56 US\$ 6,892,624.85
Amazon Public Policy Incubator Federal University of Pará (UFPA) and Research Development and Support Foundation (Fadesp)	All states of the Amazon biome	Develop an interdisciplinary research project on the socioeconomic and environmental impacts resulting from the expansion of the economic frontier of the Amazon, within the scope of the Amazon Public Policy Incubator, linked to the Research and Graduate Program Forum on Sustainable Development of the Amazon	12.9.2011	2016	R\$ 2,660,567.23 US\$ 1,710,865.69
Protected Areas of the Amazon (Arpa) – Phase 2 Brazilian Fund for Biodiversity (Funbio)	All states of the Amazon biome	Support the creation and consolidation of PAs in the Amazon biome in order to ensure the conservation of biodiversity and the maintenance of ecological processes and services in the region	4.22.2010	2015	R\$ 19,949,058.91 US\$ 10,478,547.59

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Forest Assistance Program Sustainable Amazonas Foundation (FAS)	16 state PAs in Amazonas, covering about 10 million hectares	Promote the containment of deforestation and the improvement of the quality of life of traditional populations living in the state PAs of Amazonas	3.31.2010	2015	R\$ 19,107,547.89 US\$ 11,080,050.97
Dissemination and Improvement of Sustainable Forest Management Techniques Tropical Forest Institute	States of Pará, Amazonas and Rondônia	Support the expansion of sustainable forest management practices through technical training actions, awareness-raising for key players and workers, and applied research	4.15.2011	2015	R\$ 7,449,000.00 US\$ 4,164,244.19
Belém Islands Federal University of Pará (UFPA)/ Research Development and Support Foundation (Fadesp)	State of Pará	Implement methodology to support the formulation of local-scale economic and environmental zoning of islands located around the city of Belém and expand the research infrastructure of the UFPA Postgraduate Program in Aquatic Ecology and Fishing	7.17.2012	2015	R\$ 1,138,083.93 US\$ 638,082.49
New Social Mapping in the Amazon State University of Amazonas (UEA) Muraki Institutional Support Foundation	All states of the Amazon biome	Promote the social mapping of 27 communities in the Amazon biome and the strengthening of the research network involved in the project	5.6.2011	2015	R\$ 4,614,587.03 US\$ 2,646,585.82
Socioenvironmental Management in Municipalities of Pará Institute of Man and Environment of the Amazon (Imazon)	11 municipalities in the state of Pará: Abel Figueiredo, Bom Jesus do Tocantins, Moju, Dom Eliseu, Goianésia do Pará, Itupiranga, Jacundá, Paragominas, Rondon do Pará, Tailândia and Ulianópolis	Mobilize state and municipal governments, rural producers, unions and associations, aiming to accelerate the adherence to the CAR; monitor deforestation using satellite images; and assist in planning the landscape and restoring degraded areas in the Uraim River basin, in Paragominas	7.29.2010	2014	R\$ 9,736,473.00 US\$ 5,173,746.21

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Going Green The Nature Conservancy of Brasil (TNC Brasil)	Seven municipalities in the state of Mato Grosso: Cotriguaçu, Juruena, Sapezal, Campos de Júlio, Nova Mutum, Tapurah and Nova Ubitatã; and five municipalities in the state of Pará: Bannach, Cumarú do Norte, Ourilândia do Norte, São Félix do Xingu and Tucumã	Contribute to the mobilization of local players in 12 municipalities in Mato Grosso and Pará, aiming at adherence to the CAR, and monitoring of deforestation in the region using satellite images	4.13.2010	2014	R\$ 16,000,000.00 US\$ 8,117,294.91
Amazon's Water Springs Municipality of Alta Floresta, state of Mato Grosso	Municipality of Alta Floresta, state of Mato Grosso	Support the strengthening of environmental management in the municipality by carrying out environmental diagnosis and enabling the process of registering small rural properties in the CAR, in addition to promoting actions to foster the recovery of degraded permanent preservation areas close to the springs located in the small properties	1.25.2011	2013	R\$ 2,781,340.40 US\$ 1,554,863.82
Preserving Porto dos Gaúchos Municipality of Porto dos Gaúchos, state of Mato Grosso	Municipality of Porto dos Gaúchos, state of Mato Grosso	Strengthen municipal environmental management through the physical and operational structuring of the Municipal Department of Environment and Tourism	8.12.2011	2013	R\$ 120,655.00 US\$ 72,456.76
Portal Seeds Ouro Verde Institute	Seven municipalities that are part of the region known as the Portal of the Amazon, in the extreme north of Mato Grosso: Apiacás, Alta Floresta, Carlinda, Nova Guarita, Nova Canaã do Norte, Terra Nova do Norte and Matupá	Promote the environmental recovery of 1,200 hectares of degraded areas (restoration of permanent protection and legal reserve areas) and revaluation of family farming in six municipalities in the Portal of the Amazon territory, through the dissemination of SAFs, which combine the sustainable use of forest with income generation. Additionally, the indigenous community Terena will be trained to collect the seeds that will be used in the SAFs	3.25.2009	2013	R\$ 5,397,778.87 US\$ 3,119,742.73

PROJECTS IN PROGRESS



PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
High Juruá Amônia River Ashaninka Association (APIWTXA)	Region of Alto Juruá in the state of Acre	Promote agroforestry management and production in traditional and indigenous communities to build a sustainable economic alternative to deforestation; support territorial monitoring and control; and strengthen local community organization	2.24.2015	US\$ 2,289,952.10 R\$ 6,597,581.00	100%
Environmental Regularization Brazilian Foundation for Sustainable Development (FBDS)	Amazon biome	To support the environmental regularization process in the Amazon biome, through: (i) land cover and use mapping; (ii) calculation of environmental liabilities in areas of permanent preservation (APP) of water bodies and in potential areas for recovery at protected areas (PA) and indigenous lands (TI); and (iii) integration of geospatial data into the Rural Environmental Registry System (Sicar)	12.3.2018	US\$ 2,398,726.48 R\$ 9,267,000.00	24%
Amazônia Agroecológica project Federation of Agencies for Social and Educational Assistance (Fase)	Alenquer, Almeirim, Aveiro, Belterra, Juruti, Mojuí dos Campos, Monte Alegre, Óbidos, Oriximiná and Santarém; Itaituba, Jacareacanga, Novo Progresso, Rurópolis and Trairão; Altamira, Anapu, Brasil Novo, Gurupá, Medicilândia, Pacajá, Placas, Porto de Moz, São Félix do Xingu and Uruará; Abaetetuba, Igarapé Miri, Acará, Baião, Cachoeira do Piriá, Cametá, Capitão Poço, Irituia, Mãe do Rio, Mocajuba, Moju, Ourém, Santa Isabel, Santa Luzia do Pará, São Miguel do Guamá and Viseu (PA); Cáceres, Poconé, Nossa Senhora Livramento, Chapada dos Guimarães, Cuiabá and Jangada (MT)	To strengthen sustainable economic activities through a public call for selecting small projects and actions to be directly executed by the beneficiary	6.13.2018	US\$ 4,736,950.65 R\$ 17,547,560.00	12%
Sustainable Indigenous Amazon Association of Ethno-environmental Defense Kanindé	TI Igarapé Lourdes (Rondônia), Zoró (Mato Grosso), Rio Guaporé (Rondônia) and Rio Negro Ocaia (Rondônia)	(i) To help implement Territorial and Environmental Management Plans (PGTA) in the TIs Igarapé Lourdes and Zoró; and (ii) to design PGTA in the TIs Rio Guaporé and Rio Negro Ocaia	12.4.2015	US\$ 2,156,669.07 R\$ 8,188,872.44	92%

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PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Amazonia SAR Federal Government/ Operations and Management Center of the Amazonian Protection System (Censipam)	Around 950,000 km ² will be monitored per year (23% of the Amazon biome): 764,000 km ² of areas under the greatest deforestation pressure; 144,000 km ² in the state of Amapá; and an additional 5% in isolated points of the Amazon biome due to specific demands	Implement a deforestation detection system in the Amazon using orbital imaging radar	6.23.2015	US\$ 20,783,439.87 R\$ 63,923,626.00	75%
APL Babassu Association of Settlement Areas in the State of Maranhão (Assema)	Municipalities of Lago do Junco, Lago da Pedra and Bacabal in the state of Maranhão	Support conservation and sustainable management of babassu palm plantations and recover damaged areas using SAFs in three municipalities in the Amazon biome, in the state of Maranhão	9.2.2014	US\$ 2,363,754.25 R\$ 5,286,300.00	93%
Arapaima: Production Networks Native Amazon Operations (Opan)	TIs Biá River, Espírito Santo, Acapuri de Cima, Estação, Macarrão and Deni; Uacari and Cujubim Sustainable Development Reserves; Médio Juruá Extractionist Reserve; all located in the middle course of the rivers Juruá and Solimões in the state of Amazonas	Support: (i) fishing management and nonwood forest resources on TIs and PAs; and (ii) strengthen indigenous associations and extractionist farmer associations	10.28.2014	US\$ 2,511,633.32 R\$ 6,364,730.00	100%
Sustainable Settlements in the Amazon Amazon Environmental Research Institute (Ipam)	Western Pará: municipalities of Anapu, Pacajá, Senador José Porfírio, Mojuí dos Campos and Aveiros	Support the development of a demonstrative experience of sustainable production and implement an environmental services payment scheme to families committed to reducing deforestation at National Institute of Colonization and Agrarian Reform (Incra) settlements	11.29.2011	US\$ 13,411,056.34 R\$ 24,939,200.37	94%
Sustainable Bem Viver Institute of Research and Indigenous Education (Iepé)	TIs Parque do Tumucumaque (Pará and Amapá), Paru d'Este (Pará) and Zo'é (Pará)	Implement the PGTA of the TIs Parque do Tumucumaque (Amapá and Pará) and Rio Paru d'Este (Pará) and develop a PGTA for the TI Zo'é (Pará)	11.19.2015	US\$ 3,127,236.59 R\$ 11,858,793.87	100%
Forest Assistance+ Program Foundation Sustainable Amazonas (FAS)	16 PAs in the Amazonas state with about 10.9 million hectares	Maintain and expand the actions of the Bolsa Floresta program in PAs in the state of Amazonas by: (i) supporting the development of small enterprises and sustainable forest production arrangements; (ii) training local leadership and associations to manage projects focusing on income generation and environmental and social concerns; (iii) systematization and dissemination of content, methodologies, lessons learned and innovative solutions; and (iv) launching a public call for small and medium income generating projects in the surrounding region of those PAs	4.5.2016	US\$ 8,786,621.50 R\$ 31,518,490.00	98%

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PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Family Farming Value Chains in the State of Mato Grosso Alternative Technology Center Foundation (CTA)	Regions of Portal da Amazônia, mid-northern and southeastern of the state of Mato Grosso	Support and strengthen family farming in municipalities within the Amazon biome in the southeast region of the state of Mato Grosso, by implementing and consolidating agroforestry systems (SAF), supporting collective structures for production processing and structuring commercialization channels for the SAF's products	9.2.2014	US\$ 1,447,876.95 R\$ 3,238,032.00	100%
Value Chains of Nontimber Forest Products SOS Amazon Association	Municipalities of Cruzeiro do Sul, Mâncio Lima, Rodrigues Alves, Porto Walter, Tarauacá and Feijó, in the state of Acre, as well as the municipalities of Pauini, Boca do Acre, Lábrea and Silves, in the state of Amazonas	Promote and support entrepreneurial ventures of nine partner institutions aimed at job and income generation, through the sustainable development of production chains of vegetable oils, wild cocoa and rubber	1.27.2015	US\$ 3,833,089.42 R\$ 9,953,000.00	100%
Sustainable Northern Corridor Institute of Agriculture and Forest Management and Certification (Imaflora)	Municipalities of Oriximiná and Alenquer in the state of Pará	Strengthen family extractive and agricultural activities to foster the development of the Northern Corridor of the state of Pará by implementing food processing units, sapling nurseries for SAFs and community carpentry, in quilombos and settlements	8.26.2014	US\$ 1,452,506.58 R\$ 3,312,877.00	93%
Training to Conserve Amazon Conservation Team (Ecam)	PAs in the state of Amapá	Train environmental agents and managers to strengthen the PAs in the state of Amapá	9.23.2014	US\$ 608,294.93 R\$ 1,452,000.00	99%
CAR Acre State of Acre	22 municipalities in the state of Acre	Support the implementation of the Rural Environmental Registry (CAR) and the adherence to the Environmental Regularization Program (PRA) in the state of Acre	10.29.2013	US\$ 7,707,589.49 R\$ 16,838,000.00	70%
CAR Amazonas State of Amazonas	36 municipalities in the state of Amazonas	To support the implementation of CAR in properties with up to four fiscal modules	10.1.2018	US\$ 7,459,657.33 R\$ 29,867,722.00	0%
CAR Bahia Institute of Environment and Hydric Resources of the State of Bahia (Inema) – State of Bahia and State Secretariat for the Environment (Sema)	161 municipalities in the state of Bahia by promoting registration, indirectly benefiting the whole state by providing training and improving CAR's implementation infrastructure	Support the implementation of the CAR in the state of Bahia	3.25.2014	US\$ 13,623,107.36 R\$ 31,671,000.00	90%
CAR Ceará Environment State Superintendency of the State of Ceará (Semace)	109 municipalities in the state of Ceará by promoting registration, indirectly the whole state through communication actions and by improving CAR's implementation infrastructure	Support the implementation of the CAR in the state of Ceará	2.23.2016	US\$ 6,205,114.01 R\$ 24,583,420.70	28%

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PROJECTS IN PROGRESS					
Project/Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
CAR Espírito Santo					
Institute of Agricultural and Forestry Defense of Espírito Santo (IDAF)	All municipalities of the state of Espírito Santo	To support the implementation of CAR in the state of Espírito Santo	6.19.2018	US\$ 3,699,608.45 R\$ 13,889,440.00	0%
CAR Mato Grosso do Sul					
Environmental Institute of the State of Mato Grosso do Sul (Imasul)	69 municipalities in the state in the Cerrado, Pantanal and Atlantica Forest biomes	Promote the implementation of the CAR in the state of Mato Grosso do Sul	9.23.2014	US\$ 3,682,362.80 R\$ 8,789,800.00	52%
CAR Paraná					
Paraná Environmental Institute (IAP)	All municipalities in the state of Paraná	Support the implementation of the CAR in the state of Paraná	10.26.2016	US\$ 4,523,532.16 R\$ 14,110,253.86	15%
CAR Roraima					
Environment and Water Resources Foundation of the State of Roraima (Femarh)	All municipalities of the state of Roraima	Support the implementation of the CAR in the state of Roraima	11.4.2014	US\$ 1,238,055.18 R\$ 3,075,205.25	100%
CAR: Lawful Tocantins					
State of Tocantins	State of Tocantins	Support: (i) the implementation of the CAR in municipalities throughout the state; (ii) the improvement of the deforestation monitoring and control system of the state of Tocantins; (iii) the implementation of the environment management decentralisation state program in the municipalities of the Amazon biome; and (iv) the development of the sustainable forestry district in the state's Amazon biome	5.21.2013	US\$ 13,180,543.94 R\$ 26,800,000.00	92%
Forest Cities					
Institute of Conservation and Sustainable Development of the Amazon (Idesam)	14 municipalities in the state of Amazonas: Manaus, Itapiranga, Silves, São Sebastião do Uatumã, Apuí, Novo Aripuanã, Borba, Manicoré, Tefé, Carauari, Juruá, Jutai, Lábrea and Uruará	Support community forest management in the state of Amazonas by: (i) developing the Forest Cities platform to connect forest actors and support wood productive chains; and (ii) supporting the sustainable production and commercialization of wood and vegetable oils	12.27.2017	US\$ 3,642,314.76 R\$ 12,092,485.00	56%
Environmental Operations Company					
Federal Government (Ministry of Justice)	Amazon biome. The Environmental Operations Company may also be called upon to provide assistance in other biomes	Support the physical and operational structure of the Environmental Operations Company of the National Public Security Agency (FNPS) for conducting environmental operations in the Amazon biome	1.27.2015	US\$ 11,796,765.00 R\$ 30,631,480.00	3%
Materialize					
Association of Small Agro-farmers of the Reca Project (Reca Project)	Region of Ponta do Rio Abunã – municipalities of Porto Velho, in the state of Rondônia, and Acrelândia, in the state of Acre	Strengthen the cupuassu and açai berry production sector by implementing SAFs and increasing and modernizing the production capacity of pulp processing units in traditional communities in Ponta do Abunã, aiming to create a sustainable economic alternative to deforestation	10.14.2014	US\$ 2,411,118.40 R\$ 6,422,748.00	100%

