AMAZON FUND

ACTIVITY REPORT **2021**

MESSAGE FROM THE PRESIDENT

The path to sustainability is irreversible, as is BNDES's commitment to being a key player in the integration of social, environmental, and institutional aspects of the Brazilian economic development.

The biennium 2020-2021 will be remembered as a response period to the Covid-19 pandemic. As a contribution to the fight against this health emergency, BNDES was responsible for allocating R$ 200 billion in actions aimed at society as a whole, of which R$ 92 billion were destined to thousands of small and medium-sized Brazilian businesses via the Guarantee Fund "Emergency Access to Credit Program (FGI-Peac)."

The year 2021 was also marked by the emergence of the ESG (Environmental, Social, and Governance) agenda, whose principle is aligned with BNDES's purpose of transforming the lives of generations of Brazilians via sustainable development. Among the actions that matured this year, we highlight "Living Forest" program, launched at COP26, in Scotland. It consists of a crowdfunding initiative to restore forests and watersheds in Brazil, with projected investments of up to R$ 500 million over the next seven years. A real opportunity to seek alternatives to develop the parameters set by the carbon market for reforestation actions in the country.

We believe that the letter "E" for environment represents an opportunity for Brazil. By substituting fossil fuels, consolidating the carbon market, and innovating in line with biodiversity, our country can position itself as the main actor capable of leading the green economy technological race. In this regard, based on new ethical, technological, and climate paradigms – and looking to the future while respecting the past –, we consider the Amazon as the primordial site for building the 21st-century bioeconomy.

Even without the resumption of approval of new projects within the Amazon Fund, the execution of the supported projects portfolio projects continues uninterrupted. A total of R$ 117 million was disbursed in 2021 and another R$ 366 million is planned for the coming years towards projects already contracted, all of which focus on actions to prevent deforestation, and promote environmental conservation and sustainable development.

On the eve of completing its seventy years, BNDES reinvents and improves itself, integrating the country's development ecosystem and projecting itself as a fosterer of new markets and opportunities. Brazil and the Amazon can count on us.

Gustavo Henrique Moreira Montezano
PRESIDENT OF BNDES

SUMMARY

EXECUTIVE SUMMARY

AMAZON FUND: applies non-reimbursable resources for actions to prevent, monitor, and combat deforestation in addition to encouraging the promotion of conservation and the sustainable use of the Brazilian Amazon.

Up to 20% of its resources can be used to develop systems for monitoring and controlling deforestation both in other Brazilian biomes and in other countries with tropical forests.

AMAZON FUND

13 YEARS OF ACTIVITY

Created on August 1, 2008 (Decree 6,527), the fund started operating in 2009.

In 2021, it reached a total of:

102 PROJECTS SUPPORTED

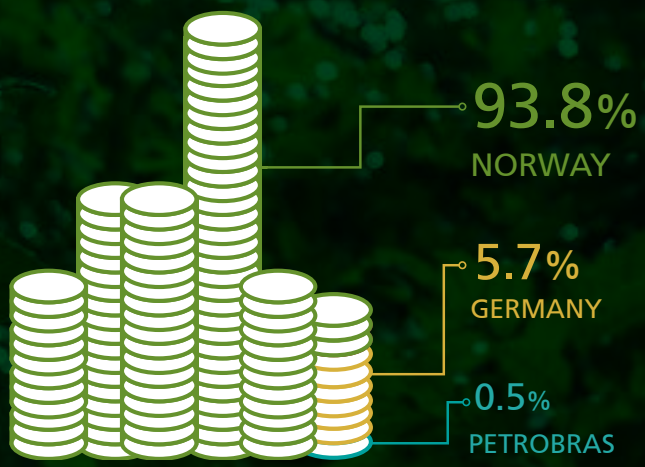
US$ **568** million IN DISBURSEMENT VALUE

US$ **693** million IN TOTAL VALUE OF SUPPORT

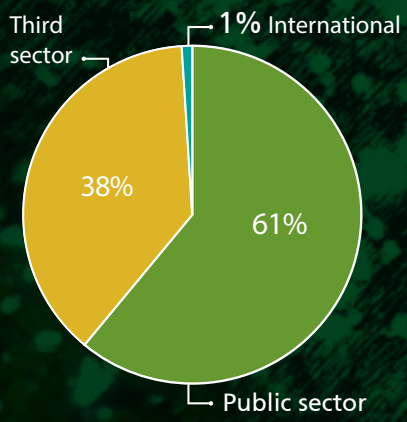
US$ **1.3** billion IN DONATIONS RECEIVED

NUMBER OF PROJECTS SUPPORTED BY LOCATION

ORIGIN OF DONATIONS



NATURE OF INSTITUTIONS SUPPORTED (% OF THE TOTAL AMOUNT ALLOCATED TO SUPPORT ACTIONS)



WITH THE SUPPORTED ACTIONS, THE FOLLOWING RESULTS WERE ACHIEVED:

1.1 milion rural properties registered in the Rural Environmental Registry (CAR)

1,706 environmental inspection missions carried out

507 community organizations strengthened

207,000 people directly benefited from sustainable production activities

195 protected areas supported

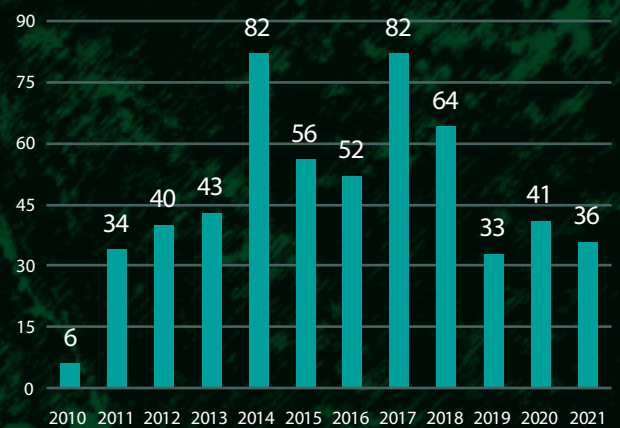
101 indigenous lands in the Amazon supported

613 scientific or informative publications produced

29,637 forest fires or illegal burn offs fought by military fire brigades

326 environmental bodies strengthened (federal, state, and municipal)

ANNUAL DISBURSEMENTS (US$ MILLION)**



Management and governance

BRAZILIAN DEVELOPMENT BANK (BNDES)

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

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

AMAZON FUND STEERING COMMITTEE (COFA)

Comprised of representatives from the Federal Government, state governments, and civil society, COFA was responsible for establishing the guidelines and monitoring the results obtained by the fund.

AMAZON FUND TECHNICAL COMMITTEE (CTFA)

Formed by independent experts, the CTFA validated the official figures regarding carbon emissions from deforestation.

Monitoring and evaluation

There are ten projects completed in 2021, totaling 47 completed since the beginning of the Amazon Fund's operation, whose results, activities carried out, and lessons learned are available on the website and in the fund's activity reports.

This year, evaluations were carried out on the effectiveness of six completed projects: two projects to support state environmental agencies and four aimed at combating forest fires and unauthorized burn-offs.

The Amazon Fund's Effectiveness Assessment, carried out by independent experts, is published on the Amazon Fund website. This assessment covered the period from 2009 to 2018, corresponding to the first ten years of the fund's operations.

Transparency

Publication of updated information on supported projects, donations received, and governance and effectiveness assessments of the Amazon Fund:

www.fundoamazonia.gov.br/en

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

** Real (R$) to Dollar (US$) conversion by each project's approval date exchange rate

INTRODUCTION

CONTEXT

The Amazon Fund is an initiative for financing actions to Reduce Emissions from Deforestation and Forest Degradation (REDD+).[1] It was proposed by Brazil in 2007 at the 13th United Nations Framework Convention on Climate Change Conference of the Parties (UNFCCC COP), and and it was designated to BNDES in 2008 by Presidential Decree 6,527. The fund was created to receive voluntary donations for non-refundable application in actions to prevent, monitor, and combat deforestation, as well as for conservation and the sustainable use of the Brazilian Amazon.

Due to the enactment of Decree 9,759, on April 11, 2019, which established rules for the federal public administration's collegiate bodies, the two committees that compriesed the Amazon Fund governance – the Amazon Fund Steering Committee (COFA) and the Amazon Fund Technical Committee (CTFA) – were extinguished on June 28th, 2019.

The Amazon Fund has received approximately R$ 3.4 billion in donations: 93.8% from the Norwegian government, 5.7% from the German government, through the KfW Entwicklungsbank, and 0.5% from Petróleo Brasileiro S.A. (Petrobras).

Regarding project support, the fund ends 2021 with a portfolio of 102 supported projects, of which 47 are concluded. The financial resources allocated to the supported projects add up to R$ 1.8 billion. Of this amount, 79.5% have already been disbursed.

OBJECTIVES OF THE AMAZON FUND

To achieve its objectives, the Amazon Fund supports projects in actions to prevent, monitor, and combat deforestation and to promote conservation and sustainable use of the Brazilian Amazon in the following thematic areas specified in Decree 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;

V. ecological-economic zoning (ZEE), territorial planning, and land tenure regularization;

VI. conservation and sustainable use of biodiversity; and

VII. recovery of deforested areas.

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

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

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, and micro and small-sized enterprises, among others, as well as in fostering innovation, regional development, and good socioenvironmental practices. In addition, one of the main BNDES strategic objectives is to contribute to the modernization of the Brazilian State by improving quality and efficiency in the provision of education, health, and security services.

BNDES's mission is to enable and propose solutions that transform Brazil's productive sector and promote the country's sustainable development. Throughout its history, the Bank presents an expressive legacy of results for the development of Brazil.

The exercise of its various activities requires the permanent training of its employees, who are admitted 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. It also reaches 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. The guidelines for the Bank's socially and environmentally responsible performance are set forth in BNDES's Corporate Social and Environmental Responsibility Policy (PRSA), whose operating principle is respect for human rights, with gender equality and valuing diversity. The latest version of PRSA was approved in 2019 by its Board of Directors.[2]

The commitment to ethics is part of BNDES's declaration of values and is expressed in its Corporate Integrity Policy. Approved in 2020, this document establishes guidelines and assignment of responsibilities necessary to strengthen integrity, aiming to prevent, detect and remedy cases of corruption, deviations, fraud, irregularities, or other illicit acts committed against the BNDES System or against third parties, in the country and abroad, in accordance with applicable Brazilian and foreign legislation.

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 2021, the Bank's actions in support of the green economy totaled R$ 7.8 billion, representing around 12% of the total disbursement.

Among other deliveries on the environmental theme for Brazilian society in 2021, during the Climate Convention (COP 26/UNFCCC) held in Glasgow, Scotland, BNDES

2 More information can be found in the BNDES Annual Report, available at: https://web.bndes.gov.br/bib/jspui/bitstream/1408/21121/3/PR_BNDES_ANNUAL_REPORT_2020_BD.pdf.

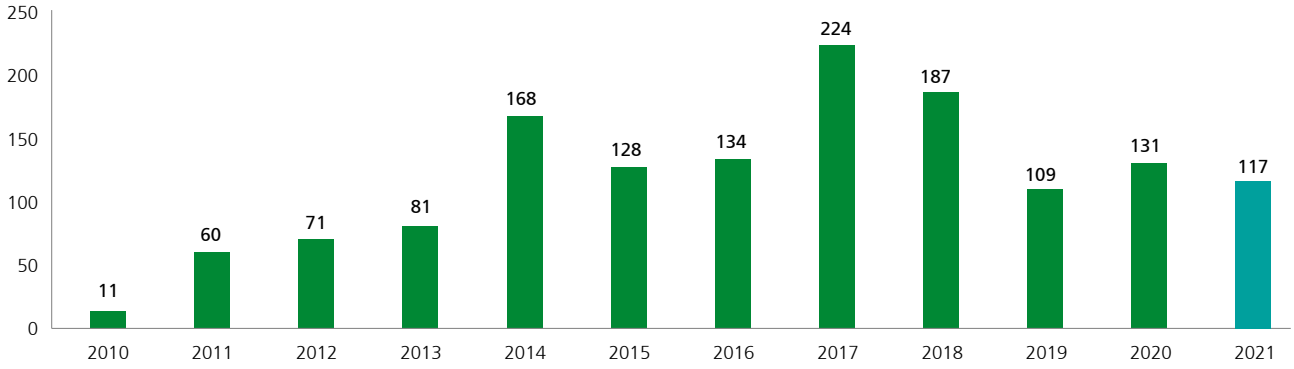
launched the Floresta Viva program, an initiative for ecological restoration of Brazilian biomes, which aims to invest R$ 500 million over seven years (up to 50% of resources from the Bank's Socio-environmental Fund). In addition, BNDES launched the NDC Portal, a virtual space in which it presents its contribution to the country's goals linked to the Paris Agreement, with the report of avoided emissions due to projects financed in renewable energy, forests, and urban mobility sectors.

In 2021, for the first time, BNDES made an environmental, social, and governance (ESG) rating,[3] obtaining first place among four development banks in emerging markets. In the general ranking of the region, the Bank reached fourth place among 848 companies in emerging countries. In the overall global ranking, it ranked 86th among 4,913 companies.

RECENT DEVELOPMENTS, CHALLENGES AND PROSPECTS

The year of 2021 was characterized by the continuity of the coronavirus pandemic, which affected locations where the supported projects operate, in addition to bringing difficulties due to circulation restrictions and their economic effects. Despite the difficulties, the projects supported by the Amazon Fund continued their implementation, receiving resources, carrying out the activities and reporting to BNDES. In total, R$ 117 million were disbursed to 17 projects in implementation. In the coming years, the balance to be disbursed for projects supported by the Amazon Fund is R$ 366 million, around 20.5% of the total approved by the fund.

GRAPH 1 | ANNUAL DISBURSEMENTS MADE BY THE AMAZON FUND (R$ MILLION)



Source: BNDES.

In 2021, an increase of 22% was observed in the rate of deforestation in the Amazon, as measured by the Project for Monitoring Deforestation in the Brazilian Amazon by Satellite (Prodes) of the National Institute for Space Research (Inpe) compared to the

3 BNDES ESG assessment, carried out by the specialized agency Vigeo Eiris, available at: https://api.mziq.com/mzfilemanager/v2/d/0a296115-dd7d-454b-ba26-369893ae3f0c/202bf86f-5259-02a4-d22e-19d5e10b8d3e?origin=2

previous year. This increase has been observed since 2015, after a period of a few years of sharp decline. It is up to the various actors involved in this challenge, within their area of activity, to review their strategies so that the downward trajectory of deforestation rates is resumed. The integration and articulation of actions to combat deforestation and promote sustainable development should guide governments at different levels, institutions, companies, and all interested sectors of society, under the coordination of the national government.

Another ten projects were completed in 2021, totaling 47 projects completed since the beginning of the Amazon Fund's operation. In Graph 2, it is possible to observe the evolution of approved and completed projects by the fund. The conclusion comprises the final accountability of all resources received by the executing institution, the submission of final reports, which include aspects such as the challenges faced during project implementation, and the completion, by BNDES, of an evaluation of results, available on the Amazon Fund website and its activity reports.

GRAPH 2 | APPROVED AND COMPLETED PROJECTS – 2009 TO 2021

Source: BNDES.

The projects concluded in 2021 cover several topics such as monitoring and fighting forest fires, municipal environmental management, sustainable production, tourism, scientific dissemination, territorial management, and environmental protection of indigenous lands and other protected areas. The projects completed in 2021 were: "Greener Rondônia," in the state of Rondônia; "New Paths in Cotriguaçu," in the municipality of Cotriguaçu; "Environmental Management Qualification Program," from the Brazilian Institute of Municipal Administration (Ibam); "Materialize," from the Association of Small Agro-farmers of the Reca Project (Reca Project); "Dema Fund," from the Federation of Agencies for Social and Educational Assistance (Fase); "Knowing to Preserve," from the Museu da Amazônia (Musa); "Training to Conserve," from the Amazon Conservation Team (Ecam); "Using Social Technologies to Reduce Deforestation," by the Interstate Agricultural Development Association (Adai); "Sustainable Bem Viver," from the Institute of Research and Indigenous Education (Iepé);

and "Value Chains of Nontimber Forest Products," of the SOS Amazon Association. The chapter "Concluded Projects" of this report and the Amazon Fund website present much information on these projects, such as activities executed, output and outcome indicators, institutional and administrative aspects associated with its development, identified risks, and lessons learned.

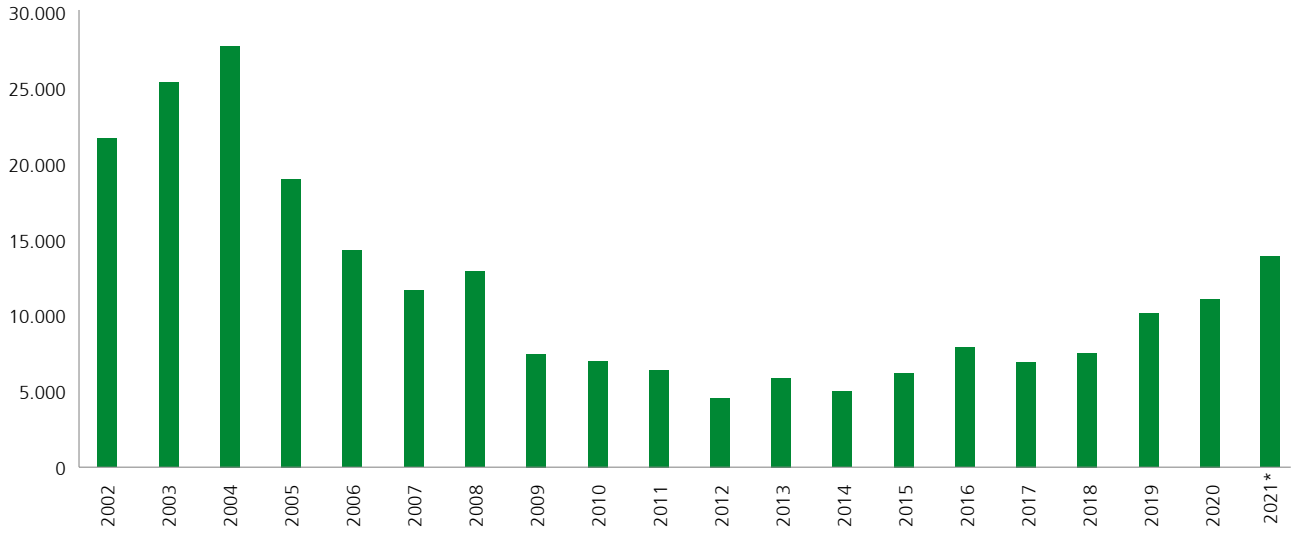
Independent thematic evaluations were completed analysing the effectiveness of projects supported by the Amazon Fund for strengthening state environmental agencies and in preventing and fighting forest fires through support for four state military fire departments. In addition, thematic evaluations continued on the Amazon Fund's support for five concluded projects to promote sustainable production and six projects that supported indigenous peoples in the region. These assessments are carried out by independent consultants and represent the state of the art in the field, being conducted within the scope of technical cooperation with the German agency GIZ.[4]

The Amazon Fund's legacy for the region and for Brazil constitutes an important chapter in the trajectory of promoting sustainable development in the Amazon.

Data on deforestation in the Brazilian Amazon

In 2021, deforestation in the region[5] was 13,235 km², registering a 22% increase compared to the previous year. This rate confirms the growth trend observed since 2015 when the annual rate was 6,207 km². In Graph 3, it is possible to verify the annual rate of deforestation in the Brazilian Amazon for the last twenty years.

GRAPH 3 | ANNUAL DEFORESTATION IN THE BRAZILIAN AMAZON – CLEAR-CUTTING (KM²)*



Source: BNDES.
* Preliminary data for 2021.

4 Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ).

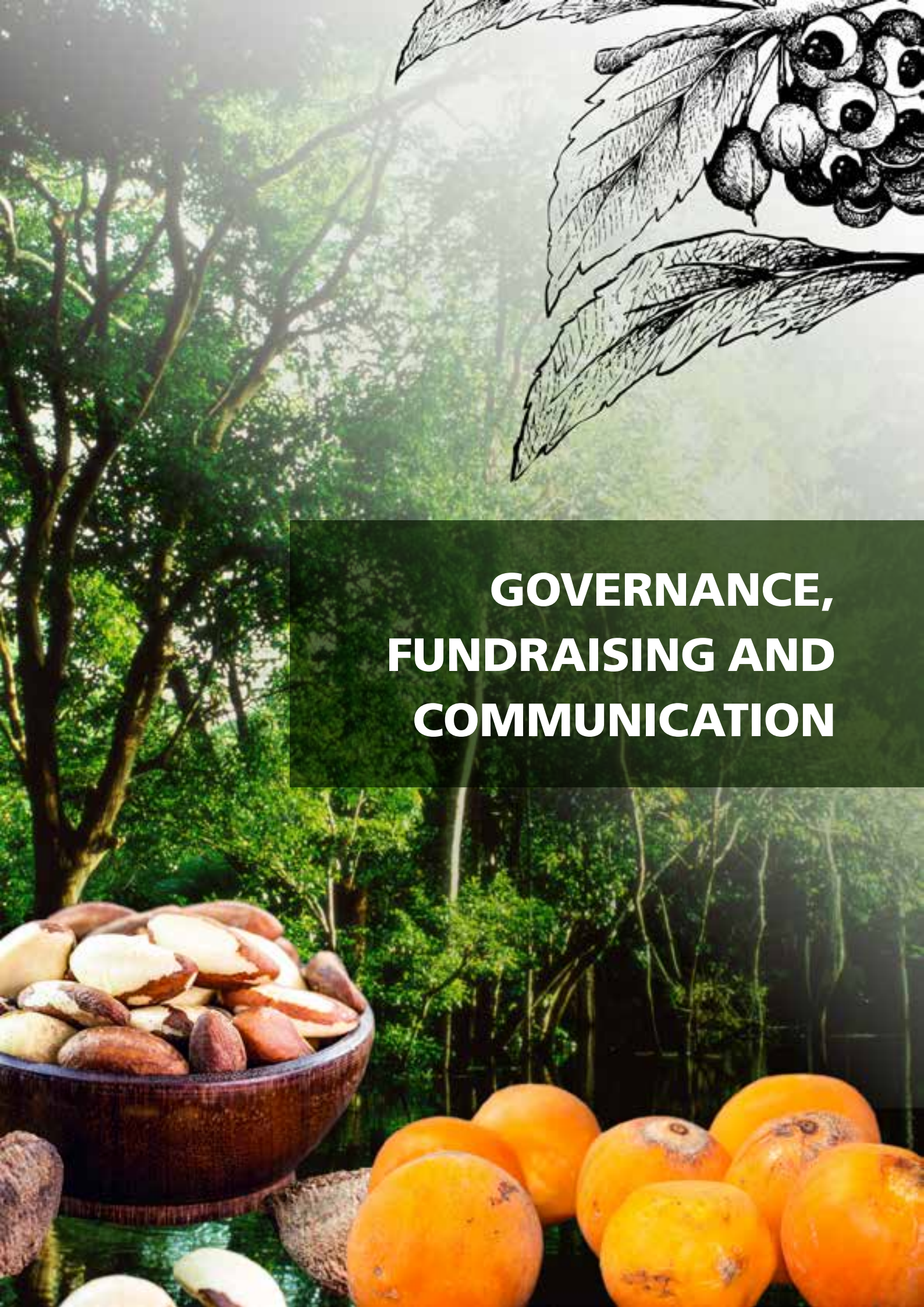
5 Annual rates are estimated based on the deforestation increases identified in each satellite image covering the Brazilian Amazon. Data are presented at the end of each year, in a preliminary manner. Consolidated data are presented in the first half of the following year. Available at: http://terrabrasilis.dpi.inpe.br

Table 1 shows the deforestation rates for 2021 in the states that make up the Brazilian Amazon. The numbers are compared to the previous year's deforestation rates. We can observe that there was an increase in the rate in all states of the region.

TABLE 1 | DEFORESTATION BY STATE

States	Deforestation 2020 (km²)	Deforestation 2021* (km²)	Deforestation variation 2021/2020 (%)
Acre	706	871	23
Amazonas	1,512	2,347	55
Amapá	24	39	63
Maranhão	336	363	8
Mato Grosso	1,779	2,263	27
Pará	4,899	5,257	7
Rondônia	1,273	1,681	32
Roraima	297	386	30
Tocantins	25	28	12
Brazilian Amazon	**10,851**	**13,235**	**22**

Source: Prodes/Inpe.
* Preliminary data.



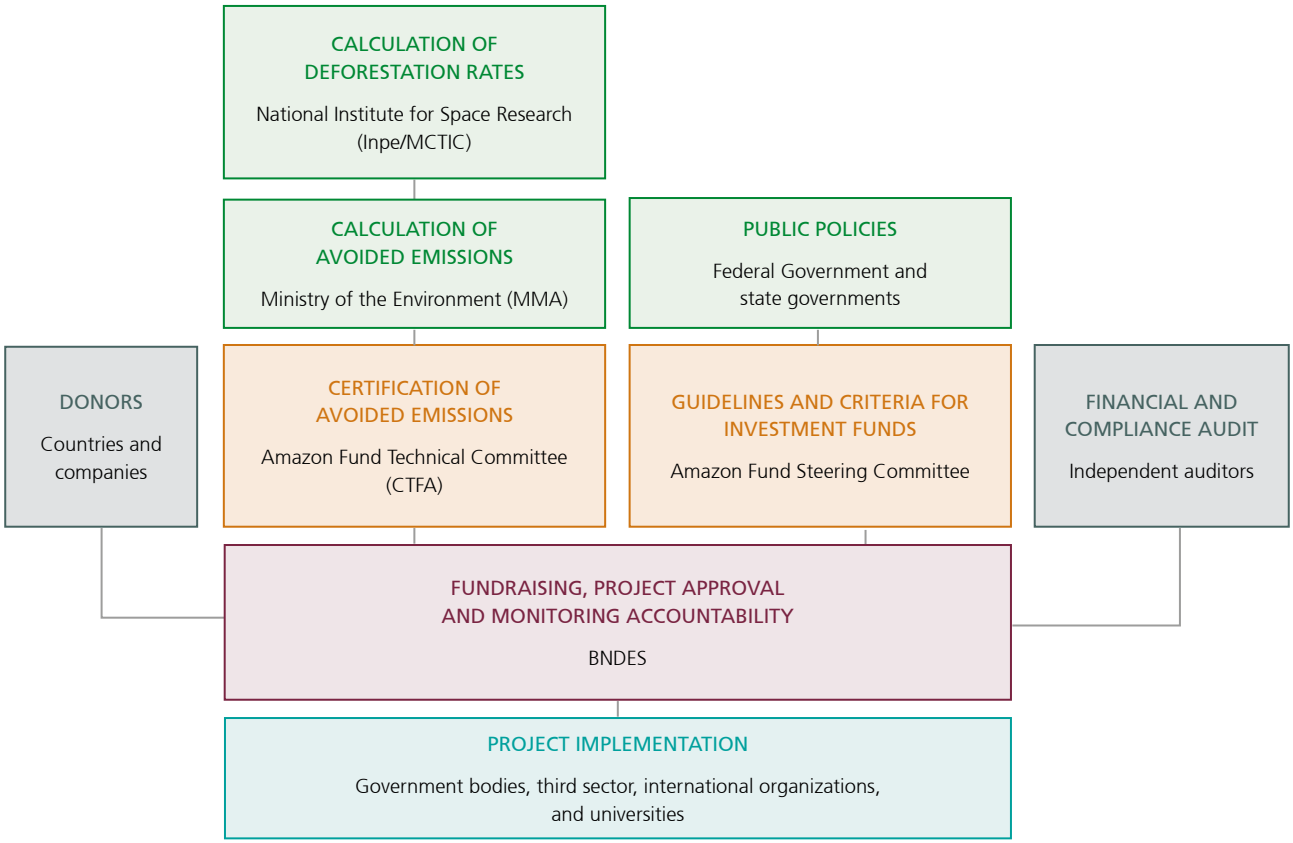
GOVERNANCE, FUNDRAISING AND COMMUNICATION

GOVERNANCE OF THE AMAZON FUND

Until June 28, 2019, the Amazon Fund had a governance structure composed of two committees made up of representatives from the Federal Government, the governments of the Brazilian Amazon states, civil society, and the scientific community. As a result of Decree 9,759, of April 11, 2019, which extinguished collegiate bodies from the federal public administration (committees, commissions, etc.) created before January 1, 2019, the Amazon Fund's technical and steering committees were dissolved.

As of 2019, the Brazilian government and representatives of the governments of donor countries began negotiations to re-establish the fund's governance structure. These negotiations continued in 2020 and 2021 but were not finalized at the time of writing this report.

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



Source: BNDES

Amazon Fund Technical Committee

Established by MMA Ordinance 345, dated October 22, 2008, the Amazon Fund Technical Committee (CTFA) was responsible for the validation of the official figures regarding carbon emissions from deforestation, as calculated by the Ministry of the Environment (MMA). The committee's work was carried out by evaluating the methodology used to calculate the deforested area and the amount of carbon per hectare used in the calculation of emissions.

The CTFA ordinarily met once a year and was made up of specialists with notable technical-scientific knowledge, appointed by the MMA after consultation with the Brazilian Forum on Climate Change. Since the creation of the Amazon Fund, the CTFA has validated the emission reduction values (Table 2). Their last meeting took place on October 22, 2018.

TABLE 2 | ANNUAL MEETINGS OF THE AMAZON FUND TECHNICAL COMMITTEE

Meeting	Date	Year of reduction	Estimated value of emission reductions (million tons of CO_2)
1st	11.10.2008	2006	200.0
		2007	303.0
2nd	12.1.2009	2008	245.7
3rd	12.13.2010	2009	445.9
4th	10.20.2011	2010	462.9
5th	11.14.2012	2011	490.2
6th	11.26.2013	2012	580.2
7th	9.10.2014	2013	516.1
8th	11.5.2015	2014	558.8
9th	11.8.2016	2015	500.8
10th	10.4.2017	2016	12.0
11th	10.9.2018	2017	58.0

Source: BNDES.

Amazon Fund Steering Committee

The Amazon Fund Steering Committee (COFA) was responsible for establishing the guidelines and criteria of the Amazon Fund, monitoring information on the application of its resources, and approving the Activity Report of the Amazon Fund.

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. Its last meeting took place in November 2018.

FUNDRAISING

Fundraising rules

Fundraising for the Amazon Fund is conditioned on the reduction of carbon emissions from deforestation, that is, Brazil needs to prove the reduction of deforestation in the Amazon to receive new donations.

A simple and conservative method was established for calculating the Amazon Fund's annual fundraising limit, to ensure that the emission reduction values are not overestimated. In summary, the calculation to obtain the values for the reduction of carbon emissions from deforestation is based on the difference between the historical average deforestation rate and the area effectively deforested in the year under evaluation. This result is multiplied by the amount of carbon present in the biomass, in tons of carbon per hectare. The calculation is performed by the following equation:

ED = (TDM - TD) * tC/ha

ED = reduction in carbon emissions from deforestation - tons of carbon (tC)

TDM = average deforestation rate (hectares)

TD = annual deforestation rate for the period (hectares)

tC/ha = tons 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 body linked to the Ministry of Science, Technology, and Innovation (MCTI). It is incumbent upon the MMA to define the methodology for calculating the limit for the annual fundraising of the Amazon Fund. It was up to CTFA specialists, until its extinction, to attest to the effective reduction of carbon emissions from deforestation in a given period, evaluating the methodology for calculating the area of deforestation and the amount of carbon per hectare used in the calculation of emissions.

Based on the emission reduction data, BNDES was authorized to collect donations and issue diplomas recognizing the contribution of donors to the fund. However, the publication of Decree 10,144, of November 28, 2019, revoked article 2 of Decree 6,527, of August 1, 2008, which authorized "BNDES to proceed with fundraising and issue a diploma recognizing the contribution of donors to the Amazon Fund." In this way, the possibility for the BNDES to attract new donations to the Amazon Fund is no longer disciplined.

Formalized donations

Based on the annual funding limits attested by the CTFA, the Amazon Fund has already received donations from foreign governments and a company. As shown in Table 3, by the end of 2018, formal commitments to donate to the Amazon Fund have been made in three currencies: Norwegian krone (kr$ or NOK) for donations from Norway; euro (€ or EUR) for donations from Germany/KfW; and reais (R$ or BRL) for

donations from Petrobras, as detailed below. Of this total, R$ 3,396,694,793.53 (US$ 1,288,235,378,26) have already been deposited in the Amazon Fund's account.[6]

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

TABLE 3 | TOTAL DONATIONS RECEIVED BY THE AMAZON FUND

Donor	Donations commited	Donations received	Donations received (R$)	Donations received (US$)
Government of Norway	NOK 8,269,496.000.00	NOK 8,269,496,000.00	3,186,719,318.40*	1,212,378,452.36
Federal Republic of Germany – KFW	EUR 54,920,000.00	EUR 54,920,000.00	192,690,396.00*	68,143,672.60
Petrobras	R$ 17,285,079.13	R$ 17,285,079.13	17,285,079.13	7,713,253.30
Total			**3,396,694,793.53**	**1,288,235,378.26**

Source: BNDES.
Note: Sum of donation installments received by the fund. Amounts converted to R$ based on the average exchange rate published by the Central Bank of Brazil for the entry dates of each installment, as provided in the donation diplomas.

Diplomas: acknowledgement of donors' contributions

When raising donations to the Amazon Fund, BNDES issues diplomas[7] informing the amount of the financial contribution and its correspondence in tons of carbon. These diplomas are nominal, non-transferable, and do not generate rights or credits of any nature. They identify the donor and the share of its contribution in the effort to reduce carbon dioxide emissions. Table 4 shows data on resources already raised. As reported, the issuance of diplomas by BNDES was suspended with the publication of Decree 10,144/2019 and the consequent revocation of article 2 of Decree 6,527/2008.

6 Conversions of donation amounts to US$ and/or R$ in this chapter were made based on the exchange rate of the respective dates of effective receipt of funds by BNDES, as expressed in the donation diplomas.

7 All issued diplomas and other information on donations received by the Amazon Fund are available at: http:\\www.fundoamazonia.gov.br/en/donations/

TABLE 4 | FUNDS RAISED

Donor	Installment	Date received	Original donation amount	Amount in R$ (BRL)*	Amount in US$ (USD)*	Tons of carbon dioxide (tCO_2)	Tons of carbon (tCO)	Year of reduction
Norway	1st	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	2nd	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	3rd	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	4th	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	5th	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	6th	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	7th	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	8th	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	9th	12.15.2014	NOK 780,000,000.00	288,991,278.87	108,839,740.46	21,767,948.1	5,936,713.1	2013
Norway	10th	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	11th	12.4.2015	NOK 1,019,496,000.00	455,568,000.00	120,000,000.00	24,000,000.0	6,545,454.6	2014
Norway	12th	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	13th	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	14th	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	1st	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	2nd	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	3rd	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	4th	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	5th	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	1st	10.14.2011	BRL 1,765,983.70	1,765,983.70	1,016,335.00	203,267.0	55,436.0	2006
Petrobras	2nd	10.14.2011	BRL 4,114,671.55	4,114,671.55	2,368,020.00	473,604.0	129,164.0	2006
Petrobras	3rd	10.17.2011	BRL 1,435,257.60	1,435,257.60	826,000.00	165,200.0	45,054.0	2006
Petrobras	4th	1.23.2012	BRL 156,626.00	156,626.00	88,750.00	17,750.0	4,841.0	2006
Petrobras	5th	4.26.2012	BRL 282,584.58	282,584.58	150,255.00	30,051.0	8,196.0	2006
Petrobras	6th	7.13.2012	BRL 174,320.80	174,320.80	85,155.00	17,031.0	4,645.0	2006
Petrobras	7th	2.20.2013	BRL 327,834.78	327,834.78	167,288.25	33,457.7	9,124.8	2006
Petrobras	8th	3.25.2013	BRL 357,002.13	357,002.13	177,383.55	35,477.0	9,675.0	2006

(Continues)

(Continuation)

Donor	Installment	Date received	Original donation amount	Amount in R$ (BRL)*	Amount in US$ (USD)*	Tons of carbon dioxide (tCO_2)	Tons of carbon (tCO)	Year of reduction
Petrobras	9th	9.25.2013	BRL 331,912.11	331,912.11	150,656.85	30,131.0	8,218.0	2006
Petrobras	10th	1.23.2014	BRL 222,324.37	222,324.37	94,201.25	18,840.3	5,138.3	2006
Petrobras	11th	2.25.2014	BRL 73,323.19	73,323.19	31,378.95	6,275.8	1,711.6	2006
Petrobras	12th	5.6.2014	BRL 89,806.99	89,806.99	40,232.50	8,046.5	2,194.5	2006
Petrobras	13th	5.8.2014	BRL 177,561.21	177,561.21	80,319.00	16,063.8	4,381.0	2006
Petrobras	14th	10.2.2014	BRL 206,057.53	206,057.53	83,138.00	16,627.6	4,534.8	2006
Petrobras	15th	10.10.2014	BRL 239,613.95	239,613.95	99,412.50	19,882.5	5,422.5	2006
Petrobras	16th	12.26.2014	BRL 458,054.97	458,054.97	172,675.00	34,535.0	9,418.6	2006
Petrobras	17th	1.19.2015	BRL 20,941.30	20,941.30	7,995.00	1,599.0	436.1	2006
Petrobras	18th	3.13.2015	BRL 471,492.55	471,492.55	151,260.00	30,252.0	8,250.6	2006
Petrobras	19th	3.27.2015	BRL 1,119,131.39	1,119,131.39	350,660.00	70,132.0	19,126.9	2006
Petrobras	20th	7.3.2015	BRL 270,114.06	270,114.06	86,600.00	17,320.0	4,723.6	2006
Petrobras	21th	7.30.2015	BRL 660,392.86	660,392.86	197,610.00	39,522.0	10,778.7	2006
Petrobras	22th	7.30.2015	BRL 288,021.65	288,021.65	86,185.00	17,237.0	4,701.0	2006
Petrobras	23th	5.10.2016	BRL 429,923.03	429,923.03	121,491.80	24,298.4	6,626.8	2006
Petrobras	24th	5.10.2016	BRL 549,030.01	549,030.01	155,150.20	31,030.0	8,462.7	2006
Petrobras	25th	4.6.2017	BRL 86,528.57	86,528.57	27,691.80	5,538.4	1,510.5	2006
Petrobras	26th	4.6.2017	BRL 397,886.33	397,886.33	127,335.85	25,467.2	6,945.6	2006
Petrobras	27th	7.31.2017	BRL 1,339,203.32	1,339,203.32	423,035.45	84,607.1	23,074.7	2006
Petrobras	28th	5.16.2018	BRL 84,498.16	84,498.16	23,658.35	4,731.7	1,290.5	2006
Petrobras	29th	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 amounts as stated on diplomas issued by the Amazon Fund.