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PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Knowing to Preserve Amazon Museum (Musa)	Municipality of Manaus in the state of Amazonas	Implement the Musa and a training center on the Água Branca Settlement, in Manaus, aiming to disseminate knowledge to promote and conserve Amazon's natural resources and cultural heritage, by developing an innovative model for forest visiting	11.30.2010	US\$ 5,302,059.59 R\$ 9,984,629.00	100%
Consolidating Territorial and Environmental Management in Indigenous Lands Center for Indigenous Work (CTI)	Five TIs in the states of Amazonas, Maranhão and Pará, covering 9,375,076 hectares: Vale do Javari (AM), Krikati (MA), Governador (MA), Andirá-Marau (PA and AM) and Nova Jacundá (PA)	Support the implementation of the PGTA at TIs Vale do Javari (AM), Krikati (MA) and Governador (MA); and the development of PGTAs of TIs Andirá-Marau (PA and AM) and Nova Jacundá (PA), under the National Policy for Territorial and Environmental Management of Indigenous Land (PNGATI)	9.28.2016	US\$ 3,688,281.11 R\$ 11,934,540.00	99%
Indigenous Experiences of Territorial and Environmental Management in Acre Acre Pro-Indigenous People Commission (CPI-Acre)	Eight TIs in the state of Acre	To support the implementation of Territorial and Environmental Management Plans (PGTA) in eight TIs in the state of Acre, through the promotion of territorial protection actions, training of indigenous agroforestry agents and management of backyards and agroforestry systems (SAF)	2.26.2018	US\$ 1,796,298.55 R\$ 5,823,061.00	49%
Tapajós Active Forest Center for Advanced Studies in Social and Environmental Promotion – Ceaps (Health and Joy Project)	Rural areas of the municipalities of Santarém, Belterra, Aveiro and Juruti, in the state of Pará, including actions in: (i) two PAs: Tapajós National Forest (Flona) and Tapajós-Arapiuns Resex; (ii) five agroextractive settlement projects (PAE): Lago Grande, Santa Rita, Salé, Valhame Deus and Balaio; (iii) four agroextractive settlement state projects (Peaex): Aruã, Vista Alegre, Mariazinha and Curumuci; and (iv) a federal settlement project (PA): Moju I e II	To strengthen nontimber forest production chains, tourism and community-based entrepreneurship in the Tapajós region of western Pará	5.2.2018	US\$ 3,588,811.30 R\$ 12,493,011.00	14%
Preserving the Babassu Forest Interstate Association of the Movement of Women Babassu Coconut Breakers (AMIQCB)	States of Maranhão (37 municipalities), Tocantins (16 municipalities) and Pará (6 municipalities)	Support the Babassu Fund process for selecting and supporting socioenvironmental projects of agro-extractive organizations in the states of Maranhão, Tocantins and Pará, associated with actions to develop skills, provide technical support and strengthen associativism through public calls for projects approved by BNDES	12.27.2017	US\$ 2,777,933.43 R\$ 9,222,739.00	16%

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PROJECTS IN PROGRESS					
Project/Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Everlasting Forest Institute of Amazon People and Environment (Imazon)	East of the state of Pará – municipalities of Capitão Poço, Dom Eliseu, Paragominas and Ulianópolis	Promote the environmental adequacy of rural properties in the Brazilian Amazon region by: (i) implementing forest restoration techniques in eastern Pará; (ii) training knowledge multiplier agents; (iii) elaborating a monitoring scheme for restoration areas; and (iv) promoting forest restoration activities	12.11.2017	US\$ 4,356,193.05 R\$ 14,293,105.00	26%
Communal Forests Tropical Forest Institute (IFT)	State of Pará	Support the implementation of new community forest management models for wood and <i>açaí</i> berry use and commercialization to strengthen social organization, generate income and contribute to deforestation reduction in PAs of sustainable use in the Marajó archipelago in the state of Pará	4.6.2017	US\$ 2,619,409.50 R\$ 8,100,000.00	44%
Valuable Forests – New Business Models for the Amazon Institute of Agriculture and Forest Management and Certification (Imaflora)	States of Pará and Mato Grosso	Support: (i) the consolidation and expansion of the "Brazil Origins" certification of origin system, contributing to the strengthening of production chains and the promotion of sociobiodiversity products of PAs in the Brazilian Amazon; and (ii) the sustainable production of cocoa on the vicinities of the Xingu region	1.18.2017	US\$ 5,411,041.23 R\$ 17,369,442.36	75%
Strengthening the Forest Based Sustainable Economy Commercialization Central Cooperative for the State of Acre (Cooperacre)	14 municipalities in the administrative regions Alto Acre, Baixo Acre and Purus	Strengthen Brazil nut and fruit pulp sectors in the state of Acre by: (i) recovering damaged and/or altered areas located in small properties or family rural properties; (ii) optimizing storage logistics of Brazil nuts and fruit transport; (iii) improving Brazil nut processing; (iv) adding value and diversifying products; (v) improving the product market strategy; and (vi) training the affiliated network	9.23.2014	US\$ 2,086,977.24 R\$ 4,981,614.66	100%
Strengthening Environmental Management in the Amazon Institute of Amazon People and Environment (Imazon)	Several municipalities in the states of Amazonas, Mato Grosso, Pará and Rondônia	Support: (i) the strengthening of environmental management in priority municipalities to develop policies aimed at preventing and controlling deforestation in the Amazon biome; (ii) studies to conduct land-title diagnosis in the states of Amazonas, Mato Grosso, Pará and Rondônia to disseminate information on land-title regularization efforts in the state of Pará; and (iii) improvements to PA management in the North Corridor region in the state of Pará	11.6.2015	US\$ 3,194,485.79 R\$ 12,104,865.00	100%

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PROJECTS IN PROGRESS					
Project/Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Strengthening Territorial and Environmental Management of Indigenous Lands in the Amazon The Nature Conservancy of Brazil (TNC Brasil)	Six TIs partially located in three municipalities in the state of Amapá and five municipalities in the state of Pará	Promote sustainable territorial and environmental management in six TIs in the states of Amapá and Pará, contributing to deforestation reduction in these areas	9.16.2014	US\$ 6,730,655.10 R\$ 15,750,406.00	99%
Banco do Brasil Foundation – Amazon Fund/ Phase 2 Banco do Brasil Foundation (FBB)	Amazon biome	Support projects to develop productive activities that promote the conservation and sustainable use of the Amazon biome	10.7.2014	US\$ 4,979,666.36 R\$ 12,000,000.00	33%
Banco do Brasil Foundation (FBB) – Amazon Fund Banco do Brasil Foundation (FBB)	Amazon biome	Support projects to develop production activities in accordance with conservation and the sustainable use of the Amazon biome	5.15.2012	US\$ 7,306,715.21 R\$ 14,515,520.43	100%
Dema Fund Federation of Agencies for Social and Educational Assistance (Fase)	Traditional communities in the state of Pará, focusing on the area affected by the Transamazon and BR-163 highways, as well as in the lower Amazon region	Support low-cost socioenvironmental projects by issuing eight public calls over three years	3.15.2011	US\$ 4,579,312.13 R\$ 7,615,854.00	87%
Kayapó Fund for Indigenous Land Conservation Brazilian Biodiversity Fund (Funbio)	TIs Kayapó, Menkragnoti, Baú and Badjonkôre, in southern Pará; and TI Capoto-Jarina, in northern Mato Grosso	Support Kayapó organizations' projects aimed at sustainable production activities, strengthening institutions, preventing deforestation, conserving biodiversity and territorial protection by implementing the Kayapó Fund, a long-term financial and operational scheme	6.21.2011	US\$ 10,583,004.57 R\$ 16,900,000.00	45%
Indigenous Land Management in the Rio Negro and Xingu Basin Socioenvironmental Institute (ISA)	Nine TIs in the Amazon biome, with a total area of more than 24 million hectares, benefitting more than 60,000 individuals from indigenous peoples	Support the implementation of the PGTA for the Xingu Indigenous Park and the development of PGTAs for the TI Yanomami and the Alto Rio Negro region, systematizing knowledge and strengthening local governance structures and indigenous organizations	6.27.2016	US\$ 3,467,961.63 R\$ 11,712,000.00	100%
Indigenous Territorial Management in the South of Amazonas State International Education Institute of Brazil (IEB)	Eight TIs in the south of the state of Amazonas, covering 1,095,169 hectares: TIs Boca do Acre, Apurinã Km 124 BR-317, Água Preta/Inari, Caititu, Jiahui, Nove de Janeiro, Ipixuna and Tenharim do Igarapé Preto	Support: (i) the implementation of the PGTA of TI in the Purus River basin (Boca do Acre, Apurinã Km 124 BR-317, Água Preta/Inari and Caititu) and in the Madeira River basin (Jiahui, Nove de Janeiro and Ipixuna) in southern Amazonas; and (ii) the development of a PGTA for the TI Tenharim do Igarapé Preto in the Madeira River basin	11.1.2016	US\$ 3,598,913.90 R\$ 11,448,505.00	90%

(Continued)

(Continuation)

PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
National Forest Inventory – The Amazon Federal Government (Brazilian Forest Service)	Amazon biome	Implement the Forest Inventory in the Amazon biome to produce information on forest resources, carbon stocks and how populations in the region use their territory	7.31.2012	US\$ 31,999,485.61 R\$ 65,000,555.12	43%
IREHI – Taking Care of Territory Native Amazon Operation (Opan)	TIs Menkü, Manoki, Pirineus de Souza and Marãiwatsédé in the state of Mato Grosso	Conclude and implement a PGTA for the TI Marãiwatsédé and implement PGTAs for the TIs Manoki, Menkü and Pirineus de Souza	12.18.2015	US\$ 2,096,159.68 R\$ 8,160,140.00	100%
Integrated Legacy of the Amazon Region (Lira) Institute for Ecological Research (IPÊ)	Brazilian Amazon	To contribute to increase the level of consolidation and effectiveness of management in PAs of the Brazilian Amazon, through a public call for projects and complementary activities aimed at the conservation of natural resources	10.30.2018	US\$ 11,649,279.04 R\$ 45,000,000.00	3%
More Sustainability in the Countryside State of Maranhão	State of Maranhão	Support the implementation of the CAR in the state of Maranhão	12.27.2017	US\$ 12,191,589.46 R\$ 40,476,077.00	7%
Mamirauá Mamirauá Sustainable Development Institute (IDSM)	Municipality of Tefé (AM); Mamirauá SDR (municipalities of Uarini, Fonte Boa and Maraã in the state of Amazonas); and Amanã SDR (municipalities of Maraã, Barcelos and Coari in the state of Amazonas)	Support participatory management initiatives in Mamirauá and Amanã SDRs through research, development and dissemination of knowledge in the following topics: sustainable agriculture, sustainable forest timber management, sustainable forest non-timber management, environmental education, environmental protection and monitoring	12.18.2012	US\$ 4,068,834.82 R\$ 8,504,678.54	100%
Sustainable Mato Grosso State of Mato Grosso	State of Mato Grosso, focusing on state PAs and on 40 municipalities in the Amazon biome	Support: (i) the consolidation of PAs in the Amazon biome; (ii) the strengthening of state environmental licensing and inspections; and (iii) the decentralization of state environmental management	12.3.2013	US\$ 14,932,820.16 R\$ 35,015,970.00	41%
Environmental Monitoring of Brazilian Biomes Space Science, Applications and Technology Foundation (Funcate) and National Institute of Space Research (Inpe)	Deforestation monitoring of and Frel proposition for Atlantic Forest, Caatinga, Pampa and Pantanal biomes; and development of a platform for analysis and visualization of large volumes of geospatial data for the entire national territory	(i) Development and implementation of deforestation monitoring systems for the Atlantic Forest, Caatinga, Pampa and Pantanal biomes; (ii) calculation of deforested areas' CO ₂ emissions and proposition of a Frel for each of these biomes; and (iii) development of a platform for analysis and visualization of large volumes of geospatial data	9.25.2017	US\$ 15,911,139.52 R\$ 49,778,000.00	34%

(Continued)

(Continuation)

PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Satellite Environmental Monitoring of the Amazon Biome National Institute of Space Research (Inpe) and Space Science, Applications and Technology Foundation (Funcate)	Amazon biome	Support the development of studies of land use and coverage in the Amazon biome, as well the expansion and improvement of Inpe's satellite environmental monitoring	10.7.2014	US\$ 27,783,399.45 R\$ 66,952,436.00	100%
Monitoring Forest Coverage in the Amazon Region Amazon Cooperation Treaty Organization (ACTO)	Amazon region	Promote the development of the capacity to monitor deforestation and land use changes in OTCA's member countries	4.30.2013	US\$ 11,847,412.87 R\$ 23,693,641.00	100%
Buriti Springs Municipality of Carlinda	Municipality of Carlina in the state of Mato Grosso	Support and strengthen municipal environment management by physically structuring the Municipal Secretariat of the Environment and Tourism through actions to restore 1,722 hectares of permanent preservation areas surrounding the springs	8.2.2011	US\$ 1,206,032.37 R\$ 1,875,500.94	100%
Amazon's Nectar Peabiru Institute	Traditional communities in the municipalities of Curuçá, Almeirim and Monte Alegre, in the state of Pará, and in Macapá and Oiapoque, in the state of Amapá	Strengthen the native bee honey supply chain to provide a sustainable economic alternative to deforestation	5.13.2014	US\$ 915,899.66 R\$ 2,030,000.00	100%
Pact for the Forest Elaboration and Development of Socioenvironmental Projects (Pacto das Águas)	Alta Floresta d'Oeste, Costa Marques, Guajará-Mirim, Ji-Paraná, Nova Mamoré, São Francisco do Guaporé and São Miguel do Guaporé, in the state of Rondônia	To support the consolidation of the production chain of Brazil nuts and strengthen productive activities related to <i>açaí</i> , cassava flour and natural rubber in two TIs and three extractive reserves in Rondônia	6.13.2018	US\$ 2,348,558.47 R\$ 8,700,000.00	36%
Pará Combating Forest Fires and Unauthorized Burn-offs State of Pará/State of Pará Military Firefighters (CBMPA)	State of Pará	Support the monitoring, prevention and combat of deforestation resulting from forest fires and unauthorized burn-offs in the state of Pará, by the physical and operational structuring of CBMPA fire stations located in 10 municipalities in the state	11.27.2012	US\$ 8,096,541.11 R\$ 16,830,280.00	100%
Small Eco-Social Projects in the Amazon Society, Population and Nature Institute (ISPN)	States of Mato Grosso, Tocantins and Maranhão, limited to the Amazon biome	Support the launching of four public calls for selecting and funding low-cost socioenvironmental projects focusing on family farmers and traditional peoples and communities in the Amazon biome in the states of Mato Grosso, Tocantins and Maranhão	7.3.2012	US\$ 6,456,480.19 R\$ 12,843,876.04	100%

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PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Sowing Rondônia Center for Studies on Culture and the Environment in the Amazon (Rioterra)	State of Rondônia, municipalities of Ariquemes, Castanheiras, Cujubim, Itapuã do Oeste, Jaru, Ji-Paraná, Machadinho d'Oeste, Novo Horizonte, Ouro Preto, Presidente Médici, Rio Crespo and Rolim de Moura	Promote the environmental adequacy of rural properties in Rondônia, by: (i) elaborating and implementing Projects for the Recovery of Degraded and/or Altered Areas in properties of up to four fiscal modules of family farmers; (ii) promoting the training and institutional strengthening of family farmers' associations; and (iii) providing landscape monitoring and evaluation	12.18.2017	US\$ 7,626,224.16 R\$ 25,305,337.00	40%
PPP-Ecos in the Amazon – Phase 2 Society, Population and Nature Institute (ISPN)	States of Mato Grosso, Tocantins and part of the state of Maranhão, within the limits of the Brazilian Amazon	To support structuring projects of sustainable production chains through public calls within the scope of the Small Eco-social Projects Program (PPP-Ecos)	9.18.2018	US\$ 5,460,127.11 R\$ 22,766,000.00	18%
Prevfogo/Ibama Brazilian Institute of the Environment and Renewable Natural Resources (Ibama)	Mainly the Amazon biome; also strengthening the logistics center at the National Center for Preventing and Combating Forest Fires (Prevfogo) in Brasília	Support the physical and operational structuring of the Prevfogo program and the provision of environmental education to raise awareness and train local actors to monitor, prevent and combat forest fires and unauthorized burn-offs in the Amazon biome	12.30.2013	US\$ 6,252,557.57 R\$ 14,717,270.00	80%
Profisc I - B Brazilian Institute of Environment and Natural Resources (Ibama)	Brazilian Amazon	To support the activities of Ibama for environmental monitoring and control of deforestation in the Brazilian Amazon	3.19.2018	US\$ 41,822,410.40 R\$ 140,264,000.00	48%
Environmental Management Qualification Program Brazilian Institute of Municipal Administration (Ibam)	Municipalities in the Amazon biome	Support the environmental management in municipalities of the Amazon biome by offering training and technical support, disseminating knowledge and information through networks and fostering innovation and promoting liaison with other government levels and the society, within the framework of environmental public policies	12.18.2012	US\$ 9,019,941.79 R\$ 18,853,482.32	100%
Green Municipalities Program State of Pará	100 municipalities in the state of Pará	Support the implementation and consolidation of the CAR of rural properties and strengthen municipal environmental management, contributing to deforestation and forest degradation combat in the state of Pará	12.10.2013	US\$ 32,420,481.86 R\$ 75,296,569.12	55%

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PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Integrated Environmental Socioeconomic Development Project (PDSEAI) State of Rondônia - State Secretariat for Environmental Development (Sedam-RO)	State of Rondônia	Support the state environmental management, including actions aimed at protecting state PAs, consolidating the CAR and strengthening municipal environmental management, contributing to deforestation and forest degradation combat in the state of Rondônia	1.21.2014	US\$ 13,382,212.30 R\$ 31,227,392.40	34%
Amazon Integrated Project Brazilian Agricultural Research Corporation (Embrapa) and Eliseu Alves Foundation (FEA)	Amazon biome	Promote the production and dissemination of knowledge and technologies aimed at the recovery, conservation and sustainable use of the Amazon biome, by supporting the implementation of projects of Embrapa's decentralized units selected through an internal project call	12.29.2015	US\$ 8,597,810.44 R\$ 33,691,380.00	50%
Ethno-environmental Protection of Isolated or Recently Contacted Indigenous People in the Amazon Center for Indigenous Work (CTI)	Amazon biome	Support and protect isolated and recently contacted indigenous people by establishing the territorial boundaries and protecting natural riches of the areas where these groups live, contributing to deforestation reduction in the Amazon	10.28.2014	US\$ 7,514,829.72 R\$ 19,043,330.00	100%
Amazon Backyards Center for Studies on Culture and the Environment in the Amazon (Rioterra)	Municipalities of Machadinho d'Oeste, Cujubim and Itapuã do Oeste in the state of Rondônia	Support family farmers and Agrarian Reform settlers in the state of Rondônia, in the municipalities of Itapuã do Oeste, Cujubim and Machadinho d'Oeste to: (i) enroll their rural properties in the CAR; and (ii) plant seedlings and conduct research on SAFs aiming to recover altered or damaged legal forest reserves and permanent forest preservation areas	7.30.2013	US\$ 3,932,808.66 R\$ 8,891,687.09	100%
Greener Rondônia State of Rondônia	Area to be covered by the Air and Ground Operations Base - to be installed in the state capital, Porto Velho - and by the four largest firefighting operational units located in the municipalities of Ji-Paraná, Guajará-Mirim, Cacoal and Vilhena, which will also be equipped with project resources. The coverage will also encompass important preservation and environmental protection areas, especially the national parks of Pacaás and Serra da Cutia	Support the monitoring, prevention and combat of deforestation resulting from forest fires and unauthorized burn-offs in the state of Rondônia, by providing training and purchasing materials and equipment for (i) the Military Firefighters Aerial and Land Operations Base to be built by the state in Porto Velho; and (ii) four operational stations, located in other municipalities throughout the state	9.11.2012	US\$ 7,430,709.95 R\$ 15,040,500.00	100%

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PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
New Paths in Cotriguaçu Municipality of Cotriguaçu	Municipality of Cotriguaçu in the state of Mato Grosso	Strengthen environmental management in the municipality of Cotriguaçu by: (i) building and equipping the Municipal Environment Secretariat; (ii) recovering degraded permanent preservation areas (DPPA) in rural properties of up to four federal fiscal modules and in surrounding areas of bodies of water in public lands; and (iii) implementing demonstrative actions to recover and manage pastures	7.22.2014	US\$ 891,047.31 R\$ 1,981,511.00	80%
Portal Seeds – Phase II Ouro Verde Institute (IOV)	Eight municipalities in the Portal da Amazônia region, located in the north of the state of Mato Grosso: Apiacás, Alta Floresta, Carlinda, Colíder, Nova Canaã do Norte, Nova Guarita, Nova Santa Helena and Terra Nova do Norte	Support the recovery of damaged areas and strengthen family farming in the Portal da Amazônia region, in the state of Mato Grosso, through the implementation and consolidation of SAFs, by planting trees, enriching agroforests, structuring market channels for products and seeds and conducting research	10.1.2013	US\$ 7,213,452.91 R\$ 16,086,000.00	100%
Sustainable Tapajós Conservation International of Brazil (CI-Brasil)	Municipalities of Santarém, Aveiro, Belterra, Itaituba, Jacareacanga, Placas, Rurópolis and Trairão in the state of Pará. Five PAs: Tapajós National Forest, Itaituba I National Forest, Crepori National Forest, Trairão National Forest and Tapajós-Arapiuns Extractive Reserve	Support sustainable community-based forest production and contribute to the valorization and conservation of Tapajós region's natural resources	10.23.2017	US\$ 7,438,704.49 R\$ 23,679,628.00	19%
Land Regularization State of Mato Grosso – Office of Articulation and Regional Development (GDR/MT)	State of Mato Grosso	To modernize land management in the state and contribute to the regularization of federal and state public areas and settlements	4.2.2018	US\$ 21,932,727.60 R\$ 72,900,000.00	9%
Kayapó Territory, Culture and Autonomy Protected Forest Association (AFP)	Two TIs in the south of Pará (Kayapó and Las Casas), totaling 3.3 million hectares	Support the implementation and updating of the PGTA of the TI Kayapó and the implementation of the PGTA of the TI Las Casas, both located in the state of Pará, contributing to the protection and sustainable management of its territories and natural resources, the promotion of their economic autonomy and the valorization of their culture	12.4.2017	US\$ 2,785,228.17 R\$ 9,089,870.67	19%

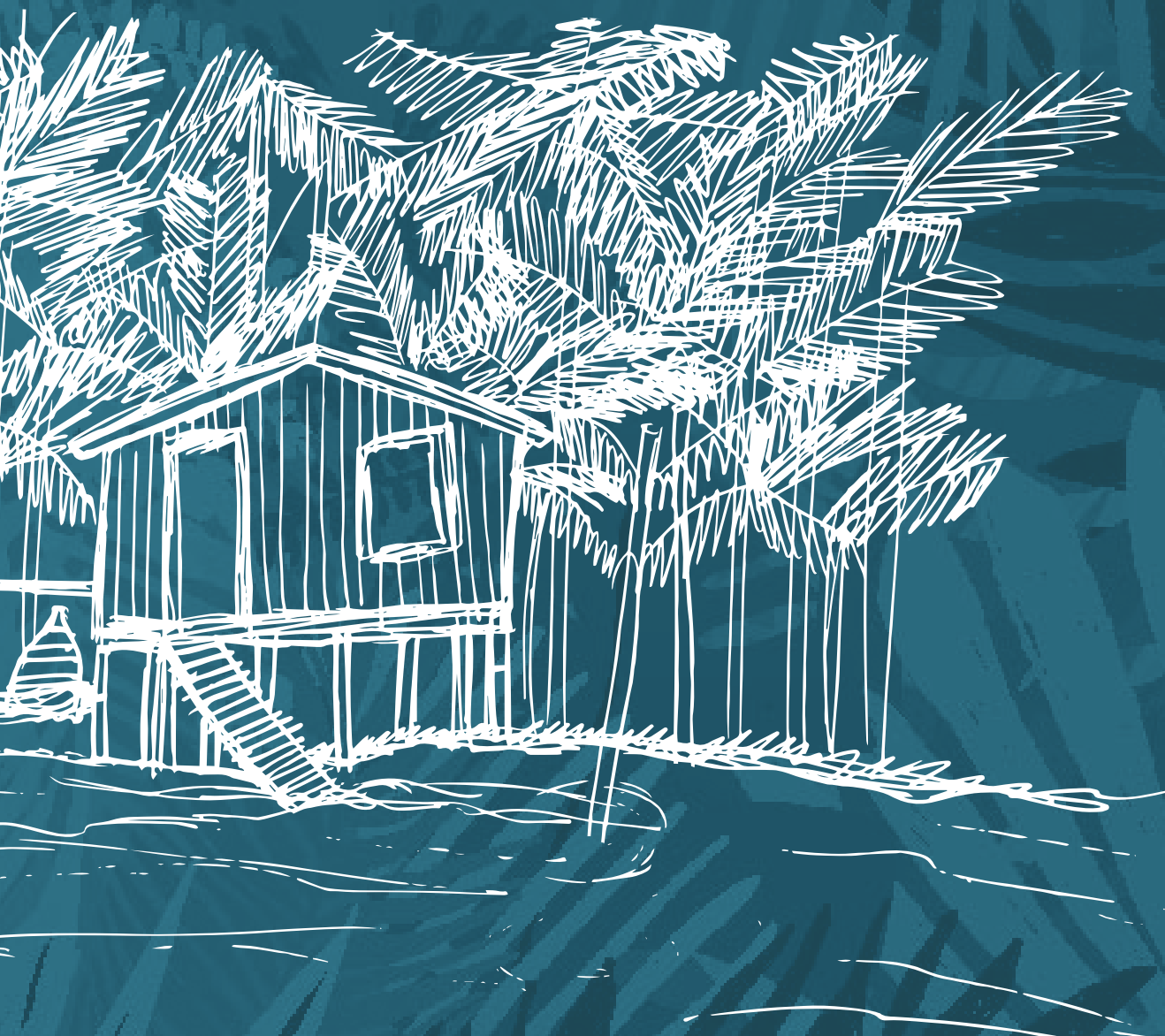
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PROJECTS IN PROGRESS					
Project/ Management	Territorial scope	Objective	Date of approval	Amazon Fund support value	Percentage disbursed
Using Social Technologies to Reduce Deforestation Interstate Agricultural Development Association (Adai)	Communities in areas of influence of hydroelectric projects in the states of Pará, Mato Grosso, Rondônia and Tocantins	Implement family agroecological production units, contributing to food security and income generation of riverine dwellers and family farmers in an environmentally sustainable way	5.24.2017	US\$ 2,779,138.85 R\$ 9,075,000.00	99%
Importance of Forest Environmental Assets State of Acre	State of Acre	Foster sustainable practices aimed at reducing deforestation, through payments for environmental services, adding value to environment and forest assets to consolidate a green, fair and competitive economy, based on Ecological-Economic Zoning	10.26.2010	US\$ 33,511,958.77 R\$ 57,057,461.00	93%
Adding Value to Amazon Socioproductive Chains Life Center Institute (ICV)	Communities in four municipalities in the north and northwest regions of the state of Mato Grosso	Support and strengthen sustainable productive arrangements in the Amazon	12.11.2017	US\$ 4,999,847.61 R\$ 16,405,000.00	70%



ANEXXES



ANNEX 1 – Independent auditor’s report and the financial statements

Fundo Amazônia

(Managed by National Bank of Economic and Social Development, or BNDES - "Banco Nacional de Desenvolvimento Econômico e Social")

**Financial statements
December 31, 2019 and 2018**

KPDS 472082

Fundo Amazônia
Financial statements
December 31, 2019 and 2018

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Independent auditors' report on the financial statements

To the Administrator of
 Fundo Amazônia
 Brasília - DF

Opinion

We have examined the financial statements of Fundo Amazônia ("Fund"), which comprise the balance sheet as of December 31, 2019 and the respective statements of net assets, changes in net assets and cash flows for the year then ended, as well as the corresponding notes, comprising significant accounting policies and other explanatory information.

In our opinion, the aforementioned financial statements present fairly, in all material respects, the financial position of Fundo Amazônia as of December 31, 2019 and the performance of its operations for the year then ended, in accordance with the accounting practices adopted in Brazil applicable to not-for-profit entities (ITG 2002 R1).

Basis for opinion

Our audit was conducted in accordance with Brazilian and international audit standards. Our responsibilities, in conformity with these standards, are described in the following section denominated "Auditors' responsibilities for the audit of the financial statements". We are independent in relation to the Fund, according to the relevant ethical principles established in the Accountants' Professional Code of Ethics and the professional standards issued by the Federal Accounting Council, and we comply with the other ethical responsibilities according to these standards. We believe that the audit evidence obtained is sufficient and appropriate to provide a basis for our opinion.

KPMG Auditores Independentes, a Brazilian entity and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

KPMG Auditores Independentes, uma sociedade simples brasileira e firma-membro da rede KPMG de firmas-membro independentes e afiliadas à KPMG International Cooperative ("KPMG International"), uma entidade suíça.

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Responsibility of Fund's Administrator for the financial statements

The Fund's Administrator is responsible for the preparation and adequate presentation of the financial statements in accordance with the accounting practices adopted in Brazil, applicable to not-for-profit entities (ITG 2002 R1) and by internal controls that has determined as necessary to enable the preparation of financial statements free of relevant distortion, regardless of whether caused by fraud or error.

In the preparation of financial statements, Administrator is responsible, limited to prerogatives provided in NBC TG 26, for assessing the ability of the Fund to continue as a going concern, disclosing, where applicable, the matters relating to its going concern and the use of this basis of accounting in preparing the financial statements, unless the Administrator intends to wind-up the Bank or cease its operations, or has no realistic alternative to avoid the closure of operations.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatements, regardless of whether any such misstatement is caused by fraud or error, and issue an audit report containing our opinion. Reasonable assurance is a high level of assurance, but not a guarantee that the audit conducted pursuant to Brazilian and international auditing standards will always detect any existing material misstatements. Misstatements may arise from fraud or error, and are considered material when, individually or in aggregate, may influence, from a reasonable perspective, the economic decisions of users taken based on such financial statements.

As part of an audit conducted according to the Brazilian and international auditing standards, we exercise professional judgment, and maintain professional skepticism during the audit. In addition:

- We identified and assessed the risks of material misstatement in the financial statements (regardless of whether any such misstatement is caused by fraud or error), we planned and performed audit procedures in response to such risks, and we obtained audit evidence that is appropriate and sufficient to underpin our opinion. The risk of not detecting material misstatement resulting from fraud is higher than that arising from error, once the fraud may involve the act of dodging the internal controls, collusion, falsification, omission or false intentional representations.
- We obtained an understanding of the internal controls relevant to the audit to design auditing procedures suitable to the circumstances, but not with the aim of expressing an opinion on the effectiveness of the Fund's internal controls.
- We assessed the adequacy of the accounting procedures used and the reasonableness of the accounting estimates and the respective disclosures made by the Administrator.



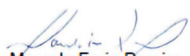
- We reach a conclusion as to the suitability of Administrator's use of the accounting basis for going concern and, based on the audit evidence obtained, as to whether there is a material uncertainty regarding events or conditions that could raise a significant doubt regarding the Fund's capacity for going concern. If we conclude that there is material uncertainty, we will call attention in our audit report to the respective disclosures in the financial statements or include any change in our opinion, if the disclosures are inappropriate. Our conclusions are based on the audit evidences obtained through the date of our report. However, future events or conditions may cause the Fund not to continue as going concern.
- We assessed the overall presentation, structure and content of the financial statements, including disclosures, and whether the financial statements represent the corresponding transactions and events in a manner that is consistent with the objective of proper reporting.

We communicate with Administrator regarding, among other things, the planned scope and timing of the audit, as well as significant audit findings, including any significant deficiencies in internal controls that we identify during our work.

We also provide to Administrator a statement that we fulfill the relevant ethical requirements, including the applicable independence requirements, and communicate all of the possible relations or matters that could considerably affect our independence, including, when applicable, the respective disclaimers.

Rio de Janeiro, May 4, 2020

KPMG Auditores Independentes
CRC SP-014428/O-6 F-RJ


Marcelo Faria Pereira
Accountant CRC RJ-077911/O-2

FUNDO AMAZÔNIA
(Managed by National Bank of Economic and Social
Development, or BNDES - "Banco Nacional de
Desenvolvimento Econômico e Social")

BALANCE SHEETS
December 31, 2019 and 2018
(In thousands of reais)

	Note	12/31/2019	12/31/2018
ASSETS			
CURRENT			
Cash and cash equivalents	4	3,581,776	3,482,996
Prepaid expenses	5	89,490	90,094
Total assets		3,671,266	3,573,090
LIABILITIES AND NET ASSETS			
CURRENT			
Available project funds	6	3,581,776	3,482,996
Support funds	7	89,490	90,094
SHAREHOLDER'S EQUITY			
Accumulated surplus/(deficit)		-	-
Total liabilities and net assets		3,671,266	3,573,090

See the accompanying notes to the financial statements.

FUNDO AMAZÔNIA
(Managed by National Bank of Economic and Social
Development, or BNDES - "Banco Nacional de
Desenvolvimento Econômico e Social")

STATEMENTS OF NET ASSETS
Years ended December 31, 2019 and 2018
(In thousands of reais)

	Note	2019	2018
REVENUES			
Income from donations to investments	6	109,034	187,214
Revenues from donations to support	7	605	960
Financial income	4	207,814	203,585
EXPENSES			
Expenses of donations to investments	6	(109,034)	(187,214)
Expenses with remuneration of available project funds	6	(207,814)	(203,585)
Administrative expenses	9	(605)	(960)
SURPLUS/(DEFICIT) FOR THE YEAR		-	-

See the accompanying notes to the financial statements.

FUNDO AMAZÔNIA
 (Managed by National Bank of Economic and Social
 Development, or BNDES - "Banco Nacional de
 Desenvolvimento Econômico e Social")

STATEMENTS OF CHANGES IN NET ASSETS
 December 31, 2019 and 2018
 (In thousands of reais)

	Accumulated surplus/(deficit)
Balance at January 1, 2018	-
Year 2018	-
Balance at December 31, 2018	-
Year 2019	-
Balance at December 31, 2019	-

See the accompanying notes to the financial statements.

FUNDO AMAZÔNIA
(Managed by National Bank of Economic and Social
Development, or BNDES - "Banco Nacional de
Desenvolvimento Econômico e Social")

STATEMENTS OF CASH FLOWS
Years ended December 31, 2019 and 2018
(In thousands of reais)

	Note	12/31/2019	12/31/2018
Cash flow from operating activities			
Funds received			
Funds received from donations	6	-	273,604
Funds received retained - (3%)	7	-	(8,208)
Funds invested in projects	6	(109,034)	(187,214)
Financial income	4	207,814	203,585
Other liabilities	8	-	(7)
(=) Net cash generated by operating activities		98,780	281,760
Cash and cash equivalents at the beginning of the year		3,482,996	3,201,236
Cash and cash equivalents at the end of the year	4	3,581,776	3,482,996

See the accompanying notes to the financial statements.