INSTITUTIONAL COORDINATION AND TECHNICAL COOPERATION

As manager of the Amazon Fund, BNDES maintains a dialogue with its various stakeholders, in order to provide transparency to its activities, obtain technical support for its operations and establish partnerships.

Prominent among these efforts is the technical cooperation agreement between BNDES and the German Agency for International Cooperation – Gesellschaft für Internationale Zusammenarbeit (GIZ), which, since 2015, has been co-financed by the Norwegian government, in addition to funds received from the German government. Within the scope of technical cooperation, several activities were carried out in 2021, including:

- technical support, through collaborative actions, for projects with a low rate of execution of activities, including activities focused on management and monitoring;
- conclusion of two thematic evaluations of effectiveness, one focused on projects with state environmental agencies (Oemas) and the other on actions to prevent and combat forest fires and unauthorized burnings. In the first evaluation, the projects "Semas Pará" and "Reforestation in the South of the State of Amazonas" were evaluated, while in the second the results of the following projects were consolidated: "Acre: Zero Forest Fires"; "Mato Grosso Forest Firefighters"; "Pará Fighting Forest Fires and Unauthorized Burn-offs" and "Forest Protection in Tocantins";
- implementation (nearing completion) of two thematic evaluations of effectiveness, one of projects supporting indigenous peoples and the other of projects for sustainable production activities. In the first evaluation, the following projects are being evaluated: "High Juruá," "Sustainable Indigenous Amazon," "Arapaima: Production Networks," "Value Chains in Indigenous Lands in Acre," "Strengthening Territorial and Environmental Management of Indigenous Lands in the Amazon" and "Ethno-environmental Protection of Isolated and Recently Contacted Indigenous Peoples in the Amazon." The second thematic evaluation comprises the projects "APL Babassu," "Sustainable Fishing," "Amazon Backyards," "Forest Sentinels" and "Productive Socio-biodiversity in Xingu";
- implementation (initial phase) of a thematic evaluation of the effectiveness of projects aimed at the municipal sphere in the Amazon, covering the following projects completed with the support of the Amazon Fund: "Environmental Management Qualification Program," "Municipality of Porto dos Gaúchos," "Recovering Marcelândia," "Amazon's Water Springs – Phase II," "Jacundá, Green Municipality Economy," "New Paths in Cotriguaçu" and "Buriti Springs";
- training through a distance education tool (EaD) aimed at improving technicians from state agencies in strategies for the elaboration and implementation of Action Plans for the Prevention and Control of Deforestation and Fires (PPCDQ);
- support in updating the PPCDQ in the states of Pará, Amazonas, and Roraima (plans with completed updates) and in the states of Acre and Amapá (in progress);
- systematic support to the Amazon Fund team on the issue of monitoring and evaluating project results and impacts;
- elaboration of a compilation of all "Records of Decisions and Issues (RET)" from the meetings of the Steering Committee of the Amazon Fund (COFA) between 2008 and 2018;[8] and
- support in improving communication, aiming to disseminate the results of the Amazon Fund nationally and internationally, including the fund's participation in international events.

8 Available at: http://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/biblioteca/GIZ-COFA-atas-rediagramadas.pdf (Portuguese only)

COMMUNICATION

Among the instruments of transparency and dialogue, the following stand out:

Website www.fundoamazonia.gov.br

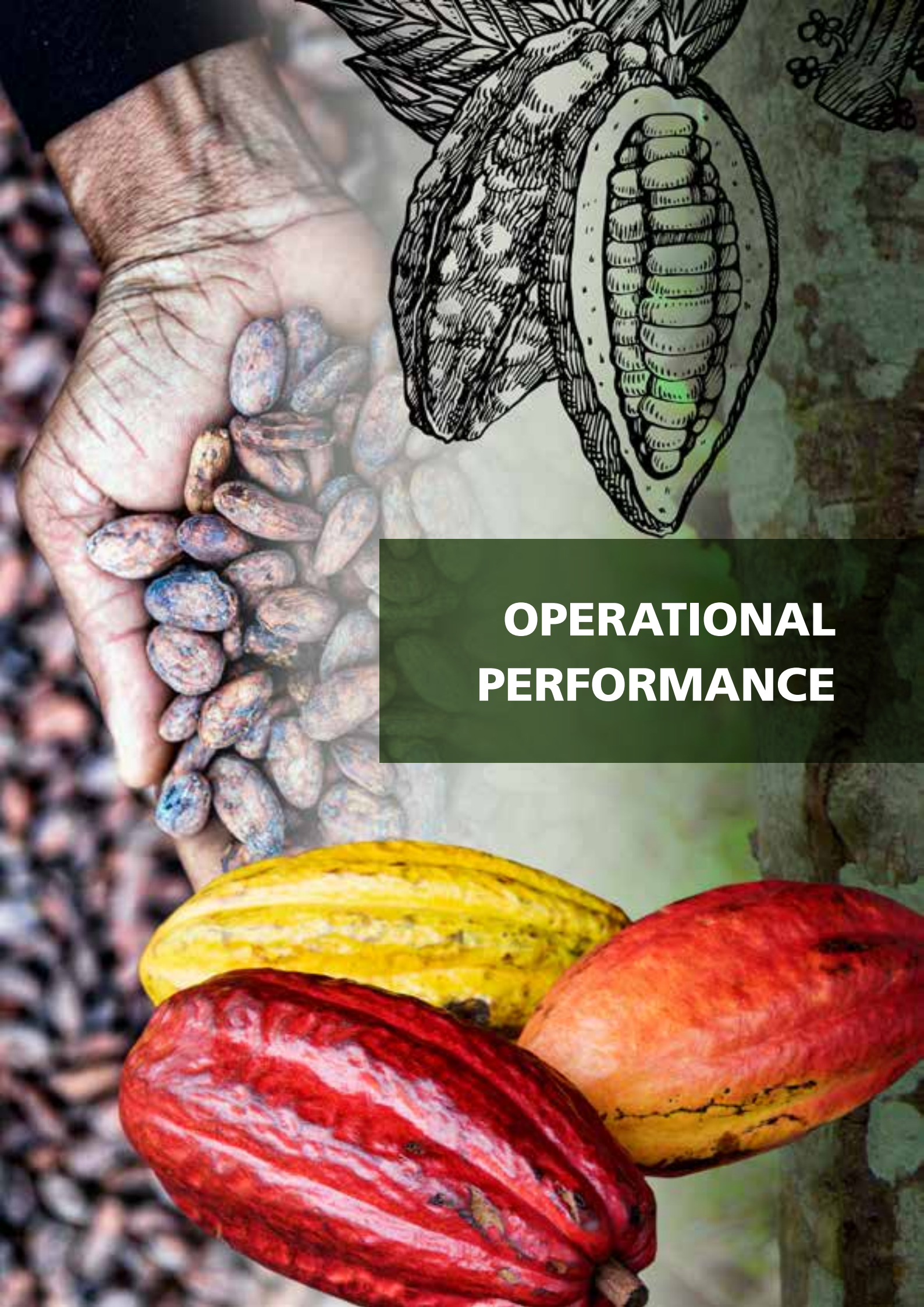
Since 2010, BNDES has maintained an updated website on the Amazon Fund on the Internet (in Portuguese and English). This website provides guidelines on how to submit projects, the process for their approval, and the documentation required at each stage of the process.[9] Up-to-date information on the fund's governance, donations received, and the monitoring and evaluation of results are also available. Customer service is provided through the Contact Us section (e-mail), by telephone, or by reading the "Frequently Asked Questions."

The portfolio of supported projects is disclosed, informing, among other data, the name of the project and the respective organization in charge, territorial scope, beneficiaries, objectives, total value of the project, amount of support from the Amazon Fund, execution period, and approval and hiring dates. Data on disbursements and activities executed in each project are also available and how it contributes to the Amazon Fund's four core themes that make up the Amazon Fund's Logical Framework. In 2019, advancing in transparency, contracts, and amendments for all projects in the fund's portfolio were also made available on the website.

Annual reports

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

9 Analysis and approvals of new projects are currently suspended in the Amazon Fund.



OPERATIONAL PERFORMANCE

PROJECT PORTFOLIO PROFILE

The Amazon Fund ended 2021 with a portfolio of 102 supported projects. Added together, they represent a total amount of R$ 1,787,355,424.04. The number of projects supported up to that date and the total funds disbursed per year are shown in Table 5.

TABLE 5 | PROJECTS APPROVED, CANCELED AND DISBURSEMENTS – 2009 TO 2021

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
2020	-	-	-	130,999,150.26	40,965,961.38
2021	-	-	-	117,490,671.19	35,569,874.08
Cancelled projects**	(12)	(178,553,409.16)	(72,449,908.20)	NA	NA
Reduced balance***		(80,725,617.62)	(33,910,192.48)	NA	NA
Total	**102**	**1,787,355,424.04**	**692,996,097.67**	**1,421,062,751.64**	**568,268,018.60**

Source: BNDES.
* See Annex 4 of this report for the list of canceled projects.
** See Annex 4 for the list of projects with supplementation and whose values have been changed.

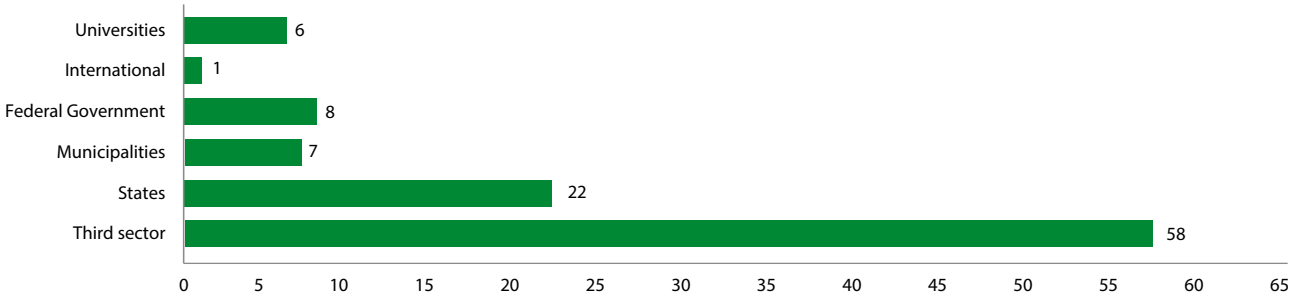
Disbursements for supported projects are made in installments over the course of their implementation which normally vary from one to six years and are established in the respective physical-financial schedules.

Table 5 shows that the total disbursed to projects up to December 31, 2021, amounts to R$ 1,421,062,750.64, which corresponds to about 80% of the total amount of support from Amazon Fund (R$ 1,787,355,424, 04).

The amount disbursed in 2021 (R$117 million) was similar to that released in 2020 (R$130 million). Of the funds disbursed in 2021, 33% were allocated to projects within the third sector and 67% to projects in the public sector (48% to federal projects and 19% to state government initiatives).

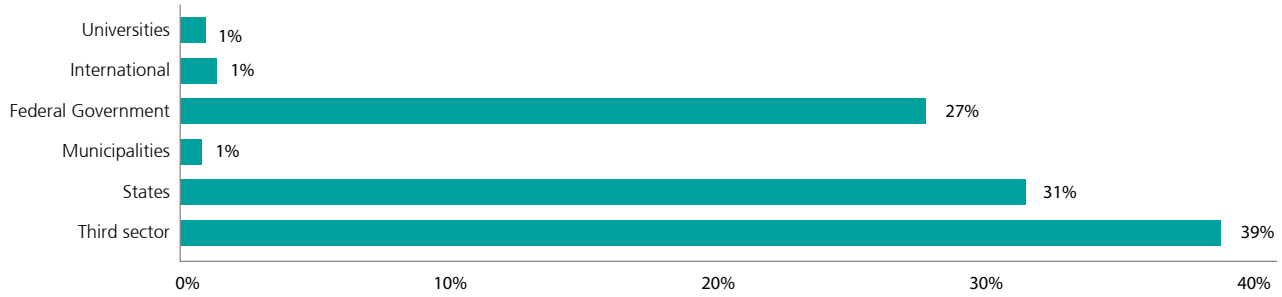
In addition to presenting projects that include various actions, the Amazon Fund portfolio is also characterized by the different legal nature of those responsible for the projects, as shown in Graphs 4 and 5.

GRAPH 4 | NUMBER OF PROJECTS SUPPORTED, BY LEGAL NATURE OF THE MANAGING ENTITY



Source: BNDES.

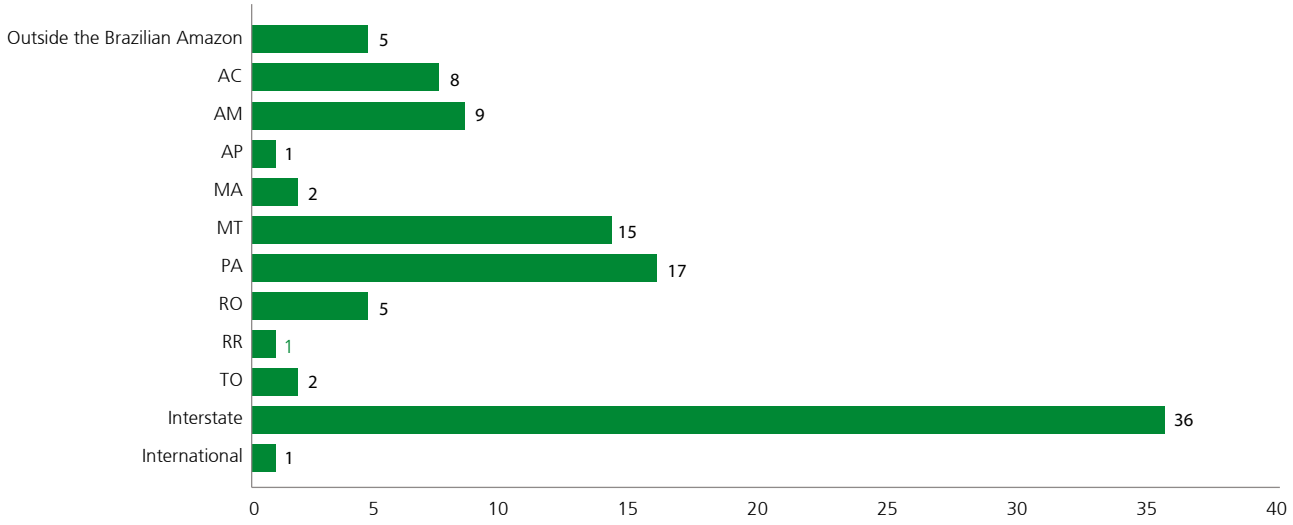
GRAPH 5 | PERCENTAGE VALUE OF THE TOTAL SUPPORT, BY LEGAL NATURE OF THE MANAGING ENTITY



Source: BNDES.

Graphs 6 and 7 depict the territorial scope of supported projects and the percentage value of support by state. As illustrated, all states in the Brazilian Amazon have projects supported by the Amazon Fund. It is also noted that the four states with the highest percentages of financial support (Acre, Amazonas, Mato Grosso, and Pará) together have more than 77% of the total area of the Brazilian Amazon[10] and account for 69% of the Fund's total support value.

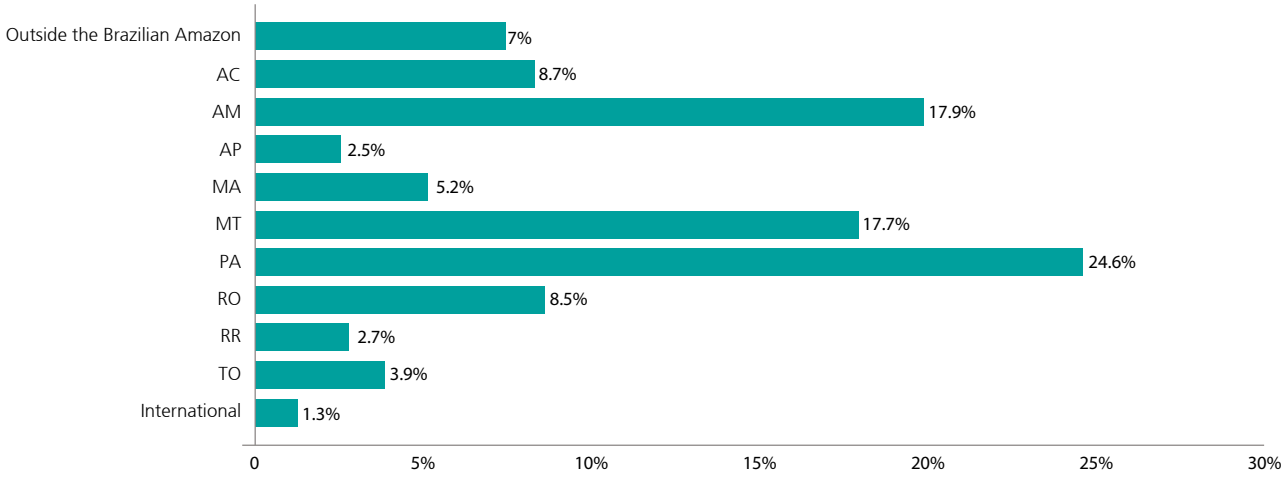
GRAPH 6 | NUMBER OF PROJECTS SUPPORTED, BY STATE



Source: BNDES.

10 Information available at: http://www.ibge.gov.br.

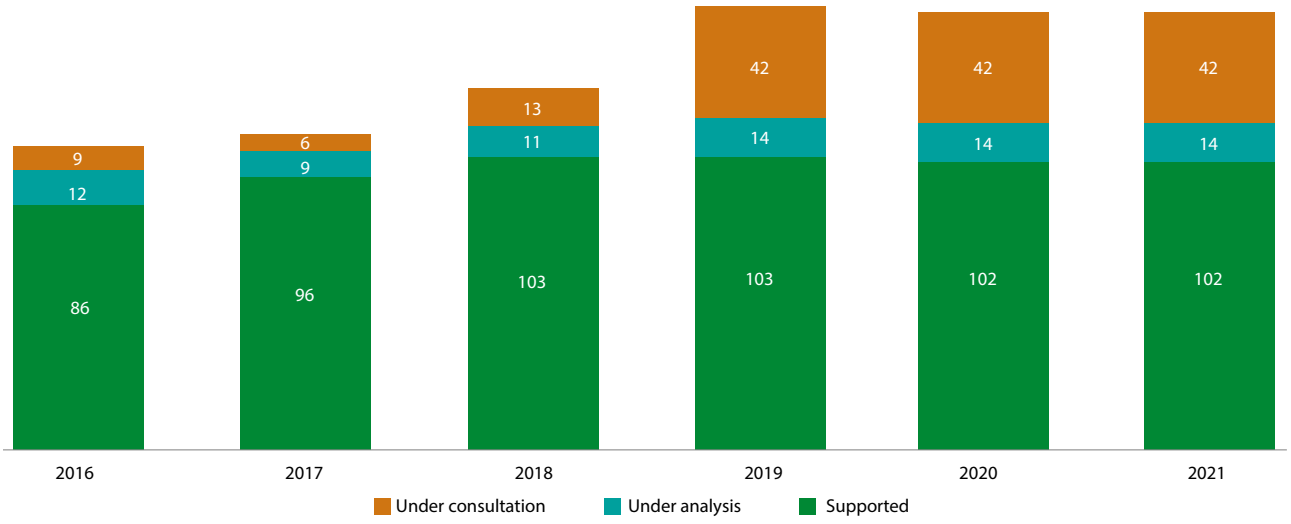
GRAPH 7 | PERCENTAGE VALUE OF TOTAL SUPPORT, BY STATE



Source: BNDES.

The annual evolution of the Amazon Fund portfolio (projects under consultation, under analysis, and supported) is shown in Graphs 8 and 9.

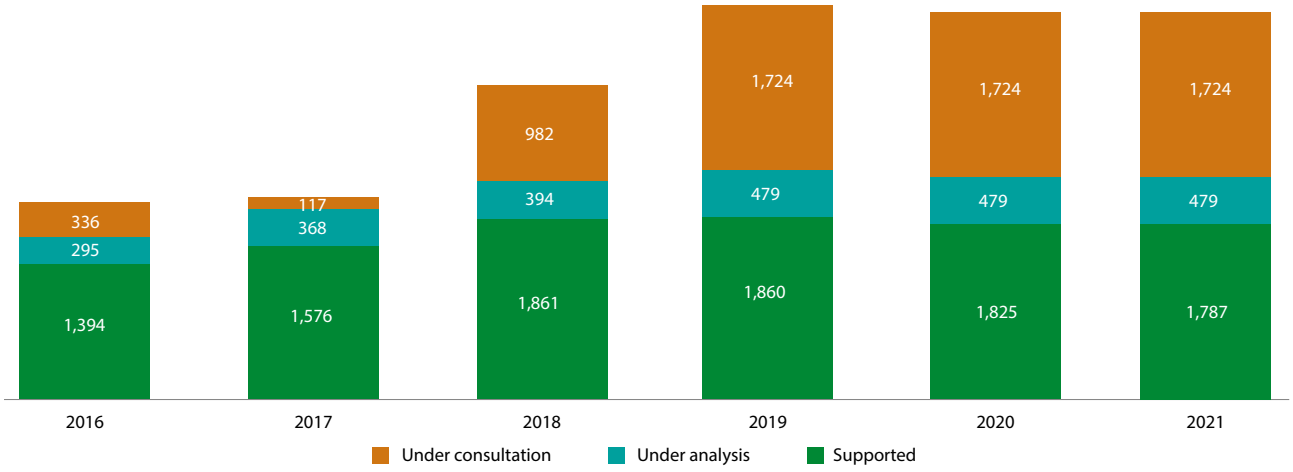
GRAPH 8 | EVOLUTION OF THE NUMBER OF PROJECTS, BY OPERATIONAL STAGE IN BNDES



Source: BNDES.

Note: In this calculation, each canceled project was deducted from the cumulative number of projects in the year of its cancellation (not the year of approval). For the years 2019, 2020 and 2021, the projects qualified in the public call for Recovery of Vegetation Coverage were considered to calculate the number of projects under consultation at BNDES.

GRAPH 9 | EVOLUTION OF THE TOTAL AMOUNT OF SUPPORT FROM THE AMAZON FUND, BY OPERATIONAL STAGE IN BNDES (R$ MILLION)



Source: BNDES.

Note: This graph shows the net cumulative value of project cancellations and value changes. The amount of reductions and projects canceled in a given year are discounted in the same respective year. For the years 2019, 2020 and 2021, the values of the projects qualified in the public call for Recovery of Vegetation Coverage were added to calculate the value of the projects under consultation with the BNDES.

It is noted that, in 2021, due to cancellations,[11] the total value of supported projects decreased compared to 2020 (from R$ 1,825 million to R$ 1,787 million). As mentioned in Chapter 1, as of 2019, no new projects were approved by the Amazon Fund and, at the time of writing this report, its governance is in the negotiation process involving the Brazilian government and the governments of donor countries.

The total amount of funds received by the Amazon Fund, plus income generated over the years (deducting the amount allocated by BNDES for its management), totals R$ 5,004 million, of which R$ 1,421 million were disbursed to projects. Therefore, the Amazon Fund currently has R$ 3,583 million to be allocated to projects already contracted and to new projects.

ACCOUNTING AND FINANCIAL ASPECTS

Accounting and financial transactions related to the Amazon Fund are recorded and reported in accordance with current legislation and the principles and standards promulgated by the Federal Accounting Council (CFC), an independent body that, in the fulfillment of its private attributions, regulates, in Brazil, the accounting and auditing procedures independently adopted. Through its collegiate and working groups, the CFC seeks to promote convergence between these procedures and the standards defined by international norms.

11 Any differences between current values and those referring to portfolio positions in previous periods are due to cancellation or changes in project values (see Annex 4).

Tables 5 and 6 summarize the information included in the audited financial statements and in their explanatory notes for the year 2021. The complete statements, accompanied by the opinion of the independent auditors, are included in Annex 1.

TABLE 6 | BALANCE SHEET OF THE AMAZON FUND AS OF DECEMBER 31, 2021 (R$ THOUSAND)

Assets		Liabilities	
Current		**Current**	
Cash and cash equivalents	3,583,826	Resource for projects	3,583,826
Prepaid expenses	88,885	Funding resources	88,885
		Net equity	
		Accumulated surplus	-
Total assets	**3,672,711**	**Total liability**	**3,672,711**

Source: BNDES.

Of the total current assets, R$ 3,583,826 thousand correspond to the amount available on December 31, 2021, for disbursements to projects already supported or to new projects. This amount is invested in the Gaia and Gaia II funds, managed by Banco do Brasil, which have a conservative profile (fixed-income investments – Brazilian government bonds) and were contracted to maintain monetary restatement and remunerate the balances available for financial support to projects (see "Financial revenue" in Table 7).

The amounts donated are recorded as financial assets of the Amazon Fund and have consideration linked to project support. The counterpart is therefore recorded as liability, under project resources. Thus, the donations received do not imply an increase in equity for the fund.

TABLE 7 | FINANCIAL STATEMENT FOR THE YEAR 2021 (R$ THOUSAND)

Revenues	**269,509**
Revenue from donations for investments	117,491
Revenue from donations for funding	254
Financial revenue	151,764
(-) Expenses	**(269,509)**
Expenses with donations for investment	(117,491)
Administrative expenses	(254)
Expenses with remuneration of project funds	(151,764)
Surplus/deficit for the period	**0**

Source: BNDES.

While the balance sheet shows accumulated balances, the income statement only considers what happened in a specific year. The total of R$ 117,491 thousand presented under the items "Income from donations for investments" and "Expenses with donations for investment" refers to the amount effectively disbursed in 2021 to projects supported by the Amazon Fund.

The amount of R$ 254 thousand reported in Table 7 refers to the appropriation made by BNDES, in 2021, of costs and expenses related to the Amazon Fund.

The income from the Gaia and Gaia II funds, in the amount of R$ 151,764 thousand, are considered income and expense because they correspond to the remuneration of the resources available for disbursements to projects. They are presented in the balance sheet as the balance of the items "Financial investments" and "Project resources."

According to the understanding of the Regional Superintendence of the Federal Revenue of Brazil of the 7th Fiscal Region, donations to the Amazon Fund should not be part of the calculation basis for Income Tax (IR) and Social Contribution on Net Income (CSLL) on the date of their entry. For purposes of calculating these taxes, whenever there is a disbursement to a supported project, an income and an expense must be recognized on the same date and in the exact amount disbursed. Thus, the calculation basis for IR and CSLL related to donations to the fund is always equal to zero, with no collection of these taxes to the public coffers.

AUDITS

Annually, the Amazon Fund undergoes the following audit processes:

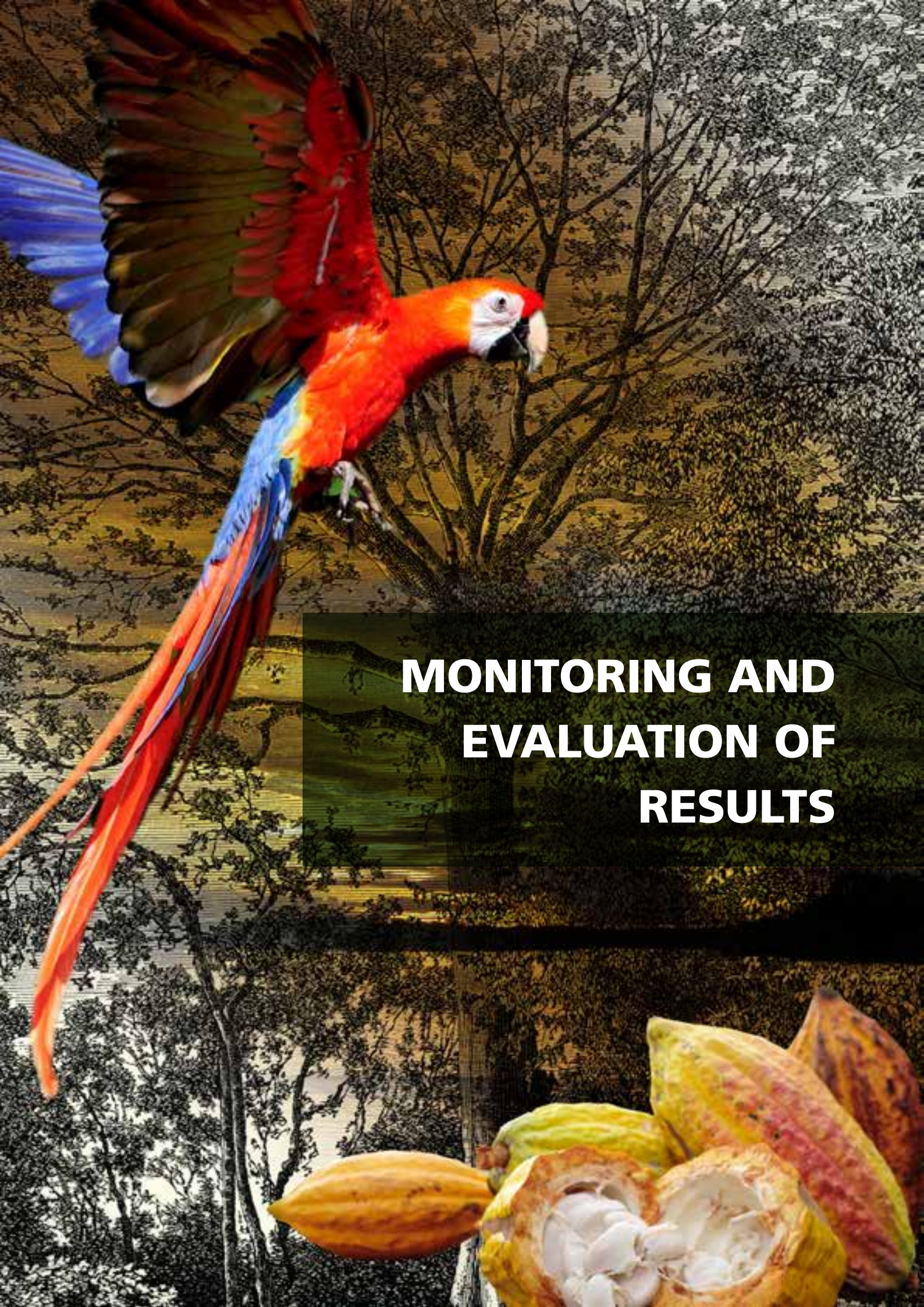
> financial audit to assess the veracity of the balances recorded in its financial statements, as well as the adequacy of the allocation of these amounts in BNDES's statements; and

> compliance audit to assess whether the projects supported by the Amazon Fund are in compliance with the (i) applicable rules and guidelines and (ii) physical evidence of project implementation, based on the set of projects that had disbursements in the year in question.

The financial audit procedures for the year 2021 were carried out by the company KPMG Auditores Independentes, which concluded that the financial statements presented by BNDES were adequate. The independent auditors' opinion can be consulted in Annex 1. The compliance audit is currently undergoing selection and hiring of independent auditors and shall be concluded until the end of 2022.

All independent auditors' opinions since 2010 are published on the Amazon Fund's website.[12]

12 Available at: http://www.fundoamazonia.gov.br/en/donations/audit/.



MONITORING AND EVALUATION OF RESULTS

The year 2021, still marked on a global scale by the Covid-19 pandemic, stood out for the expansion of vaccination coverage, although at an unequal pace between countries, as well as for the continuity of government actions in facing health emergencies and maintaining employment and income of families. As in the previous year, the Amazon Fund continued the implementation of its portfolio of projects. In the midst of this challenging scenario, it was possible to disburse in 2021 the total of R$117 million, which represented a reduction of 10% over the previous year.

In this chapter, we will begin with a brief contextualization of the main vectors of deforestation, the intervention logic (theory of change) of the Amazon Fund, and its logical framework. Next, the analysis of some regional indicators that allow monitoring the evolution of various topics in the Amazon will be presented, such as annual deforestation, production of plant extraction and the ability of environmental agencies in the Amazon to enforce the environmental legislation.

The results of the output and outcome indicators of the supported projects will be presented in a consolidated manner; as well as the safeguards adopted by the Amazon Fund in supporting projects; the contribution of the fund to the achievement of the sustainable development goals (SDGs), in addition to the policy of promoting gender equity in sustainable production projects.

The chapter concludes with an analysis of the risks (external factors) that may negatively affect the execution of the projects, the continuity of the results achieved and the operation of the Amazon Fund, in addition to an assessment of the expected impacts if some of these risks materialize.

CONTEXT

The Amazon Fund supports actions to prevent, monitor, and combat deforestation and promote the sustainable use of natural resources in the Brazilian Amazon.

The Amazon Fund's Logical Framework – a tool for planning, managing, monitoring, and evaluating results and impacts – was developed considering the main causes of deforestation in the Amazon:

> the impunity of environmental crimes due to the 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 and conflicts over land ownership, discouraging 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

> agricultural expansion, driven by the growing demand for *commodities* in a globalized market.

A great need for investments in scientific production and innovations 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, the seven thematic areas defined in Decree N° 6,527/2008, which regulates the fund's operation in the Brazilian Amazon, were also considered, 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, territorial 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 established that up to 20% of its resources may be used for developing systems to monitor and control deforestation in other Brazilian biomes and in other tropical countries.

AMAZON FUND'S LOGICAL FRAMEWORK

The Amazon Fund's Logical Framework was first released as a comprehensive document in 2010. In 2017, it was reviewed to address changes in the deforestation dynamics and the emphasis of public policies.

The logical framework is a methodology used to ensure that the actions supported contribute to the overall objective of a given program (or project), and can be viewed as a matrix, which includes 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 illustrates the logical sequence of cause and effect that takes the direct and indirect impacts of several projects to the general objective of a program, such as the Amazon Fund 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."

Regarding the indirect effects to be achieved by the Amazon Fund, the seven thematic areas defined in Decree N° 6,527/2008 (listed previously) were adopted as the starting point. This decree also established that the supported projects must observe, when pertinent, the guidelines of the Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm) and the National Strategy REDD+ (ENREDD+).[13]

In view of the breadth of the Amazon Fund's areas of activity, its logical framework was structured into four components. More detailed information on the Fund's Logical Framework can be found on the internet,[14] in the document entitled Amazon Fund's Logical Framework – 2017. This document describes the indicators for measuring results, the main risks (assumptions) that may affect its success and how the monitoring of the supported projects and of the Amazon Fund will occur.

Figure 3 shows the intervention logic of the Amazon Fund's Logical Framework. The numbering alongside the direct and indirect effects in this figure is also used in the intervention logic of each supported project.