FUNDO AMAZÔNIA
 (Managed by National Bank of Economic and Social
 Development, or BNDES - "Banco Nacional de
 Desenvolvimento Econômico e Social")

Notes to the financial statements
 December 31, 2019 and 2018
 (In thousands of reais)

1. CONTEXT OF ACTIVITIES

Fundo Amazônia was created by BNDES Resolution 1.640, of September 3, 2008, and commenced its activities in the second semester of 2009, engaged in raising donations to non-reimbursable investments in prevention, monitoring and fight against deforestation, and promotion of conservation and sustainable use of forests of Legal Amazon, under Decree 6527/2008, amended by Decrees 6565/2008 and 8773/2016.

Fundo Amazônia supports projects in the following areas:

- Management of public forests and protected areas;
- Environmental control, monitoring and supervision;
- Sustainable forest management;
- Economic activities developed on the basis of sustainable use of vegetation;
- Ecologic and economic zoning, land use planning and regularization;
- Conservation and sustainable use of biodiversity; and
- Deforested Area Restoration.

The management and administration of Fundo Amazônia are under the responsibility of the National Bank for Economic and Social Development - BNDES, and includes, among other, the raising of funds, the contracting and monitoring of the supported projects and actions, as well as operating as a judicial representative.

The governance of Fundo Amazônia established by the Decree 6527/2008 provided the existence of a Steering Committee - COFA, which is responsible for defining its guidelines and monitoring the results obtained. Due to the enactment of Decree No. 9,759 on April 11, 2019, which provided for rules for federal public administration collegiate bodies, the two committees that comprise the governance of Fundo Amazônia were as follows: the Guidance Committee for Fundo Amazônia (Comitê Orientador do Fundo Amazônia - Cofa) and the Technical Committee for Fundo Amazônia (Comitê Técnico do Fundo Amazônia - CTFA) were extinguished as of June 28, 2019. As a result of these changes in the fund's governance, negotiations started being carried out between the Brazilian government and the governments of the donor countries with the purpose of establishing a common understanding for a new governance.

This situation had no impact on the performance of projects that had already been contracted. Thus, Fundo Amazônia continues to operate normally, making new releases and monitoring the performance of projects. The funds for the continuity and conclusion of the projects already contracted are guaranteed as provided for in the donation contracts. Only reviews and approvals of new projects that were not completed until the end of 2019 were suspended during the negotiation period.

Fundo Amazônia does not have own legal personality, and its transactions are accounted for in specific accounts of the BNDES.

FUNDO AMAZÔNIA
 (Managed by National Bank of Economic and Social
 Development, or BNDES - "Banco Nacional de
 Desenvolvimento Econômico e Social")

Notes to the financial statements
 December 31, 2019 and 2018
 (In thousands of reais)

2. PREPARATION BASIS

The financial statements have been prepared and are presented in conformity with Brazilian accounting practices for not-for-profit entities, according to Interpretation ITG 2002 (R1), approved by Resolution 1409, of September 21, 2012, issued by the Federal Accounting Council.

a) Measuring basis

The financial statements have been prepared based on historical cost, except for investments, recorded as "Cash and cash equivalents" and measured at fair value through profit or loss.

b) Functional currency

The Administrator concluded that the real is the functional currency of the Fund.

3. DESCRIPTION OF SIGNIFICANT ACCOUNTING PRACTICES

The accounting policies described in detail below have been consistently applied to all the years presented in these financial statements.

3.1 Cash and cash equivalents

They include interbank funds applied in two funds managed by BB Gestão de Recursos - Distribuidora de Títulos e Valores Mobiliários S.A. - BB DTVM, which have conservative investment portfolio with low risk of change in the market value of investments. Income from investments in BB DTVM is linked to the change in the quota of invested funds, as described in note 4.

3.2 Available project funds

Refer to the balance of donations received and not yet allocated, including income from the investment of these funds.

According to Decree 6527/2008 and further amendments, 97% of the resources received are destined to projects. These amounts are recorded in liabilities less, expenses incurred by each project, so that they do not result in increase or reduction of the net assets, considering that the Fund is only the collecting and onlending agent for performance of the projects.

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3,3 Donations for support

Pursuant to §3 of article 1 of Decree 6527/08 and further amendments, the BNDES should segregate the amount equivalent to 3% of the value of donations to cover its operating costs and the expenses related to Fundo Amazônia. Income from costing related to 3% of the donations is accounted for as "Funds to Costing" and recognized according to the use of funds by the BNDES. The transfer of the 3% made by BNDES is presented as "Prepaid Expenses" and recorded as "Administrative Expenses" according to the use by the BNDES.

3,4 Statement of cash flows

The Fund opted for the direct method in the presentation of this statement. The funds received from projects were treated as operating activities, since the Fund operates as collecting and onlending agent for these funds.

4. CASH AND CASH EQUIVALENTS

They are comprised as follows:

	12/31/2019	12/31/2018
Interest earning bank deposits with the Administrator (*)	3,581,776	3,482,996
TOTAL	3,581,776	3,482,996

(*) The Administrator maintains the Fund's resources in the investment fund BB Gaia Fundo de Investimento Renda Fixa ("BB Gaia FIRF"), whose portfolio is concentrated on Government bonds, and in BB Gaia II Fundo de Investimento em Cotas de Fundo de Investimento Renda Fixa ("BB Gaia II FIC FIRF"), which concentrates at least 95% of its net assets in quotas of BB Gaia FIRF. Both funds have daily liquidity clause.

Pursuant to Decree 6527/08 and further amendments, the percentage of 97% of the donations received is destined to projects. The Fund segregates these funds in specific investment account. The resources, while not destined to projects, are invested by the BNDES in the aforementioned exclusive funds, administered and managed by BB DTVM, and remunerated based on the yield rate of each of them.

Additionally, the exclusive fund BB Gaia II FIC FIRF was created in compliance with Decision 832/2012, which established the accounting segregation of values obtained from Brazilian public sources, which cannot be destined to projects performed by the Federal Government.

Up to December 2019, the total financial revenues from investments of Fundo Amazônia since its inception totaled R\$ 1,460,233 (R\$ 1,252,419 up to December 2018).

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Changes in cash and cash equivalents are as follow:

12/31/2019				
	Total	Funds to projects (Gaia FI)	Funds to projects (Gaia II FIC)	Funds to costing
Balance at January 1, 2019	3,482,996	3,463,283	19,713	-
Income	207,814	206,686	1,128	-
Funds released	(109,034)	(109,034)	-	-
Balance at December 31, 2018	3,581,776	3,560,935	20,841	-

12/31/2018				
	Total	Funds to projects (Gaia FI)	Funds to projects (Gaia II FIC)	Funds to costing
Balance at January 1, 2018	3,201,236	3,183,846	17,390	-
Income	203,585	202,468	1,117	-
Funds retained by BNDES (3%)	(8,208)	-	-	(8,208)
Funds to return	(7)	(7)	-	-
Transfer between funds	-	(4)	4	-
Funds released	(187,214)	(187,214)	-	-
Donations received	273,604	264,194	1,202	8,208
Norwegian Ministry of Foreign Affairs	272,365	264,194	-	8,171
Petrobras	1,239	-	1,202	37
Balance at December 31, 2018	3,482,996	3,463,283	19,713	-

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5. PREPAID EXPENSES

The balance of prepaid expenses is comprised of the equivalent to 3% of the value of donations, withheld by BNDES to cover operating costs of Fundo Amazônia, net of values recognized as "Administrative Expenses" at Fundo Amazônia according to the use by BNDES.

6. AVAILABLE PROJECTS FUNDS

The balance of funds to projects was received from the following donors: (i) Norwegian Ministry of Foreign Affairs, (ii) KFW and (iii) Petrobras, and are destined to specific projects and associated to the purpose of Fundo Amazônia.

Changes in funds to projects are as follows:

	12/31/2019	12/31/2018
Balance at the beginning of the year	3,482,996	3,201,229
Income	207,814	203,585
Funds released	(109,034)	(187,214)
Donations received (*)	-	265,396
Balance at the end of the year	3,581,776	3,482,996

(*) Net value of the portion of 3% destined to cover costs.

The amount of R\$ 109,034 (R\$ 187,214 as of December 31, 2018) is recorded in Surplus (deficit) account under "Income from donations for investments" and "Expenses with donations for investments", annulling each other because Fundo Amazônia is a not-for-profit entity.

Fundo Amazônia did not receive donations in the year 2019. Since the beginning of its activities to December 31, 2019, Fundo da Amazônia received funds from the following donors:

Up to 12/31/2019			
Donor	Funds to costing - 3%	Funds to projects - 97%	Total 100%
Norwegian Ministry of Foreign Affairs	95,601	3,091,119	3,186,720
KFW	5,781	186,909	192,690
Petrobras	518	16,767	17,285
Total	101,900	3,294,795	3,396,695

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Up to 12/31/2018			
Donor	Funds to costing - 3%	Funds to projects - 97%	Total 100%
Norwegian Ministry of Foreign Affairs	95,601	3,091,119	3,186,720
KFW	5,781	186,909	192,690
Petrobras	518	16,767	17,285
Total	101,900	3,294,795	3,396,695

7. SUPPORT FUNDS

The balance of funds to costing refers to the portion of the donation (3%) retained by BNDES not yet recognized as "Income from donation". Income from donation is recognized according to the use of funds by BNDES. For the year ended December 31, 2019, no amounts were allocated for funding due to the lack of funds received from donations for the period. For the year ended December 31, 2018, an amount of R\$ 8,208 was allocated to fund 3% of the total funds received from donations, in the amount of R\$ 273,604.

8. ADMINISTRATIVE EXPENSES

In the year ended December 31, 2019, administrative expenses were recognized as R\$ 605 (R\$ 960 at 12/31/2018) and the most relevant ones: publicity, travels and lodging, lecturers and audit events and services.

9. TAXES

Any tax liability resulting from operations in the ambit of Fundo Amazônia is responsibility of BNDES, since the Fund does not have own legal personality, and its transactions are accounted for in specific accounts of the BNDES.

Pis and Cofins

Pursuant to article 1 of Law 11828, of November 20, 2008, with wording given by Law 12810, of May 15, 2013, there is exemption of PIS-PASEP Contribution for social security funding (COFINS) on donations in cash received by public financial institutions controlled by the Federal Government and destined to the prevention, monitoring, fight against deforestation, including programs of remuneration for environmental services, and promotion of conservation and sustainable use of Brazilian biomes.

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Income and social contribution taxes

There is no result to be subject to IRPJ and CSLL taxation, since income from donation is recognized in Surplus (deficit) at the same moment of allocation of operating expenses to projects created in the ambit of Fundo Amazônia, as per approval of solution to consultation 59 SRRF07/Disit, 08/06/2009, by BNDES before the Federal Revenue Service. The same occurs in connection with the financial result of investments in investment funds.

10. RELATED PARTY TRANSACTIONS

Fundo Amazônia has a relationship with BNDES, which is authorized to earmark the value of donations received in cash to non-reimbursable investments in prevention, monitoring, fight against deforestation and promotion of conservation and sustainable use of the Amazon biome. The relationship mentioned refers to values corresponding to "cash and cash equivalents" (as mentioned in Note 4), which are held in bank accounts held by BNDES.

Additionally, BNDES holds an amount equivalent to 3% of the value of donations to cover its operating costs and the expenses related to Fundo Amazônia, see further explanations in note 5 "Prepaid expenses".

11. SHAREHOLDERS' EQUITY

The net assets of Fundo Amazônia is comprised of surplus/(deficit) for the years.

12. RISK MANAGEMENT

On December 31, 2019 and 2018, the Fund does not present material credit, liquidity, market and operating risks since it has very limited operations. The Fund has concentration of credit risk with its Administrator (invested funds) as shown in Note 4. The book values represent the Fund's credit risk amount. Pursuant to Note 1, the funds for the continuity and conclusion of the projects already contracted are guaranteed as provided for in the donation contracts.

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BOARD OF EXECUTIVE OFFICERS

Gustavo Henrique Moreira Montezano - CEO

Ângela Brandao Estellita Lins

Bianca Nasser Patrocínio

Claudenir Brito Pereira

Fábio Almeida Abrahão

Leonardo Mendes Cabral

Petrônio Duarte Cançado

Ricardo Wering de Barros

Saulo Benigno Puttini

SUPERINTENDENT OF THE CONTROLLERSHIP AREA

Luciana Torres Bastos

CORPORATE REPORT DEPARTMENT HEAD

Maria da Conceição Viviane Távora de Freitas

Accountant - CRC-RJ 093.073/O-5

ANNEX 2 – Compliance audit report

BRAZILIAN DEVELOPMENT BANK - BNDES

**Ref.:Independent auditor's limited
assurance report**

JC/CMO/LL/LAPP/LM/MS

078-41/20

BRAZILIAN DEVELOPMENT BANK - BNDES

Independent auditor's limited assurance report

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INDEPENDENT AUDITOR'S REPORT

To the
 Management of
 Brazilian Development Bank - BNDES
 Rio de Janeiro - RJ

Introduction

We were engaged for the purpose of applying limited assurance procedures intended to check the compliance of projects supported by Amazon Fund in 2019 with standards and guidelines applicable to them.

Our responsibility is to issue a limited assurance report on the compliance of the projects supported by the Amazon Fund.

Procedures applied

The limited assurance procedures were followed according to the Standard NBC TO 3000 - Assurance Engagement Different from Audit and Review, issued by the Federal Association of Accountants (CFC) and approved by CFC Resolution No. 1.160/2009, and to ISAE 3000 - International Standard on Assurance Engagements, issued by International Auditing and Assurance Standards Board (IAASB), both for assurance engagements different from audit or review of historic financial information.

The limited assurance procedures comprise:

- a) Planning of the work, considering the relevance, coherence, and volume of quantitative and qualitative information;
- b) Understanding the methodology of analysis of the projects by means of interviews with the managers responsible for the information;
- c) Examining analysis reports, BNDES' Management decisions and contracts, checking their compliance with Decree No. 6.527, of August 01, 2008, which addresses the creation of the Amazon Fund by the Brazilian Development Bank (BNDES), particularly the compliance with the provisions of Article 1, and with the standards and guidelines issued by the Amazon Fund Guidance Committee (COFA);
- d) Evaluation of the purpose compliance (products and services), expected results and objectives of the projects analyzed by the technical teams of BNDES, approved by its Management, engaged or to be engaged, to verify their compliance, when applicable, with the strategic guidelines included in the Sustainable Amazon Plan (PAS) and with the tactical and operational guidelines of the Plan for Prevention and Control of Deforestation in the Legal Amazon Region (PPCDAm) and with the National Strategy for Reduction of Greenhouse Gas Emission Arising from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Management of Forests and Increase in Forest Carbon stocks (ENREDD+);
- e) Crosschecking the quantitative and qualitative information of the analysis reports and their conclusions against Management decisions and the contracts entered into between BNDES and the executors of the projects.

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Scope and limitations

The purpose of our work was the application of limited assurance procedures on the compliance by BNDES with the provisions of Decree No. 6.527/2008 in regard to supportable actions, with the guidelines and criteria issued by the Amazon Fund Guidance Committee (COFA) and, when applicable, with the strategic guidelines included in PAS, and with the tactical and operational guidelines of the PPCDAm, and with the ENREDD+, not including an evaluation of the compliance by the beneficiaries of the projects with the obligations agreed with BNDES.

The procedures followed and pertinent analyses made were restricted to the documents made available by BNDES, and their authenticity was not subject to validation.

The procedures applied do not represent an exam of financial statements according to Brazilian and international audit standards.

Our report does not provide limited assurance on targets met, results and expectations, and on information involving subjective evaluation.

Additionally, procedures to identify frauds and the expert exam of documents were not performed.

Projects supported

During the performance of the limited assurance work, we analyzed the approvals and contracts of non-reimbursable financial support to projects during 2018 and 2019, comprising the following executors and their current status:

a) Projects approved and contracted in 2018:

- Operation No. 6079754 (*): Rural Environmental Registry (CAR) Espírito Santo.

b) Projects approved in 2018 and contracted in 2019:

- Operation No. 5834967 (*): Rural Environmental Registry (CAR) Amazonas;
- Operation No. 6104073 (*): Amazon Forest - Environmental Compliance.

(*) BNDES internal numbering

Environmental aspects of the analyzed projects related to the Amazon Fund

By the end of present work, we were provided with elements that contributed to a better understanding of the matter, both in regard to its current stage and future prospects, in order to assist the decision-making process. There is a great opportunity to promote environmental, social, and economic development and forest conservation in the areas covered by the Fund, with an actual prospect of containment of deforestation in Legal Amazon, and to enable alternatives for protection and sustainable use of the forest, based on the mechanisms and processes included in PPCDAm, PAS, ENREDD+ and in the legal provisions of Decree No. 6.527/2008 and Law No. 12.187/2009.

The analysis of the proposed projects and of the procedures and criteria used in the release of funds from the Amazon Fund has made apparent the axes that guide the scope of these projects and the release of the funds: land use; control and monitoring; promotion of sustainable production activities; science, innovation and economic instruments.



Conclusions

a) We crosschecked the clauses of the contracts for financial support to the projects listed in item 4, sub-items "a and b" (projects approved and contracted in 2018, and projects approved in 2018 and contracted in 2019, respectively) against the wording of BNDES' Management decisions, which approved the financial contribution.

We found that the purpose established in BNDES' Management decisions that approved the financial support to the projects was maintained in the contracts. We also found that the contracts did not include any amendments that could affect the compliance of the projects with Decree No. 6.527/2008, and with the criteria and guidelines of COFA and, when applicable, of PAS, PPCDAm and ENREDD+.

The analysis reports and Management decisions referring to these projects were the object of our assurance analysis, for 2018. The audit report issued on March 27, 2019 concluded on the compliance of the projects with Decree No. 6.527/2008, and with the criteria and guidelines of COFA and, when applicable, of PAS, PPCDAm and ENREDD+.

Rio de Janeiro, February 17, 2020.



BDO RCS Auditores Independentes S/S
CRC 2 SP 013846/F

Julian Clemente
Accountant CRC 1 SP 197232/0-6 - S - RJ

Cristiano Mendes de Oliveira
Accountant CRC 1 RJ 078157/0-2

ANNEX 3 – Guidelines and criteria for allocation of resources and focuses in 2017 and 2018 (valid until June 28, 2019)

Projects in the Brazilian Amazon		Projects in Brazil outside the Brazilian Amazon		Projects in other tropical countries	
A	Guidance Criteria	G1-G4	Guidance Criteria	H1-H3	Guidance Criteria
B	Minimum Requirements for Projects	G5-G14	Minimum Requirements for Projects	H4-H11	Minimum Requirements for Projects
C	Resource Application Modalities	G15-G16	Resource Application Modalities	H12-H13	Resource Application Modalities
D	Resource Use Restrictions	G17-G19	Resource Use Restrictions	H14-H16	Resource Use Restrictions
E	Equality Criteria in Resource Application	G20	Equality Criteria in Resource Application	H17	Equality Criteria in Resource Application
F	Resource Application Limitations				

Amazon Fund's support focuses in 2017 and 2018	
I1-I3	General Guidance
I4-I6	Operational Modalities
I7-I10	Brazilian Amazon – Monitoring and Control
I11-I13	Brazilian Amazon – Fostering Sustainable Production Activities
I14-I18	Brazilian Amazon – Land-title Regularization and Land-use Planning
I19-I24	Brazilian Amazon – Science, Innovation and Economic Instruments
I25-I26	Amazon Fund Support in Brazil outside the Brazilian Amazon
I27	Amazon Fund Support in other tropical countries

CONSOLIDATED ON NOVEMBER 11, 2018

Guidelines and criteria for the application of the Amazon Fund's resources in the Brazilian Amazon

Application	Application limit of the total resources available in the year	Tables
Projects in the Brazilian Amazon	no limits	A - F

The Brazilian Amazon (or Legal Amazon) comprises all of the states of Acre, Pará, Amazonas, Roraima, Rondônia, Amapá and Mato Grosso, and the regions located north of the 13 ° S parallel of the states of Tocantins and Goiás and to the west of the meridian of 44 ° W of the state of Maranhão (article 3, I, of Law N° 12.651, of May 25, 2012)

A. Guidance Criteria

Code	Criteria
A1	Topic
A2	Geography
A3	Diversity of agents involved and shared governance
A4	Target audience
A5	Importance

B. Minimum Requirements for Projects

Code	Conditions
B1	Result indicators
B2	Applicants/executors
B3	Social participation
B4	Consistency with the Amazon Fund topics
B5	Consistency with the federal plan and the state plans to prevent and combat deforestation and Proveg
B6	Consistency with ENREDD+
B7	Additionality of resources
B8	Counterpart funds
B9	Territorial base
B10	Publicity and transparency
B11	Project sustainability
B12	Nonconcentration of resources
B13	Benefits of collective use
B14	Not replacing other sources of financing

C. Resource Application Modalities

Code	Modalities
C1	Direct application – Investment
C2	Direct application – Financing
C3	Payment for environmental services
C4	Indirect application

D. Resource Use Restrictions

Code	Restrictions
D1	Daily payment
D2	Payment to individuals
D3	Taxes

E. Equality Criteria in Resource Application

Code	Criteria
E1	Equality in resource application per state
E2	Equality per type of proponent

F. Resource Application Restrictions

Code	Restrictions
F1	Projects with economic purposes
F2	Projects with economic purposes to support socially-disadvantaged groups
F3	Projects with economic purposes of collective use Local Production Arrangements (APL)
F4	Projects with economic purposes of scientific and technological research developed in cooperation with technology institutions (IT) and entities with economic purposes

GUIDANCE CRITERIA

A1 – Topic

The Amazon Fund supports projects in the following thematic areas:

- Management of public forests and protected areas;
 - Control, monitoring and environmental inspection;
 - Sustainable forest management;
 - Economic activities developed from the sustainable use of vegetation;
 - Ecological and economic zoning, territorial planning and land regularization;
 - Conservation and sustainable use of biodiversity; and
 - Recovery of deforested areas.
- The projects should follow the focus established in these guidelines in Table I.

A2 – Geography

- Projects carried out in the priority municipalities to prevent, monitor and combat deforestation (these municipalities are defined in accordance with article 2 of Law N° 6,321/2007);
- Projects carried out in municipalities under area of influence of major infrastructure works;
- Projects carried out in municipalities/regions with greater conservation of forest cover; and
- Projects carried out in priority areas for the conservation of biodiversity or the improvement of the conservation status of endangered species of fauna and flora.

A3 – Diversity of agents involved and shared governance

Projects involving contact between diverse agents from the public and private sector, third sector or local communities with a shared governance structure.

A4 – Target audience

Projects involving direct benefits for traditional communities, settlements and family farmers.

A5 – Importance

Projects with the highest potential for replication.

Projects with the highest potential impact (e.g. R\$/sustainably managed or protected hectares of forest).

MINIMUM REQUIREMENTS FOR PROJECTS

B1 – Result indicators

Project must include measurable indicators for results that are directly related to the Amazon Fund's goals.

B2 – Applicants/executors

Projects must include agreement of all partners and co-executors.

B3 – Social participation

Projects involving traditional communities and indigenous people must necessarily present documents certifying the previous consent of these communities or their representative institutions. The communities involved should be explained in the project.

B4 – Consistency with the Amazon Fund topics

Projects must be compatible with at least one topic, as stated in Law N° 6,527/2008.

B5 – Consistency with the PPCDAm, the PPCDs and Combat Deforestation and the Proveg

Projects must demonstrate clear coherence with actions foreseen in the Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm), in the state plans for prevention and combat of deforestation (PPCD) and, when applicable, with the National Policy for the Recovery of Native Vegetation (Proveg).

B6 – Consistency with ENREDD+

Projects must demonstrate clear consistency with the National Strategy for Reducing Emissions of Greenhouse Gases from Deforestation and Forest Degradation, Forest Carbon Stocking, Sustainable Forest Management and Forest Carbon Stock Enhancement (ENREDD+).

B7 – Additionality of resources

Projects must respect the principle of additionality to the direct public budgets allocated to the Amazon Fund's application areas. In applying this criterion, the following aspects may be considered:

- The average direct public budget executed in the previous 2 (two) years in the public budget invested in the proposed action;
- Variation of the budget of the responsible institution or government body compared to the variation of the budget of the federative entity to which it is linked or integrates (in relation to the previous year);
- Forecasts from current government pluri-annual plans (PPA).

B8 – Counterpart funds

Projects must present counterpart funds and/or nonfinancial contributions, showing additionalities to resources received from the Amazon Fund and produce a multiplying effect for fund investments. Counter-applications can be in the form of financial resources directly invested in the project or by providing infrastructure, personnel and other indirect forms.

B9 – Territorial base

Projects must clarify their territorial base (state and, where applicable, municipality).

B10 – Publicity and transparency

Projects must present a disclosure mechanism of its implementation through the internet.

B11 – Project sustainability

Submit support strategies for the project's results after its implementation.

B12 – Nonconcentration of resources

In the Fund's efforts, there must be an effort to balance support in all its topic areas, in accordance with the priorities that are established.

B13 – Benefits of collective use

The results of projects with economic purposes should prioritize collective or public benefits related to:

- The productive infrastructure, services and inputs for collective use, without prejudice to the individual appropriation of benefits by the target population of the Amazon Fund (item A 4);
- Studies and surveys with results available to the community;
- Training and capacity building open to the community;
- Technological development with results open to the community, whenever feasible;
- Replicable innovations with practical applications;
- Other collective benefits identified in the project evaluation process.

B14 – Not replacing other sources of financing

The Amazon Fund resources cannot replace other available sources of financing.

RESOURCE APPLICATION MODALITIES

C1 – Direct application – Investment

Applications made directly by project executors, even through third-party contracts. This includes investments in buildings, equipment, training and qualification to establish initiatives. Projects may use more than one modality.

C2 – Direct application – Financing

Applications made directly by project executors, even through third-party contracts.

This includes travel expenses/field missions, individual or company consulting, field materials, communication, among others. Projects may use more than one modality.

C3 – Payment for environmental services

Payments made to providers of environmental services. Projects may use more than one modality.

C4 – Indirect application

Indirect applications by aggregating small projects, including funds and other organizations that implement projects.

RESOURCE USE RESTRICTIONS

D1 – Out-of-pocket expense payments

No out-of-pocket expense payments will be made to public agents, such as civil servants, public employees or any person in a public post. This restriction does not apply in the case of financing for research activities.

D2 – Payment to individuals

Payments of salaries or any type of remuneration may not be made to public agents, such as civil servants, public employees or any person in a public post in the three spheres of government (this restriction does not apply to the payment of research or study scholarships specifically related to the project).

D3 – Taxes

Resources cannot be applied to pay taxes that are not inherent or an integral part of financing or investments made by the project (restriction does not apply to taxes related to project activities, such as ICMS (value-added tax on sales and services) included in the price of products; National Institute of Social Security (INSS) on the payment for the services of individuals etc.).

EQUALITY CRITERIA IN RESOURCE APPLICATION

E1 – Equality in resource application per state

Avoid concentration of project resources in one state only.

E2 – Equality per type of applicant

Avoid concentration of resources among applicants: government agencies, research institutions and civil society organizations. Within the context of the Amazon Fund, civil society includes nongovernmental organizations, unions/guilds (representations for categories), firms and other institutions governed by private law.

RESOURCE APPLICATION LIMITATIONS

F1 – Projects with economic purposes

The Amazon Fund maximum participation:

90% for projects that involve small and micro businesses, producer cooperatives or associations with annual gross operating revenues less than or equal to R\$ 3.6 million;

70% for projects that involve medium-sized businesses, producer cooperatives or associations with annual gross operating revenue above R\$ 3.6 million and less than or equal to R\$ 300 million;

50% for projects that involve large companies, producer cooperatives or associations with annual gross operating revenue above R\$ 300 million.

Note: In the event of early activities on the calendar year, above limits will be proportional to the number of months in which the company has been operating, not considering fractions of months. In the case of companies under implementation, the annual sales projection will be considered, taking into account the total installed capacity. When the company is controlled by another company, or belongs to a business group, the size classification will consider the consolidated gross operating revenue.

F2 – Projects with economic purposes to support socially disadvantaged groups

Maximum share of the Amazon Fund, in duly justified cases: 100%. Economic results brought about by projects to support socially-disadvantaged groups should be distributed to the members, regardless of who the applicant is.

F3 – Projects with economic purposes for Local Production Arrangements (APL) for collective use

Maximum share of the Amazon Fund: 90%.

F4 – Projects with economic purposes for scientific and technological research developed in cooperation with Technology Institutions (IT) and companies with economic purposes

Maximum share of the Amazon Fund:

90% for projects involving small and micro businesses, producer cooperatives or associations with annual gross operating revenues less than or equal to R\$ 10.5 million;

80% for projects involving medium-sized businesses, producer cooperatives or associations with annual gross operating revenue greater than R\$ 10.5 million and less than or equal to R\$ 60 million;

70% for projects involving large companies, producer cooperatives or associations with annual gross operating revenue above R\$ 60 million – see note in item F 1.

- Beneficiaries of the financial resources from the Amazon Fund will be Technological Institutions (IT) and/or Support Institutions (IA).
- Technological Institution (IT): companies governed by internal public law or an entity directly or indirectly controlled by it or a non-profit company governed by, private law, whose institutional mission, among others, is to carry out basic or applied research activities of a scientific or technological character, as well as technological development.
- Supporting Institutions (IA) nonprofit institutions created to support research, teaching, and extension and institutional, scientific and technological development of interest to higher education institutions and scientific and technological research institutions and those institutions created under the terms of Law N° 8,958, of December 20, 1994, which have the same purpose.
- Companies and/or other entities with economic purposes with strategic interest in research will not be direct beneficiaries of resources. They intermediate financing operations and will provide financial contribution to supplement the Amazon Fund's resources.
- Support is offered to investments made to benefit the Technological Institutions (IT), with a special purpose to meet project goals.
- Participation in the intellectual property and economic results from project creations will adhere to provisions in the Innovation Law (Law N° 10,973, of December 2, 2004). Thus, the parties, in an agreement, will establish the ownership of intellectual property and profit sharing. Provided they are established in the agreement, these will be proportionately secured at a rate equivalent to the aggregate value of existing knowledge at the beginning of the partnership and of human, financial and material resources allocated by the Contracting Parties in the project.
- During analysis, BNDES will check related aspects of intellectual property rights resulting from the research, development and innovation project so as to avoid, when appropriate, practices that restrict use and assignment of these rights. In addition to the matters referred to, BNDES, in the analysis stage, will also verify the criteria for divvying up the project's financial results.

Guidelines and criteria for the application of the Amazon Fund's resources in projects to develop systems to monitor and control deforestation in Brazil outside the Brazilian Amazon

Application	Application limit of the total resources	Tables
Projects in Brazil outside the Brazilian Amazon and other tropical countries	20%	G and H

GUIDANCE CRITERIA

G1 – Diversity of agents involved and shared governance

Projects involving contact between diverse agents, public, private and third sector or local communities with a shared governance structure.

G2 – Relevance

Projects that develop and implement long-term monitoring methodology for REDD.

G3 – Priority

Within the scope of support for other Brazilian biomes, priority will be given to permanent monitoring system projects per biome, which contribute to nationwide system for monitoring and controlling deforestation, burn-offs and forest fires, in accordance with the prevention and control plans.

G4 – Scope

Rural Environmental Registry (CAR) projects and integration of state forest management data into the National Forest Control Origin System (Sinaflor) are considered part of environmental control systems.

MINIMUM REQUIREMENTS FOR PROJECTS

G5 – Result indicators

Projects must include measurable result indicators that are directly related to implementing systems so as to monitor deforestation or forest degradation.

G6 – Applicants/executors

Projects must include agreement between all partners and co-executors.

G7 – Social participation

Projects must have a monitoring phase, necessarily featuring governmental entities and civil society. Projects involving the development of monitoring systems should have a monitoring phase that necessarily includes the participation of governmental entities and civil society. Communities involved should be explained in the project.

G8 – Contribution to REDD

Projects must contribute directly or indirectly towards REDD.

G9 – Additionality of resources

Projects must represent additionality to the public budgets destined to the areas of application of the Amazon Fund. In applying this criterion, the following aspects may be considered: the average direct public budget executed in the previous 2 (two) years in the public budget invested in the proposed action; variation of the budget of the responsible institution or government body compared to the variation of the budget of the federative entity to which it is linked or integrates (in relation to the previous year); and forecasts from current government multi-annual plans (PPA).

G10 – Counterpart funds

Projects must present counterpart funds and/or nonfinancial contributions, showing additionalities to resources received from the Amazon Fund and produce a multiplying effect for fund investments. Counter-applications can be in the form of financial resources directly invested in the project or by providing infrastructure, personnel and other indirect forms.

G11 – Territorial base

Projects must necessarily address the monitoring of forests of at least one entire biome.

G12 – Publicity and transparency

Monitoring systems supported by the Amazon Fund must be based on platforms that enable broad dissemination, transparency and access to data produced, via internet.

G13 – Project sustainability

Demonstration of the capacity to economically sustain the project after it is implemented.

G14 – Decentralization of resources

In the Fund's efforts, there must be an effort to balance support in all its topic areas, in accordance with the priorities that are established.

G15 – Direct application – Investment

Applications made directly by project executors, even through third-party contracts.

This includes investments in buildings, equipment, training and qualification to establish initiatives. Projects may use more than one modality.

G16 – Direct application – Financing

Applications made directly by project executors, even through third-party contracts.

This includes travel expenses/field missions, individual or company consulting, field materials, communication, among others. Projects may use more than one modality.

RESOURCE USE RESTRICTIONS**G17 – Out-of-pocket expense payments**

No out-of-pocket expense payments will be made to public agents, such as civil servants, public employees or any person in a public post. This restriction does not apply in the case of financing for research activities.

G18 – Payment to individuals

Payments of salaries or any type of remuneration may not be made to public agents, such as civil servants, public employees or any person in a public post in the three spheres of government (this restriction does not apply to the payment of research or study scholarships specifically related to the project).

G19 – Taxes

Resources cannot be applied to pay taxes that are not inherent or an integral part of financing or investments made by the project (restriction does not apply to taxes related to project activities, such as ICMS (valued-added tax on sales and services) included in the price of products; INSS (National Institute of Social Security) on the payment for the services of individuals etc.).

EQUALITY CRITERIA IN RESOURCE APPLICATION**G20 – Equality in resource application per state**

Avoid concentration of project resources in one state only.