13 http://redd.mma.gov.br/images/publicacoes/enredd_documento_web.pdf

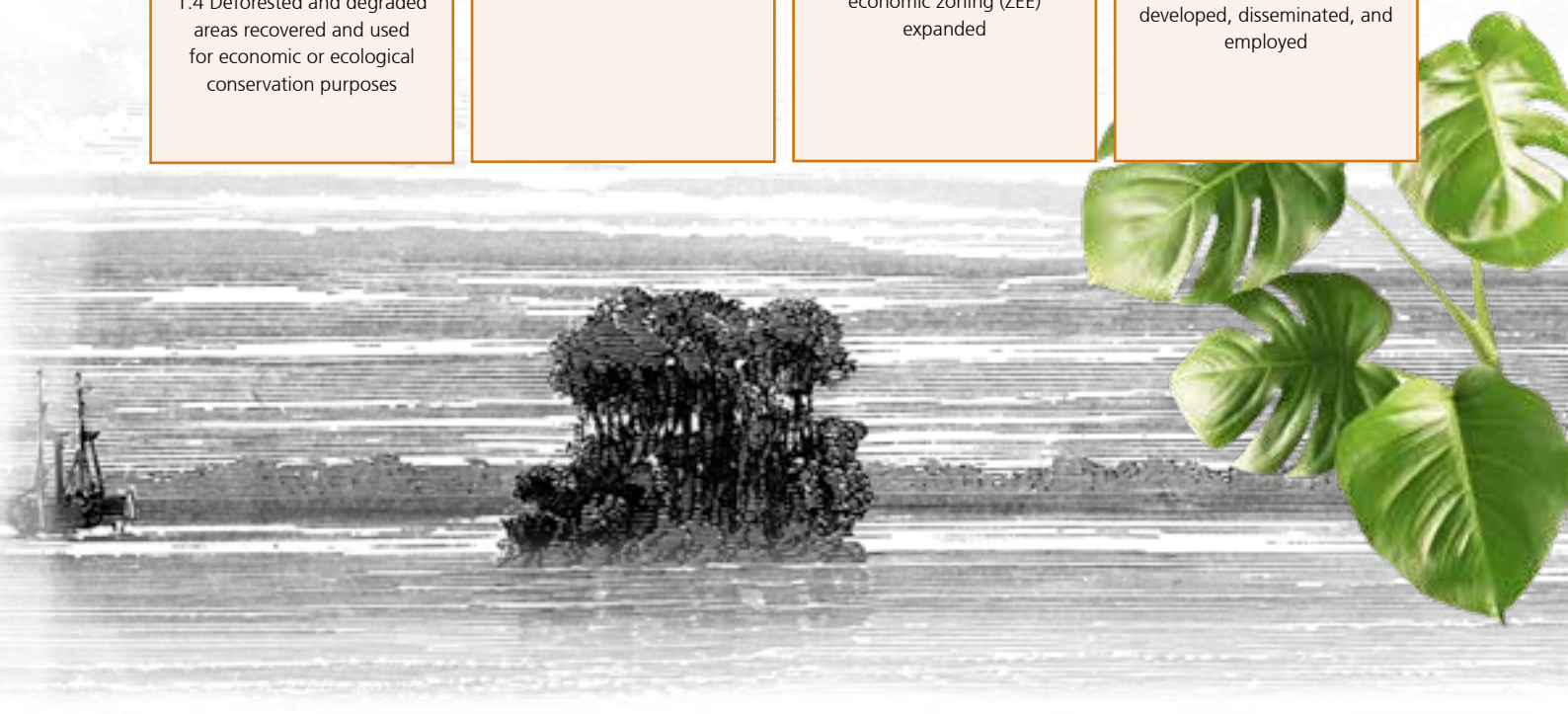
14 http://www.amazonfund.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Results-impacts/Amazon-Fund-Logical-Framework-2017.pdf

FIGURE 3: AMAZON FUND'S LOGICAL FRAMEWORK

GENERAL OBJECTIVE

Reduction of deforestation with sustainable development in the Brazilian Amazon

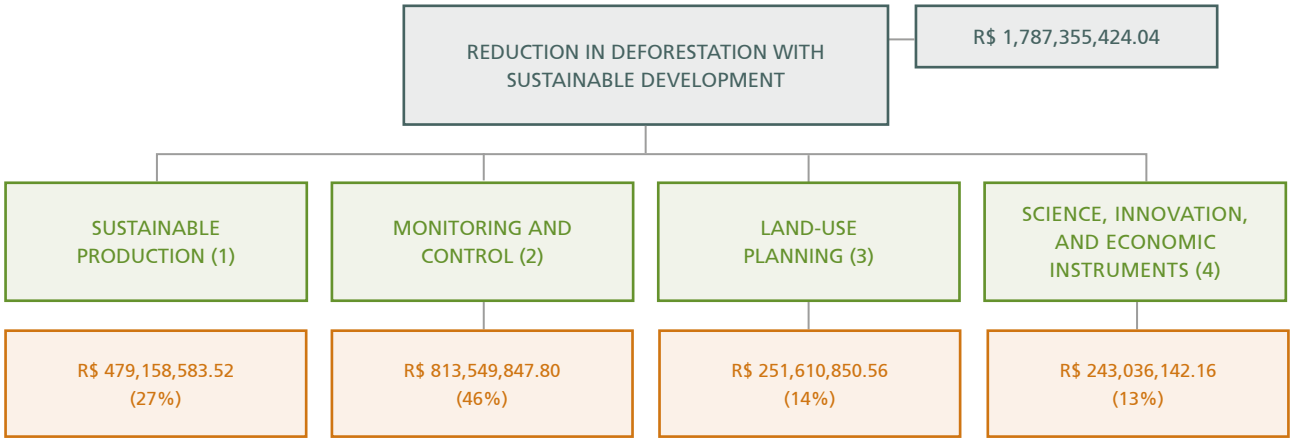
SUSTAINABLE PRODUCTION COMPONENT	MONITORING AND CONTROL COMPONENT	LAND-USE PLANNING COMPONENT	SCIENCE, INNOVATION, AND ECONOMIC INSTRUMENTS COMPONENT
IMPACT (1) Activities that maintain the forest standing are economically attractive	**IMPACT (2)** Governmental actions ensure the conformity of human activities to the environmental legislation	**IMPACT (3)** The Brazilian Amazon is submitted to land-use planning	**IMPACT (4)** Economic instruments, science, technology, and innovation contribute to the recovery and sustainable use of biodiversity
OUTCOME 1.1 Economic activities that make sustainable use of forest biodiversity identified and developed 1.2 Production chains of agroforestry and biodiversity products with enhanced added value 1.3 Managerial and technical skills expanded to implement sustainable forest and biodiversity economic activities 1.4 Deforested and degraded areas recovered and used for economic or ecological conservation purposes	**OUTCOME** 2.1 Monitoring, control, and environmental accountability agencies structured and modernized 2.2 Increased access of farmers to land environmental regularization	**OUTCOME** 3.1 Public forests and protected areas expanded 3.2 Protected areas with consolidated infrastructure, land protection, and management 3.3 Areas with regularized land titling expanded 3.4 Areas with land-use planning defined by ecological-economic zoning (ZEE) expanded	**OUTCOME** 4.1 Knowledge and technology for conservation and sustainable use of biodiversity, deforestation monitoring and control, and land-use planning produced, disseminated, and employed 4.2 Economic instruments for conservation and sustainable use of biodiversity, deforestation monitoring and control, and land-use planning developed, disseminated, and employed



Distribution of resources by component of the logical framework

The Amazon Fund supported 102 projects up to 2021. These projects' actions and resources are distributed among the four components of the logical framework as follows:

FIGURE 4: DISTRIBUTION OF THE AMAZON FUND'S RESOURCES BY THE COMPONENTS OF ITS LOGICAL FRAMEWORK



MONITORING OF REGIONAL INDICATORS

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

The monitoring of these public policies helps to understand the progress made in promoting the reduction of deforestation with sustainable development in the Amazon. For this monitoring, the indicators of the Amazon Fund at the level of its general objective and indirect effects are analyzed in a comparative perspective. 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 in that year.

The current year of evaluation is 2021. Whenever possible, a comparison is made with this year. In cases where 2021 information is not available, comparison with the latest data is made.

It is worth mentioning that the Amazon Fund is not the sole contributor to the results 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, adding to initiatives and actions of various public and private agents that operate in this vast territory that is the Amazon.

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 measured 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 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 2021 was 13,235 km². This deforested area represents about 48% of the deforestation verified in 2004, the year in which the highest deforestation rate of this century was verified. When comparing the deforestation rate of 2021 with that of 2009 (baseline), we observe a 77% increase in the deforestation rate over this period.

TABLE 8: EVOLUTION OF DEFORESTATION IN THE BRAZILIAN AMAZON – 2004-2021 AND 2009-2021

Brazilian Amazon Deforestation				
2004	2009	2021*	Variation (%) 2004/2021	Variation (%) 2009/2021
27,772	7,464	13,235	(52)	77

Source: BNDES, based on INPE data.
* Preliminary data.

TABLE 9: EVOLUTION OF DEFORESTATION IN THE BRAZILIAN AMAZON – 2009/MEAN 2010-2021

Deforestation 2009 (A)	Average 2010-2021 (B)	Variation (%) (B)/(A)
7,464	7,640	2

Source: BNDES, based on INPE data.

Another possible comparison is the average annual deforestation occurred in the period from 2010 to 2021 with the baseline of the Amazon Fund (2009), which shows a 2% increase in the deforested area in this period.

The continuous increase in the deforestation rate from 2015 on constitutes a challenge to achieving the overall objective of the Amazon Fund, with regard to the reduction of annual deforestation in the Brazilian Amazon.

Indicator: (2) Participation of the Brazilian Amazon states' GDP in 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.

The GDP is a basic indicator of the behavior of the economy that expresses the added value of goods and services in a given 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 13,493, dated October 17th, 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 the measurements are fully adopted and validated at the global level, it is recommended that the conventional GDP indicator be analyzed together with the deforestation reduction indicator.[15]

The most up-to-date information available on the evolution of the GDP of each state is the IBGE's System of Regional Accounts for the year 2019. In the following table, it is observed that the participation of the GDP of the Brazilian Amazon in the Brazilian GDP has been growing gradually in the last ten years, consolidating since 2017 a participation of about 1% (in percentage of the GDP) higher than that verified in 2010.

TABLE 10: EVOLUTION OF THE RELATIVE SHARE OF THE BRAZILIAN AMAZON GDP

nominal values in R$ billions

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP Brazil	3,885.5	4,376.4	4,814.8	5,331.6	5,779.0	5,995.8	6,269.3	6,583.3	7,004.1	7,389.1
GDP Brazilian Amazon States	310.0	362.3	399.3	449.4	486.2	506.7	546.3	584.2	623.2	659.3
GDP Brazilian Amazon States / GDP Brazil (%)	7.98%	8.28%	8.29%	8.43%	8.41%	8.45%	8.71%	8.87%	8.90%	8.92%

Source: BNDES, based on data from IBGE

Although the most recent data broken down by state is not yet available, the economic activity indicators of the Central Bank of Brazil revealed that the North and Midwest regions, where all the states of the Brazilian Amazon (except the state of Maranhão) are located, showed growth of 0.4% and 0.2%, respectively, in 2020, a year severely affected by the pandemic in which national GDP fell by 3.9%.[16]

15 For the new natural capital accounting methodologies, see (in Portuguese) IBGE (2020) "Ecosystem accounts: land use in Brazilian biomes 2000-2018. Available at: https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?view=detalhes&id=2101753

16 https://www.bcb.gov.br/content/publicacoes/apresboletimregional/Boletim_Regional_ap202102.pdf

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

Indicator: Production of plant extraction and forestry

Indicator: Legal logging in the Amazon

The Amazon Fund prioritizes the structuring of the 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 activities such as the construction of sheds for the storage of production; the acquisition of trucks, vans, tractors, and boats for collection and distribution of products; the implementation or extension and modernization of processing units of 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 (Pevs), which is based on an annual publication by IBGE[17], as well as an indicator that measures legal logging in the Amazon.

Data on vegetable 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 *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 oleaginous, the extractive production of almonds of *cumaru*, *pequi* and *copaiba*, among other products, 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 *buriti* palms (among other fiber products) is also being monitored.

Table 11 shows the evolution of the physical production (in tons) of the plant extraction of these products between 2009 and 2020, in addition to a comparison of the last year with the previous year.

17 Production of plant extraction and forestry (Pevs), IBGE: https://sidra.ibge.gov.br/tabela/289

TABLE 11: OUTPUT OF PLANT EXTRACTIVISM IN THE BRAZILIAN AMAZON STATES (TONS)

Products	2009 (t)	2019 (t)	2020 (t)	Var 2020/2019 (%)	Var 2020/2009 (%)
Açaí	115,767	222,705	220,490	-1%	90%
Brazil nuts	37,468	32,905	33,119	1%	-12%
Rubber (liquid and coagulated latex)	3,459	807	899	11%	-74%
Oleaginous*	1,240	897	824	-8%	-34%
Babassu	103,359	45,595	44,647	-2%	-57%
Fibers**	2,848	2,245	2,896	29%	2%
Historical total	**264,141**	**305,154**	**302,875**	**-1%**	**15%**

Source: BNDES, based on data from IBGE.
*Includes *copaiba* (oil), *cumaru*, *pequi,* and other products.
** Includes *buriti*, *piassava,* and other products.

Table 12 shows the evolution of these same products from the perspective of the revenue generated.

TABLE 12: OUTPUT OF PLANT EXTRACTIVISM IN THE BRAZILIAN AMAZON STATES (R$ THOUSAND)

Products	2009	2009*	2019	2020	Var 2020/2019 (%)	Var 2020/2009 (%)
Açaí	160,312	295,446	588,594	694,306	18%	135%
Brazil nuts	52,261	96,314	135,814	98,552	-27%	2%
Rubber (liquid and coagulated latex)	7,597	14,001	4,031	6,574	63%	-53%
Oleaginous**	6,570	12,108	9,457	9,360	-1%	-23%
Babassu	114,847	211,656	81,953	83,971	2%	-60%
Fibers***	4,495	8,284	5,091	8,372	64%	1%
Historical total	**346,082**	**637,809**	**824,940**	**901,135**	**9%**	**41%**

Source: BNDES, based on data from IBGE.
* Updated values for 2020 reais by the variation of the Extended National Consumer Price Index (IPCA) from 2010 to 2020.
** Includes *copaiba* (oil), *cumaru*, *pequi,* and other products.
*** Includes *buriti*, *piassava,* and other products.

It can be noted that the production of *açaí* berry, a fruit increasingly used in the manufacture of food and beverages, increased by 90% in the Brazilian Amazon in 2009-2020 and the revenue, in updated values, increased by 135% in the same period, reaching R$ 694 million.

Brazil nut, also known as Pará nut, is another important regional extractive product, harvested from the fruit (*ouriço*) of the chestnut tree, which is one of the tallest trees of the Amazon rainforest. Production volume in the 2009-2020 period decreased by 12%. Annual revenue, however, grew 2% in the same period, reaching R$ 98.5 million in 2020.

The production volume and revenue from oilseeds, babassu, and rubber (liquid and coagulated latex) decreased in the period from 2009 to 2020. Fiber production recovered in 2020, returning to the level of 2009. However, when considering all monitored products, there was a 15% increase in the volume produced and 41% in the revenue generated.

In the comparison between 2020 and 2019, it is worthy of note the growth in the volume of rubber and fiber production (11% and 29%, respectively) and, in the aggregate revenue of the products considered in the Production of plant extraction and forestry (Pevs), the 9% expansion in revenues from one year to the next should be highlighted, although physical production suffered a small reduction of 1%, indicating an increase in the average price of production.

BOX – COCOA PRODUCTION IN BRAZIL

Several projects supported by the Amazon Fund include the production, processing, and marketing of wild cocoa and cocoa grown through agroforestry systems. The following projects are mentioned as examples: "Value Chains of Nontimber Forest Products" (SOS Amazon Association) and "Forest Assistance Program+" (Sustainable Amazon Foundation – FAS). Although cocoa does not integrate the organized statistics of Pevs, it is a consolidated culture in Brazil, which occupies the seventh position in the world ranking of producers, according to the following table:

	2020	part (%)
Ivory Coast	2,200,000	38.3%
Ghana	800,000	13.9%
Indonesia	739,483	12.9%
Nigeria	340,163	5.9%
Ecuador	327,903	5.7%
Republic of Cameroon	290,000	5.1%
Brazil	269,731	4.7%
G7	4,967,280	86.6%
World	5,738,582	100.0%

Source: FAO-STAT 2022.
Production in tons.

In Brazil, cocoa production has historically been concentrated in the state of Bahia, having been observed in recent years the expansion to states of the Brazilian Amazon, especially Pará, which is currently the largest national producer. The following table presents aggregate information of the harvested area, production in tons, and marketed value between 2018 and 2020:

	Area (thousand ha)			Production (thousand t)			Production Value (R$ thousand)		
	2018	2019	2020	2018	2019	2020*	2018	2019	2020
Brazil	577	582	578	239	259	264	2,837,554	3,124,162	3,182,840
Legal Amazon	138	151	158	114	135	141	1,415,684	1,543,168	1,611,519
Pará	128	141	147	110	129	135	1,374,337	1,488,032	1,559,444
Rondônia	9	9	9	4	5	5	37,702	51,415	47,719
Amazonas	1	1	1	1	1	1	3,572	3,627	4,262
Roraima	0.3	0.1	0.1	0	0	0	73	94	94
Northeast	421	413	403	114	113	111	1,302,576	1,431,012	1,410,755
Bahia	421	413	403	114	113	111	1,302,576	1,431,012	1,410,755
Other regions	18	18	18	10	12	12	119,294	149,982	160,566

Source: IBGE, apud: BnB - Etene Sectoral Notebook (2021). See https://www.bnb.gov.br/s482-dspace/bitstream/123456789/650/3/2021_CDS_149.pdf
* estimate

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.[18]

TABLE 13: LEGAL LOGGING IN THE AMAZON (VOLUME IN M³)

State/Province	2009	2020	2021	Var 2021-2020 (%)	Var 2021-2009 (%)
Acre	277,489	271,980	395,486	45%	43%
Amazonas	355,113	785,545	482,455	-39%	36%
Amapá	64,189	208,894	83,254	-60%	30%
Maranhão	10,359	12,493	16,645	33%	61%
Mato Grosso	2,043	58,119	66,241	14%	3,142%
Pará	9,041	2,946,478	3,346,516	14%	36,915%
Rondônia	-	1,188,752	1,196,959	1%	-
Roraima	89,502	169,126	118,082	-30%	32%
Tocantins	21,366	10,521	3,868	-63%	-82%
Total	**829,102**	**5,651,910**	**5,709,508**	**1%**	**589%**

Source: BNDES, based on data from Ibama.

TABLE 14: LEGAL LOGGING IN THE AMAZON (VALUE IN R$ THOUSAND)

State/Province	2009	2009*	2020	2021	Var 2021-2020 (%)	Var 2021-2009 (%)
Acre	10,095	20,476	16,495	26,153	59%	28%
Amazonas	19,633	39,822	79,210	73,021	-8%	83%
Amapá	3,944	8,000	14,763	5,153	-65%	-36%
Maranhão	905	1,836	3,310	5,770	74%	214%
Mato Grosso	1,317	2,671	14,371	14,118	-2%	428%
Pará	3,314	6,722	748,050	1,042,215	39%	15,405%
Rondônia	-	-	136,855	147,405	8%	-
Roraima	4,153	8,424	34,330	7,231	-79%	-14%
Tocantins	7,314	14,835	762	1.45	-100%	-100%
Total	**50,675**	**102,786**	**1,048,146**	**1,321,066**	**26%**	**1,185%**

Source: BNDES, based on data from Ibama.
* Updated values for 2021 reais by the IPCA variation from 2010 to 2021.

Based on the analysis of the data of legal logging, it can be observed that, in the period from 2009 to 2021, the volume of timber production grew 6.9 times. It is necessary to consider that this expressive growth was also due to the improvement of the National System of Control of Origin and Forest Products – Sinaflor. Annual revenue rose from R$102 million in 2009 to R$1.3 billion in 2021 (1,185%).

Of the total logged timber legally harvested in 2021 (5.7 million m³), just over 35% was obtained through sustainable forest management (2.0 million m³), a percentage lower than in previous years. Sustainable forest management is managing the forest to obtain benefits while respecting the self-sustaining mechanisms of the ecosystem

18 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.

being managed. That is, sustainable forest management does not allow clear cutting of forests in the Amazon.

Compared to the previous year, in 2021 there were reductions of more than 30% in the legal production of timber in four states of the Brazilian Amazon (Amazonas, Amapá, Roraima, and Tocantins). In the region as a whole, production remained practically stable between the two years, while revenues grew 26%. Regarding nominal revenue growth, it is worth mentioning that inflation in 2021 reached 10.06%.

The Amazon Fund has contributed directly to these results in two ways: (i) direct support to projects that implement 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 the basket of Amazon forest products, based on IBGE Pevs data, shows that there was a 41% increase in the revenue generated by these products between 2009 and 2020. In turn, in a period with even more up-to-date information (2009 to 2021), there was a 1,185% growth in the revenue generated by logging. It can be concluded, therefore, that the evolution of these indicators indicates that the indirect effect "activities that maintain the forest standing are economically attractive" 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 licenses or authorizations 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," respectively.

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 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.[19] The indicator that measures the number of municipalities capable of licensing activities with local environmental impact aims to 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 15 presents data obtained directly from state environmental agencies in the Brazilian Amazon.

TABLE 15: REGIONAL INDICATORS OF THE "MONITORING AND CONTROL" COMPONENT

States	Number of state environmental agencies outposts*		Number of municipalities able to license activities with local environmental impact (cumulative)**		Number of environmental permits or licenses granted by state environmental agencies (annual)***	
	2009	2021	2009	2021	2009	2021
Acre	5	5	1	1	2,239	415
Pará	4	11	10	135	3,259	3,566
Amazonas	0	6	2	1	2,723	2,581
Roraima	1	0	13	15	183	1,531
Tocantins	20	20	0	4	3,360	12,490
Mato Grosso	11	9	5	48	5,430	6,066
Rondônia	14	14	1	22	2,480	4,692
Maranhão	1	2	0	36	0	777
TOTAL	**56**	**67**	**32**	**262**	**19,674**	**32,118**
Variation (%)	**20%**		**719%**		**63%**	

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 the three dimensions monitored, highlighting a significant increase (719%) in the number of municipalities able to license activities with local environmental impact.

The number of permits issued annually by environmental agencies also experienced a 63% increase in the monitored period (2009 and 2021), while the number of outposts of state environmental agencies increased by 20%.

19 Complementary Law 140 of December 8, 2011.

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 ordered territorrialy ("land-use planning" component)

Indicator: Area of indigenous lands (IL) and federal protected areas (PA) in the Brazilian Amazon with land-use management tool

Indicator: Deforestation in Brazilian Amazon PAs

Two indicators were created to monitor this component. The first measures the extent of federal protected areas which have had a territorial management tool developed, and the second monitors the rate of deforestation in protected areas (federal and state PAs and ILs in the Brazilian Amazon).

It is worth mentioning that Brazil, through Law 9.985/2000, established a National System of Nature Protected Areas (Snuc). The PAs that are part of the Snuc are divided into two groups with specific characteristics: full protection units and sustainable use units.

The basic objective of full protection PAs is to preserve nature and only the indirect use of its natural resources is allowed. On the other hand, the basic objective of sustainable use PAs is to make nature conservation compatible with the sustainable use of part of its natural resources.

The indicator "area of indigenous lands (IL) and federal protected areas (PA) in the Brazilian Amazon with land-use management tool" follows the evolution of the elaboration of territorial management tools in ILs and federal PAs that have, respectively, territorial and environmental management plans (PGTA) and management plans. The use of these instruments in protected areas has contributed to the reduction of deforestation in these territorial domains.

The management plan of a PA is a document that, based on the general objectives of a PA, establishes the zoning regulation and the norms that should govern land use and the management of natural resources, including the implementation of the necessary physical structures for its management.

In turn, the PGTAs are tools for implementing the Brazilian Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI) and are instruments that aim at the valorization of indigenous material and immaterial heritage and at the recovery, conservation, and sustainable use of natural resources, ensuring the improvement of the quality of life and the full conditions of physical and cultural reproduction of current and future indigenous generations. These plans must provide for the protagonism, autonomy and self-determination of the indigenous peoples in negotiating and establishing community agreements that allow the strengthening

of territorial protection and control, as well as being a guideline for public policies directed to these peoples.[20]

TABLE 16: AREA OF FEDERAL PAS AND ILS IN THE BRAZILIAN AMAZON WITH LAND-USE MANAGEMENT INSTRUMENTS (MANAGEMENT PLANS OR PGTAS)

	Number of federal PAs and ILs with land-use management instrument			Variation 2021/2009 (%)	Area (km²) of federal PAs and ILs with land-use management tool			Variation 2021/2009 (%)
	2009	2020	2021		2009	2020	2021	
Federal PAs	28	89	93	218%	160,742	468,114	470,641	193%
ILs	33	98	104	197%	75,741	564,912	590,659	680%
Total	**61**	**187**	**197**	**223%**	**236,483**	**1,033,026**	**1,061,301**	**349%**

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

Based on the data analysis in Table 16 about PAs with land-use management tool in the period between 2009 and 2021, it can be verified that there was considerable growth in both the number and the territorial extension of the protected areas with these instruments in the Amazon.

In the period considered, the number of federal PAs and ILs that have a land-use tool tripled, from 61 to 197. In turn, the territorial extension of these areas with land-use instruments more than quadrupled, reaching 1.06 million km², an area greater than the sum of the territories of Norway and Germany.

The Amazon Fund has supported several projects to strengthen and consolidate the protected areas of the Amazon. It is worth highlighting the support to eight projects aimed at the elaboration and implementation of PGTAs, selected within the scope of the public call for Support for Territorial and Environmental Management in Indigenous Lands, promoted by the Amazon Fund.

These projects promote, among other actions, environmental management and the development of sustainable production activities by indigenous peoples; the protection of isolated indigenous peoples and of recent contact; the implementation of initiatives to monitor and control the territory, as well as the strengthening of local community organization, culture, and way of life of these populations. Besides these projects dedicated exclusively to the indigenous theme, there are other supported projects that also contemplate some action that benefits these populations.

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 as well as verifies if the communities to be benefited consent to the actions to be implemented.

There are 101 ILs benefiting from some type of action supported by the Amazon Fund, which comprises approximately 65% of the area of all ILs in the Brazilian Amazon.

Table 17 shows the variation of deforestation in protected areas in the Brazilian Amazon (federal, state and indigenous territories).

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

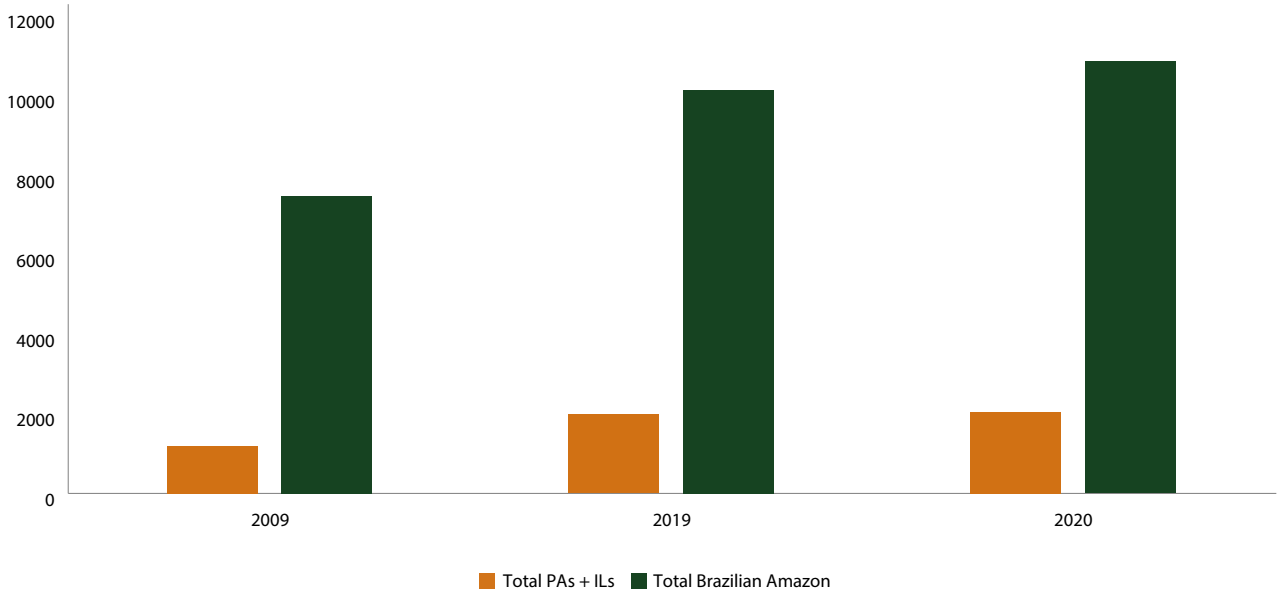
TABLE 17: DEFORESTATION IN PROTECTED AREAS IN THE BRAZILIAN AMAZON

		Deforested area (km²)				
Protected Areas	**Number of protected areas**	**2009**	**2019**	**2020**	**Var. 2020/2019 (%)**	**Var. 2020/2009 (%)**
Federal PAs	174	287	453	504	11%	76%
State PAs	179	320	1,021	1,110	9%	247%
Indigenous lands (ILs)	387	247	503	432	-14%	75%
Total history	**740**	**854**	**1,977**	**2,046**	**3%**	**140%**

Source: BNDES, based on INPE/Prodes data.

In Table 17, it can be seen that there was a 140% growth in the deforested area in all these land categories, when comparing the years 2009 and 2020. It should be noted that this growth is about three times higher than the increase in global deforestation in the Brazilian Amazon calculated by INPE/Prodes for the same years (45%), with a negative emphasis on state PAs category, in which deforestation increased 247% when compared to the Amazon Fund baseline (2009). The increase in the relative participation of PAs and ILs in total deforestation can be seen in the following graph:

GRAPH 10: DEFORESTATION IN PAS AND ILS IN TOTAL DEFORESTATION (KM²)



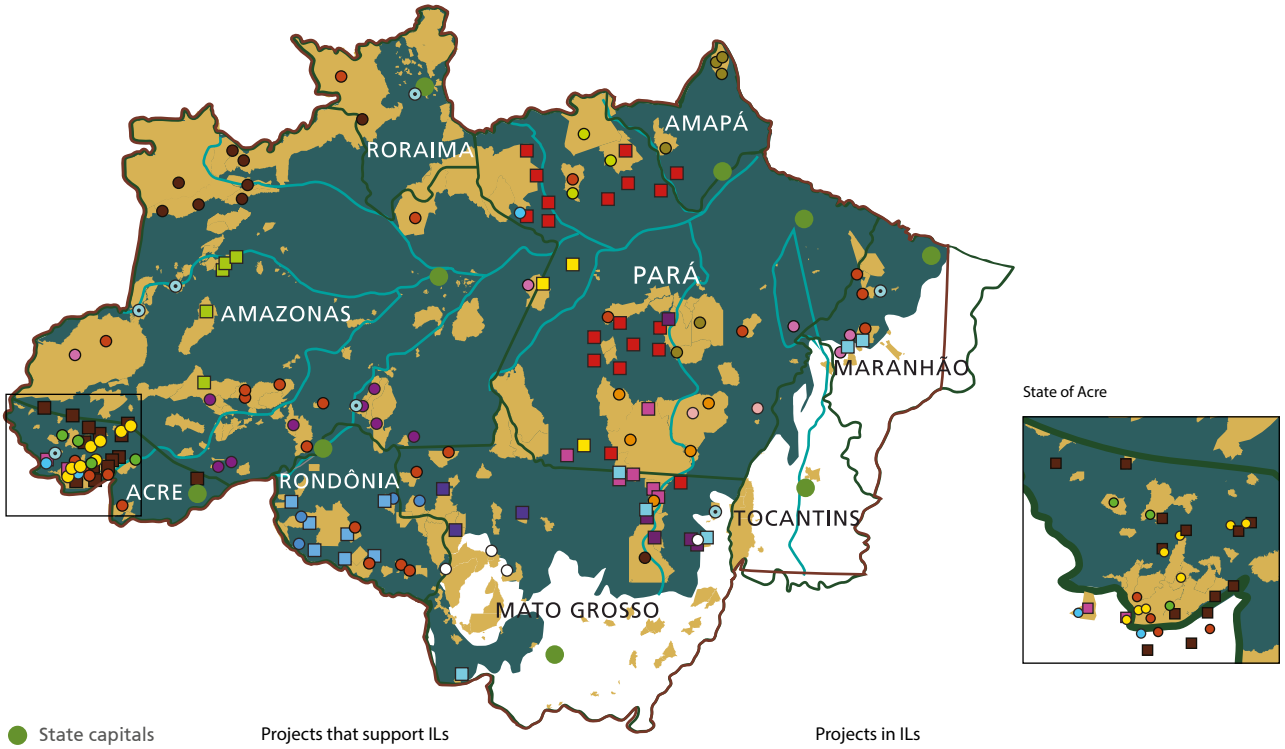
Source: BNDES, based on INPE/Prodes data.

It is worth mentioning that the deforested area in federal, state, and ILs protected areas represented about 19% of the deforestation measured in the Brazilian Amazon in 2020. The fact that these protected areas account for an area greater than 40% of the territory of the Brazilian Amazon highlights the importance of these territorial categories and the relevant role of traditional peoples, including indigenous ones, in forest conservation and the prevention of deforestation.

The significant increase in deforested areas in protected areas reinforces the importance of supporting new actions to consolidate the management of these

territories, as well as strengthening the public entities responsible for monitoring them. The Amazon Fund 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 ILS



Source: BNDES, based on INPE/Prodes data.

Indirect effect: (4) Economic instruments, science, technology and innovation contribute to the recovery, conservation and sustainable use in the Brazilian Amazon (component "science, innovation, and economic instruments")

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

Two indicators were selected for the monitoring of the component "science, innovation, and economic instruments": (i) "number of patent applications filed with

the National Institute of Industrial Property (INPI)", which allows a first evaluation of the degree of strengthening of the regional innovation system; and (ii) "subsidy value paid to extractivists for the promotion of sociobiodiversity product chains in the states of the Brazilian Amazon (PGPM-Bio)" to monitor the evolution of the policy of economic incentives in the Amazon region. Considering that until 2021 the Amazon Fund has not supported projects for the payment of subsidies to sociobiodiversity products or similar projects, the second indicator was not included in this report.

TABLE 18: PATENT APPLICATIONS FILED AT THE INPI BY RESIDENTS OF THE STATES OF THE BRAZILIAN AMAZON

	2009	2020	2021	Var. 2021/2020 (%)	Var. 2021/2009 (%)
Brazil	7,709	7,986	7,288	(9%)	(5%)
Amazon States					
Acre	3	17	10	(41%)	233%
Amazonas	63	36	29	(19%)	(54%)
Amapá	3	6	8	33%	167%
Maranhão	24	67	62	(7%)	158%
Mato Grosso	29	48	76	58%	162%
Pará	25	76	64	(16%)	156%
Rondônia	13	9	14	56%	8%
Roraima	1	2	2	0%	100%
Tocantins	8	14	17	21%	113%
Total	**169**	**275**	**282**	**3%**	**67%**

Source: BNDES, based on INPI data.

Comparing the number of patent applications filed at the INPI by residents in the states of the Amazon in 2009 and 2021, there was an increase of 67%. In Brazil, in general, there was a decrease of 5% considering the same years.

Despite the considerable increase in the number of patent applications in the analyzed period, the number of patent applications filed in the region in absolute terms is low (3.8% of the total number of applications in Brazil). This shows the need to strengthen this aspect that is relevant for the sustainable exploitation of the resources of the region, for the improvement of deforestation monitoring and for the development and improvement of forms and methods that contribute to better land-use in the Amazon.

The reasons that lead to 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 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's performance

> Worsening of the indicator that measures the deforestation rate in the Brazilian Amazon, with a 77% increase in the deforested area in 2021 compared to the 2009 rate. In turn, when comparing the average annual deforestation occurred in the period from 2010 to 2021 with deforestation in 2009 (Amazon Fund baseline), there is a 2% increase in the deforested area.

> Gradual increase of the relevance of Amazonian GDP in Brazilian GDP, reaching 8.9% in 2019, compared to 7.9% in 2009, which is also a positive sign.

> Increase of 15% in the volume produced and 41% in the revenue generated by the extractivism products monitored by the Amazon Fund in the period from 2009 to 2020, according to data from Pevs of IBGE, and an increase of 589% in the volume and 1,185% in the revenue generated annually by legal logging between 2009 and 2020.

> Expansion of the number of state enviromental agencies outposts by 20%, decentralization of environmental management to municipalities by 719% and the increase of licenses and permits issued by environmental agencies by 63% in the period from 2009 to 2021.

> A more than fourfold increase (349%) in the area of federal PAs and ILs with land-use management tools (2009-2021) and worsening of the indicator that monitors deforestation in protected areas, which indicates an increase of 140% in deforestation in federal and state PAs and ILs (2009-2020).