Guidelines and criteria for the application of the Amazon Fund's resources in projects to develop systems to monitor and control deforestation in other tropical countries

Application	Application limit of the total resources	Tables
Projects in Brazil outside the Brazilian Amazon and other tropical countries	20%	G and H

GUIDANCE CRITERIA

H1 – Diversity of agents involved and shared governance

Projects involving contact between diverse agents, public, private and third sector or local communities with a shared governance structure.

H2 – Relevance

Countries with large-scale forest coverage.

H3 – Scope

In other tropical countries, the Amazon Fund support will be limited to projects that contribute to creating or improving systems to monitor forest coverage and deforestation control systems.

Forest coverage monitoring systems is understood as applying techniques that involve processing (e.g., geo-referencing, enhancements and classification) of images of the Earth's surface (aerial or satellite) for the purpose of mapping land cover and use, deforestation, forest degradation and forest regeneration (regeneration and reforestation), using the information produced (e.g., mapping, spatial analysis and statistics) for forest management.

Deforestation control systems include devising action plans to reduce deforestation, developing platforms for measuring, reporting and verifying forest cover data, organizing, managing and making available information on the process of deforestation, such as management plans, authorizations, permits, sale and transportation documents and other forest control documents. It also includes support for the creation and improvement of forest product traceability systems (definition of methodologies and procedures, database development and information management systems).

MINIMUM REQUIREMENTS FOR PROJECTS

H4 – Result indicators

Projects must include measurable result indicators that are directly related to implementing systems so as to monitor deforestation or forest degradation.

H5 – Applicants/executors

Projects must be presented by the central government of the beneficiary country, multilateral institutions or by Brazilian governmental institutions, and, in the two latter cases, must have the formal consent of the central government of the country that will benefit from the efforts in the project.

H6 – Contribution to REDD

Projects must contribute directly or indirectly towards REDD.

H7 – Counterpart funds

Projects must present counterpart funds and/or nonfinancial contributions, showing additionalities to resources received from the Amazon Fund and produce a multiplying effect for fund investments. The following aspects may be considered: the average direct public budget executed in the previous 2 (two) years in the public budget invested in the proposed action; variation of the budget of the responsible institution or government body compared to the variation of the budget of the federative entity to which it is linked or integrates (in relation to the previous year); and forecasts from current government multi-annual plans (PPA). The contributions can be in the form of financial resources directly invested in the project or by the provision of infrastructure, personnel and other indirect forms.

H8 – Publicity and transparency

Monitoring systems supported by the Amazon Fund must be based on platforms that enable broad dissemination, transparency and access to data produced, via internet.

H9 – Project sustainability

Demonstration of the capacity to economically sustain the project after it is implemented. BNDES will provide a standardized tool for integrating and disseminating updated information to implement all projects.

H10 – Decentralization of resources

In the fund's efforts, there must be an effort to balance support in all its topic areas, in accordance with the priorities that are established.

H11 – Previous phase

As a stage to consider international projects, BNDES, prior to project eligibility, will request a formal assessment from the Ministry of Foreign Affairs (MRE) on the priority and the impacts of the project with regard to Brazil's foreign relations.

RESOURCE APPLICATIONS MODALITIES**H12 – Direct application – Investment**

Applications made directly by project executors, even through third-party contracts.

This includes investments in buildings, equipment, training and qualification to establish initiatives. Projects may use more than one modality.

H13 – Direct application – Financing

Applications made directly by project executors, even through third-party contracts.

This includes travel expenses/field missions, individual or company consulting, field materials, communication, among others. Projects may use more than one modality.

RESOURCE USE RESTRICTIONS**H14 – Out-of-pocket expense payment**

No out-of-pocket expense payments will be made to public agents, such as civil servants, public employees or any person in a public post. This restriction does not apply in the case of financing for research activities.

H15 – Payment to individuals

Payments of salaries or any type of remuneration may not be made to public agents, such as civil servants, public employees or any person in a public post in the three spheres of government (this restriction does not apply to the payment of research or study scholarships specifically related to the project).

H16 – Taxes

Resources cannot be applied to pay taxes that are not inherent or an integral part of financing or investments made by the project .

EQUALITY CRITERIA IN RESOURCE APPLICATION**H17 – Equality in resource application per state**

Avoid project concentration in the same country.

Amazon Fund's support focuses in 2017 and 2018

GENERAL GUIDELINES

I 1 – Focuses for 2017 and 2018

The following items define the Amazon Fund's focus for the biennium 2017 and 2018 and establish additional guidelines and criteria. In the absence of a review of these focuses until 12.31.2018 the focuses defined herein will be in force until the next meeting of the Amazon Fund's Guidance Committee or until the approval of the new guidelines.

I 2 – Requirements for supporting states

Support for new projects presented by state governments will be conditional upon the state concerned being in the process of implementing the CAR in its territory, using either their own resources, those from the Amazon Fund or from other sources. Priority should be given to new projects submitted by states that are integrated or in the process of being integrated into the National Forest Control Origin System (Sinaflor), in compliance with article 35 of Law N°12.651/2012.

Contracts between the Amazon Fund and the states within the Brazilian Amazon must include a contractual obligation for the state to revise their plans to prevent and combat deforestation (PPCD) if they are outdated, and another obligation to produce and publicize an annual monitoring report on their PPCDs.

I 3 – Exception to the requirement of resource additionality in the Brazilian Amazon

Projects related to item I 12 and projects that aim to continue or improve environmental monitoring and control of deforestation, presented by federal or state agencies or public institutions with legal mandate to carry out enforcement actions under the National Environmental System (Sisnama), may exceptionally be exempted from the minimum condition of additionality of resources mentioned in item B 8. Therefore, a technical justification formally presented by the Ministry of Environment will be required, as well as a declaration from the body/applicant institution stating the nonexistence of available source of resources for the requested financial support. The above mentioned technical justification and statement are mandatory documents that must accompany the financial support request formally filed at BNDES, which will also check adherence to the conditions established in the donation agreements to the Amazon Fund.

OPERATIONAL MODALITIES

I 4 – Operational modalities

The focuses here defined will be supported through the direct presentation of structuring projects or projects selected through public calls promoted directly by the Amazon Fund (BNDES) or through partner institutions.

Support for scientific and technological development projects will be provided exclusively through the public call modality (promoted directly by the Amazon Fund (BNDES) or through a partner institution) or through structuring projects that have the objective of subsidizing the formulation or implementation of public policies, according to criteria to be defined by COFA.

The Amazon Fund's Guidance Committee (COFA) may establish guiding criteria to induce the submission of projects adhering to the focus of the biennium, establishing aspects such as the minimum target scope, supported items, deadlines and other constraints.

I 5 – Structuring projects

Structuring project is one that meets cumulatively the following criteria:

- a. Contributes to the implementation of a public policy.
- b. Will have a decisive impact to solve the problem situation.
- c. Has scale in the territory (whenever the project develops its actions in the territory).

Structuring projects may be proposed by: (a) Federal Government and its agencies; (b) state governments and its agencies; (c) private non-profit organizations; or (d) companies; or (e) multilateral institutions.

The criterion "has scale in the territory" will be considered as fulfilled when, for example, the project actions cover in its entirety a set of municipalities, rural settlements or protected areas, a state planning region, the surroundings of major infrastructure works etc. Defining territorial scale must be done in accordance with the project's characteristics and the respective public policies.

I 6 – Call-to-submission

In addition to calls for projects directly promoted by the Amazon Fund (BNDES), support will be granted to partner institutions to promote public calls for projects. The partner institutions must demonstrate experience, knowledge and operational capacity to confer quality and scale to public calls, with partner institutions being understood as entities of the third sector and the federal and state governments.

The Amazon Fund will be permanently open to the presentation by partner institutions of requests for financial collaboration that seek their support for public calls for projects, focusing on the actions prioritized for the biennium 2017 and 2018 in the Brazilian Amazon.

Public calls promoted directly by the Amazon Fund or indirectly supported through the partner institutions should be publicized on the Amazon Fund's website or the partner institutions responsible, as the case may be.

BRAZILIAN AMAZON – MONITORING AND CONTROL**I 7 – Inspection and control of environmental crimes and infractions**

Promotion of inspection, investigation and combat of crimes and environmental infractions, including support: (i) to increase the capacity of environmental inspection, investigation and combat of federal and state governments; (ii) integration of state intelligence and oversight systems with federal systems; (iii) integrated control actions, involving state environmental agencies, Ibama, Funai and ICMBio; (iv) the integrated computerization of state forest management data to Sinaflor, including authorizations to suppress vegetation and management plans; and (v) allocation of seized assets.

I 8 – Implementation and effectuation of the Rural Environmental Registry (CAR) and environmental regularization

Promotion of the environmental regularization process through: (i) support for registration in the Rural Environmental Registry (CAR) of small properties or rural family possessions (up to four government-established modules), indigenous lands and quilombolas; (ii) support to the integration of state CAR systems into the Rural Environmental Registry System (Sicar) and adaptation of complementary modules for Analysis and Monitoring, management of State Environmental Regularization Programs (PRA) and Environmental Reserve Quotas (CRA); (iii) support to the development and implementation of the PRA; (iv) support for activities to validate enrolments in the CAR; (v) support to the elaboration and validation of projects for the rehabilitation of degraded and altered areas (Prada) of small farms or family farms; and (vi) support for structuring and operationalizing the monitoring of the environmental regularity of rural properties.

Support for the implementation of the CAR and the environmental regularization of rural properties will be done primarily through operations with the states, which may sign partnerships/contracts to carry out the necessary actions, in compliance with applicable legislation. However, CAR and environmental regularization projects carried out by other partners in areas that were not included in state-run projects may also receive support.

I 9 – Preventing and combating the occurrence of forest fires

Support for actions to prevent and combat forest degradation caused by fires in native vegetation presented by government agencies operating in the Brazilian Amazon, military fire brigades or nongovernmental organizations in partnership with government agencies, primarily in rural settlements, protected areas and lands of indigenous peoples.

To promote the integration of the information on authorizations of fires issued by the states with the National Fire Information System – Sisfogo, through support to the integration of systems.

I 10 – Improvement and strengthening of plant cover monitoring

Support for the monitoring of deforestation, the dynamics of land use change, forest degradation and burning in the Brazilian Amazon.

BRAZILIAN AMAZON – FOSTERING SUSTAINABLE PRODUCTION ACTIVITIES**I 11 – Economic activities for the sustainable use of forests and biodiversity**

Structuring, strengthening and consolidation of productive chains of socio-biodiversity and family-based sustainable agriculture, including valorization of the extractive economy, timber and nontimber forest management, aquaculture and fishing arrangements, agroecological and agroforestry systems, community-based tourism, sustainable cattle raising and technical assistance for these activities.

I 12 – Green grant program and payments for environmental services

Strengthening of the Environmental Conservation Support Program (Bolsa Verde) and of incentives for community-based environmental and ecosystem services.

I 13 – Restoration of degraded and altered areas

Support to the implementation of the National Policy for the Recovery of Native Vegetation (Proveg), especially the restoration of degraded and altered areas of: (i) small farms or properties up to four government-established modules, with prioritization of Pradas implementation; and (ii) protected areas, indigenous lands and traditional communities.

BRAZILIAN AMAZON – LAND-TITLE AND TERRITORIAL PLANNING

I 14 – Land-title regularization

Support for land-title regularization of public lands, with priority of the critical areas with greater deforestation and agrarian conflicts, including support for the allocation of public lands and the holding of joined efforts for agrarian and environmental regularization. No support will be made available to pay for expropriation.

I 15 – Territorial planning

Support for the elaboration, revision and detailing of ecological-economic zoning (ZEE), including actions to train managers and technicians of government and civil society, and the formulation of action plans that foresee the application of the ZEE in other public policy instruments, such as the Pluri-annual Plan, Environmental Regularization Programs, environmental licensing, rural credit granting and the granting of rights to use water resources.

I 16 – Indigenous lands

Support to the elaboration and implementation of the territorial and environmental management plans for indigenous lands, aligned with the National Policy for the Territorial and Environmental Management of Indigenous Lands (PNGATI) including the protection and surveillance of indigenous lands.

I 17 – Protected areas

Support for the creation, recognition and consolidation of protected areas (nature conservation units and indigenous lands).

Support for the formation of ecological corridors, connecting public and private lands, by means of, among others: (i) the creation of protected areas (nature conservation units); (ii) improvement of the environmental and territorial management of protected areas, including areas of permanent preservation (APP), legal reserve and restricted use; (iii) recovery of degraded areas, in compliance with the provisions of item I 13; and (iv) of the formalization of agreements to maintain corridors.

Support for the restoration and maintenance of priority areas for management of protected areas in buffer zones, noted that support will be limited to small properties or rural family possessions (up to four government-established modules).

I 18 – Settlements

Support for the environmental and land regularization of settlements, including the implementation of the Green Settlements Program (Program for Prevention, Combat and Alternatives to Illegal Deforestation in Amazon Settlements).

BRAZILIAN AMAZON – SCIENCE, INNOVATION AND ECONOMIC INSTRUMENTS

I 19 – New products from socio-biodiversity

Support for scientific and technological research focused on socio-biodiversity product chains, including the development of new products based on Amazonian biodiversity – pharmaceuticals, phytopharmaceuticals, medicines, cosmetics and other products of interest to the chemical and food industries.

I 20 – Sustainable production activities

Support for scientific and technological research aimed at timber and nontimber forest management, recovery of degraded areas (including species selection, seed management and methods to optimize recovery), integration of crop-livestock-forest (ILPF), fisheries and aquaculture, conservation of water resources and soil.

I 21 – Systems for the monitoring and control of deforestation, forest degradation and fires

Support to the development, implementation and improvement of land use and land cover monitoring systems and control of deforestation, forest degradation, regeneration and fires to quantify deforestation, as a subsidy to public policies to prevent and combat deforestation.

I 22 – Studies, projections and simulations

Support for studies, projections and simulations related to land use and land cover, with the objective of subsidizing the elaboration and implementation of public policies to prevent and combat deforestation and to reduce greenhouse gas emissions resulting from deforestation, according to criteria to be defined by COFA.

I 23 – Community financing

Support for the structuring and contribution of financial resources to community revolving funds or similar instruments to enable the expansion of the value chains of forest management, socio-biodiversity and agroecology.

I 24 – Promotion of public procurement policy

Support for the expansion of the public procurement policy for products originating from forest management, socio-biodiversity and agroecology, aiming to give them support and a greater scale.

I 25 – Economic instruments and impact investment

Support for the development of a social and environmental impact investment ecosystem and other impact initiatives in the Brazilian Amazon, as well as for economic instruments that allow the Amazon Fund resources to be combined with private resources or with other sources.

AMAZON FUND'S SUPPORT OUTSIDE THE BRAZILIAN AMAZON**I 26 – Rural Environmental Registry (CAR) and environmental regularization of rural properties**

Promotion of the environmental regularization process through: (i) support for registration in the Rural Environmental Registry (CAR) of small properties or rural family possessions (up to four government-established modules); (ii) support for the integration of state CAR systems into the Rural Environmental Registry System (Sicar) and adaptation of complementary modules for analysis and monitoring; and (iii) support to activities for the validation of enrollments in the CAR.

Beneficiaries of CAR support projects outside the Brazilian Amazon must necessarily make a financial contribution. In projects that contemplate states where the cerrado, caatinga and pantanal biomes represent, cumulatively, more than 40% of their territory, financial contributions must be of at least 10% of the total value of the project. In other cases outside the Brazilian Amazon, financial contributions must be of at least 20% of the total value of the project.

Support for the implementation of the CAR will be done primarily through operations with states, which may sign partnerships/contracts to carry out the necessary actions, in compliance with applicable legislation.

I 27 – Deforestation monitoring systems

Support to projects that contribute to the creation or improvement of systems for monitoring forest cover outside the Brazilian Amazon, according to the guidelines and criteria in force (see items G 1 to G 20).

Support for protection and surveillance on indigenous lands.

Promote integrated computerization of state forest management data to the National Forest Control Origin System (Sinaflor), including authorizations for suppression of vegetation and management plans.

AMAZON FUND'S SUPPORT IN OTHER TROPICAL COUNTRIES**I 28 – Deforestation monitoring systems in other tropical countries**

Support for projects that contribute to the creation or improvement of forest cover monitoring systems and deforestation control systems in other tropical countries, according to current guidelines and criteria (see items H 1 to H 17).

GENERAL GUIDELINES**I 1 – Focuses for 2015 and 2016**

The following items define the Amazon Fund's focus for 2015 and 2016 and establish guidelines and additional criteria.

I 2 – Requirements when supporting states

Support for new projects presented by state governments will require implementing the CAR in the territory, using either their own resources, those from the Amazon Fund, or from other sources.

Contracts between the Amazon Fund and the states within the Brazilian Amazon must include a contractual obligation for state to revise their plans to prevent and combat deforestation (PPCD) if they are outdated, and another obligation to produce and publicize an annual monitoring report on their PPCDs.

I 3 – Exception to the requirement of resource additionality in the Brazilian Amazon

Projects that aim to continue or improve environmental monitoring and control of deforestation, presented by federal or state agencies or public institutions with legal mandate to carry out enforcement actions under the National Environmental System (Sisnama) may exceptionally be exempted from the minimum condition of additionality of resources mentioned in item B 8. Therefore, a technical justification formally presented by the Ministry of the Environment will be required, as well as a declaration from the body/applicant institution stating the nonexistence of available source of resources for the requested financial support. The above mentioned technical justification and statement are mandatory documents that must accompany the financial support request formally filed at BNDES.

BRAZILIAN AMAZON – MONITORING AND CONTROL

I 4 – Rural Environmental Registry (CAR) and environmental regularization of rural properties

Fostering environmental regularization through: (i) support for small properties or temporarily-owned rural family properties (up to four government-established modules) to enroll on the Rural Environmental Registry (CAR); (ii) support to integrate state-run CAR systems into the Rural Environmental Registry System (Sicar) and to adapt not only complementary modules for Analysis and Monitoring, but also management for state-run Environmental Regularization Programs (PRA) and Environmental Reserve Quotas (CRAs); (iii) support to develop and implement the PRAs; (iv) support for activities to validate enrollment on the CAR; (v) support to develop projects to recover degraded and altered areas (Prada) on small properties or temporarily-owned rural family properties; (vi) support for activities to validate Pradas; and (vii) support to structure and operationalize monitoring for environmental compliance of rural properties.

Support to implement the CAR and environmental regularization for rural properties will be carried out primarily through operations with the states, which may establish partnerships/contracts to carry out the necessary actions, while respecting applicable legislation. However, other CAR projects in areas that were not included in state-run projects may receive support from other partners.

I 5 – Forest fires

Support for efforts to prevent and combat forest degradation caused by fires in native vegetation, which were presented by government environmental agencies operating in the Brazilian Amazon and by NGOs in partnership with government agencies, primarily on settlements, in protected areas and on indigenous land.

I 6 – Monitoring

Support to monitor deforestation, forest degradation and forest fires in the Brazilian Amazon.

BRAZILIAN AMAZON – FOSTERING SUSTAINABLE PRODUCTION ACTIVITIES

I 7 – Economic activities that make sustainable use of the forest and biodiversity

Structuring, strengthening and consolidating socio-biodiversity production sectors and sustainable family farming, including adding value to the extraction economy, timber and nontimber forestry, aquaculture and fishing arrangements, agro-ecological and agro-forestry systems, as well as community-based tourism, including technical assistance for sustainable production activities.

I 8 – Green Settlements Program

Implementing the Green Settlements Program (Program for Prevention, Combat and Alternatives to Illegal Deforestation in Amazon Settlements).

I 9 – Recovering degraded and altered areas

Support to recover degraded and altered areas on small properties or temporarily-owned rural family properties (up to four government-established modules), prioritizing the implementation of Pradas..

BRAZILIAN AMAZON – LAND-TITLE AND TERRITORIAL PLANNING

I 10 – Land-title regularization

Support to implement land-title regularization for public land, prioritizing critical areas with intense deforestation; priority is also given to digitalizing land titles as well as building or consolidating state land-title mapping, as well as computerizing property registration and records at state land agencies. No support will be made available to pay for expropriation.

I 11 – Indigenous land

Support to prepare and implement territorial and environmental management plans for indigenous land, in compliance with the National Policy on Territorial and Environmental Management of Indigenous Land (PNGATI).

I 12 – Protected areas

Support to create and consolidate protected areas.

BRAZILIAN AMAZON – FOCUS ON SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT

I 13 – New products from socio-biodiversity sectors

Support for scientific and technological research focused on biodiversity product sectors, including developing new products using the Amazon's biodiversity-pharmaceuticals, plant health care, medicine, cosmetics and other products of interest to the chemical and food industries.

I 14 – Sustainable production activities

Support for scientific and technological research aimed at timber and nontimber forest management, recovering degraded areas, integrating farming and cattle-raising-forestry (ILPF), as well as sustainable fishing and aquaculture, water resources and soil conservation.

I 15 – Systems to monitor and control deforestation, forest degradation and forest fires

Support to develop, implement and improve systems to monitor land use and coverage, as well as to control deforestation, forest degradation and forest fires aimed at quantifying deforestation, so as to help public policies prevent and combat deforestation.

I 16 – Research infrastructure

Support from the Amazon Fund for scientific and technological development will include support for the necessary research infrastructure.

BRAZILIAN AMAZON – OPERATIONAL MODALITIES

I 17 – Guidance

The focus defined in items I 4 to I 16 will receive support exclusively by directly presented structuring projects or projects selected through calls-to-submission run directly by the Amazon Fund (BNDES) or through partner institutions.

I 18 – Structuring projects

A structuring project cumulatively meets the following criteria:

- d. It contributes to implementing a public policy.
- e. It is responsive to the problem-situation.
- f. It has sufficient scale in the territory (whenever the project develops its efforts in the territory).

Structuring projects can be proposed by: (a) Federal Government agencies; (b) state or government agencies; or (c) private nonprofit organizations.

For scientific and technological development projects, structuring projects can be proposed by scientific and technological institutions, and/or their supporting foundations and/or civil society organizations, whose purpose is duly defined in its articles of incorporation or bylaws, or, proposed by the federal or state government agencies.

The criterion "have sufficient scale in the territory" will be deemed met when, for example, the project's efforts cover an entire set of municipalities, settlements or protected areas, a state planning region, the surrounding areas of PAC works etc. Defining territorial scale must be done in accordance with the project's characteristics and its respective public policies.

I 19 – Call-to-submission

In addition to the calls-to-submissions run directly by the Amazon Fund (BNDES), support for partner institutions will be admissible to promote calls-to-submissions for projects. Partner institutions must prove experience, knowledge and operational capacity to offer quality and scale in calls-to-submission. Partner institutions are understood as third-sector entities and those from federal and state governments.

The Amazon Fund, at any time, will receive requests presented by partner institutions for financial collaboration, which seek support to run calls-to-submissions for projects, with a focus on priority efforts in 2015 and 2016, as established in items I 4 to I 16.

The calls-to-submission run directly by the Amazon Fund or those receiving indirect support through partner institutions, will be advertised on the Amazon Fund's website or that of partner institutions, as may be the case.

AMAZON FUND SUPPORT IN BRAZIL OUTSIDE THE BRAZILIAN AMAZON

I 20 – Rural Environmental Registry (CAR) and environmental regularization of rural properties

Fostering environmental regularization through: (i) support for small properties or temporarily-owned rural family properties (up to four government-established modules) to enroll on the Rural Environmental Registry (CAR); support to integrate state CAR systems into the Rural Environmental Registry System (Sicar) and to adapt complementary modules for Analysis and Monitoring; and (iii) support for activities to validate enrollments on the CAR.

Beneficiaries of projects supporting the CAR in other biomes will necessarily make financial contributions. Projects whose scope covers states where savanna (Cerrado), xeric shrubland (Caatinga) and Wetland biomes represent cumulatively more than 40% of its territory, must receive financial contributions of at least 10% of the total amount of the project. In other cases outside the Brazilian Amazon, financial contributions must represent at least 20% of the total amount of the project.

Support to implement the CAR will be carried out primarily through operations with the states, which may establish partnerships/contracts to carry out the necessary actions, and respecting applicable legislation.

I 21 – Systems to monitor deforestation in other Brazilian biomes

Support for projects that help create or improve monitoring systems for forest coverage in other Brazilian biomes, in accordance with current guidelines and criteria (see items G 1 to G 20).

AMAZON FUND SUPPORT IN OTHER TROPICAL COUNTRIES

I 22 – Systems to monitor deforestation in other tropical countries

Support for projects that help create or improve monitoring systems for forest coverage in other tropical countries, in accordance with current guidelines and criteria (see items H 1 to H 18).

Annex 4 – Cancellations, changes in values and supplementation

CANCELED PROJECTS			
Project	Project management	Value of the support (R\$)	Year of cancellation
S.O.S. Cumaru do Norte	Municipality of Cumaru do Norte (PA)	755,299.70	2012
Sustainable Porto de Moz	Municipality of Porto de Moz (PA)	337,206.46	2014
Anapu towards the Green Seal	Municipality of Anapu (PA)	431,940.00	2014
Sustainable Maranhão	State of Maranhão	20,036,000.00	2016
Roraima's Firefighters	State of Roraima	12,800,000.00	2016
Forest Income	Vale Association for Sustainable Development (Vale Fund)	35,000,000.00	2017
Agroforestry Business	Jari Foundation	2,838,549.00	2017
Sepror Agroecology	State of Amazonas	14,900,000.00	2018
Indigenous Territorial Sustainable Management	State of Amazonas	16,465,000.00	2018
Forest Management and Production Chains Boosting	State of Amapá	40,304,200.00	2018
Fruits from the Forest	Brazilian Group for Education and Teaching	4,053,734.00	2018
TOTAL	-	147,921,929.16	-



PROJECTS WITH CHANGES IN THE VALUE OF SUPPORT				
Project	Project management	Value of the support (R\$)	Original value of the support (R\$)	Value of the change* (R\$)
Forest Assistance Program	Amazonas Sustainable Foundation (FAS)	19,107,547.89	19,169,087.00	(61,539.11)
Protected Areas in the Amazon (Arpa) – Phase 2	Brazilian Biodiversity Fund (Funbio)	19,949,058.91	20,000,000.00	(50,941.09)
Portal Seeds	Ouro Verde Institute (IOV)	5,397,778.87	5,433,450.00	(35,671.13)
Preserving Porto dos Gaúchos	Municipality of Porto dos Gaúchos (MT)	120,655.00	133,890.00	(13,235.00)
Recovering Marcelândia	Municipality of Marcelândia (MT)	551,556.98	669,126.00	(117,569.02)
Dema Fund	Federation of Agencies for Social and Educational Assistance (Fase)	7,615,854.00	9,347,384.00	(1,731,530.00)
CAR: Legal Tocantins	State of Tocantins	26,800,000.00	40,504,400.00	(13,704,400.00)
Importance of Forest Environmental Assets	State of Acre	57,057,461.00	60,000,000.00	(2,942,539.00)
Public Policy Incubator in the Amazon	Federal University of Pará (UFPA)	2,660,567.23	2,704,084.90	(43,517.67)
South of Amazonas State Reforestation	State of Amazonas	17,575,286.19	20,000,000.00	(2,424,713.81)
Jacundá, Green Municipality Economy	Municipality of Jacundá	199,352.05	792,200.00	(592,847.95)
Forest Firefighters of Mato Grosso	State of Mato Grosso	12,518,230.09	12,625,000.00	(106,769.91)
Banco do Brasil Foundation – Amazon Fund	Banco do Brasil Foundation	14,515,520.43	15,000,000.00	(484,479.57)
Integrated Environmental and Socioeconomic Development	State of Rondônia	31,227,392.40	32,659,602.00	(1,432,209.60)
Amazon Water Springs – Phase 2	Município de Alta Floresta	7,146,563.54	7,182,970.00	(36,406.46)
	Municipality of Alta Floresta	7,146,563.54	7,182,970.00	(36,406.46)
CAR Roraima	State of Roraima	3,075,205.25	10,820,500.00	(7,745,294.75)
Nontimber Products Value Chains	SOS Amazon Association	9,953,000.00	9,993,000.00	(40,000.00)
Forest Protection in Tocantins	State of Tocantins	4,958,910.00	5,000,000.00	(41,090.00)
Amazon Backyards	Cultural and Environmental Study Centre of the Amazon (Rioterra)	8,891,687.09	9,117,000.00	(225,312.91)
Forest Sentinels	Farmers' Cooperative of Vale do Amanhecer (Coopavam)	5,175,522.50	5,288,817.00	113,294.50
Strengthening the Forest-based Sustainable Economy	Central Extractive Trade Cooperative of the State of Acre (Cooperacre)	4,981,614.66	5,081,763.00	(100,148.34)
Value Chains in Indigenous Territories in Acre	Acre's Pro-Indigenous Peoples Commission (CPI-Acre)	3,091,111.21	3,106,064.00	(14,952.79)
Amazon Bioactive Composts	Federal University of Pará (UFPA)	1,352,368.48	1,352,336.00	32.48
Buriti Springs	Municipality of Carlinda	1,875,500.94	1,870,581.50	4,919.44
Acre: Zero Forest Fires	State of Acre	13,280,709.56	13,280,700.00	9.56
TOTAL		354,375,023.39	393,510,515.40	(39,135,492.01)

* The last three projects in the table had an increase in value because they predicted the inflation adjustment of the value of the Amazon Fund's financial support.

PROJECTS WITH SUPPLEMENTATION					
Project	Project management	Value of the support (R\$)	Original value of the support (R\$)	Value of the supplementation (R\$)	Year of the supplementation's approval
Knowing to Preserve	Museu da Amazônia (Musa)	9,984,629.00	8,454,421.00	1,530,208.00	2015
Materialize	Association of Small Agroforestry Producers of Project (Reca)	6,422,748.00	4,751,520.00	1,671,228.00	2015
TOTAL		16,407,377.00	13,205,941.00	3,201,436.00	



ANNEX 5 – Result’s framework model

Objectives (direct effects)	1.1 Economic activities for the sustainable use of the forest and biodiversity identified and developed – “sustainable production”	1.2 Expansion of the added value of the agroforestry and biodiversity production chains – “sustainable production” component	1.3 Expansion of managerial and technical capabilities for the development of economic activities for the sustainable use of the forest and biodiversity – “sustainable production” component	1.4 Recovery of deforested and degraded areas and their use for economic purposes and ecological conservation – “sustainable production” component
“Sustainable production” component				
What is the amount of funding allocated to each objective?	R\$ – thousand	R\$ – thousand	R\$ – thousand	R\$ – thousand
How can deliveries (effectiveness) associated with each objective be measured?	Rural properties with sustainable production projects implemented (number of properties)	Processing units for family farming and extractive products expanded or renovated (number of units)	Practical training courses on the management of sustainable economic activities provided – total (number of people)	Area with completed actions to recover vegetation cover with native species – planting, enrichment or densification (hectares)
	Rural properties that received technical assistance (number of properties)	Infrastructure built for sustainable production and recovery of vegetation – nurseries/seed houses/sheds (number of units)	Practical and management training for sustainable economic activities – women (number of women)	Area with completed actions to recover vegetation cover with native species – management of natural regeneration (hectares)
	Demonstration units implemented – agroforestry systems (SAF)/sustainable livestock farming/crop-livestock-forest integration (number of demonstration units)	Transportation equipment purchased for sustainable production activities – boats/cars/trucks/tractors and motorcycles (number of pieces of equipment)	Practical and management training for sustainable economic activities – indigenous peoples (number of individuals)	Area with completed actions to recover vegetation cover with native species – agroforestry system (SAF) (hectares)
	Infrastructure built for sustainable production and recovery of vegetation – nurseries/seed houses/sheds (number of units)	Sustainable production studies conducted – diagnostics/business plans/communication plans (number of studies)	Small projects supported by cooperative entities – projects up to R\$ 150,000 (number of projects)	Infrastructure built for sustainable production and recovery of vegetation – nurseries/seed houses/sheds (number of units)
	Transportation equipment purchased for sustainable production activities – boats/cars/trucks/tractors and motorcycles (number of pieces of equipment)	Small projects supported by cooperative entities – projects up to R\$ 150,000 (number of projects)	Medium and large projects supported by cooperative entities – projects above R\$ 150,000 (number of projects)	Transportation equipment purchased for sustainable production activities – boats/cars/trucks/tractors and motorcycles (number of pieces of equipment)
	Sustainable production studies conducted – diagnostics/business plans/communication plans (number of studies)	Medium- and large-sized projects supported by cooperative entities – projects above R\$ 150,000 (number of projects)	Sustainable production integrating events – seminars/workshops held (number of events)	Small-sized projects supported by cooperative entities – projects up to R\$ 150,000 (number of projects)
	Small-sized projects supported by cooperative entities – projects up to R\$ 150,000 (number of projects)	Sustainable production integrating events – seminars/workshops held (number of events)	Training publications or media produced for sustainable production purposes (number of publications)	Medium- and large-sized projects supported by cooperative entities – projects above R\$ 150,000 (number of projects)

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Objectives (direct effects)	1.1 Economic activities for the sustainable use of the forest and biodiversity identified and developed – “sustainable production”	1.2 Expansion of the added value of the agroforestry and biodiversity production chains – “sustainable production” component	1.3 Expansion of managerial and technical capabilities for the development of economic activities for the sustainable use of the forest and biodiversity – “sustainable production” component	1.4 Recovery of deforested and degraded areas and their use for economic purposes and ecological conservation – “sustainable production” component
“Sustainable production” component				
How can deliveries (effectiveness) associated with each objective be measured?	Medium- and large-sized projects supported by cooperative entities – projects above R\$ 150,000 (number of projects)	Training publications or media produced for sustainable production purposes (number of publications)	Individuals directly benefited by the project – sustainable production (number of individuals)	Sustainable production integrating events – seminars/workshops held (number of events)
	Sustainable production integrating events – seminars/workshops held (number of events)	Individuals directly benefited by the project – sustainable production (number of individuals)	Women directly benefited by the project – sustainable production (number of individuals)	Training publications or media produced for sustainable production purposes (number of publications)
	Training publications or media produced for sustainable production purposes (number of publications)	Women directly benefited by the project – sustainable production (number of individuals)	Indigenous people directly benefited by the project – sustainable production (number of individuals)	Individuals directly benefited by the project – sustainable production (number of individuals)
	Individuals directly benefited by the project – sustainable production (number of individuals)	Indigenous people directly benefited by the project – sustainable production (number of individuals)	Institutions indirectly supported – associated/ partnership public calls (number of institutions)	Women directly benefited by the project – sustainable production (number of individuals)
	Women directly benefited by the project – sustainable production (number of individuals)	Institutions indirectly supported – associated/ partnership public calls (number of institutions)		Indigenous people directly benefited by the project – sustainable production (number of individuals)
	Indigenous people directly benefited by the project – sustainable production (number of individuals)			Institutions indirectly supported – associated/ partnership public calls (number of institutions)
	Institutions indirectly supported – associated/ partnership public calls (number of institutions)			
How can the expected effects (effectiveness) of projects’ deliveries be measured?	Annual income from sustainable economic activities – <i>in natura</i> products (R\$ 1,000)	Annual income from sustainable economic activities – processed products (R\$ 1,000)	Individuals trained in the practice and management of sustainable economic activities that effectively apply the acquired knowledge – total (number of individuals)	Recovered area used for economic purposes (hectares)
	Area of forest directly managed (hectares)	Area of forest directly managed (hectares)	Individuals trained in the practice and management of sustainable economic activities that effectively apply the acquired knowledge – women (number of individuals)	Area recovered for environmental conservation and/or regularization – ongoing recovery (hectares)
	Third sector organizations that have advanced in management and governance (number of organizations)	Third sector organizations that have advanced in management and governance (number of organizations)	Individuals trained in the practice and management of sustainable economic activities that effectively apply the acquired knowledge – indigenous peoples (number of individuals)	Third sector organizations that have advanced in management and governance (number of organizations)
			Third sector organizations that have advanced in management and governance (number of organizations)	