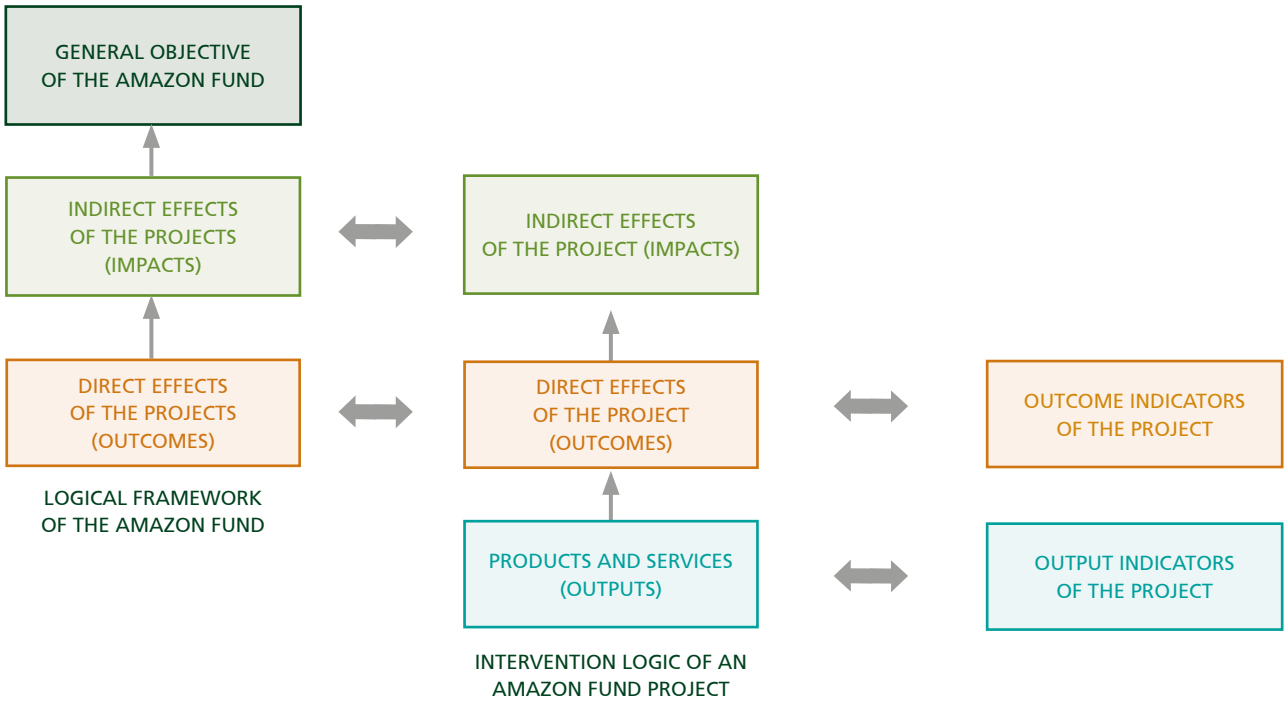
> Growth of 67% in the number of patent applications filed with the INPI by residents in the states of the Brazilian Amazon (2009-2021).

PROJECT RESULTS CHART

For each project, a specific result 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 the 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 put their implementation at risk.

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 visits 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 results chart 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,[21] which contains a specific section for each supported project, including, among other information: the name of the organization in charge of the project implementation; the project's territorial scope and its beneficiaries; the total amount of financial resources dedicated to the project, and the amount of the Amazon Fund's financial support; the expected implementation time; the amounts already disbursed and their respective dates; the project's context and summarized information about it; its intervention logic; and a summary of the activities that have already been carried out.

To monitor the results of the supported projects, a range of indicators common to them was developed that enable their consolidation and provide a joint perspective of the products and services provided and of the impacts resulting from their actions. It should be noted that, in some cases, the results are qualitative in nature, requiring individual analysis.

In addition to the projects' monitoring during their implementation, the Amazon Fund publishes an assessment of the results and impacts of each concluded project. Please see "Concluded projects" chapter of this report for information about the ten projects concluded in 2021, including an assessment of their results and impacts. Thus, from a portfolio of 102 supported projects, 47 are concluded and have their assessment published in the Amazon Fund's activities reports. Whenever possible, an analysis is made of the impacts of the concluded projects on the deforestation rate in their area of influence.

The tables below present the consolidated results and impacts measured based on indicators defined in the indicators of the projects supported by the Amazon Fund. In these tables, a color code was adopted to facilitate the identification of indicators according to their nature (output and outcome). The results of the projects completed in 2021 are summarized in this section and are presented with more detail in the chapter "Concluded projects" of this report (please see next chapter).

"Promotion of sustainable production activities" components

By the end of 2021, support for sustainable productive activities represented 27% of the amount of the Amazon Fund's project portfolio, that is, R$ 479 million. One of the objectives of the Amazon Fund is to promote a sustainable forest-based economy through the valorization of products (timber and nontimber) and environmental services of the forest, in order to create an economic alternative that enables the conservation of native vegetation.

The projects supported in this component comprise, for example, extractive activities, processing (industrialization) of extractive and family agriculture products, food

21 Available at: http://www.fundoamazonia.gov.br/en/carteira-de-projetos/

security initiatives (food production for own consumption), handicraft production, and community-based tourism. The products supported include rubber, oleaginous seeds, cassava flour, cocoa, Brazil nut, tourism, timber, honey, resin, soaps, oils, babassu and *açaí* berry.

TABLE 19: INDICATORS OF THE "PROMOTION OF SUSTAINABLE PRODUCTION ACTIVITIES (1)" COMPONENT – CUMULATIVE VALUES

Indicators of sustainable production (Component 1)	Until 2020 (accrued)	Until 2021 (accrued)	Variation 2021/2020 (%)
Individuals trained to practice sustainable economic activities (total)	43,011	43,870	2
Individuals trained to practice sustainable economic activities (women)	4,498	7,487	66
Individuals trained to practice sustainable economic activities (indigenous)	3,625	4,641	28
Strengthened community organizations	507	507	_
Small projects (up to R$150 thousand) supported by agreggating entities **	2,691	2,679*	_
Medium or large projects supported by aggregating entities	72	72	_
Rural properties with sustainable production projects	4,706	4,841	3
Rural properties (households) receiving technical assistance	10,588	9,956*	-6
Processing units for family farming and extractivism products implemented	377	377	_
Individuals directly benefited from the supported activities (total)	202,159	207,345	3
Individuals directly benefited from the supported activities (women)	46,692	47,835	2
Area of forest directly managed as a result of supported projects (hectares)	74,685,536	74,685,538	_
Recovered area used for economic purposes (hectares)	15,092	15,452	2
Individuals trained to practice sustainable economic activities effectively using the knowledge acquired (total)	21,032	21,745	3
Increase in revenue obtained from the sale of unprocessed products (R$ thousand)	132,089	149,681	13
Increase in revenue obtained from the commercialization of processed products (R$ thousand)	95,636	104,784	10

Source: BNDES.
* Values adjusted as a result of revision/divergence of classification criteria or correction of material error
** The concept of project in this case includes, for example, the simple acquisition of an equipment for a productive activity that has been planned by the community.

COLORS/LEGEND Code
Output indicator
Outcome indicator

Activities in support of sustainable production include the strengthening of indigenous associations and associations of agro-extractive producers for the processing of biodiversity products. In other words, the structuring of these production chains include support for community entrepreneurship, integrating a broad strategy to promote the bioeconomy in the region. This process requires the implementation of new production systems that maintain the forest standing and promote the industrialization of its products integrated with other business sectors of the country and with centers of innovation and scientific and technological development.

The economic impact of sustainable production is also verified by an indicator that measures the revenue (gross revenue) of the supported projects, obtained from the commercialization of the generated production (*in natura* and processed products and services).

The analysis of this indicator observes its baseline (annual revenue immediately prior to the start of the project), the monitored year, and the revenue increase generated by the project during its implementation. This increment is determined by annually comparing the revenue in a given year with the baseline revenue. This annual increase (or reduction) is added up over the years of the project's implementation and, when consolidated, represents the revenue increase resulting from the project.

The table below shows the consolidation of revenue results obtained from the commercialization of products by the supported projects in the period from 2010 to 2021. It should be noted that once a project is concluded, its revenues are no longer considered.

TABLE 20: INDICATORS OF 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 (2021)**	**Increment**	**Baseline**	**Latest year (2021)**	**Increment**
R$28.8 million	R$73.3 million	R$149.6 million	R$31.5 million	R$66.2 million	R$104.7 million

Source: BNDES.

In 2021, four projects were completed that had as their main focus the promotion of sustainable production in the Brazilian Amazon.

The Association of Small Agro-farmers of the Reca Project (Reca) was directly responsible for the "Materialize" project, characterized as a project that supported community entrepreneurship actions implemented by three productive associations and a cooperative in the municipalities of Porto Velho (RO) and Acrelândia (AC).

Several actions were carried out that benefited the families of agro-extractivists associated to the productive associations supported by the project. Among the supported activities stand out the construction and acquisition of equipment for a new processing plant for *cupuaçu*, *açaí* berry, and other fruits.

The project also supported the processing of vegetable oils and seeds, as well as implanted 315 hectares of SAFs in 135 family plots of the members of the supported community organizations, in addition to promoting the institutional strengthening of these organizations.

The project "Using Social Technologies to Reduce Deforestation," implemented by the Interstate Agricultural Development Association (Adai), benefited riverside families and small farmers in areas of influence of hydroelectric powerplant projects in the states of Pará, Mato Grosso, Rondônia, and Tocantins.

The project promoted the agroecological production of food, aiming at providing food security for families and the reduction of pressure on natural resources.

Throughout the project, 240 PAIS (integrated and sustainable agroecological production units) were implemented, which involves organic agriculture integrated with the creation of small animals.

The "Dema Fund" project, implemented by the Federation of Agencies for Social and Educational Assistance (Fase), supported the selection of low-cost socio-environmental subprojects through public calls, having as beneficiaries traditional communities of the Amazon (small producers, quilombolas, and indigenous peoples), located in the state of Pará.

In all, 112 subprojects were supported, representing a broad set of interventions aimed at sustainable production and food security. This project also supported the registration of small areas in the Rural Environmental Registry (CAR), which resulted in the registration of 327 properties.

Finally, the project "Value Chains of Nontimber Forest Products," implemented by the SOS Amazon Association, supported entrepreneurial initiatives in nine partner institutions through the sustainable development of the production chains of vegetable oils, wild cocoa, and rubber. The actions of the project took place in six municipalities in the state of Acre and four municipalities in the state of Amazonas.

Among other actions, a plant for extracting vegetable oils and fats was implemented; equipment was purchased for two soap factories based on vegetable oils and fats; twenty rubber processing and drying units (UPS) were built, and native cocoa production centers were implemented.

"Monitoring and control" control component

By the end of 2021, support for monitoring and control actions represented 46% of the amount of the Amazon Fund's project portfolio, that is, R$ 813 million. The "monitoring and control" component has been recognized in independent evaluations of PPCDAm as the one that improved the most and, consequently, as the one with greater participation in reducing deforestation in the Amazon since 2004.

Among the actions supported by the Amazon Fund, the following stand out: (i) expansion and strengthening of CAR as an instrument for rural environmental management and monitoring of deforestation in rural establishments; (ii) expansion and improvement of environmental monitoring by satellites carried out by INPE and implementation of a deforestation detection system in the Amazon using orbital radar images by the Amazon Protection System Management and Operational Center (Censipam) of the Ministry of Defense; (iii) control of deforestation in the Brazilian Amazon through enforcement activities by Ibama; and (iv) prevention and fight against forest fires and unauthorized burn off, through operational structuring of the region's military fire departments and actions to mobilize and train rural producers in fire prevention and fire-fighting techniques, including the formation of civilian brigades.

TABLE 21: INDICATORS OF THE "MONITORING AND CONTROL (2)" COMPONENT – CUMULATIVE VALUES

Monitoring and control indicators (Component 2)	Until 2020 (accrued)	Until 2021 (accrued)	Variation 2021/2020 (%)
Strengthened environmental agencies (federal, state, and municipal)	326	326	_
Amount disbursed for projects to combat forest fires and illegal burn offs (R$ thousand)	77,345	77,345	_
Public employees trained in environmental management and/or deforestation monitoring technologies	7,489	10,893	45
Environmental monitoring missions carried out	1,620	1,706	5
Forest fires or illegal burn offs fought by Military Fire Brigades	30,693	29,637*	-3
Public employees trained effectively using the knowledge acquired (total)	4,632	4,828	4
Rural properties registered in the Rural Environmental Registry (CAR) – Protocol	1,403,373	1,075,770*	-23
Area of rural properties registered in the CAR – Protocol (hectares)	132,530,944	124,479,541*	-6
Area with vegetation cover recovered for conservation or environmental regularization (regeneration in progress)	15,263	15,353	1
Infraction notices (fines) issued for violations against the flora	13,522	13,522	_

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

COLORS/LEGEND Code
Output indicator
Outcome indicator

In 2021, the "Greener Rondônia" project implemented by the Military Firefighters Department of the State of Rondônia (CBMRO) was concluded. With the Amazon Fund's support firefighting equipment was acquired, standing out the acquisition of a single-engine turboprop aircraft used to transport military firefighters in the logistics of forest firefighting and to support monitoring activities of state environmental inspection agencies.

The actions implemented allowed the operational structuring of CBMRO companies that cover the entire state of Rondônia, significantly expanding the role of this corporation in combating forest fires.

In 2021, the project "Environmental Management Qualification Program," implemented by the Brazilian Institute of Municipal Administration (Ibam), was also completed. With the support of the Amazon Fund, environmental management was strengthened in 420 municipalities in the nine states of the Brazilian Amazon through the provision of training to more than four thousand public employees and three thousand representatives of civil society.

This project included, among other actions, the holding of events with members of the municipal legislative branch, with the participation of more than one thousand councilors. Technical-legal content was produced and made available to the municipalities of the Brazilian Amazon through consultation with experts, with more than 1,800 original legal opinions published on the internet portal, as well as a

competition to reward the municipalities that stood out in their preservation of natural resources and sustainable local development.

Also at the municipal level, in 2021, the project "New Paths in Cotriguaçu" was completed, implemented by the municipality of Cotriguaçu, in the state of Mato Grosso. This project included the construction and physical structuring of the headquarters of the Municipal Secretariat of the Environment of Cotriguaçu; the recovery of degraded permanent preservation areas (app) in rural properties; and the dissemination of techniques for restoration and sustainable management of pastures, developed by the Brazilian Agricultural Research Company (Embrapa), through the implementation of four demonstration units of good agricultural practices.

Land-use planning component

At the end of 2021, support for land-use management actions represented 14% of the amount of the Amazon Fund's project portfolio, that is, R$ 252 million. The forest's occupation is inherent to the region's development process, but this occupation must be planned. Among the tools available, the Amazon Fund's support for consolidating PAs management and implementing the PNGATI stands out.

TABLE 22: INDICATORS OF THE LAND-USE MANAGEMENT COMPONENT (3) – CUMULATIVE VALUES

Land-use planning indicators (Component 3)	Until 2020 (accrued)	Until 2021 (accrued)	Variation 2021/2020 (%)
Protected areas supported	190	195	3
Indigenous lands supported	101	101	_
Individuals trained in activities related to the management of public forests and protected areas (total)	3,318	3,716	12
Individuals trained in activities related to the management of public forests and protected areas (indigenous)	1,922	1,922	_
Indigenous peoples directly benefited by the support of the Amazon Fund	58,530	59,755	2
Individuals trained in activities related to the management of public forests and protected areas effectively using the knowledge acquired	1,842	1,850	_
Areas of PAs created (km²)	7,083	7,083	_
Extent of protected areas with infrastructure, environmental management, and/or control of its territory strengthened (km²)	444,489	522,337	18

Source: BNDES.

COLORS/LEGEND Code
Output indicator
Outcome indicator

The federal and state PAs and ILs 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 illegal deforesting and land grabbing.

In 2021, with the support of the Amazon Fund, two projects were completed which focused on actions in the land-use management component.

The "Sustainable Bem Viver" project, implemented by the Institute of Research and Indigenous Education (Iepé), implemented its activities in three IL, namely: IL Parque do Tumucumaque, IL Rio Paru d'Este, and IL Zo'é, located in the states of Amapá and Pará. Through this project, activities of management and sustainable use of natural resources were supported, including the training of one hundred indigenous women in weaving and handicraft activities. In the territorial control dimension, bases were built at strategic points and equipment was acquired for community surveillance networks. The project promoted, among other actions, the training of indigenous people for territorial and environmental management, in addition to promoting the preparation of the Territorial and Environmental Management Plan (PGTA) of IL Zo'é.

In turn, the project "Training to Conserve," implemented by the Amazon Conservation Team (ECAM), had the objective of strengthening the management of PAs in the state of Amapá, through the training of environmental agents and managers.

Eight courses were held and 161 environmental agents were trained, with the target audience being people who work in the protection and management of PAs, public or private institutions and even residents of the PAs and their vicinity. The training covered a wide range of topics, such as basic cartography, notions of GPS, environmental legislation, climate change, surveillance practices, fire prevention, and firefighting, among others.

It is noteworthy that the management of PAs is a major challenge throughout the Amazon. This issue has particular relevance in the state of Amapá – where the project was implemented – given the representativeness of the PAs in the total area of the state territory (62% of the entire state).

"Science, innovation, and economic instruments" component

By the end of 2021, support for scientific and technological development actions and economic instruments to enhance the standing forest represented 13% of the amount of the Amazon Fund's project portfolio, that is, R$ 243 million. The support for this component has a strategic and cross-sectional character, benefiting the other components.

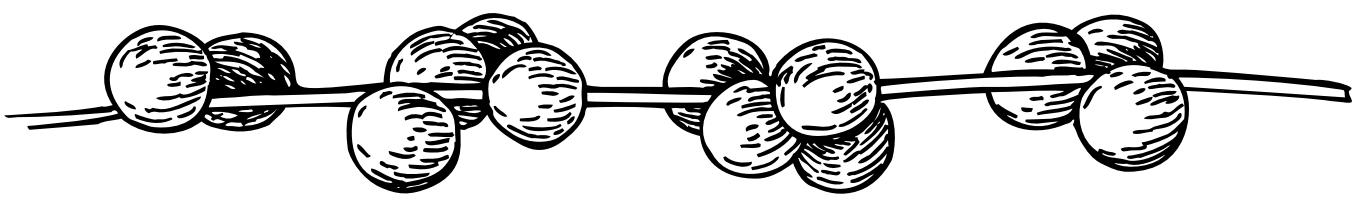


TABLE 23: INDICATORS OF THE "SCIENCE, INNOVATION, AND ECONOMIC INSTRUMENTS (4)" COMPONENT – CUMULATIVE VALUES

Indicators of science, innovation, and economic instruments (Component 4)	Until 2020 (accrued)	Until 2021 (accrued)	Variation 2021/2020 (%)
Total amount disbursed for scientific and technological research (R$million)	140.4	149.7	7
Researchers and technicians involved in scientific and technological research activities residing in the Amazon region during the execution of the projects	385	387	1
Families benefiting from payment for environmental services	2,089	2,124	2
Scientific, pedagogical or informative publications produced	596	613	3
Patents applied for or filed	2	2	_

Source: BNDES.

COLORS/LEGEND Code
Output indicator
Outcome indicator

In 2021, the "Knowing to Preserve" project implemented by the Amazon Museum (Musa) was concluded. With the support of the Amazon Fund, the Museum of the Amazon and a Training Center were implemented in Manaus, aiming at the dissemination of knowledge that contributes to the valorization and conservation of the natural resources of the Amazon.

The implementation of Musa included, among other activities, the construction of an observation tower, the creation of trails, and the implementation of laboratories for capturing, editing, and transmitting images.

The Musa has become one of the main tourist attractions of Manaus. Its imposing steel tower rivals the great trees of the forest and allows about thirty visitors, distributed at different levels, to observe the largest rainforest in the world. It is worth mentioning that Musa won the Travellers' Choice 2021 award from TripAdvisor.[22]

AMAZON FUND'S SAFEGUARDS

Decision 1/CP 16 of the United Nations Framework Convention on Climate Change (UNFCCC) defined the safeguards for Reducing Emissions from Deforestation and Forest Degradation, Conserving Forest Carbon Stocks, Sustainable Forest Management and Increasing Forest Carbon Stocks (REDD+)

These safeguards are a set of seven guidelines aimed at enhancing positive socio-environmental impacts and reducing negative impacts related to REDD+ activities. They are also known as Cancún safeguards, as it was in this Mexican city that the 16th Conference of the Parties (COP) was held in 2010, when the REDD+ safeguards were approved.

22 https://www.tripadvisor.com.br/Attraction_Review-g303235-d2364476-Reviews-Museu_da_Amazonia_MUSA-Manaus_Amazon_River_State_of_Amazonas.html

The safeguards should ensure that REDD+ initiatives adequately address sensitive issues such as the rights of indigenous peoples and traditional communities, social participation, the preservation of natural ecosystems, the permanence of REDD+ results achieved, and the risk of displacement of pressure from deforestation and forest degradation to other areas.

Through the Cancún safeguards, REDD+ initiatives should promote and support:

i) actions that complement or are consistent with the objectives of the national forest programs and other relevant international conventions and agreements;

ii) transparent and effective forest governance structures, under the principle of national sovereignty and in accordance with the national legislation;

iii) respect for the knowledge and rights of indigenous peoples and members of local communities, considering the relevant international obligations, national laws, and the UN's Declaration on the Rights of Indigenous Peoples

iv) full and effective participation of stakeholders, particularly indigenous peoples and local communities;

v) actions that are consistent with the conservation of natural forests and biological diversity, ensuring that the REDD+ action 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;

vi) actions to avoid the risks of reversals of the REDD+ results; and

vii) actions to reduce the spreading of carbon emissions to other areas.

The Amazon Fund is prior to the approval of the REDD+ safeguards, but since the beginning of its activities a set of guidelines and criteria has been established by the Amazon Fund Steering Committee (COFA) that, associated with the operational policies of BNDES, the fund's manager, as well as the observance of the Brazilian legal-normative framework, functions as its safeguards.

As a requirement of the UNFCCC for the recognition of its results in reducing deforestation, in 2015 Brazil submitted to the UN the 1st Safeguards Summary.[23] In 2018, the 2nd Safeguards Summary was submitted,[24] with information on how the Cancún safeguards were addressed and respected by Brazil during the implementation of actions to reduce emissions from deforestation in the Amazon biome (from 2006). These two summaries also address how the Amazon Fund has been supporting and contributing to the observance of these safeguards.

The Ministry of the Environment (MMA), responsible for the implementation of these safeguards at the national level, started in 2017 the development of the National REDD+ Safeguards Information System (SISREDD+). At the end of 2021, the MMA presented the country-defined[25] indicators for the pilot application of SISREDD+.

23 http://redd.mma.gov.br/images/publicacoes/salvaguardas_1sumario.pdf

24 https://redd.unfccc.int/files/2sumariosalv_br_final.pdf

25 http://redd.mma.gov.br/images/gtt-salv/indicadores-sisredd.pdf

Advances in the subject and descriptive information on the implementation of Cancún safeguards by Brazil can be monitored on the MMA's REDD+ Brasil website.[26]

AMAZON FUND'S CONTRIBUTION TO SUSTAINABLE DEVELOPMENT GOALS

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

Among the 17 SDGs, a subset of ten to which the Amazon Fund contributes to a greater or lesser degree are identified below:

SDG 1: END POVERTY IN ALL ITS FORMS, EVERYWHERE

It was defined as one of the guiding criteria for the actions supported by the Amazon Fund the prioritization of projects involving direct benefits to traditional communities, agrarian reform settlements, and family farmers. In all the actions supported by the Amazon Fund until 2021, about a quarter of the funds went to the promotion of sustainable production 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 marketing but also projects aimed at food security (food production for own consumption) of traditional peoples. Support is given, among others, to the implementation of agroforestry systems, the signing of fishing agreements, the installation of processing units for socio biodiversity products, certification of origin, training, and the development of business plans, as well as research to develop new products derived from the fruits, seeds, and bioactive compounds of the Amazon flora.

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 protagonism of young people. Starting in 2012, the fund has demanded, in public calls for projects, that they indicate their strategy to engage women and young people in the activities directly related to the supported value chains and promote the participation of women in leadership positions.

SDG 6: ENSURE DRINKING WATER AND SANITATION

Projects supported by the Amazon Fund prioritize the forest restoration of riparian forests, that is, plant formations located on the banks of streams, lakes, dams and springs. One of the forms contemplated by the fund's support prioritizes the recovery of springs by implementing programs that reward, with payment for environmental services, those who protect and preserve the springs that supply water for people's consumption.

26 http://redd.mma.gov.br/en/

SDG 8: PROMOTE DECENT WORK AND ECONOMIC GROWTH

One of the great challenges to be faced 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 production chains; the building of capacities and skills to promote a viable economic model that is sustainable; and the transformation of agricultural activity into a fully sustainable activity, including increasing its productivity.

SDG 11: MAKE SUSTAINABLE CITIES AND COMMUNITIES

The Amazon Fund has contributed significantly to safeguard the world's natural and cultural heritage since its goal is to reduce deforestation rates with sustainable development in the Brazilian Amazon. The fund thus supports actions that directly or indirectly safeguard the natural heritage represented by forests, in addition to its important role of financing actions aimed at valuing the material 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 PATTERNS

The environmental monitoring actions were strengthened with the support of the fund, including support for improved monitoring of deforestation by satellites in Brazil and other South American countries bordering the Amazon, which are developing or improving their own monitoring systems. The fund's support also covers the expansion of environmental surveillance missions, as well as actions to prevent and fight forest fires, including training military firefighters, establishing civilian firefighting brigades, and acquiring specialized equipment.

SDG 13 - COMBAT GLOBAL CLIMATE CHANGE

The Amazon Fund is the world's largest REDD+ forest conservation fund according to various criteria, including donations received and approved amounts to projects.[27] All resources invested by the fund should contribute, directly or indirectly, to the reduction of deforestation. Brazil's total greenhouse gas (GHG) emissions decreased from 3.3 billion tons of carbon dioxide equivalent (CO_2eq) in 2004 to 1.3 billion tons of CO_2eq in 2016.[28] This result represented a significant contribution of Brazil to the mitigation of global warming and stems mainly from changes in land and forest use, that is, from the reduction of deforestation rates.

SDG 15: PROTECT AND PROMOTE THE SUSTAINABLE USE OF TERRESTRIAL ECOSSYSTEMS

With the support of the Amazon Fund, actions were promoted in 190 PAs and 101 ILs, covering activities of protection and territorial surveillance, consolidation of its management, and promotion of sustainable production activities in PAs of sustainable use, that aim to make nature conservation compatible with the sustainable use of part of its natural resources.

SDG 17: STRENGTHEN THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

The Amazon Fund was created by the Brazilian society in dialogue with the international community, having several partnerships, including governments that donate resources to the Amazon Fund, a cooperation agreement with an international technical cooperation agency and the support of the fund to an international project being implemented by OTCA, aimed at monitoring forest cover in the Regional Amazon, that is, also beyond Brazil's borders.

PROMOTING 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).

27 https://climatefundsupdate.org/the-funds/

28 Sistema de Registro Nacional de Emissões (Sirene). Available at: https://sirene.mctic.gov.br/portal/opencms/paineis/2018/08/24/Emissoes_em_dioxido_de_carbono_equivalente_por_setor.html

The Amazon Fund, through its support for projects that contribute to component 1 of its logical framework ("activities that maintain the forest standing have economic attractiveness"), seeks to contribute to the promotion of gender equity.

Since 2008, BNDES, which is in charge of managing Amazon Fund, has included a social clause in all of its financing contracts, which expresses the fight against race and gender discrimination and child and slave labor in Brazil. In the context of the projects supported by the fund, the promotion of gender equality was introduced as a selection criterion in three public calls.[29]

The fund also has indicators in sustainable production projects to verify the extent to which women participate in activities and decision-making, including monitoring the number of women in coordinating positions in 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 concluded projects have contributed to promoting gender equality.

In 2019, the Amazon Fund website published a study entitled Equality between men and women in sustainable production activities projects supported by the Fund,[30] 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.

The result showed a very expressive number of women developing production activities that promote the reduction of deforestation in small properties in the Amazon, contributing directly to the Amazon Fund's ultimate goal. 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.

These results allowed the identification of good practices related to gender equality in the projects, lessons learned, as well as the elaboration of recommendations for the Amazon Fund.

EVALUATION OF EFFECTIVENESS

The Amazon Fund's portfolio has 102 projects, of which 47 have been concluded. The results and impacts of the concluded projects are evaluated by the Amazon Fund team and are disclosed in the Fund's annual reports (see chapter "Concluded projects") and on the Fund's website.[31]

29 In 2012, in the public call for Sustainable Productive Activities Projects; in 2014, in the public call aimed at supporting PGTAs; and in 2017, in the scope of the public calls for consolidation and strengthening of sustainable and inclusive value chains and of recovery of the vegetation cover.

30 http://www.amazonfund.gov.br/export/sites/default/en/.galleries/documentos/library/Giz-Gender-Study.pdf

31 http://www.fundoamazonia.gov.br/en/carteira-de-projetos/busca/index.html?reloaded&facet_Situacao_prop=concluido

In 2016, with the technical support of the German agency GIZ,[32] a conceptual framework was developed to be applied in the independent evaluations of the effectiveness of the projects implemented with resources from the Amazon Fund.[33]

The increase in the number of projects concluded led to the understanding that evaluating them in thematic blocks according to their objectives would produce important inputs for the aggregation of the results and impacts achieved by them and for the identification of joint contributions to achieve the objectives of the Amazon Fund. To guide these thematic evaluations, an addition to the conceptual framework for thematic evaluations was developed in 2020, also published on the Amazon Fund website.[34]

In 2021, two thematic evaluations of effectiveness were completed, one focused on projects with state environmental agencies (Oemas) and the other focused on actions to prevent and combat forest fires and illegal burn offs.

In the first evaluation, the projects "Semas Pará" and "Reforestation in the South of the State of Amazonas" were evaluated, while in the second evaluation the results of the following projects were consolidated and analyzed: "Acre: Zero Forest Fires," "Mato Grosso Forest Firefighters," "Pará Fighting Forest Fires and Illegal Burn offs," and "Forest Protection in Tocantins."

Also in 2021, activities were carried out in two effectiveness evaluations at an advanced stage of completion: one of projects that supported indigenous peoples and the other of projects that implemented sustainable production activities. Finally, a thematic evaluation was initiated of the effectiveness of seven projects aimed at the municipal sphere in the Amazon.

Independent effectiveness assessments can be checked in their entirety on the website of the Amazon Fund on the Internet.[35] The conduction of these evaluations has, among others, the following purposes:

> 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, which contributes to improve the quality of projects and helps the investment prioritization, thus supporting decision-making processes;

> monitor the compliance with the Cancun safeguards agreed upon under the scope of UNFCCC for REDD+ actions by the Amazon Fund projects; and

> verify the projects' alignment with the PPCDAm and with the state plans for prevention and control of deforestation and ENREDD+

32 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

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

34 http://www.fundoamazonia.gov.br/en/monitoring-evaluation/independent-evaluations/

35 http://www.fundoamazonia.gov.br/en/monitoring-evaluation/independent-evaluations/

The following are some of the conclusions of the evaluation of the effectiveness of projects to combat forest fires and illegal burn offs supported by the Amazon Fund,[36] completed in 2021:

i) the results obtained in the projects were extremely relevant to improving the fight against deforestation resulting from forest fires and illegal burn offs;

ii) the projects fulfilled all the proposed objectives, with the main result of a shorter response time in the fight against forest fires and illegal burn offs and the increase in the capillarity of the Military Fire Brigades in the territories of their states;

iii) the cost-benefit of the activities carried out was considered positive;

iv) the projects were a "watershed" because, before them, forest fires were not treated as a priority activity in the planning actions of these institutions in the Brazilian Amazon; and

v) the long-term sustainability of the results achieved with the support of the Amazon Fund depends mainly on the budgetary conditions of the states, which are responsible for maintaining the main equipment acquired under the projects and the availability of funding resources for the Military Fire Brigades.

The following are some conclusions from the effectiveness assessment of projects to support state environmental agencies,[37] also completed in 2021:

i) both projects were relevant to the implementation of the new environmental policy, based on the new Forest Code Law, sanctioned in 2012, at the beginning of the execution of the projects;

ii) it can be stated that the main positive impacts were the access of producers to the initial phase of environmental regularization, through registration in the CAR, which was facilitated. This led to improved monitoring and control of illegal activities, commitment to recover environmental liabilities, and reduction of illegal behaviors, resulting in initial responses that contributed to the reduction of deforestation;

iii) important results were achieved, although some of them still need to reach a broader effectiveness, as the full environmental regularization process is still underway in both states and the projects did not provide support for all stages of this regularization;

iv) when measuring the cost-benefit of the results of the projects evaluated, it can be stated that efficiency was good in the monitoring and control actions and low in the actions related to sustainable production; and

v) it can be stated that the institutions with projects evaluated continue to advance in the implementation of environmental regularization of rural properties and in the provision of an information base for environmental monitoring and enforcement actions.

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36 http://www.amazonfund.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Independent-evaluations/CBM-Effectiveness-Evaluation-Report.pdf

37 http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Independent-evaluations/OEMAs-Effectiveness-Evaluation-Report.pdf

It is worth mentioning that in 2019 a mid-term evaluation of the effectiveness of the Amazon Fund was completed, 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 mid-term evaluation of the effectiveness of the Amazon Fund covered its first ten years of operation, and it can be said that government programs that fulfill the stages of planning, execution, monitoring, and evaluation of their impacts are rare, thus closing a complete cycle. This is now the case of the Amazon Fund, which, with this mid-term assessment, gained a technical analysis of its effectiveness with an international standard.

This broad assessment of the effectiveness of the Amazon Fund made recommendations for improvements and concluded that there is clear evidence that the Amazon Fund has contributed to reducing deforestation in the Amazon. Both the evaluation and its complementary studies can be consulted on the fund's website.[38]

AMAZON FUND'S RISK MANAGEMENT

Risk management is an integral part of the Amazon Fund management and the projects it supports. It occurs through the periodic review of the behavior of both the risks and the effects of mitigation measures. External factors that may negatively influence the execution of projects or the maintenance of the results achieved by the fund are considered risks.

The following format was defined for the Amazon Fund's risk management:

> enumeration of the risks identified based on the intervention logic represented by the Amazon Fund's general goal and its indirect effects;

> assessment of the probability of occurrence of each identified risk; and

> definition of the mitigation measures, when possible, by the Amazon Fund or other actors.

Based on the identified risks that may negatively influence the execution of the projects or the maintenance of the results achieved by the Amazon Fund, an assessment of the impacts of some of these risks was developed, indicating the severity of their consequences for the achievement of the general objective of reducing deforestation (see column "Impacts").

38 Available at: http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Independent-evaluations/Amazon-Fund-Mid-Term-Evaluation-Report-Effectiveness.pdf; http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Independent-evaluations/Amazon-Funds-Benefits-Distribuitions-Study.pdf; http://www.fundoamazonia.gov.br/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Independent-evaluations/CAR-Guide-Impacts.pdf

There was no change in the degrees of risk in the review carried out in 2021.

AMAZON FUND'S RISK MANAGEMENT		
Overall objective: Reduction of deforestation with sustainable development in the Brazilian Amazon		
Identified risk	**Response/mitigation**	**Impacts**
 Migration flows in the Amazon put pressure on the environment	The Brazilian Amazon has the highest fertility rates in the country and receives migratory flows that accompany the expansion of agricultural activities and the demand for labor for large infrastructure projects, such as hydroelectric plants and highways. The year of 2021 continued to be marked by the Covid-19 pandemic, which reduced migratory movements in the Brazilian territory, especially those of border citizens.[39] Similarly, difficulties related to the foreign market led to a reduction in the growth of more intensive industrial activities in the Amazon (mining and agricultural chains) compared to other sectors. The pressure on the environment put by all these activities is a long-term phenomenon that reinforces the need for permanent measures to combat deforestation and promote a new sustainable model of orderly occupation of the Amazon territory.[40] The Amazon Fund works toward this goal through all of the components it supports: sustainable production, monitoring and control of deforestation, land-use planning, and scientific and technological development. **The Amazon Fund continues to assess the risk as low.**	The economic recovery of the states of the Amazon, after the gradual overcoming of the pandemic, requires the continuous adoption of public policies that promote sustainable activities, allowing the organized occupation of the territory, and reducing the incentives to migrate to open new areas by clearing native forests.
 New strategies and technologies are incorporated by offenders to deforest illegally	The development of monitoring and control technologies has also been adopted by offenders when selecting territories where they illegally deforest. The trends already identified regarding the size and land categories of deforested areas were confirmed in the last year, which suggests the use of new strategies and technologies by environmental offenders. It was observed, for example, that polygons larger than one hundred hectares, responsible in 2017 for 27% of the deforested area in the Brazilian Amazon,[41] represented 37% in 2020. Regarding land categories, it is important to note that 48% of deforestation in 2020 occurred in public areas, protected areas, and indigenous lands, territories in which deforestation is largely illegal. The continuity of the process of allocating public lands in the Amazon region can have a positive impact on containing deforestation. Private areas registered in the National Rural Environmental Registry System (Sicar) accounted for 19% of deforestation. Although the implementation of the CAR is advanced in the states of the region, the stage of analysis and validation of registrations remains a bottleneck in the implementation of the Forest Code. It should be noted, on the other hand, that among the 15 states in Brazil that have already issued rules related to environmental regularization programs (PRA), six are from the Brazilian Amazon (Acre, Amazonas, Amapá, Rondônia, Pará, and Mato Grosso).[42] In 2021, it is worth mentioning the entry into operation of the "dynamized analysis" by the Brazilian Forest Service (SFB), which provides tools for automatic correction of the information registered by the owner, thus accelerating the CAR analysis and validation process. The Amazon Fund has been supporting public agencies in implementing the CAR and developing and implementing improvements in monitoring and control systems of the Amazon rainforest using satellite images (optical and radar), besides supporting environmental inspection missions. **The Amazon Fund continues to assess the risk as medium.**	Bills that provide for extension of deadlines for adherence to the CAR and the Environmental Regularization Program (PRA), in addition to proposals for changes in legislation on land regularization to make ownership proof instruments more flexible, may lead to the advance of illegal deforestation with the expectation of consolidating new areas.

39 https://portaldeimigracao.mj.gov.br/images/Obmigra_2020/Relat%C3%B3rios_Conjunturais/Informativo_Conjuntural_-_2%C2%BA_qudri_2021.pdf

40 In the period in which this report was written, the Artisanal and Small-Scale Mining Development Support Program (Pró-Mape) was instituted through Decree 10,966, of 02/11/2022, with the purpose of stimulating the development of artisanal and small-scale mining, which raises concerns about the risk of migratory pressures towards the Brazilian Amazon.

41 https://www.gov.br/mma/pt-br/assuntos/servicosambientais/controle-de-desmatamento-e-incendios-florestais/copy2_of_BALANODEATIVIDADES2020site.pdf

42 https://www.climatepolicyinitiative.org/wp-content/uploads/2021/12/Onde-Estamos-2021.pdf

Changes in the Brazilian environmental legislation reduce the forest's protection	Under Law 13.887/2019, the deadline for the registration of rural properties in the CAR was excluded, and adherence to the PRAs was guaranteed only to the owners who made the said registration until December 31, 2020. At the end of 2021, however, a bill was presented to the National Congress that intends to extend this deadline until December 31, 2023 (Bill 36/2021). In addition, Bill (PL) 2.159/2021 was approved in the Chamber of Deputies and is now under analysis in the Federal Senate,[43] which, among other changes, establishes simplified procedures or even the exemption from environmental licensing for a set of activities understood as having low impact. In this context, uncertainties remain regarding the consequences of this legislation on the advance of deforestation and the consolidation of irregularly deforested areas in the Amazon. On a positive note, the conditions of the rural credit regulations announced for the 2021/22 Harvest Plan renewed support under favorable conditions for investments aimed at promoting the environmental regularization of rural establishments (ABC environmental program) and the edition of Resolution 140/2021 of the Central Bank of Brazil, which created a specific section in the Rural Credit Manual to discipline social, environmental, and climate conditions to access rural credit.[44] **The Amazon Fund continues to assess the risk as medium.**	Uncertainties related to this legislation can negatively impact forest protection, contributing to increased deforestation in the Amazon. Should this occur, the Amazon Fund's ability to raise funds would be compromised, as well as achieving its general objective of reducing deforestation with sustainable development in the Brazilian Amazon. The reinforcement of the legislation of the Central Bank of Brazil, together with the announcement of the financial conditions announced for the 2021/22 Harvest Plan, should positively impact forest protection.
New governance and public policy priorities change the development model	The two new collegiate bodies at the federal level, established in 2019, closed last year an initial cycle of activities summarized below: i) Executive Committee for the Control of Illegal Deforestation and Recovery of Native Vegetation – Conaveg: approval of the 2020 report and review of the National Plan for the Control of Illegal Deforestation and Recovery of Native Vegetation (Planaveg) 2020-2023; and ii) National Council of the Brazilian Amazon: coordinated Law and Order Guarantee Operations (GLO) and approved the Amazon Plan 2021-2022, in which guidelines are established for actions to inspect and combat environmental and land crimes.[45] At the state level, the consolidation of the Interstate Consortium for the Sustainable Development of the Brazilian Amazon, formed in 2019 by the nine Amazonian states, deserves to be highlighted. The consortium has been playing an important role in promoting joint initiatives aimed at the sustainable development of the Brazilian Amazon and in dialogue with civil society and other spheres of government. Changes in the composition of collegiate bodies can directly affect the control of deforestation, besides impacting development actions such as those of the Amazon Fund. **The Amazon Fund continues to assess the risk as medium.**	Changes in the composition of several collegiate bodies linked to the environment sought, among other objectives, to rationalize the decision-making process by reducing the number of members of these collegiate bodies. On the other hand, the need for dialogue with civil society and other governmental spheres in the Amazon imposes on this new governance the challenge of continuing Brazil's role as an international player in the issue of climate change, advancing with the planning of actions that contribute to the implementation of the Paris Agreement and the achievement of the voluntary goals proposed by the country.

43 https://www25.senado.leg.br/web/atividade/materias/-/materia/148785

44 https://www.in.gov.br/en/web/dou/-/resolucao-bcb-n-140-de-15-de-setembro-de-2021-345119695

45 https://www.gov.br/planalto/pt-br/conheca-a-vice-presidencia/conselho-da-amazonia/plano-amazonia-20-21/plano_amazonia_2021_2022__7_.pdf

Climate change causes periods of prolonged droughts and forest fires	In 2021, the Sixth Assessment Report of the Intergovernmental Panel on Climate Change was released, dedicated to assessing the multiple impacts associated with climate change. Although it recognizes that it is still possible to achieve the goal of limiting the increase in the planet's temperature by 1.5° by the end of this century, the report points out the urgency of promoting actions to reduce GHGs and support the transition of industrial standards on a global scale.[46] The size of this challenge is attested by the confirmation of the increase in CO_2 measurement in the atmosphere in 2021, which again reached the peak of history, more than offsetting the reduction induced by the pandemic in 2020. The figures make it clear that the economic recovery after Covid-19 has not been environmentally sustainable.[47] For Brazil, these results reinforce the projections on climate change produced by the Brazilian Panel on Climate Change (PBMC), which predict the reduction of rainfall in the Amazon and the consequent increase in the intensity of the dry season and the frequency of forest fires. Likewise, the number of fires in the Amazon biome in 2021, although lower than in 2020, remains high. The Amazon Fund supports actions that contribute to achieving the goals of the Paris Agreement, such as the restoration and reforestation of 12 million hectares of forests by 2030; expansion of the systems of sustainable management of native forests; strengthening of the compliance with the Forest Code; and achievement of zero illegal deforestation in the Brazilian Amazon by 2030. **The Amazon Fund continues to assess the risk as high.**	The consequences of not achieving the goals agreed upon in the Paris Agreement may affect each biome differently. In the case of the Amazon, deforestation and prolonged droughts put the forest's natural regeneration capacity at risk and may lead to a progressive process of desertification and reduction of its functions for balancing the rainfall regime in the regions under its influence. These events pose challenges for the agricultural sector and food security and may result in the additional search for available land and, therefore, greater deforestation.

Component 1 – Sustainable production

Identified risk	Response/mitigation	Impacts
Economic slowdown hinders the development of a sustainable forest-based economy	The global economy recovered in 2021, although the effects of the pandemic are still present in the disorganization of production chains, the increase in industrial costs, and the return of inflation on a global scale. The Brazilian economy does not differ from this scenario, having registered GDP growth of 4.6%. The economies of the five regions of the country and all states grew in 2021, reflecting, in particular, the recovery of the service sector, which was the most affected by the pandemic in 2020.[48] The North region recorded the lowest annual growth rate (2.9%), but it was the region whose activity declined least in 2020. The labor market has also recovered since the first quarter of 2021, although the unemployment rate remains high (12.6%). The annual production volume of the basket of forest-based extractive products monitored by the Amazon Fund showed a 1% reduction in 2020 compared to 2019, and a 9% increase in nominal revenues obtained. The Amazon Fund has supported the structuring and expansion of forest-based production chains and the environmental sustainability of small farmers' agricultural activities. The integration of the production, distribution, and commercialization links is a decisive factor in adding value to forest-based economic activities, especially for the production carried out by populations that inhabit remote regions and have little access to public services. **The Amazon Fund continues to assess the risk as high.**	The reduction in the annual production volume of extractive products basket, partially offset by the increase in revenues from revenue, indicates the risk of weakening value chains in the region. The eventual decrease in financial and technical support operations to producers of sociobiodiversity will produce negative impacts on the income of families and the retention capacity of these local populations.

46 https://www.ipcc.ch/report/ar6/wg2/

47 https://www.iea.org/reports/global-energy-review-co2-emissions-in-2021-2

48 The Northern region of Brazil comprises seven of the nine states of the Brazilian Amazon. Information based on the Central Bank's Regional Economic Activity Index (IBCR), an indicator of GDP with regional breakdown. See: https://www.bcb.gov.br/content/publicacoes/boletimregional/202202/br202202b4p.pdf

Component 2 – Monitoring and control		
Identified risk	**Response/mitigation**	**Impacts**
Agrarian reform policy inconsistent with the environmental policy	In 2020, the Provisional Measure (MP) 910/19 lost its validity, which provided for two modifications in the criteria for land regularization of occupations on federal public lands: i) expansion from four to 15 fiscal modules[49] of the land area limit to be regularized by simple declaration of the occupant; and ii) extension of the time frame for titling occupied public lands. The content of the aforementioned MP was partially modified by Bill 2.633/2020, which is pending in the Federal Senate and may be voted on in 2022. The text of the bill preserves the current time frame and modifies for six fiscal modules the parameter of area subject to regularization by self-declaration, under conditions. In parallel, Bill 510/2021 should be voted on together, which advances on issues such as the regularization without inspection of occupations of up to 2,500 hectares, in addition to allowing the land regularization by owners of more than one rural property or applicant who has already benefited from an agrarian reform program or land regularization. The Amazon Fund has been supporting projects in its four components, which reinforces the promotion of policies to prevent, control, and combat deforestation, in addition to consolidating the sustainable use of land located in protected areas. **The Amazon Fund continues to assess the risk as medium.**	The presentation of Bill 2.633/2020, which mitigated some of the most uncertain points present in MP 910/2019, whose validity has expired, suggests a maturing of the debate on the alignment of agrarian reform policy and environmental policy in the legislative sphere. The eventual positive contribution of measures for land legalization, including agrarian reform settlements in the Amazon, must be associated with environmental regularization actions, the use of technical assistance and rural extension (Ater) tools, and the promotion of production activities for the sustainable use of the forest, without which negative impacts caused by new deforestation may occur.
Insufficient actions for the monitoring and repression of deforestation due to tax restrictions	Command, control, and inspection actions are essential to prevent the private appropriation of public lands by land grabbers who promote illegal deforestation. These actions must be accompanied by Brazil's determination as a responsible and competitive producer in the national and international trade in forest products, including wood. Although in 2021 there was a recovery of the Brazilian economy in relation to the previous year, the scenario of fiscal restriction observed in recent years continues to impose challenges to the allocation of additional resources for actions to repress deforestation and illegal burning. We can note, for example, the 3% reduction in the budget of the Ministry of the Environment (MMA) in 2021 compared to the previous year.[50] Added to this is the small number of employees allocated, to date, in the main bodies linked to the MMA. On the other hand, the National Council of the Brazilian Amazon prioritized, in 2021, the execution of Law and Order Guarantee (GLO) operations with preventive and repressive actions to combat environmental crimes in the Brazilian Amazon. For 2022, the MMA foresees the hiring of new public employees for the Brazilian Institute of Environment and Renewable Natural Resources (Ibama) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio), aiming to expand actions in the field. The importance, for the Amazon Fund, of monitoring and control actions of deforestation can be measured by the fact that half of the top ten Amazon Fund supported projects (in value) was dedicated to satellite environmental monitoring projects and support for enforcement missions and police repression of environmental infractions and crimes. The challenge of fiscal recovery remains on the government agenda and should also reflect pressure to control spending for this and other purposes in 2022, hindering the expansion of actions and requiring prioritization efforts and new forms of inspection and monitoring by public agents. **Given the large territorial scale of the Amazon and the persistence of these fiscal restrictions, the Amazon Fund continues to assess the risk as high.**	Insufficient actions to monitor and repress deforestation represent a vacuum of the state's presence, which may lead to an increase in the occurrence of illegal activities that contribute to increased deforestation. Additionally, for the Amazon Fund, there is a risk of deterioration of the sustainability of results achieved by the supported projects.

49 The fiscal module is an agrarian unit of measurement used in Brazil, established by Law 6.746 of 1979. It is expressed in hectares and is variable, being fixed for each municipality. In the Amazon, a fiscal module is equivalent to between 55 and 110 hectares. Source: https://www.embrapa.br/codigo-florestal/area-de-reserva-legal-arl/modulo-fiscal

50 Source: portaltransparencia.gov.br/orgaos-superiores/44000?ano=2018

Component 3 – Land-use planning		
Identified risk	**Response/mitigation**	**Impacts**
Increase of demand for new lands for cultivation and pasture	The expansion of pastures and agricultural crops on a large scale represents one of the greatest factors of pressure on the demand for land in the Amazon. Regarding soybean planting, the voluntary commitment signed in 2006 by industries and major trading companies operating in the country, the "soybean moratorium," whose premise is the non-commercialization of production from areas deforested after 2008 in the Amazon biome, is of fundamental importance and has been limiting deforestation for agricultural expansion in the Amazon. In this context, it is observed that the agreements signed at COP-26 reinforced the need to direct agricultural production towards the intensive creation and more widespread use of biotechnology. It is worth mentioning the adhesion of Brazil, together with 103 other countries, to the "Pact for the Reduction of Methane Emissions" (Global Methane Pledge). The initiative involves a commitment to reduce emissions of this gas by 30% by 2030 and represents one of the most significant steps to comply with the Paris climate agreement.[51] The Amazon Fund supports projects of federal agencies such as the National Institute for Space Research (INPE), the Management and Operational Center of the Amazon Protection System (Censipam), and Ibama for the performance of monitoring and environmental surveillance actions, projects of sustainable production activities, and projects for the promotion of environmental regularization, like the support to the CAR. **The Amazon Fund continues to assess the risk as high.**	Real estate speculation and increased pressure for new land for cultivation and pasture, associated with the non-use of already open areas, are the main economic vector of deforestation. The delay in adopting intensive practices based on sustainable technologies facilitates the opening and consolidation of new deforestation fronts in the Amazon.

Component 4 – Science, innovation and economic tools		
Identified risk	**Response/mitigation**	**Impacts**
Qualified technical staff and researchers leaving the region	The main indicators associated with the training of professionals and the intensity of research, development, and innovation (RD&I) activities show that the Amazon remains behind other regions of the country. The regional information from the Coordination for the Improvement of Personnel (Capes) for 2020 reveals that in the states of the Brazilian Amazon are located 9.8% of postgraduate programs and only 5.7% of postgraduate scholarships in the country.[52] In both cases, these shares are lower than the representativeness of the region's population in Brazil. Regional imbalances associated with the development of science, technology and innovation (TC&I) have been expanded in the last ten years, a period in which the National Council for Scientific and Technological Development (CNPq) and Capes have suffered budget cuts of approximately 51% of the resources dedicated to research and development (R&D). The institutions located in the Center-South of Brazil were less affected, as they concentrate most of the excellence programs, according to Capes' evaluation. In the Amazon, where many postgraduate courses have been created recently and, therefore, are not yet consolidated, programs tend to suffer more cuts. Last year, the approval of Complementary Law 177/202[53] made the resources of the National Fund for Scientific and Technological Development (FNDCT), responsible for the largest source of funds for science in Brazil, non-contingent. This measure is estimated to produce positive results over time, both in the volumes contributed and in the regional distribution most favorable to the R&D environment in the states of the Amazon. Until the new legislation takes effect, there remains a lack of incentives for development and training of new professionals in the region. The Amazon Fund supports the local scientific and technological development and the permanent residence of researchers, by promoting projects that carry out specific thematic research, which includes, among other activities, the construction and equipping of state-of-the-art laboratories and the granting of scholarships. **The Amazon Fund continues to assess the risk as medium.**	The continuing low investment scenario in ST&I in the Amazon limits the production and transfer of knowledge and technologies that can contribute to the recovery, conservation and sustainable use of the forest. In the medium term, the impacts of such deficiency result in the reduction of value added to the socio-biodiversity chains and the perpetuation of unsustainable economic practices. For the Amazon Fund, additionally, low levels of research and innovation negatively impacts the supply of qualified human resources for implementing ST&I projects and producing information and statistics necessary for the qualified design of public policies for the region.

51 https://unfccc.int/news/world-leaders-kick-start-accelerated-climate-action-at-cop26

52 https://geocapes.capes.gov.br/geocapes/

53 http://www.planalto.gov.br/ccivil_03/leis/lcp/Lcp177.htm

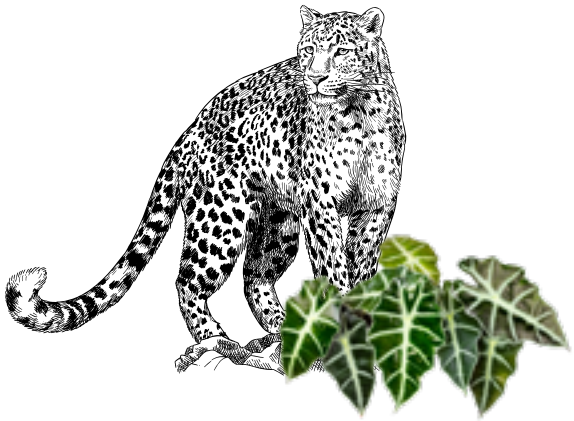
Regarding the cross-cutting risks related to unintended consequences for women or gender equality, human rights and anti-corruption, we inform that the guidelines and principles for a socially and environmentally responsible action of BNDES are set out in the Corporate Policy of Social and Environmental Responsibility (PRSA), which has, as its principle of action, the respect for human rights, gender equality, and the appreciation of diversity. The most recent version of the PRSA was approved in 2019 by its Board of Directors.[54]

The commitment to ethics is part of the BNDES statement of values and is expressed in its Corporate Integrity Policy. Approved in 2020, it establishes guidelines and attributions necessary to strengthen integrity, aiming to prevent, detect, and remedy cases of corruption, deviations, fraud, irregularities or other unlawful acts committed against the BNDES System or against third parties, in the country and abroad, in accordance with applicable Brazilian and foreign laws.

The BNDES adopts a set of practices related to this theme, such as the verification, during the registration analysis of the organizations requesting financial support, of the existence of acts, on the part of the applicants, that evidence the practice of discrimination of race or gender, child or slave labor, crime against the environment or that characterize moral or sexual harassment – all of which prevent the concession of financial support.

It should be noted that in 2020 – the year of the most recent BNDES annual report (in English), available at the time of the preparation of this report[55] – there was no record of losses arising from fraud or cases of corruption. More detailed information on this subject can be found in the aforementioned report, including the governance of BNDES, its internal audit, the Bank's ethics committee, the corporate integrity policy of the BNDES System, the Anti-Money Laundering and Terrorism Financing Policy, and the internal correction systems, composed of the internal affairs department and the investigative procedures committees, among other internal organizational structures.

Finally, BNDES adopts the practice of conducting an integrity investigation before the election, appointment or hiring of external advisors and members of statutory bodies.



54 https://www.bndes.gov.br/wps/portal/site/home/desenvolvimento-sustentavel/o-que-nos-orienta/prsa-e-sua-implementacao

55 https://web.bndes.gov.br/bib/jspui/bitstream/1408/21121/3/PR_BNDES_ANNUAL_REPORT_2020_BD.pdf

CONCLUDED PROJECTS

Concluded projects are those that: (i) performed the planned activities; (ii) had their accountability approved; and (iii) carried out an evaluation of their results.

GREENER RONDÔNIA

PROJECT MANAGEMENT

State of Rondônia, with the Military Fire Department of the State of Rondônia (CBMRO) as executor

TERRITORIAL SCOPE

State of Rondônia, with emphasis on the area of reach of the Operations Base installed in the capital Porto Velho and the four largest operational units of the firefighters, located in the municipalities of Ji-Paraná, Guajará-Mirim, Cacoal, and Vilhena, in addition to preservation and environmental protection areas, with emphasis on the national parks of Pacaás and Serra da Cutia

BENEFICIARIES

Population of the state of Rondônia, especially in the region covered by the project

OBJECTIVE

Support actions to monitor, prevent, and combat deforestation resulting from forest fires and unauthorized burn-offs in the state of Rondônia through training and acquisition of materials and equipment to instrumentalize CBMRO's Land Operations Base and Air Operations Group in Porto Velho and four operational units located in other municipalities in the state

TOTAL AMOUNT OF THE PROJECT

R$ 17,357,458.36
US$ 8,575,395.67

AMOUNT OF AMAZON FUND SUPPORT

R$ 15,040,500.00
US$ 7,430,709.95

EXECUTION PERIOD

2nd quarter of 2013 to the 3rd quarter of 2021

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
9.11.2012	12.21.2012	R$ 15,040,500.00 US$ 7,430,709.95	100%

Context

The state of Rondônia is located in the western part of the Northern region of Brazil and occupies an area of 237.59 thousand km², in which 52 municipalities are distributed. According to data from the 2010 Demographic Census of the Brazilian Institute of Geography and Statistics (IBGE), the estimated population of the state is 1.56 million, with a population density of 6.58 inhabitants/km².

In 2018, its Gross Domestic Product (GDP) was R$ 44.9 billion, corresponding to 0.6% of the national GDP and 12.4% of the regional GDP. The composition of the state's GDP indicates greater participation of the service sector, leveraged by trade, followed by agricultural and industrial activities (mainly food, meat packing industry, and mining).

The occupation process of Rondônia resulted from the incentives to replace the forest with various forms of cultivation and livestock. The annual deforestation rate in the state increased until 2004, when it reached 3,858 km². From then on, a sharp decrease was observed in the rates until 2010, when the minimum amount of 435 km² was registered. However, it has been in an upward trend since 2011, reaching 1,273 km² in 2020.

In the Amazon, fire is one of the most used instruments in rural production activities due to the culture of cut-burning for cleaning the land and transforming the forest into pasture. Although the use of controlled fire sometimes fulfills roles in some ecosystems, forest fires and burn-offs produce greenhouse gas emissions (GHG), impact soil fertility, destroy biodiversity, weaken ecosystems, destroy transmission lines, worsen air quality, increase the risk of road accidents, and limit air traffic, among other aspects.

The project

The project of the Military Fire Department of the State of Rondônia (CBMRO) is part of the state strategy to prevent forest fires and unauthorized burn-offs and aimed to support actions to monitor, prevent, and combat deforestation resulting from forest fires and unauthorized burn-offs in the state in order to contribute to reducing GHG emissions.

To reach its goals, the project focused its activities on the instrumentalization of the CBMRO´s Air and Ground Operations Base in Porto Velho and four operational units located in the municipalities of Ji-Paraná, Guajará-Mirim, Cacoal, and Vilhena through the acquisition of aircraft, vehicles, equipment, and communication and personal protection kits.

The coordinated actions from the CBMRO´s Air and Ground Operations Base in Porto Velho and the four aforementioned operational units extend to 14 other municipalities in Rondônia, covering a considerable part of the total area of the state.

The project also supported training CBMRO´s personnel and civil servants of partner organizations in environmental management, in addition to training CBMRO pilots to operate the aircraft acquired by the project.

Intervention logic

The project is part of the "monitoring and control" component (2) of the Amazon Fund Logical Framework. Its direct effect was thus defined: "the Military Fire Department of Rondônia (CBMRO) better structured for monitoring and combating deforestation caused by forest fires and illegal burn-offs."

The occurrence of forest fires is related to the duration of the dry season and the use of fire in production activities. It is also usually a stage of the illegal deforestation process with views to land grabbing[56] when, after the removal of larger trees (and the most valuable), fire is used to open new areas for agricultural purposes.

The structuring of CBMRO to expand forest fire monitoring and firefighting actions and to train managers directly contributes to reducing the loss of vegetation cover resulting from forest fires and unauthorized burn-offs. This, in turn, contributes to the general objective of the Amazon Fund to "reduce deforestation with sustainable development in the Amazon."

Activities executed

The project was structured around two components, namely:

i) Instrumentalization of the CBMRO´s Air and Ground Operations Base in Porto Velho and CBMRO´s four other operational units in the state of Rondônia.

Within the scope of this component, an extensive list of essential equipment for the final activity of CBMRO was acquired, especially a single-engine turboprop aircraft; six light-duty trucks for quick and initial actions; five heavy-duty forest trucks; in addition to six towing tanks, an accessory that confers fire extinguishing capacity for trucks.

The Cessna Grand Caravan aircraft acquired by the project has priority use in the transportation of military firefighters in the logistics of forest firefighting, in addition to monitoring actions in support of state environmental inspection agencies. This aircraft is capable of operating on rural runways and can take up to 11 people.

Additionally, communication and location equipment, such as mobile transceivers, mobile firefighting kits, including hoses, backpack fire pumps, and complete personal protection and logistical support kits, such as 150 sets/uniforms with respective accessories, tents, flexible backpacks, and portable electric generators for up to 150 combatants, were purchased.

ii) Promote training of CBMRO´s personnel and partner organizations.

This action promoted the training of CBMRO´s personnel and partner organization in environmental management, including the participation with CBMRO´s civil servants in a postgraduate course in Environmental Sciences and training CBMRO´s pilots to operate the aircraft acquired by the project.

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

Finally, it is worth mentioning that, originally, there were plans to construct an air and land operations base at the federal public airport of Porto Velho. However, this activity is no longer necessary as the Government of the State of Rondônia made one of its hangars, located at the Governador Jorge Teixeira International Airport, in Porto Velho, available to CBMRO for an indefinite period. The resources not used to construct this base were redirected to supplement the purchase amount of the Grand Caravan aircraft.

Result and impact indicators

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

Direct effect 2.1: The Military Fire Department of Rondônia (CBMRO) better structured for monitoring and combating deforestation caused by forest fires and illegal burn-offs.

The main indicators used to monitor this objective were:

> Number of hot spots in the state of Rondônia (outcome indicator)

Target: not defined | Result achieved: 4,797 (2020)

Although the occurrence of hot spots depends on several factors in addition to those addressed in the project, it should be noted that the baseline, corresponding to the average verified in the period 2003-2012 (ten-year period prior to the approval of the project) was 9,255 hot spots in the 14 municipalities that make up the area covered by the project. In the period between 2013-2020, the verified average was reduced to 5,573 outbreaks, i.e., a decrease of approximately 40% in the number of hot spots, which indicates a sustained result in the positive evolution of this indicator.

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

Target: not defined | Result achieved: 1,457

During 2020, 1,457 forest fires and unauthorized burn-offs were combated and, in 2012 (project baseline), 831 forest fires or burn-offs were combated, which shows a 75% growth in CBMRO's combat capacity. It should be added that, based on the project with the Amazon Fund, the firefighters of the state of Rondônia have been increasing their performance and raising the level of actions to combat forest fires, as shown in Table 24:

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

Baseline	2013	2014	2015	2016	2017	2018	2019	2020
831	890	1,337	1,395	1,265	1,110	1,083	1,316	1,457

Source: BNDES based on information received from CBMRO.

> Number of pilots effectively trained using the knowledge acquired (outcome indicator)

  Target: 6 | Result achieved: 5

> Number of CBMRO´s civil servants and partner organizations trained in environmental management (output indicator)

  Target: not defined | Result achieved: 134

The training actions involved 104 civil servants of partner organizations and 30 civil servants of CMBRO´s staff in environmental management, including the training of three CBMRO military personnel in a postgraduate course in Environmental Law at Universidade Federal do Paraná.

Institutional and administrative aspects

Regarding institutional and administrative aspects, CBMRO reported that the greatest legacy of the project was to expand the capacity of the corporation in conjunction with other governmental agencies. The establishment of partnerships during the execution of the project took place through technical cooperation agreements with several institutions in order to carry out activities in firefighting operations through the implementation of forest fire prevention and firefighting brigades.

Such partnerships are usually mobilized each year on the occasion of the launch of the Forest Fire Season Operations Plan (Potif), in which joint action strategies are defined in seasonal periods in which there is a higher occurrence of burn-offs and forest fires.

At the municipal and state levels, cooperation agreements were signed with the State Secretariat for the Environment and Sustainable Development of Porto Velho (Sema) and the State Secretariat for Environmental Development (Sedam). At the federal level, the agreements were signed between the Brazilian Institute of Environment and Natural Resources (Ibama) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio), the latter responsible for managing federal protected areas (PA).

According to CBMRO, the integration of efforts allowed results to be achieved more efficiently since it reduced the costs necessary to implement firefighting actions.

Risks and lessons learned

Generally speaking, it can be said that the "Greener Rondônia" project executed the planned activities satisfactorily, having achieved good results. The "number of forest fires or illegal burn-offs combated directly by CBMRO" indicator saw a favorable evolution throughout the project, as well as the training action of managers.

As for the risks and lessons learned, the complexity and delay in the bidding processes of firefighting kits were mentioned, keeping in mind that the bidding process occurs centrally in the state administration. A positive lesson was the flexibility in project management, which allowed the change of the supplier and the equipment with a higher unit price, related to the acquisition of the aircraft, which resulted in operational gains.

Finally, it should be noted that the specific characteristics of the Amazon, with a large territorial extension and areas of difficult access, make the work of firefighters riskier and more complex, requiring different strategies in relation to fire.

The presentation of these diverse strategies and the comparison of the positive impacts observed in four other projects similar to the "Greener Rondônia" project, previously supported by the Amazon Fund, can be found in the "Ex-Post Effectiveness Assessment Report of Fighting Forest Fires and Unauthorized Burn-off Projects."[57]

Sustainability of results

In an assessment carried out in 2020, CBMRO reported that firefighting, personal protective equipment (PPE), and vehicles obtained in 2013 and 2014 continue to be used. The acquired aircraft, given its multifunctionality, was cited as one of the greatest legacies of the project for the future, achieving not only the general objective but also contributing directly to society since it monitors, inspects, and transports servers, brigade members, and equipment throughout the year.

In the long term, the sustainability of the results achieved with support from the Amazon Fund, given the nature of this project, depends mainly on the budgetary conditions of the state of Rondônia, which is responsible for maintaining the main equipment acquired within the scope of the project, as well as providing the funding resources of CBMRO.

It should be mentioned that the training and qualifications of public civil servants, carried out as a result of the project, tend to produce lasting and increased effects, if we consider that the diffusion of knowledge that naturally occurs in organizations does not depend on additional public funds.

Finally, despite the progress already made with support from the Amazon Fund, it is understood that it remains to further expand the response capacity of CBMRO, so that it is structured to verify the nature of the hot spots pointed out by the monitoring systems and is adequately equipped, with human and material resources, to combat all identified forest fires and unauthorized burn-offs.

57 Available at: https://amz.bndes.net/export/sites/default/en/.galleries/documentos/monitoring-evaluation/Independent-evaluations/CBM-Effectiveness-Evaluation-Report.pdf.

MATERIALIZE

PROJECT MANAGEMENT

Association of Small Agro-farmers of the Reca Project

TERRITORIAL SCOPE

The Ponta do Rio Abunã – municipalities of Porto Velho (RO) and Acrelândia (AC)

BENEFICIARIES

Agro-extractionist families associated with conglomerate entities and beneficiaries of the investments in fruit processing plants

OBJECTIVE

Strengthen the production chain of cupuaçu, açaí, vegetable oils, and peach palm through the implementation of agroforestry systems (SAF), the expansion and modernization of the productive capacity of the pulp processing units, and the restructuring of a plant oil processing unit and a nut and seed storage shed in the traditional communities of Ponta do Abunã in order to constitute a sustainable economic alternative to deforestation

TOTAL AMOUNT OF THE PROJECT

R$ 7,126,393.21
US$ 2,675,268.87

AMOUNT OF AMAZON FUND SUPPORT

R$ 6,422,748.00
US$ 2,411,118.40

EXECUTION PERIOD

2nd quarter of 2015 to the 4th quarter of 2020

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
10.14.2014	1.19.2015	R$ 6,422,748.00 US$ 2,411,118.40	100%

Context

The scope of the "Concretizar (Materialize)" project is an area located on the triple border between the states of Acre, Amazonas, and Rondônia, a region known as Ponta do Rio Abunã. There are 25 projects for agrarian reform settlements established in this region, totaling more than 6,231 km² occupied by almost nine thousand families of settled farmers. It is an area of agrarian conflict, with serious social and environmental issues. The Association of Small Agro-farmers of the Reca Project has been operating in the region since 1989 as a pioneer in the experience of sustainable use of the forest in Brazil and serving as a model for several interested parties in the implementation of agroforestry systems (SAF).

The project

The project was selected through the Public Call for Sustainable Productive Projects, within the scope of the Amazon Fund, intended to support "aggregating" projects, which were managed by one entity and composed of sub-projects from other entities. The four conglomerate entities, responsible for the execution of the project's actions, were Associação Baixa Verde (ABV), the Produtores Rurais do Município de Acrelândia (Aspromacre), Association of Small Agro-farmers of the Reca Project (Associação RECA), and Cooperativa Agropecuária e Florestal of the RECA Project (Cooper-Reca).[58]

The project aimed at deploying 300 ha of SAF in 135 family units of the members. Furthermore, the following transversal actions of general scope were carried out for all aggregated entities: a) expansion and modernization of the productive capacity of the fruit processing units, especially cupuaçu and açaí; b) reconstruction of the oil and seed processing unit and the drying and storage structures of nuts and other in natura and processed products; c) institutional strengthening; and d) technical assistance and rural extension (Ater). Through cross-cutting actions, the project estimated to benefit other 435 families in the region, providing them with the opportunity to process their production at the Reca facilities.

Intervention logic

The project is part of the "Sustainable Production" component (1) of the Amazon Fund Logical Framework. Its direct effects were defined as follows: 1.2 "agroforestry and biodiversity product chains with expanded added value"; 1.3 "technical capacity of small agro-extractionists expanded for the implementation of SAF and in good practices of production and storage of products of socio-biodiversity and community leaders in project management, participatory governance and marketing strategies"; and 1.4 "deforested and degraded areas recovered through agroforestry systems (SAF) and used for economic purposes and ecological conservation."

58 Associação RECA appears in the project as a conglomerating and conglomerated entity. This is due to the fact that during the analysis phase, there was the withdrawal of two previously selected entities. Since the Associação Reca has a significant number of associated families and the basic activity of all these families is the cultivation of SAF, its inclusion was proposed, as well as that of the Cooperative linked to it, as executing entities of SAFs.

In addition to promoting the expansion of the area with vegetation cover in the Amazon, recovery of deforested areas through SAF provides income alternatives for local populations by integrating the simultaneous cultivation of agricultural crops and forest species. Additionally, the possibility of local processing of the species allows to increase the added value and increase the generation of local income. Such activities directly contribute to the general objective of the Amazon Fund to "reduce deforestation with sustainable development in the Brazilian Amazon."

Activities executed

Five Ater technicians were hired, aiming at the implementation of 300 ha of SAFs. The management of activities involved the acquisition of inputs and services for the four agglutinated entities, monitoring the implementation, and maintenance of plantations. As a result of this joint effort, 339,149 seedlings of 38 different species were planted, which allowed 115 combinations of inter-cropped varieties. The 11 most relevant economic combinations prevailed in the project, such as peach palm, cupuaçu, açaí, andiroba, copaíba, and cumaru, all processed in the Reca units. The proper execution of these activities required the performance of 1,059 technical visits to 126 properties, covering a total area of 7,796 ha.

In order to expand and modernize the fruit processing units, two production lines were concentrated in the same place: one for the processing of cupuaçu (and other fruits) and another for açaí. The new unit that was built, with a total area of 1,296 m^2, was equipped with machines and equipment designed to process up to 15 tons of pulp per day. The installed storage structure, with 543 m^2, comprises a cold chamber and a freezing tunnel, a stock area of in natura and processed products and a drying structure. The latter two also serve the plant and seed oil processing unit.

The following were also implemented: (i) a water distribution and supply system, scaled to meet production peaks in the fruit processing unit; (ii) a wastewater collection system in industrial units coupled to a wastewater treatment plant (ETE); (iii) a rainwater use system for water catchment; and (iv) a heart of palm cooking water recirculation system.

Finally, equipment was purchased to upgrade the analysis laboratory located in the fruit processing unit. The modernization of the unit was considered necessary for the proper operation of the new structure.

It should be mentioned that a fire in 2015, at the beginning of the project execution period, destroyed part of the Cooperativa Reca facilities. For this reason it was necessary to supplement resources to allow the reconstruction of the oil and seed processing unit and the drying and storage structures for nuts and other in natura and processed products.

These investments were incorporated into the activities carried out, resulting in a new production unit with the capacity to process 100 kg of raw material per hour in an area of 504 m^2. Due to this incident, the new investments comprised items related to safety, fire prevention, and firefighting systems, including the installation of fire hydrants, extinguishers, and alarms both in the old and new facilities. A camera

monitoring system was installed in strategic surveillance places, as well as a monitoring panel for the movement in the factories. In addition, 30 people, including associates and employees, were trained to compose a volunteer team of brigade members.