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Objectives (direct effects)	2.1 Monitoring, control and environmental accountability institutions structured and modernized – “monitoring and control” component	2.2 Increased access of rural producers to environmental regularization of their properties – “monitoring and control” component
“Monitoring and control” component		
What is the amount of funding allocated to each objective?	R\$ – thousand	R\$ – thousand
How can deliveries (effectiveness) associated with each objective be measured?	Training in environmental management or deforestation monitoring technologies – total (number of individuals)	Rural properties registered in the Rural Environmental Registry (CAR) – protocol (number of properties)
	Training in environmental management or deforestation monitoring technologies – women (number of women)	Area of rural properties registered in the CAR – protocol (number of properties)
	Training in environmental management or deforestation monitoring technologies – public servants (number of individuals)	Transportation equipment purchased for environmental monitoring, control and regularization purposes – boats/cars/trucks/motorcycles (number of pieces of equipment)
	Training in environmental management or deforestation monitoring technologies – female public servants (number of individuals)	Rural properties submitted to register verification (number of properties)
	Transportation equipment purchased for environmental monitoring, control and regularization purposes – boats/cars/trucks/motorcycles (number of pieces of equipment)	Area of rural properties submitted to register verification (hectares)
	Equipment purchased to combat forest fires and unauthorized burnings – aircraft/pickup truck/boat/tank semi-trailer/forest tank truck (number of pieces of equipment)	Projects elaborated for the recovery of degraded or altered areas (Prada) (number of projects)
	Vehicles rented for environmental inspection actions (number of vehicles)	Area of properties with projects elaborated for the recovery of degraded or altered areas (Prada) (hectares)
	Flight hours in environmental inspection actions (number of hours)	Area with completed actions to recover vegetation cover with native species – planting, enrichment or densification (hectares)
	Environmental inspection missions carried out (number of missions)	Area with completed actions to recover vegetation cover with native species – management of natural regeneration (hectares)
	Training in firefighting techniques for the creation of civilian fire brigades – total (number of individuals)	Area with completed actions to recover vegetation cover – agroforestry systems (SAF) (hectares)
	Training in firefighting techniques for the creation of civilian fire brigades – women (number of individuals)	Environmental monitoring, control and regularization integrating events – seminars/workshops (number of events)
	Electronic systems for environmental monitoring and control implemented, improved and/or integrated (number of systems)	Training publications or media produced for environmental monitoring, control or regularization (number of publications)
	Integrating events for environmental monitoring, control or regularization – seminars/workshops (number of events)	Infrastructure built for recovery of vegetation – nurseries/seed houses/sheds (number of units)
	Training publications or media produced for environmental monitoring, control or regularization (number of publications)	
	Area mapped with georeferencing for monitoring and control purposes (hectares)	
Environmental agencies strengthened (number of institutions)		
Training in prevention and combat of forest fires and unauthorized burnings or integrated fire management – public servants (number of individuals)		

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Objectives (direct effects)	2.1 Monitoring, control and environmental accountability institutions structured and modernized – “monitoring and control” component	2.2 Increased access of rural producers to environmental regularization of their properties – “monitoring and control” component
“Monitoring and control” component		
How can deliveries (effectiveness) associated with each objective be measured?	Training publications or media produced for environmental monitoring, control or regularization (number of publications)	
	Area mapped with georeferencing for monitoring and control purposes (hectares)	
	Environmental agencies strengthened (number of institutions)	
	Training in prevention and combat of forest fires and unauthorized burnings or integrated fire management – public servants (number of individuals)	
	Operations to combat forest fires and unauthorized burnings carried out by the Military Fire Brigade in partnership with other Military Fire Brigades (number of joint operations)	
	Military Fire Brigade actions to support environmental inspection carried out by other competent state and federal agencies (number of actions)	
How can the expected effects (effectiveness) of projects’ deliveries be measured?	Area monitored in the Brazilian Amazon region (hectares)	Properties registered in the CAR with verified and regular register (number of properties)
	Area monitored in Brazil outside the Brazilian Amazon region (hectares)	Area of properties registered in the CAR with verified and regular register (number of properties)
	Area monitored area in other tropical countries (hectares)	Recovery projects for degraded or altered areas (Prada) approved by the environmental agency (number of projects)
	Notice of violation for infractions against the flora (number of cases)	Area of properties with recovery projects for degraded or altered areas (Prada) approved by the environmental agency (hectares)
	Fines imposed for infractions against flora (R\$ 1,000)	Recovered area in use for economic purposes (hectares)
	Individuals trained in environmental management and deforestation monitoring technologies that effectively apply the acquired knowledge – total (number of individuals)	Area recovered for environmental conservation and/or regularization – ongoing recovery (hectares)
	Individuals trained in environmental management and deforestation monitoring technologies that effectively apply the acquired knowledge – women (number of individuals)	
	Individuals trained in environmental management and deforestation monitoring technologies that effectively apply the acquired knowledge – public servants (number of individuals)	
	Individuals trained in environmental management and deforestation monitoring technologies that effectively apply the acquired knowledge – female public servants (number of individuals)	
Individuals trained in firefighting techniques for the creation of civilian fire brigades that effectively apply the acquired knowledge – total (number of individuals)		

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Objectives (direct effects)	2.1 Monitoring, control and environmental accountability institutions structured and modernized – “monitoring and control” component	2.2 Increased access of rural producers to environmental regularization of their properties – “monitoring and control” component
“Monitoring and control” component		
How can the expected effects (effectiveness) of projects’ deliveries be measured?	Women trained in firefighting techniques for the creation of civilian fire brigades that effectively apply the acquired knowledge – women (number of individuals)	
	Heat sources – the first measurement is the average number of heat sources in the five years prior to the implementation of the project (number of heat sources)	
	Heat sources verified by Fire Brigade field operations (number of heat sources)	
	Forest fires or unauthorized burnings fought by the Fire Brigade (number of fires)	
	Individuals trained in prevention and combat of forest fires and unauthorized burnings or in integrated fire management that effectively apply the acquired knowledge – public servants (number of individuals)	
	Individuals trained in prevention and combat of forest fires and unauthorized burnings or in integrated fire management that effectively apply the acquired knowledge – female public servants (number of individuals)	
	Individuals trained in techniques of controlled burnings and prevention of forest fires or in alternative nonburning techniques that effectively apply the acquired knowledge – total (number of individuals)	
	Individuals trained in techniques of controlled burnings and prevention of forest fires or in alternative nonburning techniques that effectively apply the acquired knowledge – women (number of individuals)	
	Access to electronic systems implemented or integrated for environmental monitoring and control (number of accesses)	
	Organizations using electronic systems implemented or integrated for environmental monitoring and control (number of organizations)	

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Objectives (direct effects)	3.1. Expansion of public forests and protected areas – "land-use planning" component	3.2 Protected areas with infrastructure, territorial protection and consolidated management – "land-use planning" component	3.3 Expansion of areas with regularized land titles – "land-use planning" component	3.4 Expansion of areas with their territorial organization established by ecological-economic zoning (EEZ)
"Land-use planning" component				
What is the amount of funding allocated to each objective?	R\$ – thousand	R\$ – thousand	R\$ –thousand	R\$ – thousand
How can deliveries (effectiveness) associated with each objective be measured?	Studies conducted to identify priority areas for the creation of PAs or for the legal recognition of indigenous lands (TI) completed (number of studies)	Territorial management plans drawn up or revised (number of plans)	Rural properties with georeferencing implemented for land regularization purposes (number of properties)	Planning and/or diagnosis and/or prognosis studies for implementing EEZ (number of studies)
	Transportation equipment purchased for land-use planning purposes – boats/cars/trucks/tractors and motorcycles (number of pieces of equipment)	Transportation equipment purchased for land-use planning purposes – boats/cars/trucks/tractors and motorcycles (number of pieces of equipment)	Transportation equipment purchased for land-use planning purposes – boats/cars/trucks/tractors and motorcycles (number of pieces of equipment)	Area mapped with georeferencing for land-use planning purposes (hectares)
	Land-use planning integrating events – seminars/workshops held (number of events)	Land-use planning integrating events – seminars/workshops held (number of events)	Land-use planning integrating events – seminars/workshops held (number of events)	Geographic Databases (GDB) structured and fed with the geoinformation used to elaborate the EEZ (number of databases)
	Training publications or media produced for land-use planning purposes (number of publications)	Training publications or media produced for land-use planning purposes (number of publications)	Training publications or media produced for land-use planning purposes (number of publications)	Transportation equipment purchased for land-use planning purposes – boats/cars/trucks/tractors and motorcycles (number of pieces of equipment)
	Area mapped with georeferencing for land-use planning purposes (hectares)	Territorial surveillance missions carried out (number of missions)	Digitized documents for land management purposes (number of documents)	Public events of discussion and validation of EEZ carried out (number of events)
	Individuals directly benefited by the project – land-use planning (number of individuals)	Training in management or territorial protection of protected areas – total (number of individuals)	Area of rural properties mapped with georeferencing for land-title regularization purposes (hectares)	Training publications or media produced for land-use planning purposes (number of publications)
	Women directly benefited by the project – land-use planning (number of individuals)	Training in management or territorial protection of protected areas – women (number of individuals)	Individuals directly benefited by the project – land-use planning (number of individuals)	
	Indigenous people directly benefited by the project – land-use planning (number of individuals)	Training in management or territorial protection of protected areas – indigenous peoples (number of individuals)	Women directly benefited by the project – land-use planning (number of individuals)	

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Objectives (direct effects)	3.1. Expansion of public forests and protected areas – "land-use planning" component	3.2 Protected areas with infrastructure, territorial protection and consolidated management – "land-use planning" component	3.3 Expansion of areas with regularized land titles – "land-use planning" component	3.4 Expansion of areas with their territorial organization established by ecological-economic zoning (EEZ)
"Land-use planning" component				
How can deliveries (effectiveness) associated with each objective be measured?	Training in management or territorial protection of protected areas – public servants (number of individuals)		Indigenous people directly benefited by the project – land-use planning (number of individuals)	
	Training in management or territorial protection of protected areas – female public servants (number of individuals)			
	Area mapped with georeferencing for land-use planning purposes (hectares)			
	Area with completed actions to recover vegetation cover with native species – planting, enrichment or densification (hectares)			
	Area with completed actions to recover vegetation cover with native species – management of natural regeneration (hectares)			
	Area with completed actions to recover vegetation cover – agroforestry systems (SAF) (hectares)			
	Small-sized projects supported by cooperative entities – projects up to R\$ 150,000 (number of projects)			
	Medium- and large-sized projects supported by cooperative entities – projects above R\$ 150,000 (number of projects)			
	Individuals directly benefited by the project – land-use planning (number of individuals)			
	Women directly benefited by the project – land-use planning (number of individuals)			
	Indigenous people directly benefited by the project – land-use planning (number of individuals)			
	Institutions indirectly supported – associated/ partnership public calls (number of institutions)			

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Objectives (direct effects)	3.1. Expansion of public forests and protected areas – "land-use planning" component	3.2 Protected areas with infrastructure, territorial protection and consolidated management – "land-use planning" component	3.3 Expansion of areas with regularized land titles – "land-use planning" component	3.4 Expansion of areas with their territorial organization established by ecological-economic zoning (EEZ)
"Land-use planning" component				
How can the expected effects (effectiveness) of projects' deliveries be measured?	Area of protected areas created (hectares)	Protected areas (PA) with environmental and territorial management tool under implementation (number of PA)	Rural properties with regularized land titles (number of properties)	Area with territorial organization established through EEZ (hectares)
	Area of indigenous lands (TI) recognized (hectares)	Area of PA with environmental and territorial management tool under implementation (number of PA)	Area of rural properties with regularized land titles (number of properties)	
		TIs with environmental and territorial management tool under implementation (number of TIs)		
		Area of TIs with environmental and territorial management tool under implementation (hectares)		
		Individuals trained in the management and monitoring of protected areas that effectively apply the acquired knowledge – total (number of individuals)		
		Women trained in the management and monitoring of protected areas that effectively apply the acquired knowledge – (number of individuals)		
		Indigenous people trained in the management and monitoring of protected areas that effectively apply the acquired knowledge – (number of individuals)		
		Public servants trained in the management and monitoring of protected areas that effectively apply the acquired knowledge – (number of individuals)		
		Public servants trained in the management and monitoring of protected areas that effectively apply the acquired knowledge – women (number of individuals)		
		Area recovered in use for economic purposes (hectares)		
		Area recovered for environmental conservation and/or regularization – ongoing recovery (hectares)		
		Third sector organizations that have advanced in management and governance (number of organizations)		

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Objectives (direct effects)	4.1 Knowledge and technologies for biodiversity conservation and sustainable use, deforestation monitoring and control and land-use planning developed, disseminated and applied – "science, innovation and economic instruments" component	4.2 Economic instruments for biodiversity conservation and sustainable use, deforestation monitoring and control and land-use planning developed, disseminated and applied – "science, innovation and economic instruments" component
"Science, innovation and economic instruments" component		
What is the amount of funding allocated to each objective?	R\$ – thousand	R\$ – thousand
How can deliveries (effectiveness) associated with each objective be measured?	Studies carried on (number of studies)	Solidarity finance platforms structured to support socio-biodiversity production chains projects (number of platforms)
	Laboratories built or renovated (number of laboratories)	Amount paid for environmental services (R\$ 1,000)
	Area of laboratories built or renovated (square meters)	Subsidies granted to extractive producers and small farmers for the promotion of socio-biodiversity production chains (R\$ 1,000)
	Transportation equipment purchased for scientific and innovation purposes – boats/cars/trucks/ motorcycles (number of pieces of equipment)	Amount paid for governmental purchases (R\$ 1,000)
	Electronic systems developed and/or improved for environmental monitoring and control purposes (number of systems)	Rural properties benefiting from payment for environmental services (number of properties)
	Science and innovation integrating events – seminars/workshops held (number of events)	Transportation equipment purchased for economic instruments implementation – boats/cars/trucks/ motorcycles (number of pieces of equipment)
	Area mapped with georeferencing for monitoring and control purposes (hectares)	Integrating events for economic instruments implementation – seminars/workshops held (number of events)
	Area mapped with georeferencing for monitoring and control purposes (hectares)	Training publications or media produced for economic instruments implementation (number of publications)
How can the expected effects (effectiveness) of projects' deliveries be measured?	Scientific publications produced (number of publications)	Solidarity finance operations carried out (working capital, endorsement, etc.) to foster sustainable production activities (number of operations)
	New products or technologies developed (number of products)	Amount of support provided (working capital, endorsement, etc.) through solidarity finance platform instruments (R\$ 1,000)
	Patent applications filed with the National Institute of Industrial Property (INPI) (number of patents)	Financial default of solidarity finance operations (working capital, endorsement, etc.) to foster sustainable productive activities (R\$ 1,000)
	Geospatial information on land use and coverage generated by technologies developed or improved – alerts/maps/reports (number of pieces of information)	Area with vegetation cover benefitting from environmental services payment (hectares)

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Objectives (direct effects)	4.1 Knowledge and technologies for biodiversity conservation and sustainable use, deforestation monitoring and control and land-use planning developed, disseminated and applied – "science, innovation and economic instruments" component	4.2 Economic instruments for biodiversity conservation and sustainable use, deforestation monitoring and control and land-use planning developed, disseminated and applied – "science, innovation and economic instruments" component
"Science, innovation and economic instruments" component		
How can the expected effects (effectiveness) of projects' deliveries be measured?		Production entities that have sold products under government programs (number of entities)
		Individuals that have sold products under government programs (number of individuals)
		Production entities benefited by grants for the promotion of products of socio-biodiversity (number of organizations)
		Individuals benefited by grants for the promotion of products of socio-biodiversity (number of individuals)
		Amount disbursed by investment fund in social- and environmental-oriented businesses with co-investment of the Amazon Fund
		Annual income from sustainable economic activities of community organizations – in natura products (R\$ 1,000)
		Annual income from sustainable economic activities of community organizations – processed products and services (R\$ 1,000)

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