The institutional strengthening of the aggregated entities included investments in the physical infrastructure of the respective headquarters and in the training actions aimed at the productive activities. The physical space for meetings and community events represented by Aspromacre was reformed and expanded to 132 m^2, while, for ABV, a new community center was built to hold events and meetings in an area of 192 m^2. Both were equipped with basic items such as files, refrigerators, air conditioning systems, tables, and chairs.

As for training actions, 49 events were held with the participation of 443 people (270 men and 173 women), including workshops, field days, exchanges on the implementation and management of the SAFs, lectures on good practices with experienced agro-extractionists in the region, seminars, themed events, and technical meetings.

Result and impact indicators

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

Below are the results of the main indicators agreed to monitor the expected direct effects.

Direct effect 1.2 - Chains of agroforestry products and biodiversity with expanded added value.

> Revenue obtained by Cooper-Reca with the economic activities of sustainable use supported by the project, broken down by product (outcome indicator)

  Target: Vegetable oils R$ 536,000 | Result achieved: R$ 1.5 million

  Target: Cupuaçu R$ 2.7 million | Result achieved: R$ 1.3 million

  Target: Açai R$ 1.8 million | Result achieved: R$ 632,000

  Target: Peach palm R$ 887,000 | Result achieved: R$ 341,000

  Target: Brazil nut not defined | Result achieved: R$ 589,000

The aggregate results of the project reveal revenues three times higher than the target established for vegetable oils. For the other products, the results are at levels below the established goals. However, considering all the products supported by the project, a growth of more than 40% was obtained in its revenue in relation to the beginning of the project (baseline). It should be noted that the project's aggregate results refer to the period ended in 2018.

> Number of storage structures (cold room and freezing tunnel) of in natura and processed products deployed (output indicator)

  Target: 3 | Result achieved: 3

> Number of processing structures reformed or expanded (output indicator)

  Target: 3 | Result achieved: 2

Throughout the execution of the project, Reca concluded that it would be possible to optimize the investment by maintaining the cupuaçu and açaí processing lines in the same unit. Thus, two processing units were implemented (one of fruits and the other of oils) with an installed capacity higher than the three units originally foreseen in the goal.

Direct effect 1.3 - Technical capacity of small agroextractivists expanded for the implementation of SAFs and in good practices for the production and storage of products of socio-biodiversity and community leaders in project management, participatory governance, and marketing strategies.

> Number of individuals trained for the implementation of SAFs and the adoption of good practices for the production and storage of socio-biodiversity products specified by gender (output indicator)

  Target: 120 men and 50 women | Results achieved: 353 men and 90 women

> Number of leaders trained in project management, participatory governance, and marketing strategies specified by gender (output indicator)

  Target: 35 men and 15 women | Results achieved: 74 men and 44 women

Direct effect 1.4 - Deforested and degraded areas recovered through SAFs and used for economic and ecological conservation purposes.

> SAF area deployed (output indicator)

  Target: 300 ha | Result achieved: 315.2 ha

> Area of forest directly managed as a result of the project (outcome indicator)

  Target: 3,230 ha | Result achieved: 6,867 ha

Table 25 shows the rate of deforestation in the last six years in the two municipalities where the project activities are concentrated, as well as the total deforested area in relation to the respective total area. In the case of the municipality of Acrelândia, it can be observed that the average annual deforestation during the project execution period (2015-2019) was 4% higher than the rate verified in the base year (2014). The same comparison for the municipality of Porto Velho reveals an increase of 57%, which reinforces the relevance of projects aimed at the protection and sustainable use of the forest, combined with the permanent involvement of communities and local representative entities. It should be noted that Porto Velho is one of the largest municipalities in Brazil in territorial area and one of the most populous in the Amazon.

TABLE 25 | DEFORESTATION EVOLUTION IN THE LAST SIX YEARS IN THE TWO MUNICIPALITIES WHERE THE PROJECT ACTIVITIES ARE CONCENTRATED

	Area (km²)	Total deforested (km²)	2019	2018	2017	2016	2015	2014
Porto Velho (RO)	34,631	10,617.9 (30.7%)	419.0	388.8	353.4	309.0	289.2	224.9
Acrelândia (AC)	1,880	1,227.3 (65.3%)	20.4	23.8	6.1	24.5	15.2	17.3

Source: Preparation based on Prodes/Inpe data.
Notes: (amounts in parentheses = % of total area)

Institutional and administrative aspects

In general, the project was properly executed and achieved the main targets established. Among the aspects that contributed to this result, we can highlight the history of Reca and Cooper-Reca with the production in SAFs, which favored the consolidation of the product value chain. Through partnerships with the Brazilian Agricultural Research Corporation (Embrapa) in Acre and Rondônia, Reca has sought to map the soil profiles of the region and research the potential of other products, such as "cupulate," and the best use of products already utilized, such as peach palm. Particularly in relation to the design of the project, the role played by Ater professionals in the technical support to producers stands out as an important element for the achievement of results and their sustainability. Other relevant partnerships under the project were established with the Federal University of Rondônia (Unir-RO) for agroforestry residency actions and with the Executive Commission of the Cocoa Farming Plan of Pará (Ceplac-PA) for the transfer of improvement technology for seedling production.

Reca´s institutional maturity was very important in supporting ABV and Aspromacre, attesting to the relevance of the Amazon Fund's support modality through aggregating entities. Physical investments (construction of the respective headquarters and acquisition of equipment) and management training actions in these two entities, by providing them with material conditions more appropriate for the performance of their activities, were also decisive in the transfer of knowledge and experience that will enable them to future investment cycles.[59]

Finally, it should be noted that this project stands out positively for its broader view of the value chain of agroforestry products, with a significant part of the investments made in the processing stages, complementing the activities of planting agroforestry systems.

Risks and lessons learned

Two events provided a lesson in the importance of preserving some flexibility for the adjustment of the project's implementation strategy throughout its execution. The first was due to the fire that occurred in June 2015, which led to the total loss of the oil

59 A video about the project and, in particular, about the benefits of SAF training for the members of the executing entities is available at: http://www.fundoamazonia.gov.br/pt/projeto/Materialize/#iframe-1.

and seed processing unit and required the request for an amendment to the project. Its approval led to changes in the physical and financial execution of the project, at the same time that it motivated the implementation of safety, prevention, and firefighting systems in all production units, also resulting in the training of thirty employees and associates for the formation of a voluntary brigade.

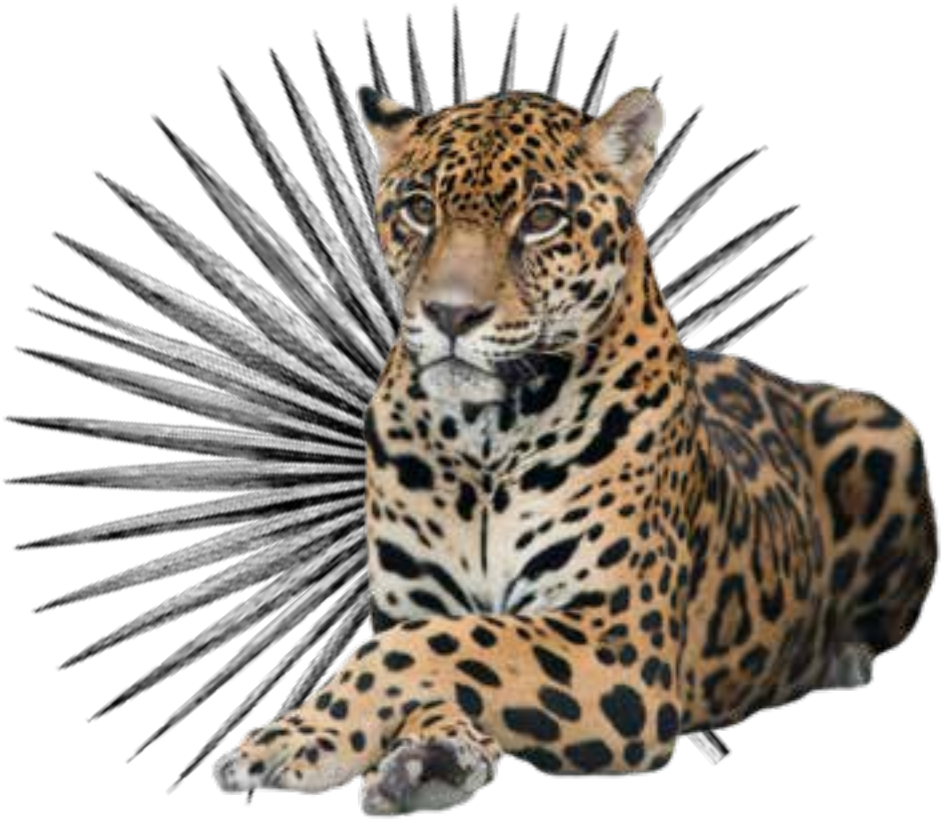
In the other case, an opportunity for optimization was identified in the fruit processing units which, after approval of an amendment, alerted the initial configuration of the project to benefit greater production capacity.

Sustainability of results

Reca´s trajectory, based on the promotion of Amazonian socio-biodiversity and on the productive organization of community-based family production, has been built on partnerships and commercialization strategies that value its own brand. In this project, Reca's nearly forty years of experience was shared with partner entities that joined the cooperative model and, as such, contributed to the sustainability of the results achieved.

Most of the actions supported were focused on sustainable production and income generation for local populations. This contributes to the results achieved being sustained over time and even expanded in the most successful cases.

However, it is important to remember that the persistent impacts of Covid-19 and the economic uncertainties associated with it pose additional challenges to the sustainability of the results of this and other projects.



VALUE CHAINS OF NONTIMBER FOREST PRODUCTS

PROJECT MANAGEMENT
SOS Amazon Association

TERRITORIAL SCOPE
Six municipalities in the state of Acre: Cruzeiro do Sul, Mâncio Lima, Rodrigues Alves, Porto Walter, Tarauacá, and Feijó; and four municipalities in the state of Amazonas: Pauini, Boca do Acre, Lábrea, and Silves

BENEFICIARIES
Family farmers, extractivists, riverside, and indigenous people

OBJECTIVE
Disseminate and support entrepreneurial initiatives in nine agglutinated institutions with a view to generating jobs and income through the sustainable development of the production chains of vegetable oils, wild cocoa and rubber

TOTAL AMOUNT OF THE PROJECT
R$ 10,202,517.05
US$ 3,927,449.29

AMOUNT OF AMAZON FUND SUPPORT
R$ 9,938,777.00
US$ 3,825,922.81

EXECUTION PERIOD
3rd quarter of 2015 to the 4th quarter of 2021

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
1.27.2015	5.13.2015	R$ 9,938,777.00 US$ 3,825,922.81	100%

Context

The municipalities of the Juruá river region in Acre and southern Amazonas form a corridor with similar forest resources (wild cocoa, oilseeds, and rubber), in an area of approximately 206 thousand km². The opportunity to facilitate the exchange of experiences in these three production chains was identified by SOS Amazon, an organization created in 1988 with the mission of promoting the conservation of biodiversity and the growth of environmental awareness in the Amazon.

The project

The project was selected through the Public Call for Sustainable Productive Projects, in 2012, within the scope of the Amazon Fund. The public call was intended to select projects in the "aggregating" modality, i.e., enterprises managed by an institution ("aggregated") and composed of sub-projects from other institutions ("executors" or "aggregated").

SOS Amazon, selected as an aggregating institution, mobilized nine aggregated institutions to support sustainable production activities in the vegetable oil, wild cocoa, and rubber production chains in six municipalities in the state of Acre and four in the state of Amazonas.

In addition to physical investments in sustainable production units, the project supported technical assistance and rural and forestry extension for the aggregated and their associates, the certification of products and enterprises, and the development of new markets and commercial partnerships.

Intervention logic

The project is part of the "Sustainable Production" component (1) of the Amazon Fund Logical Framework. Its direct effects were defined as follows: (1.1) extractive production of cocoa, rubber, and oilseeds structured in nine community organizations; (1.2) cocoa, rubber, and oilseed chains with expanded added value in nine community organizations; and (1.3) expanded managerial and technical capacities for extractive production and processing cocoa, rubber, and oilseeds and the implementation of agroforestry systems.

The project's activities contributed to strengthen the region's socio-biodiversity product chains. The supported actions contributed to enhance the value of the standing forest by promoting the generation of income for local populations with environmental sustainability, directly contributing to the general objective of the Amazon Fund to "reduce deforestation with sustainable development in the Brazilian Amazon."

Activities executed

The activities were distributed in a set of actions transversal to the nine aggregated institutions, in addition to a block of specific actions for each of them.

With regard to the Technical Assistance and Rural and Forestry Extension (Aterf) activities, during the project there were about 3,800 technical visits to the nine aggregated organizations and producers, with a focus on good management practices, processing, storage, and transport of products from the native cocoa, oilseed (murumuru, buriti, cocão, açaí and copaíba), rubber chains as well as in the implementation, management, and mapping of SAFs.

SAF units were installed in the dimensions between 0.5 ha and 1.0 ha, benefiting 177 families in a total area of 121 ha. In addition, 89 thousand seedlings were produced in community nurseries. The main planted species were açai, cocoa, buruti, andiroba, cupuaçu, soursop, bacaba, mahogany, copaíba, cajarana, acerola, avocado, and citrus.

The project also supported the elaboration of management plans for non-timber activities in six organizations: Coopercintra, Coopfrutos, Coapex, Pushuã, Caet, and Cooperafe. The activities included the use of information from forest inventories, the description and location of family forest management units, the productivity estimate of the managed areas, the list of managers included in the survey, the characterization of the target species of the plans, and, finally, the recommendations for good management practices. Over 10,500 hectares of forest were inventoried and 31,354 individuals from eight forest species, especially the rubber tree, were mapped.

As for the actions related to the certification of the products, the organizations able to receive organic certification for the European and North American markets were identified and the Organic Certification and Forest Garden Products (FGP) seal was applied.[60] Visits were made to the family units, training, a good handling and processing practices workshop was given, as well as a specific workshop on organic and extractive certification and a fair market for the representatives of the nine organizations.

All activities had technical assistance from a company specialized in the audit and certification of cooperatives and their products. Not all aggregated entities were considered fit to receive certification at the time the project was executed and four of them were audited and obtained certification of compliance with the rules of organic production of wild cocoa, buriti, andiroba, tucumã, patauá, açai, breu, cumaru, pau-rosa, and murumuru.

In parallel to the certification activities, two foreign market studies were carried out, one of them aimed at marketing opportunities for vegetable oils, soaps made using Amazonian oils and FDL rubber,[61] in four European countries (Germany, France, England, and Italy). The second study aimed to explore the market for fine and specialty cocoa in the United States. The work included defining product quality standards, preparing processing manuals, and sending samples to previously identified customers.

In the component focused on the organizational strengthening of the aggregated entities and the value chain support network, annual workshops were given for

60 The Forest Garden Products (FGP) certification was created in 1987 and, since 2014, has been part of the family of certification standards recognized by the International Federation of Organic Agriculture Movements (IFOAM). Available at: http://www.analogforestry.org/wpsite/wp-content/uploads/2014/10/FGP-A4-version-baja.pdf and https://www.ifoam.bio/our-work/how/standards-certification.

61 Liquid smoking sheet is an innovative technique that gives greater value to rubber in its production inside the forest, replacing the traditional drying processes.

a broader audience (communities, collectors, etc.) and specific workshops for the development of themes related to project management. In all, 63 workshops were held that trained 777 people, 38% women, 21% young people, 10% indigenous people, and 29% land reform settlers.

Also in this component, four seminars of institutional integration, assessment, and participatory planning were held, in which it was possible to jointly assess the technical and financial execution of the project.

In addition to the activities carried out in the transversal components, each of the nine aggregated organizations received resources for fixed investments and other actions specific to their needs and skills to be developed.

Some of the worth mentioning investments are: (i) implementation of a plant for extraction of the vegetable oils and fats; (ii) acquisition of equipment for an existing oil extraction plant and for use in two plants for vegetable oil and fat based soap; (iii) construction of twenty rubber processing and drying units (UPS); (iv) construction of a pre-processing unit for seeds and fruits of oilseed species; (v) construction of three centers for the production of native cocoa; (vi) acquisition of various equipment, such as fruit pulper, breaker, and rotary dryer for fruits, stainless steel tank for oil collection, 4 x 4 vehicle, aluminum boat and vessel engine, latex extraction and murumuru collection kits, hydraulic rams for nurseries, and the acquisition of almond drying barges.

Result and impact indicators

The project activities contributed to the results related to the "Sustainable Production" component (1) of the Amazon Fund Logical Framework.

Below are the results of some of the indicators agreed to monitor the expected direct effects.

Direct effect (1.1) – Extractive production of cocoa, rubber, and oilseeds structured in nine community organizations:

> Number of individuals directly benefited by the project (outcome indicator)
  Target: 1,200 | Final result: 2,200

> Number of women directly benefited by the project (outcome indicator)
  Target: 300 | Final Result: 850

> Number of indigenous people directly benefited by the project (outcome indicator)
  Target: 200 | Final Result: 140

> Number of settlers directly benefited by the project (outcome indicator)
  Target: 200 | Final Result: 645

The project had a wide territorial scope, working directly in protected areas (Purus National Forest, Arapixi Extractive Reserve, and the Japiim-Pentecoste Area of Relevant Ecological Interest), indigenous lands (IL Arara do Igarapé Humaitá and IL Camicuã), settlements, and riverine areas around protected areas (PA). The results achieved in the

above mentioned indicators presented far exceeded the agreed upon target, with the exception of the number of indigenous people benefited by the project.

> Gross revenue obtained from the sale of products of extractive origin by the nine community organizations supported (outcome indicator)

TABLE 26 | GROSS REVENUE OBTAINED FROM THE SALE OF PRODUCTS OF EXTRACTIVE ORIGIN

Baseline	Target	Result
Fine cocoa: R$ 35,750.00	50% change over baseline	Fine cocoa: R$ 219,147.50 (+ 513%)
Oilseeds: R$ 44,000.00		Oilseeds: R$ 973,720.0 (+ 2,113%)
Rubber: R$ 66.173,00		Rubber: R$ 363,289.80 (+ 449%)

Source: BNDES, based on information received from projects.

The goals of this indicator were agreed upon in the form of a percentage change over the baseline values (2014). To understand the expressiveness of the results achieved in value, the consolidated gross revenue in 2019, the last year of calculation, reached R$ 1.5 million, compared to R$ 145.9 thousand in the baseline. Revenue from sales of soap has not yet been recorded because the two organizations with investments in this chain had their projects finalized in the last months of the project execution.

> Amount received per family due to the sale of extractive products *in natura* (outcome indicator)

TABLE 27 | AMOUNT RECEIVED PER FAMILY

Baseline (R$ per sack)	Target	Result
Murumuru: R$ 20.00/sack	40% change over baseline	Murumuru: R$ 40.00/sack (+ 100%)
CVP Rubber:* R$ 5.00/kg		CVP Rubber: R$ 6.00/kg (+ 20%)
FDL Rubber: R$ 7.00/kg		FDL Rubber: R$ 10.5/kg (+ 50%)

Source: BNDES, based on information received from projects.
* CVP: Virgin Pressed Cernambi.

Direct effect (1.2) – Chains of cocoa, rubber, and oilseeds with increased added value in nine community organizations:

> Market studies carried out (output indicator)

Target: 3 | Final Result: 2

> Certification of community organizations and their products such as extractive origin, organic production, and fair market (outcome indicator)

Target: 9 | Final Result: 4

Four of the aggregated organizations underwent auditing and obtained organic certification for several products. This certification provides consumers with quality assurance, in addition to adding value to production by improving sales value.

> Established sales partnerships (outcome indicator)

Target: 9 | Final Result: 9

Actions related to the marketing strategy are fundamental to consolidate the value chains of sustainable production. Throughout the execution of the project, the aggregated organizations had the opportunity, made possible by an international partner company, to participate in BIOFACH 2018, an annual fair held in Nuremberg, Germany, considered the largest organic products fair in the world.[62]

Direct effect (1.3) Expanded managerial and technical capacities for the extractive production and processing of cocoa, rubber, and oilseeds and the implementation of agroforestry systems:

> Number of individuals trained for associations and cooperatives (output indicator)

  Target: 675 | Final Result: 777

> Number of individuals trained for associations and cooperatives effectively using the knowledge acquired (outcome indicator)

  Target: 90 | Final Result: 171

> Number of individuals participating in awareness-raising events or integrating events (output indicator)

  Target: 900 | Final Result: 2,400

The results achieved by the set of training and awareness activities, far superior to the targets, reflect the degree of commitment of the executing organizations and the visibility that the project managed to project in the routine of the families involved.

Table 28 shows the rate of deforestation in the last seven years in the states of Acre and Amazonas, with an increase in the relative participation of these two states in the total deforestation of the Brazilian Amazon. Reversal of this trajectory depends, among other factors, on the continuity of projects aimed at the protection and sustainable use of the forest, combined with actions to monitor and combat illegal deforestation.

TABLE 28 | RECENT DEVELOPMENTS IN DEFORESTATION IN THE STATES OF ACRE AND AMAZONAS

Deforestation (km²)	2014	2015	2016	2017	2018	2019	2020	2021
Acre	309	264	372	257	444	682	706	871
Amazonas	500	712	1.129	1.001	1.045	1.434	1.512	2.347
Brazilian Amazon	5,012	6,207	7,893	6,947	7,536	10,129	10,851	13,235
AC and AM total (%)	**16.1%**	**15.7%**	**19.0%**	**18.1%**	**19.8%**	**20.9%**	**20.4%**	**24.3%**

Source: http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes

62 Available at: https://www.biofach.de/en.

Institutional and administrative aspects

The SOS Amazon Association acted as an aggregating entity for nine other co-executive organizations directly benefiting from the project's support, listed below: (i) Cooperative of Natural Products of the Amazon (Copronat); (ii) Association of Rural Female Workers United for Freedom, Humanity and Love of the Nova Cintra Community (Amuralhas); (iii) Cooperative of Producers of Family Agriculture and Solidarity Economy of Nova Cintra; (iv) Cooperative of Natural Producers of the Forest (Cooperfrutos); (v) Agroextractivist Cooperative of Porto Walter (Coapex); (vi) Agroextractivist Cooperative of Mapiá and Médio Purus (Cooperar); (vii) Agroextractivist Cooperative Shawãdawa Pushuã (Casp); (viii) Agroextractivist Cooperative of Tarauacá (Caet); and (ix) Cooperative of Production and Marketing of Agroextractivist Products of Feijó (Cooperafe).

Partnerships were established with the Technology Foundation of Acre (Funtac), with the objective of providing technological support to aggregated and guidelines for good management practices, and with Sema, which made it possible to extend direct resources from other sources to aggregated, such as the Sustainable Development Program of the Inter-American Development Bank (IDB).

In partnership with Sebrae, WWF-Brazil and Universidade Federal do Acre (Ufac), a discussion group was created on the vegetable oil chain in the region and the means to strengthen it.

Risks and lessons learned

The experience of the aggregating organization is a decisive factor in the execution of projects involving partner institutions with less managerial capacity and organizational maturity. Some of the risks identified in the project design materialized throughout the execution, such as: (i) change in administrative management and in part of the executing teams and (ii) little experience of the aggregated in the management of higher value financial resources. These difficulties required closer monitoring by the SOS Amazon Association and were part of the management evolution process of the aggregated.

Sustainability of results

The actions supported were focused on sustainable production and income generation for local populations. Overcoming the goals agreed upon by the group of aggregated organizations through the project suggests that the investments were effective, which contributes to the results achieved to be sustained over time.

The results achieved by the various training actions benefited the target audience of the project, expanding their knowledge on the implementation of SAFs and sustainable management. This training tends to produce lasting and widespread effects as the SAFs consolidate as an income option for these populations.

An indicator that, although not part of the monitoring plan, is illustrative of the local mobilization induced by the project concerns the number of members/associates of the nine aggregated organizations, which increased by 59% in the period between 2015 and 2020.

Finally, it is worth mentioning the fact that one of the nine aggregated organizations is Amuralhas, an association of working women. Promoting gender equality is one of the objectives of sustainable development (SDG 5) and one of the priorities of the Amazon Fund's action, especially in sustainable production projects. In a study published on the Fund's website in 2019,[63] it was found that, by increasing their income through participation in sustainable production activities, women internalize new skills, new knowledge, rights and opportunities, which translates into strengthening the sustainability of projects.

63 Available at: http://www.amazonfund.gov.br/export/sites/default/en/.galleries/documentos/library/Giz-Gender-Study.pdf.

USING SOCIAL TECHNOLOGIES TO REDUCE DEFORESTATION

PROJECT MANAGEMENT
Interstate Agricultural Development Association (Adai)

TERRITORIAL SCOPE
Communities in the areas of influence of the hydroelectric projects in the states of Pará, Mato Grosso, Rondônia, and Tocantins

BENEFICIARIES
Riverine families and small farmers in areas of influence of hydroelectric projects

OBJECTIVE
Implement family agroecological production units, contributing to food security and income generation of riverine people and family farmers in an environmentally sustainable manner

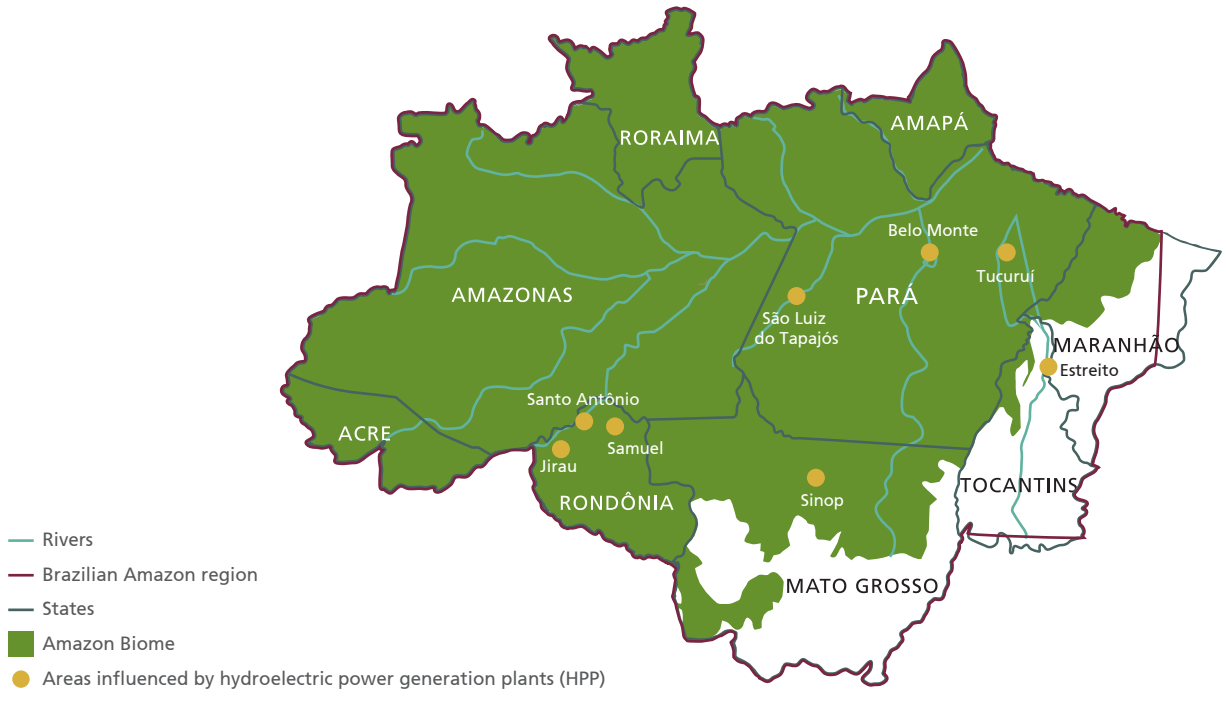
TOTAL AMOUNT OF THE PROJECT
R$ 9,157,010.25
US$ 2,808,983.81

AMOUNT OF AMAZON FUND SUPPORT
R$ 9,059,718.63
US$ 2,779,183.85

EXECUTION PERIOD
3rd quarter of 2017 to the 4th quarter of 2021

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
5.24.2017	7.31.2017	R$ 9,059,718.63 US$ 2,779,183.85	100%



Context

The Interstate Agricultural Development Association (Adai) was founded in 1993 as a non-profit entity to act in the implementation of projects in communities affected by hydroelectric power generation projects dams.

The area covered by the project comprises six regions in which resident families had their ways of life affected by the operation, construction or planning of hydroelectric plants (UHE), namely:

> Rondônia: UHE Santo Antônio, UHE Jirau and UHE Samuel, involving the municipalities of Porto Velho, Candeias do Jamari, Alto Paraíso, and Itapuã do Oeste;

> Mato Grosso: UHE Sinop, involving the municipality of Sinop;

> Tocantins: UHE Estreito, involving the municipalities of Filadélfia and Babaçulândia;

> Pará: UHE Belo Monte, involving the municipalities of Altamira, Brasil Novo, and Vitória do Xingu;

> Pará: UHE Tucuruí, involving the municipalities of Marabá and Nova Ipixuna; and

> Pará: UHE São Luiz do Tapajós, involving the municipalities of Itaituba, Trairão, and Rurópolis.[64]

The project

The objective of the project was to promote agroecological food production, aiming at food security for families and reducing pressure on natural resources. For this, the Pais method (integrated and sustainable agroecological production) was used, which involves organic agriculture integrated with the breading of small animals and uses inputs produced on the property itself in order to preserve soil quality.

The Pais method also enables the cultivation of diversified and healthier foods for consumption and commercialization and reduces dependence on external inputs, thus promoting improvement of the quality of life of family farmers. Throughout the project, 240 Pais with irrigation systems powered by a solar energy source were implemented.

Native forest species were also planted with the objective of diversifying production on a sustainable basis and reforesting degraded areas at the project's implementation sites. In addition to training for the preparation of seedlings and use of the plantation management techniques, families received technical assistance in agroecology, which also benefited awareness and environmental education.

64 The procedures to start the construction of UHE São Luiz do Tapajós were canceled by Ibama in 2016 after the decision to file during the environmental licensing phase. However, the riverine families that are in the polygon of this enterprise experience a situation of vulnerability due to other factors inherent to the local socioeconomic reality. For this reason, and regardless of any future resumption of the project, they were considered as eligible target audience for the activities of the project.

Intervention logic

The project is part of the "Sustainable Production" component (1) of the Amazon Fund Logical Framework. Its direct effects were defined as follows: (1.1) Agroecological family production developed for food security and income generation of families affected by hydroelectric projects; and (1.3) Technical capability of families affected by hydroelectric projects expanded for agroecological production and for its commercialization.

The supported actions enhanced forest conservation by promoting income generation for local populations with environmental sustainability, thus directly contributing to the general objective of the Amazon Fund to "reduce deforestation with sustainable development in the Brazilian Amazon."

Activities executed

Integrated and sustainable agroecological production kits are a social technology characterized by the use of simple techniques and gradual implementation. The low cost, standard structure is highly replicable, consisting of a central chicken coop and circular gardens in the surroundings, requiring only simple tools and materials for its installation and maintenance.

Throughout the project, 240 Pais were deployed in properties of families selected based on criteria such as expressed interest, proximity to consumer centers, number of families with a female household head (43% of total selected), and geographical dispersion (in order to generate nearby centers and minimize deployment costs).[65] Activities included acquisition of the materials to build structures under joint effort and inputs to plant vegetables, legumes, fruits, and grains.

The installation of irrigation systems is critical for the proper performance of the Pais. The 240 kits were installed bearing in mind, for each property, irrigation needs for each culture, property characteristics (such as slope and distance from water source), and solar radiation in the region. The main system is composed of a water tank of five thousand liters, two pumps (one for capturing in the water source and a second to boost the irrigation sprinklers on the crops), and two solar panels to generate energy to operate the pumps.

Installation of the Pais and irrigation kits was complemented by the production and planting of 56 thousand forest seedlings, which benefited the selected properties with the replantation of native species to the development of agroecological production. Species that offer the necessary shading to the installed gardens and that produce fruits, oils, and essences that can be sold were selected.

By relying on the transmission of knowledge and techniques of sustainable production on a small scale, the project required intensive training and monitoring actions. All teams of the local units gathered in three meetings to discuss planning, monitoring, and evaluation aspects of the project. The first meeting was held at the start of the project, focusing on the elaboration of the work plan and two more meetings throughout its execution.

65 In order to geographically concentrate the programmed actions, optimize project management, and maximize the intended results, the activities were developed in a number of municipalities slightly smaller than originally planned.

Aiming at the formation of local teams and leaders at the head of the project, a course was also promoted, divided into three 40-minute modules, on the themes associated with the implementation of the Pais, the operation and basic maintenance of solar panels, and knowledge in agroecology.

To concentrate this activity and promote greater integration of teams, the project's area of operation was divided into three major regions: (i) Mato Grosso and Rondônia; (ii) Xingu and Tapajós; and (iii) the Tocantins River Basin. In each of these regions, the three training modules were carried out, totaling nine sessions and resulting in 96 men and 71 women trained.

Additional training was given and experience shared through two meetings with multiplier farmers in each region, mobilizing 58 men and 59 women, and a visit to exchange knowledge between family farmers to multiply experiences. This last event brought together 44 men and 38 women from the three regions covered by the project.

As a broader training space, 80 field days were also held. In this activity, themes related to production, commercialization, and environmental aspects were worked on, aiming at the continuous training of 240 farmers with on-site activities but also with the possibility for neighboring families who were interested in the actions of the project to participate.

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 main indicators used to monitor this objective were:

> Estimated amount of the production of the Pais implemented by the project for self-consumption of the families (outcome indicator)

  Target: R$ 471,900 | Final Result: R$ 1.3 million (accumulated)

> Revenue obtained from commercialization of the surplus of the Pais implemented by the project (outcome indicator)

  Target: R$ 471,900 | Final Result: R$ 1.8 million (accumulated)

> Number of seedlings produced in the project (output indicator)

  Target: 24,000 | Final Result: 56,318

The production and marketing indicators far exceeded the established targets. Between 2017 and 2020, the accumulated gross income reached R$ 3.1 million, of which 57% was obtained through local sales. It is also worth mentioning the result of the production of forest seedlings, more than twice the expected target. The species selected that produce fruits and oils have the potential to increase the future income of families.

> Number of rural properties with families benefited by technical assistance actions (outcome indicator)

  Target: 240 | Final Result: 240

> Number of technical assistance visits carried out (output indicator)

  Target: 4,320 | Final Result: 5,520

> Number of individuals participating in the technical training course, broken down by gender (output indicator)

  Target: 72 | Final Result: 167 (96 men and 71 women)

> Number of individuals participating in local multiplier meetings, broken down by gender (output indicator)

  Target: 48 (24 men and 24 women) | Final Result: 117 (59 men and 58 women)

> Number of individuals effectively trained using the knowledge acquired for agro-ecological production, broken down by gender (outcome indicator)

  Target: 720 | Final Result: 1,067 (511 men and 556 women)

> Number of exchange meetings (output indicator)

  Target: 2 | Final Result: 1

The set of training activities and multiplication of experiences, often a challenge in the execution of projects with great territorial dispersion, showed very robust results in relation to the targets, except for the second meeting to exchange knowledge, canceled due to the Covid-19 pandemic.

Table 29 shows the rate of deforestation in the last seven years in the states of Pará, Mato Grosso, Rondônia, and Tocantins, which together account on average for over 70% of the total deforestation of the Brazilian Amazon in the same period. Despite the economic dynamics and various deforestation vectors in each state, the persistence of high deforestation rates in the region reinforces the need of support, among other actions, for activities aimed at the protection and sustainable use of the forest, similar to this project.

TABLE 29 | RECENT DEVELOPMENTS IN DEFORESTATION IN THE STATES OF PARÁ, MATO GROSSO, RONDÔNIA, AND TOCANTINS

Deforestation (km²)	2014	2015	2016	2017	2018	2019	2020	2021
Pará	1,887	2,153	2,992	2,433	2,744	4,172	4,899	5,257
Mato Grosso	1,075	1,601	1,489	1,561	1,490	1,702	1,779	2,263
Rondônia	684	1,030	1,376	1,243	1,316	1,257	1,273	1,681
Tocantins	50	57	58	31	25	23	25	28
Brazilian Amazon	5,012	6,207	7,893	6,947	7,536	10,129	10,851	13,235
PA, MT, RO and TO/total (%)	**73.7%**	**78.0%**	**74.9%**	**75.8%**	**74.0%**	**70.6%**	**73.5%**	**69.7%**

Source: Prodes/Inpe.

Institutional and administrative aspects

Adai has established partnerships with local associations and municipalities to carry out the project. It is worth mentioning the partnership with Província Irmã Amabile Avosani (Pama), a congregation of Franciscan Nuns located in Porto Velho (RO), which provided support for commercialization of part of the production.

For project management, a local base was structured in each of the six regions covered by the project. Investments in communication equipment made to integrate the bases were fundamental in allowing continuity of the execution of activities in the midst of the Covid-19 pandemic, since routines were impacted by the adoption of remote work.

Finally, throughout the project, promotional and guidance materials were produced. The booklets and folders contain technical guidelines for the management and maintenance of the production kits and were made available on Adai´s website or partially distributed in a printed version to the communities. Much of the material was used in the fieldwork and also served as a source of consultation during the pandemic, when face-to-face meetings were reduced.

Risks and lessons learned

When executing projects of this nature, there are previously identified risks related to the vulnerability of the socioeconomic condition of families, the lack of training in sustainable production techniques or even uncertainty regarding the documentation of properties able to receive support. An example of the difficulties faced in this project was the removal of some families from areas in which ownership of the property was questioned in the state of Tocantins which required relocation and re-installation of the production kits, without prejudice up to end of the process.

On the other hand, this same contingency represents a lesson learned since the update of the land status and registration of the properties in the Rural Environmental Registry (CAR), according to contractual requirements in the operations of the Amazon Fund, are additional benefits of the project.

The project executors reported the difficulty local environmental agencies had in issuing environmental licensing waivers and the use of water resources in small projects. This difficulty required meetings with the environmental departments to present the project and answer questions about the project.

Regarding mobilization of the families, some initial resistance was observed in the approach of concepts linked to agroecological production, in many cases due to the difficulty of understanding and implementing these new concepts. It should also be noted that the project was carried out in regions where tensions remain between the activities that promote the standing forest and those that threaten the Amazon biome.

Sustainability of results

The actions supported were focused on good safety, sustainable production, and income generation for local populations. This characteristic contributes to the results achieved being sustained over time and even expanded in the most successful cases. Overcoming the agreed upon goals in a relatively short period after execution of the project suggests that the investments and the new techniques used were well assimilated by the families.

DEMA FUND

PROJECT MANAGEMENT

Federation of Agencies for Social and Educational Assistance (Fase)

TERRITORIAL SCOPE

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

BENEFICIARIES

Traditional Amazon communities: small producers, quilombolas, and indigenous people

OBJECTIVE

Supporting low-amount socio-environmental projects through public call

TOTAL AMOUNT OF THE PROJECT

R$ 7,499,641.00
US$ 5,202,175.48

AMOUNT OF AMAZON FUND SUPPORT

R$ 6,601,699.07
US$ 4,579,312.13

EXECUTION PERIOD

3rd quarter of 2011 to the 4th quarter of 2021

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
3.15.2011	6.14.2011	R$ 6,601,699.07 US$ 4,579,312.13	100%

Context

The municipalities located around the Transamazon and BR-163 highways and in the Lower Amazon region are areas under pressure from potential deforestation vectors, such as livestock, logging, and soy.

In this context, the Dema Fund was created in 2004, the result of a partnership between the Federal Government and civil society. Resources were used to sell logs seized from illegally extracted mahogany, mainly in the region of Altamira and São Félix do Xingu (PA). Ibama, when seizing the logs, chose to donate them with charges to the Federation of Agencies for Social and Educational Assistance (Fase) so that the resources obtained from their sale could be used to compensate the region for the environmental damage suffered. Thus, the income of the Dema Fund[66] should be directed to support sustainable development projects in Pará.

Fase is a non-governmental, non-profit, charitable, educational, and social assistance organization that was founded 1961, which operates in six Brazilian states (PA, PE, ES, MT, BA, and RJ) and has its national headquarters in Rio de Janeiro.

The project

The "Dema Fund" project aimed to support, through public calls launched over three years, the selection of socio-environmental sub-projects of small value, having as beneficiaries traditional communities of the Amazon (small producers, quilombolas, and indigenous people), located in the state of Pará, focusing on the area of influence of the Transamazon and BR-163 highways and the lower Amazon region.

The sub-projects selected and supported from these public calls were framed in at least one of the following thematic areas: (i) sustainable community forest management; (ii) economic activities developed from the sustainable use of forests; (iii) conservation and sustainable use of biodiversity; and (iv) recovery of degraded areas.

The advantage of the project is to promote capillarity in the allocation of resources and the benefit to an economically vulnerable population, which is dedicated to sustainable activities related to productive chains of Amazonian socio-biodiversity.

Intervention logic

The project is part of the "Sustainable Production" component (1) of the Amazon Fund Logical Framework. Its direct effects were defined as follows: (i) economic activities of sustainable use of the forest and biodiversity identified and developed as an affirmation of the way of life of the forest peoples; (ii) chains of agroforestry products with expanded socioeconomic added value and enhancing the food and nutritional security of the forest peoples; (iii) expanded technical capacity within the organizations of the forest peoples for implementation of the agroforestry systems, forest management activities, agroextractivist production, territory management,

66 The Dema Fund is a financial fund without legal personality, represented by a bank account held by Fase. The resources linked to it are perpetually deposited in Banco da Amazônia, unavailable for withdrawals of the principal, authorizing the use of periodic income for application in sustainable development projects in western Pará.

land regularization, and processing of agroforestry products; and (iv) deforested and degraded areas recovered and used as instruments of permanence and guarantee of the territories of the forest peoples in the Amazon of Pará.

Activities executed

Within the scope of the project, seven public calls were made by Fase, between the years 2011 and 2014, to select socio-environmental sub-projects aimed at supporting small producers, quilombola communities, and indigenous communities in Xingu. In total, 112 sub-projects were supported in the total amount of R$ 3.1 million.[67]

TABLE 30 | PUBLIC CALLS LAUNCHED BY THE PROJECT

Public Calls		Sub-projects supported	
Type	**No. of Public Notices**	**Amount R$**	**Quantity**
Small producers	3	2,602,211	91
Quilombolas	3	397,519	17
Indigenous	1	75,714	4
Total	**7**	**3,075,444**	**112**

Source: BNDES, with project information.

Due to the diversity of productive activities carried out by the beneficiary families, the project supported a wide set of interventions. In the sub-projects focused on sustainable production and food security, investments in physical structures of four fruit processing plants, 21 sheds and collective spaces, nine flour houses, eight fish farming tanks, five handicraft houses, 24 chicken coops, and two community inns stand out.

In the sub-projects destined to recover degraded areas, the main actions were the deployment of 101 SAFs and the enrichment of 177 productive backyards, with the planting of 323 thousand seedlings.[68]

The project also supported the registration of small areas in CAR, which resulted in the registration of 327 properties in the region of BR-163 and in the Mesoregion of the Lower Amazon.

As part of the training activities, 24 sub-project elaboration workshops were offered, in addition to 21 management and monitoring events and four external evaluation seminars.

Result and impact indicators

The Dema Fund project activities contributed to the results related to the "Sustainable Production" component (1) of the Amazon Fund Logical Framework.

Direct effects 1.1 – Economic activities of sustainable use of the forest and biodiversity identified and developed as an affirmation of the way of life of the forest peoples;

67 To ensure greater capillarity to the project, a maximum amount of R$ 30,000 was established for each sub-project (for sub-projects directed to the quilombola and indigenous populations of Xingu, the maximum amounts were R$ 24,000 and R$ 22,000, respectively).

68 Data related to the representative sample of only 54% of the sub-projects.

and 1.2 – Chains of agroforestry products with expanded socioeconomic value and enhancing the food and nutritional security of the forest peoples.

The main indicators used to monitor these objectives were:

> Average income of families benefited by small projects with economic activities of sustainable use (outcome indicator)

  Target: not defined | Result achieved: R$ 2,000 per family

> Revenue obtained by families benefited by small projects with economic activities of sustainable use (outcome indicator)

  Target: not defined | Result achieved: R$ 3.9 million

The production of 1,031 families sampled with productive projects (of the total of 2,627 benefited families) totaled an estimated revenue of R$ 2.1 million (R$3.9 million estimated for all the supported sub-projects). The total income per beneficiary family was around R$ 2,000 during the implementation of the project and the production of the largest portion of the sub-projects was concentrated in the period 2015-2017.

> Insertion in the local market of agroforestry products resulting from small projects (outcome indicator)

  Target: not defined | Result achieved: 63% of production

On average, 63% of the production was sold and the remaining portion was used for subsistence consumption. For commercial value, we highlight the production of pulp of various fruits, such as acerola, pineapple, buriti, cupuaçu, graviola, mango, and passion fruit, which reached the volume of 120 tons by the end of the project. Twenty-seven thousand liters of açai pulp, 1,600 liters of various oils (andiroba, babassu, Brazil nut and copaíba), 92 thousand liters of cassava flour, 15 tons of Brazil nut, as well as babassu mesocarp flour, fresh fruits, vegetables, and free-range chicken were also produced.

It is worth noting that the results obtained with expansion of sustainable production had a direct impact on the food and nutritional security of families. The executors of the sub-projects also reported that the organic production valued the native products and that the supported sub-projects helped to recover varieties that were disappearing.

Direct effect 1.3 – Enhanced technical capacity within the scope of forest peoples' organizations for the deployment of agroforestry systems, forest management activities, agroextractive production, territory management, land regularization, and processing of agroforestry products.

The indicator agreed to monitor this objective was:

> Number of individuals trained in SAFs, forest management, agroextractive production, land management, land regularization, and processing of agroforestry products (output indicator)

  Target: not defined | Result achieved: 2,842

In addition to the training workshops to prepare sub-projects and monitoring, 346 events were recorded in a decentralized manner in the 112 sub-projects supported. In total, 2,842 people participated in at least one course or collective work meeting, of which 1,578 were men and 1,264 were women.

It is worth highlighting the relevance of gender in the execution of this project. Of the total of 5,448 people directly benefited in 33 municipalities in the state of Pará through the 112 sub-projects implemented with the coordination of Fase, 46% were women who play a relevant role in the management of production spaces and community coexistence made possible by the project.

Direct effect 1.4 – Deforested and degraded areas recovered and used as instruments of permanence and guarantee of the territories of the forest peoples in the Amazon of Pará.

The indicator agreed to monitor this objective was:

> Areas recovered from the "small projects" supported by the Dema Fund

Target: not defined | Result achieved: 886 ha

The systematization of the results of the project revealed that, even in initiatives whose objective was to recover degraded areas, an increase in the use of new techniques or the revival of traditional sustainable techniques was observed, including the use of vegetation cover and organic biomass to protect the soil, the production of organic feed for fish and birds, and organic gardens in the "mandala" system, adding poultry and beekeeping.

Deforestation in the state of Pará in 2011 was 3,008 km^2, while, in 2020, 5,257 km^2 were deforested. Projects that promote the valorization of the standing forest, by itself, do not have the capacity to change the dynamics of deforestation, needing to be integrated with additional environmental inspection and deforestation control actions.

Institutional and administrative aspects

The execution of the project required an effort to coordinate and articulate partnerships by Fase, responsible for executing the public calls. The organizational and governance structure of Fase/Dema Fund was fundamental to prevent the capillarity and territorial distribution of the sub-projects from making their proper management unfeasible. This was possible due to the presence of several organizations with a thematic or territorial focus in the Management Committees of the Dema Fund.

The main partner organizations were the Living, Producing, and Preserving Foundation (FVPP) and the Xingu Prelature of the Catholic Church in the area of the Transamazon/Xingu highway; the Pastoral Land Commission (CPT – Prelature of Itaituba) and the Union of Rural Workers (STTR) of Itaituba around the BR 163 highway; the Support Center for Community Action Projects (Ceapac) and the STTR of Santarém in the Lower Amazon region; the Coordination of the Associations of the Remaining Communities of Quilombos of Pará (Malungu), in performance with the Quilombola populations; and the representation of the Indigenous Pastoral of the Prelature of Itaituba and representation of the indigenous organizations of Terra do Meio and IL Baú in the relationship with indigenous populations.

This set of partner entities helped the organizations proposing the sub-projects in promoting the necessary contacts and understandings with the government institutions of the regions, such as prefectures, universities, Incra, ICMBio, Ibama, Embrapa, Technical Assistance and Rural Extension Company (Emater), and the National Indian Foundation (Funai). Along with Fase, all this articulation ensured execution of the project in a large geographical area with different socioeconomic situations and, in many cases, in the absence of adequate transport infrastructure and services.

The project benefited from cooperation with the State Secretariat for Environment and Sustainability (Semas) of Pará in the timely examination and dispensation of an environmental license for sustainable projects without the risks of environmental impacts, which was facilitated through the implementation of an internet website.

It should be noted that the Ford Foundation fulfilled a strategic role in preparing and executing this project, especially in supporting the specific Management Committees for Quilombola and indigenous populations.

Risks and lessons learned

The results of the set of supported community sub-projects indicate that the "Dema Fund" project satisfactorily implemented the planned activities and achieved good results. It is a project that reinforces the role played by local populations in the protection and sustainable use of forests as well as in the local supply of good quality food. Indigenous peoples, Quilombola (former slaves) communities, agroextractivists, and family farmers living around the forests, when encouraged to diversify their crops, implement new activities or revive ancestral practices in the sites, respond with diversified production, taking into account their interests and their specific needs.

The realization of public calls for sub-projects in indigenous areas was a great challenge, especially because the execution period of the project coincided with the construction of the Belo Monte hydroelectric plant in the Xingu region. The significant compensatory resources required from the entrepreneurs of that project discouraged the demand for sub-projects with the Dema Fund, which led the Management Committee to give up making a second public call on the subject.

Another lesson of the project is that small collective initiatives generate important changes in local communities due to the participatory approach that puts rural and forest populations and their local organizations in the spotlight. The training offered and the management techniques learned allow these community organizations to escape informality, which represents a decisive factor in the sustainability of the projects.

Sustainability of results

The project benefited from an independent external evaluation contracted by Fase and completed in 2017. In general, the sustainability of the sub-projects was evaluated as positive, based on some factors considered decisive in its execution and management: (i) the strong emphasis on strengthening the capacities of local actors and encouraging joint work between families; (ii) the high level of integration of

projects in communities, and it should be noted that one of the principles was not to approve proposals that demonstrated excessive participation of external advisors; and (iii) the significant participation of women and the appreciation of initiatives based on community and traditional knowledge and values.

On the other hand, the weaknesses existing in the communities and the already highlighted pressures of the surroundings weigh against the sustainability of the initiatives. As challenges, the need for continued technical assistance, the difficult access to electricity, and the difficulties with transportation and repair of equipment were also pointed out.

Finally, it should be noted that a second Amazon Fund support operation was concluded in 2018 to carry out new public calls for sub-projects. The new operation, which planned to allocate 60% of the contracted amount to the consolidation of the initiatives that have achieved a satisfactory result in this project, is in execution and represents an additional support to the sustainability of the implemented actions.

SUSTAINABLE BEM VIVER

PROJECT MANAGEMENT

Institute of Research and Indigenous Education (Iepé)

TERRITORIAL SCOPE

Indigenous lands (IL) Tumucumaque Park (PA and AP), Paru d'Este River (PA) and Zo'é (PA), in the municipalities of Alenquer, Almeirim, Monte Alegre, Óbidos, and Oriximiná, in Pará, and Laranjal do Jari (AP)

BENEFICIARIES

Indigenous populations and communities of the IT Tumucumaque Park, Paru d'Este, and Zo'é

OBJECTIVE

Contribute to (i) implement the Territorial and Environmental Management Plan (PGTA) of the Tumucumaque Park (AP and PA) and Rio Paru d'Este (PA) ILs; and (ii) prepare PGTA for the Zo'é (PA) IL within the scope of the National Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI)

TOTAL AMOUNT OF THE PROJECT

R$ 12,404,198.00
US$ 3,271,063.00

AMOUNT OF AMAZON FUND SUPPORT

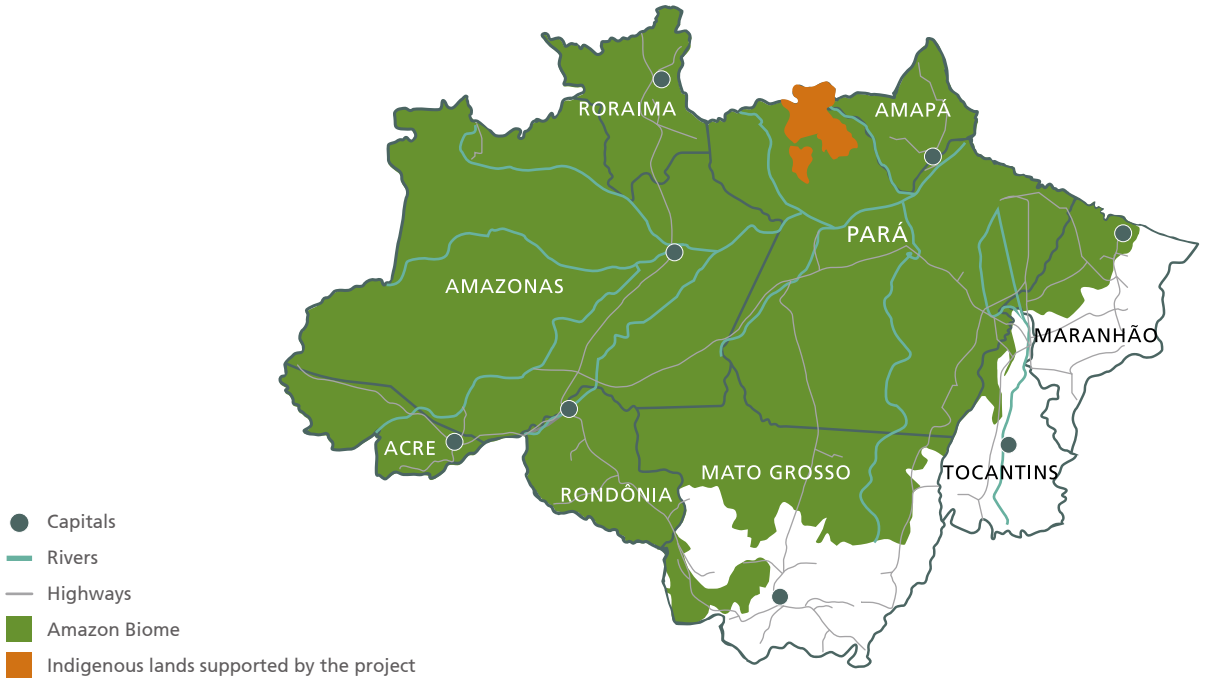
R$ 11,858,793.87
US$ 3,127,236.59

EXECUTION PERIOD

1st quarter of 2016 to the 4th quarter of 2021

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
11.19.2015	1.7.2016	R$ 11,858,793.87 US$ 3,127,236.59	100%



Context

The Territorial and Environmental Management Plan (PGTA) is an instrument of the National Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI), of a dynamic nature, designed to express the leadership, autonomy, and self-determination of indigenous peoples. The PGTA materializes the planning, agreed by the entire indigenous community involved, of the use of its territory for cultural, environmental, and economic purposes.

The institution responsible for the execution of the supported project, the Institute of Research and Indigenous Education (Iepé), is a civil association founded in 2002, which operates in the cultural strengthening and sustainable development of indigenous communities in Brazilian territory, located in the Guiana Plateau, providing specialized advice and diversified technical training to these populations.

The project

The "Sustainable Bem Viver" project comprises two components. The first of these, which refers to the implementation of the PGTA of the Tumucumaque Park and Paru d'Este River ILs, includes the following activities: territorial control and protection; management and sustainable use of natural resources; training and education on territorial and environmental management; and governance of the PGTA, including the training of indigenous leaders, the strengthening of indigenous organizations, regional articulation, and shared management.

The second component, which comprises the elaboration of the PGTA of IL Zo'é, brings together the following actions: awareness and mobilization; surveys and field research; discussion, elaboration, agreement and presentation of the PGTA, and the definition of subsidies and operational guidelines for indigenous peoples of recent contact.

Intervention logic

The project is part of the "Sustainable Production" (1) and "Territorial Planning" (3) components of the Amazon Fund Logical Framework.

Its direct effects were defined as follows: 1.1 Economic activities for the sustainable use of forests identified and developed in the Tumucumaque Park (AP and PA) and Paru d'Este River (PA) ILs; 1.3 Expanded management and technical capacities for sustainable production in the Tumucumaque Park (AP and PA) and Paru d 'Este River (PA) ILs; 3.2 Strengthened institutions and leaders for territorial and environmental management with territorial monitoring carried out.

The "Sustainable Bem Viver" project sought to advance the implementation of PNGATI in Amazonian ILs, with the arrangement of a new PGTA, and the execution of two existing PGTAs. ILs and PAs are the least deforested territorial categories in the Amazon. Support for territorial protection and consolidation of the management of these territories contributes directly to the general objective of the Amazon Fund: "reduce deforestation with sustainable development in the Brazilian Amazon."

Activities executed

The "Sustainable Bem Viver" project was structured in two components: the first consisted of the implementation of the PGTA of the Tumucumaque Park and Paru d'Este River ILs; and the second promoted the elaboration of the PGTA of the Zo'é IL.

I – The first component was implemented in the Tumucumaque Park and Paru d'Este rivers, highlighting the main activities carried out below:

> Control and Territorial Protection

Equipment was purchased and delivered to the community surveillance networks and the Integrated Plan for Surveillance and Protection of the two ILs was prepared. The project supported eight surveillance and monitoring expeditions.

Eight bases for the operation of the Community Monitoring Networks were built. Established at points considered strategic, the bases are houses under traditional construction which serve for meetings and team meets to update territorial and environmental monitoring, plan expeditions, and for youth training courses.

Within the scope of the activities of updating socio-environmental diagnoses on the IL and its surroundings, the project deepened the diagnosis of mining and prospecting in the Tumucumaque complex and its surroundings in order to subsidize continuity of the implementation of the Territorial Protection Plan of the Indigenous Lands of Tumucumaque and Paru d'Este River.

> Management and sustainable use of natural resources

The project enabled eight agroecological expeditions, going to the villages to promote technical assistance activities and monitoring the extraction and management of gardens, involving men, women, and young indigenous people.

Throughout its execution, technical studies of viability of production chains were also carried out and two community projects conceived from these studies were supported: the "Community Beekeeping Project in the village of Santo Antônio" and the "Indigenous Stingless Beekeeping Project in the village of Jaherai," both in the Tumucumaque Park IL. The community evaluated that the productive practices introduced have expanded the supply of honey and contributed to food security.

> Training for Territorial and Environmental Management

Throughout the project, 14 stages of environmental agent training were carried out. In all, 67 young environmental agents were trained over the course of four years in the themes of governance and indigenous participation, surveillance and territorial protection, nutrition and health, cultural strengthening, in addition to PNGATI itself.

Training specifically aimed at women was also offered. The workshop with the Articulation of Indigenous Women Tiriyó, Katxuyana, and Txikiyana (Amitikatxi) lasted three days, with debates in the morning and workshops on weaving and handicrafts with beads in the afternoon, with one hundred women in attendance. The workshop on the Articulation of Indigenous Women Wayana and Aparai (Amiwa) also lasted three days, focusing on traditional knowledge of use of medicinal plants, with 64 women in attendance.

> Governance of the PGTAs

The strengthening of indigenous leaders and organizations permeated several activities of the project, aiming to create conditions for continued implementation of the PGTAs, which are long-term plans of these populations. Management training workshops were held for representatives of indigenous organizations and one of the topics of greatest interest in training was related to associative and procedural issues for organizations to access resources via new projects.

> Regional Articulation and Shared Management

The project supported indigenous people in activities related to the Mosaic Advisory Council of Protected Areas of the Eastern Amazon, and the Councils of neighboring PAs.

II – The second component was elaboration of the PGTA of IL Zo'é, highlighting the main activities carried out for this purpose:

> Ethnomapping

Participatory ethno mapping was carried out through ten survey expeditions and nine workshops at the "*Casa dos Mapas*" Zo'é, in which the information collected in the field was worked on, consolidating the formation of the Zo'é in the elaboration of their PGTA.

> Documentation

Documentation was made on the use of raw materials, especially the registration of knowledge involved in the elaboration of chestnut fibers and fruit for adornments and nets and in the collection of clay and manufacture of roasters, pots, and pans. A collection of 136 objects that were part of the Zo'é cultural exhibition, which took place at the Emílio Goeldi Museum, was also documented. These objects will be incorporated into the collection of the Indigenous Peoples Museum.

> Agreement

The formal PGTA agreement meeting of IL Zo'é took place in 2019. The coordinator of Funai, members of the indigenous health team, the prosecutor of the Public Prosecutor (MPF) of Santarém, as well as the technical team of Iepé were present. As for the indigenous, about fifty young people and adults were present, including the leaders of all local groups.

> Publication

After the agreement, the work was carried out to publish the PGTA, contemplating the revision, editing, and translation of all materials produced with the Zo'é throughout 2018 and 2019. A first print run of one hundred copies was formatted and printed.[69]

The publication is composed of four parts, highlighting the second, which contains the guidelines prepared by the Zo'é to ensure continuity of their way of life, as well as explaining what they expect from the performance of their partners Funai, the Special Secretariat for Indigenous Health (Sesai), Iepé, and others with less direct performance, such as the MPF.

69 Available at: http://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/acervo-projetos-cartilhas-outros/Iepe-PGTA-Zoe.pdf.

Result and impact indicators

The project activities contributed to the results related to the "Sustainable Production" (1) and "Territorial Planning" component (3) of the Amazon Fund Logical Framework.

Below are the results of some of the indicators agreed to monitor the expected direct effects.

Direct effect 1.1 – Economic activities of sustainable use of the forest, identified and developed in the Tumucumaque Park (AP and PA) and Paru d'Este River (PA) ILs:

> Volume of *in natura* production generated by the supported project broken down by product (outcome indicator)

  Target: no predefined target | Result achieved: 798 kg of honey

> Number of handicraft production workshops carried out (output indicator)

  Target: 4 | Result achieved: 4

> Number of local projects for the management, processing and commercialization of agroforestry products (output indicator)

  Target: 2 | Result achieved: 2

Strengthening income-generating activities is an indigenous demand, always integrated with their territories and ways of life. The project had some actions in this line, with emphasis on stingless bee keeping and beekeeping activities.

Direct effect 1.3 – Expanded management and technical capacities for sustainable production in the Tumucumaque Park (AP and PA) and Rio Paru d'Este (PA) ILs:

> Number of women trained in the production of handicrafts (outcome indicator)

  Target: 55 | Result achieved: 60

> Number of technical studies to enable production chains of native products and management of natural resources (output indicator)

  Target: 2 | Result achieved: 2

Technical training and mapping of the production chains present in the territories are important for their economic, social, and environmental sustainability. The project achieved the desired results in this action.

Direct effect 3.2 – Institutions and leaders strengthened for territorial and environmental management, with territorial monitoring carried out:

> Number of indigenous associations strengthened for territorial and environmental management (outcome indicator)

  Target: 2 | Result achieved: 2

> Publication of the PGTA of the Zo'é IL (output indicator)

  Target: 1 | Result achieved: 1

Publication of the PGTA is the result of a broad participatory process of information collection and dialog with indigenous communities.

- Number of indigenous leaders trained to exercise the role of communities (output indicator)

  Target: 68 | Result achieved: 70

- Number of structured control and surveillance bases (output indicator)

  Target: 4 | Result achieved: 8

- Number of surveillance expeditions carried out (output indicator)

  Target: 4 | Result achieved: 8

- Number of trained young environmental agents (output indicator)

  Target: 40 | Result achieved: 67

Territorial control and management comprise several activities and are intrinsically related to the livelihood of traditional populations.

Institutional and administrative aspects

Implementation of the "Sustainable Bem Viver" project included the establishment of partnerships and cooperation, especially with the Apiwa and Apitikatxi indigenous associations and Funai. Another important partnership was established with the Forest and Biodiversity Development Institute of the State of Pará (Ideflor-Bio), which served as a member of the Technical Center for the Implementation of the PGTA of the Tumucumaque Park and Paru d'Este River ILs and supported the elaboration and implementation of the Integrated Surveillance and Territorial Protection Plan of the two ILs.

During the development of the project, the Association of Indigenous Peoples Wayana and Apalai (Apiwa) and the Association of Indigenous Peoples Tiriyó, Kaxuyana, Txikuyana (Apitikatxi) became stronger, assuming important responsibilities, such as fuel distribution for travel and to execute activities.

Risks and lessons learned

Ensuring extensive participation of indigenous people – not just chiefs and leaders but also young people and women – during the implementation of the project's actions was considered a success. The interest of these groups was increasing throughout the project's realization, having implied, however, greater logistical efforts and expenses.

Another lesson learned was about native languages. Even with Iepé's experience in working with Karib-speaking indigenous peoples in the region, there were challenging linguistic issues. Despite recognizing the importance of indigenous languages in the strengthening process, the languages that already had greater understanding by non-indigenous people or greater representativeness among local leaders prevailed. In projects with similar characteristics, the role of the translator should be appreciated more and more people should be put on this task.

In order to offer the workshops on occupation and use of the territory that would be integrated into the PGTA, some literacy activities were carried out, and it was clear, both for the Zo'é and for the Iepé and Funai teams, that it would not be possible

to build a PGTA without offering the Zo'é the opportunity to appropriate means of registration and communication, such as writing in their indigenous language, making lists, sketches, maps, etc., detailed according to their own criteria.

One difficulty faced in the execution of the project was the inconstancy in Funai's participation in its activities and events. During the course of the project, communication and scheduling of joint activities with the Brazilian indigenous body became more time-consuming processes.

Sustainability of results

Youth and leadership training activities promote the appreciation and training of indigenous young people so that they can contribute to their learning for a better life within their villages and demarcated lands. It is common for these young people to recognize that it is also up to them to share learning they acquired with more people, in addition to their dependence on meetings and projects. Indigenous women have also manifested themselves in this sense, articulating themselves in an increasingly participatory way in the assemblies.

The high engagement observed in sustainable production activities indicates that these initiatives may be continued after the end of the project, with emphasis on those related to beekeeping and stingless bee keeping. The young people dedicated to these activities have multiplied their learning among themselves and to other villages. The Articulation of Indigenous Women of Amiwa and Amitikatxi emerged during the activities of this project and the women who are in charge of these articulations are motivated by the advances achieved.

In relation to territorial protection, it should be noted that, after the end of the project's support, autonomous inspection expeditions have already been carried out by the indigenous people themselves, duly registered and shared with the competent bodies (Funai and Ideflor-Bio), which indicates the benefits arising from the project will be permanent.

KNOWING TO PRESERVE

PROJECT MANAGEMENT

The Amazon Museum (Musa)

TERRITORIAL SCOPE

Municipality of Manaus, state of Amazonas

BENEFICIARIES

Population of Manaus and nearby cities, national and foreign tourists, students and teachers of the public and private network of the state of Amazonas, and other interested in socio-environmental issues

OBJECTIVE

Support the implementation of the Museu da Amazônia (Musa) and a training center in the Água Branca settlement in Manaus, aiming to disseminate knowledge that contributes to value and conserve natural resources of the Amazon and its cultural heritage through an innovative forest visitation model

TOTAL AMOUNT OF THE PROJECT

R$ 10,394,822.12
US$ 5,519,881.24

AMOUNT OF AMAZON FUND SUPPORT

R$ 9,984,629.00
US$ 5,302,059.59

EXECUTION PERIOD

4th quarter of 2011 to the 4th quarter of 2021

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
11.30.2010	9.1.2011	R$ 9,984,629.00 US$ 5,302,059.59	100%

Context

The Adolpho Ducke Forest Reserve, on the outskirts of Manaus, has been systematically studied for over thirty years, especially by the National Amazon Research Institute (Inpa), and has extensive documentation on its biodiversity, its forest, and aquatic ecosystems and its biotic and abiotic interactions. The Amazon Museum (Musa) was installed there.

Another part of the project was carried out in a rural settlement adjacent to the Adolpho Ducke Forest Reserve, the Água Branca settlement. This area is an "ecological corridor" connecting the Adolpho Ducke Forest Reserve and the Puraquequara Lake. Most of the properties that are there are covered with native forests. However, if no measures are taken to ensure the maintenance of this ecological corridor, the reserve risks having its conservation value reduced by forest fragmentation and the isolation of its biota.

The project

Musa, implemented with support from the Amazon Fund, promotes an innovative model for visiting the forest and disseminating knowledge about the Amazon. It proposes to offer experiences that allow the visitor to get in touch with the biological and sociocultural diversity of the region. To this end, Musa is based on the "living museum" concept of socio-biodiversity, based on the knowledge acquired by researchers from Brazilian and international scientific institutions that carry out research in the Amazon region.

The "Knowing to Preserve" project structured a complex of pavilions, tanks, trails, overhead walkways, stations, and a forest observation tower in the Adolpho Ducke Forest Reserve. It also supported the structuring of a training center in the Água Branca settlement. The objective was to strengthen the bioeconomy of the intervention area, promoting a demonstrative model of economic activities that valued the "standing forest", with the possibility of generating income and improving social conditions. Thirty-six families living in the Água Branca settlement were directly benefited.

Intervention logic

The project is part of the "Sustainable Production" (1) and "Science, Innovation, and Economic Instruments" (4) components of the Amazon Fund Logical Framework.

Its direct effects were defined as follows: 1.3 Managerial and technical capacities of the settlers and visitors of the expanded training center for the sustainable use of the biodiversity of the Amazon biome; and 4.1 Knowledge about the Amazon biome disseminated to raise awareness of the population on the socio-environmental theme and to promote regional tourism.

The "Knowing to Preserve" project sought to expand knowledge about the Amazon biome and its natural and social history so that society can value and contribute to conserve the forest, its biodiversity, and the cultural heritage of its peoples. It also aimed to promote sustainable production through knowledge, aimed at social

development, as well as the generation of local income through nature tourism, collaborating to achieve the general objective of the Amazon Fund to "reduce deforestation with development in the Brazilian Amazon."

Activities executed

The project was structured in two components: the first consisted in implementing a "living museum" of Amazonian socio-biodiversity in the Adolpho Ducke Forest Reserve – Amazon Museum (Musa); and the second promoted the construction of an agroforestry training center (CTA) in the Água Branca Settlement, in Manaus, an area contiguous to the reserve.

In the first component, the following main activities were developed: construction of an observation tower, three forest observation trails and stations, suspended walkway, laboratories for capturing, editing and transmitting images, exhibition tents and museum reception, as well as the purchase of recording, editing and image transmission equipment, and a utility vehicle. In November 2014, a fee to visit Musa´s facilities, the observation tower, and the guided trails was implemented.

Musa, with its imposing observation tower, became one of the main tourist attractions of Manaus. The steel tower, 42 m tall, with 242 steps and 81 m^2 of base, rivals the large trees of the forest. The three platforms, located at 14, 28, and 42 m high, allow about thirty visitors, distributed at different levels, to observe the largest rainforest in the world – the Amazon rainforest.

In component two, investments in infrastructure included the construction of CTA facilities, the acquisition of tractor and equipment, as well as the preparation of agricultural cultivation and forest product management areas. Several courses were also given to the family farmers of the Água Branca settlement, where the CTA is located, which expanded the commercialization of the production initially at fairs and, with the arrival of the Covid-19 pandemic, with orders placed on the internet.

Result and impact indicators

The project activities contributed to the results related to the "Sustainable Production" (1) and "Science, Innovation, and Economic Instruments" component (4) of the Amazon Fund Logical Framework.

The following are the results of some agreed indicators to monitor the predicted direct effects.

Direct effect 1.3 - Managerial and technical capacities of the settlers and visitors of the expanded training center for the sustainable use of the biodiversity of the Amazon Biome:

> Number of courses taken (output indicator)

Target: 5 | Result achieved: 6

The project achieved its goal of conducting courses at the CTA, with training in seed collection, botanical identification, management of SAFs, and the agroecological poultry breeding. It is interesting to note that the infrastructure implemented allowed

several other courses and activities financed by other Musa projects and partners to be carried out.

> Number of trained individuals (output indicator)

Target: 80 | Result achieved: 305

With the creation of adequate infrastructure, the CTA carried out several courses and other training activities. The public participating in these activities comprised 17 settlers from the Água Branca settlement itself, 38 individuals from other nearby settlements, and 250 from various origins.

This number of trained people resulted from the use of the CTA by other Musa projects and initiatives, which was an externality of the project since initially the creation of the training center had the population of the Água Branca settlement as its target audience. Expansion of the use of CTA for other training in the agroforestry theme is very positive.

Direct effect 4.1 – Knowledge about the Amazon Biome disseminated to raise the population's awareness of the socio-environmental theme and to promote regional tourism:

> Annual number of visitors received by Musa (outcome indicator)

Target: 31,200 | Result achieved: 37,700

Visitor measurements were counted based on estimation and began to be measured in 2013, when 15,600 visitors were counted. Since then, the number has evolved positively until reaching 37,700 visitors in 2017. In addition to increasing the number of visitors, an important milestone in the evolution of Musa's sustainability was the start of collecting tickets as of the end of 2014.

Institutional and administrative aspects

The main partnerships that enabled the creation of Musa were established with the following agencies: (i) Federal Government, with the assignment of 100 ha for 15 years on the margins of the Ducke Reserve in Manaus; (ii) Incra, with the assignment of a 30 ha area for the creation of the CTA; and (iii) the University of the State of Amazonas (UEA), which paid for infrastructure expenses, administrative staff, and preparation of the first exhibitions and visitation sites.

After the initial structuring provided by the project, Musa also obtained resources from the Research Support Foundation of the State of Amazonas (Fapeam), from the National Council for Scientific and Technological Development (CNPq), and from private companies through incentives from the Rouanet Law, which allowed assembly of the *Peixe e Gente* e *Aturás – Mandiocas – Beijus* exhibitions. Another partner in projects at CTA was the Itaú-Unibanco Ecochange Program in partnership with the Ekos Brasil Institute.

Risks and lessons learned

At the beginning of the project, the amounts presented by the construction companies for the works exceeded those originally planned. It took extensive searching to find

amounts compatible with the budgets, especially for the observation tower. There were adjustments to reduce the cost of the tower and the raw material was purchased directly to enable its construction.

Throughout the project, rainy periods caused delays in the execution of the works since working conditions made it impossible to operate machinery and equipment. These periods also impacted the pace of CTA´s activities, whose access was affected by poor road conditions.

There were also delays in the construction of the tower and other Musa structures, which made it impossible to start activities on the scheduled date, negatively impacting the cost of the museum's activities.

The cost of museums is a permanent challenge for the sector. At the beginning of its activities, Musa did not have a stable source of funding. As a result, supplementation of resources from the Amazon Fund for the project was approved, which was able to fund the museum's activities until its full operation, when ticket fees strengthened its cash flow.

Sustainability of results

The revenue from charging visitors to see Musa now has significant portion on the institution's balance sheet. The number of visitors increased progressively from 37,700 visitors in 2017 to 68,800 visitors in 2019.

The increase in visits was accompanied by an increase in collection, with an increase of 165% in revenue in the same period (between 2017 and 2019), considering both the collection with inflows and other inflows of resources.

After the end of the project, investments continued to be made in improving the museum's infrastructure. Among other aspects, they included the opening of a new trail and an increase in existing trails, expansion of the Orchidarium, construction of the surroundings of Vitórias-Régias Lake (*Victoria amazonica*), creation of the Sensory Trail, renovations on the serpentarium, the fungarium, and the butterfly sanctuary.

The Covid-19 pandemic impacted Musa's activities in 2020 since the museum did not receive visitors and, consequently, did not obtain revenue from tickets for about three months. In 2021, although it remained closed at the beginning of the year, the museum found ways to reduce costs and increase its visitation and revenue, with the opening of the "*Passado Presente – Dinos e Sauros da Amazônia*" exhibit.

Musa won the Travellers' Choice 2021 award from the Tripadvisor travel website,[70] which is relevant qualitative information, in addition to being top three in the rank of tourist attractions in Manaus, second only to Teatro Amazonas and "Meeting of the Waters,"[71] according to the classification of the travelers themselves registered on this travel platform. Thus, Musa contributes to increasing the length of stay of tourists in the city and, consequently, to greater income generation and tax collection in the state of Amazonas.

70 Available at: https://www.tripadvisor.com.br/Attraction_Review-g303235-d2364476-Reviews-Museu_da_Amazonia_MUSA-Manaus_Amazon_River_State_of_Amazonas.html.

71 Available at: https://www.tripadvisor.com.br/Attractions-g303235-Activities-a_allAttractions.true-Manaus_Amazon_River_State_of_Amazonas.html.

TRAINING TO CONSERVE

PROJECT MANAGEMENT

Amazon Conservation Team (Ecam)

TERRITORIAL SCOPE

Protected areas (PA) in the state of Amapá

BENEFICIARIES

Managers and members of the management councils of the PAs and residents of these units and their surroundings

OBJECTIVE

Train environmental agents and managers aiming to strengthen protected areas in the state of Amapá

TOTAL AMOUNT OF THE PROJECT

R$ 1,404,360.67
US$ 608,294.93

AMOUNT OF AMAZON FUND SUPPORT

R$ 1,404,360.67
US$ 608,294.93

EXECUTION PERIOD

2nd quarter of 2015 to the 4th quarter of 2021

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON SUPPORT
9.23.2014	12.2.2014	R$ 1,404,360.67 US$ 608,294.93	100%

Context

Protected areas play a strategic role in reducing deforestation. However, managing these units throughout the Amazon is a great challenge given the size of their territories and the limited resources available for their conservation. In Amapá, a state in which these units occupy 62% of the territory, this issue has particular relevance.

The PAs of the state of Amapá are federal, state, and municipal, both full protection and sustainable use. The basic objective of full protection PAs is to preserve nature and only the indirect use of its natural resources is allowed; on the other hand, the basic objective of sustainable use PAs is to make nature conservation compatible with the sustainable use of part of its natural resources.

Throughout its experience in projects with PAs, the Amazon Conservation Team (Ecam) identified, as one of the main deficiencies, the insufficient level of knowledge of environmental agents and unit managers on topics such as community relations, communication, using tools for PA management planning, producing information, as well as monitoring and evaluating actions under this theme.

The project

The project aimed to train environmental agents and managers to consolidate the manage protected areas in the state of Amapá. To this end, training courses and training of environmental agents and park rangers aimed at a broad audience and, specifically, for managers and members of the management councils of the units, advanced courses focused on improving the implementation of public policies in the PAs.

The organization responsible for executing the project was Ecam, a civil society organization of public interest (Oscip) created in 2002 and which works with indigenous peoples and traditional communities, aiming to conserve the environment and the sustainable management of their territories. Ecam carries out projects in the states of Amapá, Amazonas, Rondônia, Roraima, and Pará.

To support it in defining the themes to be taught, in the dissemination to the interested public and to make the courses possible, Ecam counted on its partnership with ICMBio, *Universidade Federal do Amapá* (Unifap), the State Environmental Department of Amapá (Sema-AP), and the State Forestry Institute of Amapá (IEF).

Intervention logic

The project is part of the "Territorial Planning" component (3) of the Amazon Fund Logical Framework. Its direct effect was defined as: "Improved management of federal and state PAs in the state of Amapá."

Training environmental agents and managers of the PAs that protect the units contributes to reduce the loss of vegetation coverage in these protected areas and, therefore, to the general objective of the Amazon Fund of "reducing deforestation with sustainable development in the Amazon."

Activities executed

The project was structured with the objective of promoting, through formal training actions, efficiency in the management of PAs and reducing the lack of human resources trained for this purpose.

The actions were divided into two categories. The first one aimed at training the general public according to the criteria of representativeness of the PAs present in the public notices through six editions of training courses for environmental agents and park rangers, while the second one consisted of two advanced courses (called master courses) for decision makers, experienced unit managers and environmental agents who stood out in the training of the training module for environmental agents.

The target audience for the six environmental agent courses were people who work in the protection and management of PAs, which can be from public or private institutions and even residents of the units and their vicinity. Training covered a wide scope of topics, such as basic cartography, notions of GPS, water rescue, environmental legislation, climate change, surveillance practice, fire prevention, and firefighting, among others.

Regarding the master course aimed at managers and members of the management councils of the PA, two editions were carried out, each lasting 12 days. The contents covered involved theoretical and practical aspects, which included monitoring, by dividing the classes into working groups, of the selected territories of the Environmental Protection Area (APA) of Fazendinha, Araguari, Cunani, Amapá Forests, Mapinguari, Parna do Tumucumaque, Rebio do Lago Piratuba, and Rebio Parazinho.

Each group was composed of at least one civil servant (public official) of the PA but was mostly community members who support the actions in the aforementioned territories. In the end, the students developed seven strategic plans containing the structuring of actions to solve perceived problems in their units, which range from practicing environmental education, such as awareness for garbage collection, to the preservation of vulnerable species.

The other activities carried out were related to the dissemination of the project and its results. As enrollment to participate in the training was public, it was necessary to make the public notices and other relevant information for each edition of the project available on Ecam´s website. In addition, reports by TV Amapá's journalism team and a video about the project on YouTube were produced and dissemination on social media.[72]

With support from the Amazon Fund, a publication was also produced on the project entitled: *Perspectives and dialogues for territorial management: training community park rangers to conserve protected areas*.[73]

72 Information on the project can also be found at http://ecam.org.br/projetos-sociais/.

73 Available at: http://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/acervo-projetos-cartilhas-outros/Ecam-Olhares-Dialogos-Gestao-livro.pdf.

Result and impact indicators

The project activities contributed to the results related to the "Territorial Planning" component (3) of the Amazon Fund Logical Framework.

Direct effect 3.1 – "Improved management of federal and state protected areas (PA) in the state of Amapá."

The main indicators used to monitor this objective were:

> Number of individuals trained in activities related to the management of public forests and protected areas – environmental agent courses – specified by gender (output indicator)

  Target: 150 | Final Result: 123 (82.0% of the target – 36 women and 87 men)

> Number of individuals trained in activities related to the management of public forests and protected areas – master courses – specified by gender (output indicator)

  Target: 50 | Final Result: 38 (76% of the target – 15 women and 23 men)

> Number of individuals trained in activities related to the management of public forests and protected areas effectively using the knowledge acquired – environmental agent courses and master courses – specified by gender (outcome indicator)

  Target: 200 | Final Result: 161 (80.5% of the target – 51 women and 110 men)

The training goals were set as a parameter for the expected results and were important in the project planning process. Although the classes were composed through public selection processes, there were requirements imposed on the training candidates in the public notices and the percentage goals achieved between 75% and 80% can be considered satisfactory.

> Extent of protected areas with strengthened environmental management and/or with the control of their strengthened territory

  Target: 18.7 million ha | Final result: 8.9 million ha (48% of the target)

Regarding the territorial coverage of the PAs to which the students selected for the training actions should be linked, the goal was below expectations. This is explained by the demands of the public selection, in which it was not possible to ensure that all state PAs had representatives.

Table 31 shows the evolution of deforestation in the last seven years in the areas affected by the project. It is observed that Amapá, in comparison with other states of the Brazilian Amazon, has the lowest deforestation rates, which is explained, in part, by the relevant area of PAs in relation to the total area of the territory.

The average deforestation verified in federal and state PAs in the state of Amapá was approximately 5.2 km^2/year, in the period between 2015 and 2020, compared to the project's baseline of 6.6 km^2/year in 2014. The constant improvement of this indicator depends on the continuity of projects aimed at the protection and sustainable use of the forest, combined with the permanent involvement of the communities and local representative entities.

TABLE 31 | DEFORESTATION EVOLUTION IN PAS IN THE STATE OF AMAPÁ (2014-2020, IN KM²)

	2014	2015	2016	2017	2018	2019	2020
Deforestation in Federal and State PAs in Amapá	6.62	4.85	3.07	5.25	7.33	7.45	3.43

Source: http://www.dpi.inpe.br/prodesdigital/prodesuc.php

Institutional and administrative aspects

Throughout the execution of the project, Ecam was able to attract and mobilize several partners in addition to those previously mentioned, highlighting the International Federation of Park Keepers (FIG), the Brazilian Association of Park Keepers (ABG), the Institute of Scientific and Ecological Research of Amapá (Iepa), the World Wildlife Fund (WWF), and Unifap, which issued certificates to students who completed the courses taught by the project.

The broad programmatic content of the courses favored the articulation of these partnerships and represented an opportunity to build contact and knowledge networks for the participants.

Regarding the administrative aspects, the investments of the project in the items associated with communication deserve to be highlighted, allowing Ecam to carry out distance learning modules provided for in the master courses for managers.

Risks and lessons learned

The project was executed in a phased manner in six courses, which allowed Ecam to make adjustments to enhance the expected results. When forming the first classes, for example, it was identified that the participation of women in response to the public notices was low. This fact ended up being the subject of a specific debate module in the third class, which was asked to disclose the public notice to the female public of their localities after returning to their communities. This action resulted in a significant increase in the participation of women in subsequent classes.

Another lesson learned for future projects concerns territorial coverage. It is desirable to think about selection rules that contemplate the participation and goal of qualified agents for all PAs in the state. This could be done by adapting the public notices that consider the particularities of each region surrounding the protected areas and also by mapping potential candidates, adjusting the requirements and contents to be addressed in the courses.

Sustainability of results

The courses made it possible to renew and strengthen the network of park rangers in the state of Amapá, which represents an important gain in PA conservation. It should be noted that the group supported by the project integrated a network of approximately 450 park rangers trained in the state of Amapá throughout previous editions of the Training to Conserve project.

After the training, the participants acted in several voluntary actions in several municipalities of the state, which confirmed the recognition of their role as environmental agents in the region, in addition to operating in the region as park rangers, for example, in the Arinaldo Gomes Barreto Amazon Biopark, in Macapá.

Finally, it is worth highlighting the indirect effects of the project and the incorporation of its contents in regional public policy initiatives, such as: (i) adopting the curriculum developed by the project as one of the hiring criteria for new PAs Brigade members by ICMBio; (ii) using the knowledge acquired in actions to generate income combined with awareness about biodiversity conservation, of which the structuring of an ecotourism business model in the municipality of Serra do Navio (AP) by a trained student in the project is an example; and (iii) the institutional strengthening of the Association of Park Keepers of Amapá (AGPA), which had relevant participation from project students in preparing the institutional video from the training in the audiovisual workshops that integrated the content of the courses.[74]

74 Available at: https://www.youtube.com/watch?v=oWy1ZcJ18Mk.

ENVIRONMENTAL MANAGEMENT QUALIFICATION PROGRAM

PROJECT MANAGEMENT

Brazilian Institute of Municipal Administration (Ibam)

TERRITORIAL SCOPE

Municipalities of the Amazon Biome

BENEFICIARIES

Officials of the municipal administration bodies focused on the local environmental management of the 529 municipalities of the nine states of the Amazon biome

OBJECTIVE

Support the strengthening of environmental management in municipalities of the Amazon biome through the provision of training and technical assistance; the dissemination of knowledge and information in a network; and by stimulating innovation and coordination with other spheres of government and society in general within the scope of environmental public policies

TOTAL AMOUNT OF THE PROJECT

R$ 19,620,429.22
US$ 9,386,866.92

AMOUNT OF AMAZON FUND SUPPORT

R$ 18,853,482.32
US$ 9,019,941.79

EXECUTION PERIOD

4th quarter of 2013 to the 1st quarter of 2021

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
12.18.2012	2.5.2013	R$ 18,853,482.32 US$ 9,019,941.79	100%

Context

The Brazilian Institute of Municipal Administration (Ibam) is a non-profit civil association governed by private law that operates in Brazil and abroad, mainly in Latin American and Portuguese-speaking African countries. Ibam operates to introduce good management practices in municipal governments and improve federal relations and management decentralization processes in the country mainly through courses, research, and advice to governments.

One of Ibam's focuses is to help consolidate local actors – government and society – as agents to improve the environmental quality of municipalities and the living conditions of citizens.

The institute seeks to promote the institutional development of municipalities by strengthening their capacities to formulate public policies, provide quality services to citizens, and stimulate local development.

The project

The "Environmental Management Qualification Program" project (PQGA) aimed to provide training in environmental management to public servants and representatives of civil society predominantly through distance education technology, in addition to providing the exchange of experiences between participants. It also promoted in-person events with a view to raising awareness about the importance of environmental issues for members of the municipal legislative branch, an important target audience in the formulation of local policies.

The PQGA made available technical-legal content to municipalities in the Brazilian Amazon through a portal on the internet, including the possibility of consulting experts hired by the project. It also provided access to studies and knowledge related to environmental management.

Furthermore, it also held a contest to reward the municipalities that stood out in their performance to preserve natural resources and for sustainable local development, as well as promoted in-person activities with municipalities and states to promote the decentralization of environmental management.

Intervention logic

The project is part of the "monitoring and control" component (2) of the Amazon Fund Logical Framework. The direct effect expected by the project actions was defined as follows: 2.1 "Municipal institutions of monitoring, control, and environmental responsibility far better qualified to exercise environmental management."

The actions supported by the project aimed to prevent deforestation by contributing to government actions in the municipalities of the Amazon biome ensure the adequacy of anthropogenic activities to environmental legislation, that is, that productive activities are in accordance with Brazilian environmental legislation.

Activities executed

The activities and output of the project can be grouped into six components, namely:

i) Training focused on environmental management for municipalities that are part of the Amazon biome

The main activities carried out in this component were: (i) development of the training modules, with structuring of the educational proposal, customization of the technological platform to be used, elaboration of the contents, identification of the topics of interest to the technicians of the municipal environmental agencies (OMMA), and the production of the didactic materials; and (ii) academic management, which involved the monitoring of the classes, the continuous training of tutors, and other actions, such as telephone calls and sending messages to encourage participation by the target audience.

In all, 201 courses were offered at the end of the PQGA in 17 topics, with the five most frequent courses being: Municipal Environmental Licensing, Rural Environmental Registry (CAR), Municipal Environmental Management, Introduction to Geotechnology, and Solid Waste Integrated Management Plan. Four hundred and twenty municipalities from the nine states of the Amazon Biome participated in this action, training 7,706 people, 4,627 of which were public servants.

ii) Meetings with municipal legislatures

21 meetings were held in seven states of the Amazon, with the participation of 1,683 people, with 1,230 councilors and 453 advisors. The coordination with the entities representing the councilors were important for the dissemination of the meetings.

Based on the analysis of the information collected, educational lectures were prepared, the book "*O vereador e a Câmara Municipal* [The Councilor and the City Council]" was edited and published, and a proposal for an amendment to the Organic Law of the Municipalities. There were meetings in two formats: "Regional meetings," which promoted the effective participation of councilors and advisors on discussions about environmental issues relevant to municipalities and "State meetings," with the participation of members of state agencies such as the Court of Auditors, State Secretariats of the Environment, and Public Prosecutor's Office.

iii) Technical and legal guidance to municipal governments

1,813 new legal opinions and 50 technical notes were prepared. The project registered 449 municipalities that accessed the PQGA portal. 10,266 document downloads were made, considering both the new materials prepared by the PQGA and the Ibam publication base.

The technical notes that aroused the greatest public interest were on the themes: "Municipal Environmental Policy," "Specific Instruments, Environmental Control, and Promotion of Sustainable Practices and Economic Incentives," representing around 75% of total downloads.

iv) Learning communities

The project created learning communities in order to promote the integration of managers and technical teams of the various municipal environmental agencies of the Amazon Biome. It sought to stimulate the approximation of this public and encourage the exchange of materials, knowledge, and solutions in the environmental area through interaction mechanisms in the digital environment.

The federal communities (CF) brought together members of 306 municipalities and a total of 520 participants from the Executive Branch. The thematic communities (TCs), meanwhile, gathered 231 participants and were conceived to provide means of continued training for those who have completed PQGA courses, encouraging the development and technical deepening of the contents.

v) Award for good municipal practices

The project organized the award of good environmental practices in five categories: (i) territorial and land planning; (ii) environmental monitoring, control, and recovery; (iii) sustainable production and incentives for conservation; (iv) socio-environmental governance; and (v) environmental education. For each category, two projects were awarded, one from the municipal governments and the other from civil society organizations. In total, 140 initiatives were awarded from 58 different municipalities and, of these proposals, 61 were authorized by the selection committee.

In addition to the ten award-winning practices, a certificate of recognition of merit was granted to the 51 qualified practices as provided for in the regulations. Below are the award-winning practices.

TABLE 32 | WINNERS OF THE AWARD FOR GOOD ENVIRONMENTAL PRACTICES

Category	Municipal government	Civil society organization
Territorial and land planning	Regularization and environmental adaptation in rural properties related to the rural environmental register City Hall of Cotriguaçu	Amazon dialogue forum: urgent land regularization! International Institute of Education of Brazil (IEB)
Environmental monitoring, control, and recovery	Participatory process for environmental recovery of springs contributing to the municipal supply system City Hall of Paranaíta	Participatory monitoring program in the protected areas of the Forest Assistance program (PPDUC) Sustainable Amazon Foundation (FAS)
Sustainable production and incentives for conservation	Conservation project of the waters of Brasil Novo/Pará City Hall of Brasil Novo	Implementation of the wood production chain in Resex Ituxi Tropical Forest Institute (IFT)
Socio-environmental governance	Sinop without fire - Paranka Project to prevent and combat fires City Hall of Sinop	Socio-environmental governance in Marajó Tropical Forest Institute (IFT)
Environmental education	Caeteuara Green Room Municipal Secretariat of the Environment of the City of Bragança	Forest formation International Institute of Education of Brazil (IEB)

Source: Ibam.

vi) Decentralization of environmental management

Thirteen meetings were held between state and municipal governments, with the participation of 280 people. The PQGA identified that the greatest obstacle to the decentralization of environmental management is the limited capacity of most

municipalities in the region to effectively exercise their functions in environmental control. Considering this restriction, we sought to expand the dialogue between states and municipalities on the subject.

Result and impact indicators

The project activities contributed to the results related to the "monitoring and control" component (2) of the Amazon Fund Logical Framework. Below are the results of the main indicators agreed to monitor the expected direct effect.

Direct effect 2.1 "Municipal institutions of monitoring, control, and environmental responsibility far better qualified to exercise environmental management."

> Number of public servants trained (output indicator)

  Target: 604 | Result achieved: 4,627

> Number of municipalities using distance training in environmental management (output indicator)

  Target: 302 | Result achieved: 420

The distance learning action, which was one of the main actions of the PQGA, managed to exceed the target of trained civil servants by 667%, reaching 4,627 people.

> Number of face-to-face meetings with representatives of the municipalities held (output indicator)

  Target: 12 | Result achieved: 21

> Number of councilors participating in-person at awareness-raising events on environmental issues (output indicator)

  Target: 468 | Result achieved: 1,230 (output indicator)

> Number of accesses to the virtual learning community (output indicator)

  Target: 644 | Result achieved: 682

> Number of accesses to the portal on the internet (outcome indicator)

  Target: not defined | Result achieved: 8,419

> Number of technical and legal guidelines provided to the municipalities covered by the project (outcome indicator)

  Target: 1,510 | Result achieved: 1,813

The legal advice provided by the PQGA responded 20% more consultations on the internet portal than the goal established in the project.

> Number of actions/projects entered in the award (outcome indicator)

  Target: 35 | Result achieved: 140

The high adherence to the awarding of good municipal practices, with four times more registrations than the target, was a significant result that indicates that the project achieved a good presence in the municipalities of the region.

> Number of meetings between municipal and state governments held and actions to support decentralization

  Target: 9 | Result achieved: 11 (efficiency indicator)

> Number of individuals participating in the meetings with representatives of the state and municipal governments of the Amazon Biome and participants in the workshops

  Target: 180 | Result achieved: 925 (efficiency indicator)

Institutional and administrative aspects

After an initial awareness-raising effort, the program for the qualification of environmental management in the states of the Amazon Biome was officially launched, with the first adhesions by the municipalities. The maintenance and strengthening of relations with municipalities, states, and local partners was an ongoing challenge throughout the project.

The PQGA adopted as a mobilization strategy to execute the project in the states the articulation with government agencies, municipal entities, and institutions of organized civil society. As such, terms of technical and institutional cooperation were signed over the five years of its execution that contributed to achieving the results, as well as the construction of a network of partners in the region, namely:

> state secretariats of the environment;
> state associations of municipalities;
> Institute of Man and Environment for the Amazon (Imazon)
> Green Municipalities Program (PMV/PA)
> Federation of Municipal Associations of the State of Pará (Famep)
> Permanent Forum of Municipal Environment Secretaries of Pará (Fopesmma)
> Mato Grosso Program of Sustainable Municipalities
> Amazon Environmental Research Institute (Ipam)
> Court of Auditors of the Municipalities of the State of Pará
> Permanent Forum of the Municipal Secretaries of Environment of Amazonas (Fopes)
> Institute of Conservation and Sustainable Development of Amazonas (Idesam)
> Center for Technical Cooperation in the Interior (Ccoti)
> Union of Chambers and Councilors of Rondônia (Ucaver)
> Amazon Conservation Team (Ecam)
> National Association of Municipal Environmental Bodies (Anamma)
> Amazon Environmental Protection Institute (Ipaam)
> Amazon Training Network (Recam)
> Forum of Brazilian Capitals
> Brazilian Botanical Gardens Network

Risks and lessons learned

The project worked directly with different agents of the public authorities at the municipal level. It reported that the importance of providing more opportunities for participants in the Legislature to present their opinions on local environmental issues was noted, despite the difficulties represented by the heterogeneity in access to information of this public. It was verified that the success of in-person meetings depends both on the organization of the activities and the contents addressed, as well as on the mediation of conflicts.

In smaller activities, the engagement of other actors, such as participants in learning communities and municipal environmental advisors, was important to qualify the discussions on the environmental agenda.

It was observed that integrating environmental management qualification activities with large meetings of municipal managers, organized by other institutions, is an opportunity to minimize costs, including those related to public travel to these events.

Sustainability of results

The methodology used in the PQGA may be replicated in new programs to promote environmental management in other Brazilian biomes. The knowledge transmitted about environmental management to municipal administration officials and to members and employees of the municipal legislatures of the Amazon has been incorporated and may be relayed to new public officials at the municipal level who may need this knowledge.

The PQGA incorporated new technologies and social media to mobilize, communicate, and coordinate its activities. The program benefited from this window of opportunity represented by the emergence of real-time communication applications on smart phones. Thus, barriers that historically led to the isolation of many municipalities in the Amazon region could be overcome, reducing part of the negative effects of distances and infrastructure shortages. Thus, in addition to serving at scale, the PQGA generated exchange networks in the states, which should continue to bear fruit after the completion of the project.

The entire technical production of the PQGA (publications, opinions, good practices, study books, as well as other documents and files on environmental management) was gathered by Ibam and is available in the Document Warehouse[75] for free access to all interested parties, allowing the project to continue supporting the environmental management of the country.

75 Available at: http://amazonia.ibam.org.br/armazem.

NEW PATHS IN COTRIGUAÇU

PROJECT MANAGEMENT
Municipality of Cotriguaçu

TERRITORIAL SCOPE
Municipality of Cotriguaçu, in the northwest of the State of Mato Grosso

BENEFICIARIES
Population of the municipality of Cotriguaçu (MT)

OBJECTIVE
Support the strengthening of municipal environmental management through: (i) construction and physical structuring of the headquarters of the Municipal Secretariat of the Environment; (ii) recovery of permanent preservation areas (PPAs) degraded in rural properties of up to four fiscal modules and in the surroundings of water bodies in public areas; and (iii) implementation of demonstrative units for recovery and management of pastures

TOTAL AMOUNT OF THE PROJECT
R$ 1,638,897.19
US$ 736,980.48

AMOUNT OF AMAZON FUND SUPPORT
R$ 1,567,845.25
US$ 705,029.79

EXECUTION PERIOD
3rd quarter of 2015 to the 3rd quarter of 2020

PROJECT EVOLUTION

APPROVAL DATE	CONTRACTING DATE	TOTAL AMOUNT DISBURSED	TOTAL PERCENTAGE DISBURSED OF AMAZON FUND SUPPORT
7.22.2014	12.2.2014	R$ 1,567,845.25 US$ 705,029.79	100%

Context

The municipality of Cotriguaçu was created in 1991. It is located in the northwest of the state of Mato Grosso, in an area bordering the south of the state of Amazonas. It is the area of influence of BR-163 (Cuiabá – Santarém) and the Aripuanã River Basin. It occupies a territory of 9,124 km² with an estimated population of 20,238 inhabitants by the IBGE in 2020.

Of the total area of the municipality, about 78% is native vegetation, a fact that is mainly due to the existence of the Escondido Indigenous Land (belonging to the Rikbaktsa ethnic group) in its territory and part of the Igarapés do Juruena and Juruena National State Parks, which together occupy 32% of the territory of the municipality.

The project

The "New Paths in Cotriguaçu" project was structured on three components. The first aimed to strengthen municipal environmental management through the construction and physical structuring of the headquarters of the Municipal Secretariat of the Environment (SMMA), thereby enabling its separation from the Municipal Secretariat of Economic Development, Agriculture, Environment, and Land Affairs.

The second component aimed at the recovery of degraded permanent preservation areas (PPA) in private rural properties of up to four fiscal modules and public areas located around water bodies.

In turn, the third component sought to disseminate, among rural owners, techniques of restoration and sustainable management of pastures developed by Embrapa through the implementation of units demonstrating good agricultural practices.

Intervention logic

The project is part of the "sustainable production" (1) and "monitoring and control" (2) components of the Logical Framework of the Amazon Fund. The direct effects expected by the project actions were defined as follows: 1.1 "cattle raising developed in a sustainable way and with expanded productivity in the municipality"; 1.4 "deforested and degraded areas recovered for ecological conservation purposes"; and 2.1 "structured and modernized monitoring, control, and environmental accountability institutions of the municipality."

By supporting the recovery of native vegetation and the dissemination of sustainable pasture management techniques, the project contributed to the increase of the forest area and the development of sustainable livestock activity in the region.

In turn, the construction of the headquarters of the Municipal Secretariat for the Environment and its operational structuring aimed to provide good working conditions for the environmental management of the municipality, which strengthens environmental governance in Cotriguaçu, an essential factor in the control and prevention of deforestation.

Activities executed

The building of the new SMMA headquarters, with a built area of 180 m², began operations, and was provided with furniture, air conditioning, telephones, and other equipment. The environmental agency was equipped with two desktop computers, two notebooks, printers, a pick-up truck, and two motorcycles. As a result, the project strengthened the structure dedicated to environmental issues in the municipality since, before the project, the SMMA was a department linked to the Secretariat of Agriculture.

134 ha of PPAs were recovered in 42 small farms and in six areas of public domain of the municipality. The original forecast of the project was to recover 600 ha but most of the producers participating in the project requested a reduction in the area to be surrounded due to the reduction in the minimum PPA width required by the legislation for water bodies.

However, the amount necessary to surround the areas to be recovered remained practically the same as the fence length changed little, as what was reduced was the distance from the fences to the banks of the rivers. Seedlings for reforestation were provided to small farmers by the municipal plant nursery.

In the six properties selected as Demonstrative Units of Pasture Management (DU), soil preparation was carried out with addition of limestone and fertilization. In the four DUs in which the implementation of the complete package of good agricultural practices was completed, producers reached an average occupancy rate of 2.4 animals per hectare (AU/ha), compared to the target of 2.5 AU/ha. The technological package developed by Embrapa proved to be viable and advantageous to the producer.

Result and impact indicators

The project activities contributed to the results related to the "sustainable production" (1) and "monitoring and control" component (2) of the Amazon Fund Logical Framework.

Below are the results of the main indicators agreed to monitor the expected direct effects.

Direct effect 1.1 – Cattle raising developed in a sustainable manner and with increased productivity in the municipality.

> Number of demonstrative units for pasture management implemented (output indicator)

  Target: 6 | Result achieved: 4

Despite the partial result in the number of demonstrative units, the efficacy gain observed in the implemented DUs is a positive sign of the importance of this type of action that takes to the territory new models of occupation of the property that favor the densification of production instead of the pattern of opening of new areas.

Direct effect 1.4 – Deforested and degraded areas recovered for ecological conservation purposes.

> PPA area with regeneration in progress (outcome indicator)

Target: 600 ha | Result achieved: 134 ha

The original expectations that based the elaboration of the project were not confirmed, in view of the change in the environmental legislation which reduced the PPAs in rural properties. As the activity of PPA recovery is dependent on the adherence of small landowners – and the main motivation of these landowners is to comply with environmental legislation, the changes introduced by the new legislation had the impact of reducing the area of forests recovered by the project.

Direct effect 2.1 - Structured and modernized institutions for monitoring, control, and environmental accountability of the municipality.

> Headquarters of the Municipal Secretariat of the Environment built (output indicator)

Target: 180 m^2 of built area | Result achieved: 180 m^2

With the support of the project, the building of the headquarters of the Municipal Secretariat of the Environment of Cotriguaçu was built and the furnishings, computer equipment, and transport necessary for its full operation were acquired.

> Annual deforestation in the municipality of Cotriguaçu

Baseline: 46.2 km^2 (2014) | Observed index: 32.2 km^2 (2019)

The annual deforestation rate by clearcutting in 2014 (year prior to the beginning of the project's actions)[76] was 46.2 km^2, while in 2019, this rate was 32.2 km^2. During this period, the average annual deforestation rate was 42.5 km^2, which corresponds to about 0.4% of the municipality's territory per year.

TABLE 33 | DEFORESTATION EVOLUTION IN THE MUNICIPALITY OF COTRIGUAÇU

Year	Deforested area in the municipality of Cotriguaçú
2014	46.2
2015	57.8
2016	50.8
2017	45.2
2018	22.5
2019	32.2

Source: Prepared based on information from the Prodes System, from Inpe.[77]

76 The annual deforestation rates are calculated by Inpe for the periods between August and July of each year, without interruption, since 1988.

77 Inpe's Prodes system performs the inventory of primary forest loss using Earth observation satellite images for the entire length of the Brazilian Amazon.

Institutional and administrative aspects

Prior to the project, SMMA was a department of the Secretariat of Agriculture of the Municipality of Cotriguaçu. With approval of the project by the Amazon Fund, it became a secretariat with objectives, functions, physical, and personal structure within the City Hall of Cotriguaçu.

From the State Ordinance of the Sema/MT 554[78] dated August 8, 2016, the municipality of Cotriguaçu, through the SMMA, met the necessary requirements to carry out the actions of licensing, monitoring, and environmental inspection of activities and enterprises that cause or may cause environmental impact at the local level. Therefore, with the creation of the SMMA and the support of the Amazon Fund, the conditions were created for the municipality of Cotriguaçu to gain autonomy and advance in the process of decentralization of environmental management in the state of Mato Grosso.

Risks and lessons learned

The SMMA team in Cotriguaçu reported that the management of the project was challenging due to the bureaucratic complexities of the contracting carried out within the scope of the project, resulting in difficulties in meeting deadlines.

Another lesson learned is that transparency and social participation are important factors for the success of the project as society can accompany and be part of the learning process, in addition to providing the exchange of knowledge between those involved.

Sustainability of results

The maintenance or increase of environmental actions at the municipal level is dependent on the availability of the municipal budget. The SMMA reported that the budget of the city of Cotriguaçu is strongly demanded by the areas of health, education, and road infrastructure, making SMMA initiatives dependent on projects through partnerships such as the one established with the Amazon Fund.

78 Available at: https://www.iomat.mt.gov.br/portal/visualizacoes/html/14585/#e:14585/#m:855843.

PROJECTS CONCLUDED BY 2020

In addition to the projects completed this year, there are 37 other projects supported by the Amazon Fund completed in previous years, which are listed below. Detailed information about these projects, as well as their results and impacts, can be found in the Amazon Fund's activity reports from 2013 to 2020 and at fundoamazonia.gov.br/en.

Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Sustainable Indigenous Amazon Association for Ethno-Environmental Defense Kanindé	Indigenous lands (IL) Igarapé Lourdes (RO), Zoró (MT), Rio Guaporé (RO), and Rio Negro Ocaia (RO)	Contribute to the implementation of the Territorial and Environmental Management Plans (PGTA) of ILs Igarapé Lourdes and Zoró and to the development of PGTAS for ILs Rio Guaporé and Rio Negro Ocaia	1.21.2016	2020	R$ 7,352,757.03 US$ 1,936,464.85
High Juruá Ashaninka Association of the Amônia River (Apiwtxa)	Region of Alto Juruá in the state of Acre	Promoting agroforestry management and production in traditional and indigenous communities; supporting initiatives for monitoring and controlling the territory; and strengthening the organization of the local community	4.16.2015	2020	R$ 6,597,581.00 US$ 2,289,952.10
Pará Against Forest Fires and Unauthorized Burn-offs State of Pará - Brazilian Military Fire Department of the state of Pará (CBMPA)	State of Pará	Support the actions to monitor, prevent, and combat deforestation resulting from forest fires and unauthorized burn-offs in the state of Pará by the physical and operational structuring of units of the Military Fire Department located in 14 municipalities of the state	6.26.2013	2020	R$ 16,830,280.00 US$ 8,096,541.11
APL Babassu Association in Settlement Areas in the state of Maranhão (Assema)	State of Maranhão, in the municipalities of Lago do Junco, Lago da Pedra, and Bacabal	Supporting the conservation and sustainable management of babassu palms and the recovery of degraded areas through agroforestry systems (SAF) in three municipalities that are part of the Amazon biome in the state of Maranhão	10.29.2014	2020	R$ 4,897,085.37 US$ 2,196,002.41
Strengthening Territorial and Environmental Management of Indigenous Lands in the Amazon The Nature Conservancy of Brazil – TNC Brazil	Six indigenous lands (IL) located in the states of Amapá and Pará	Promoting sustainable territorial and environmental management in six ILs in the states of Amapá and Pará, aiming to contribute to the reduction in deforestation in these areas	11.18.2014	2020	R$ 15,487,682.61 US$ 6,730,581.70
Arapaima: Production Networks Native Amazon Operation (Opan)	Indigenous lands (IL) Rio Biá, Espírito Santo, Acapuri de Cima, Estação, Macarrão, and Deni; Uacari and Cujubim Sustainable Development Reserves; Médio Juruá Extractive Reserve; all located in the middle course of the rivers Juruá and Solimões in the state of Amazonas	Support (i) fishing management and nontimber forest resources on ILs and PAs and (ii) strengthening indigenous associations and extractive producer associations	1.26.2015	2020	R$ 6,364,730.00 US$ 2,511,633.32

(Continues)

(Continuation)

Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Ethno-environmental Protection of Isolated and Recently Contacted Indigenous Peoples in the Amazon Center for Indigenous Work (CTI)	Brazilian Amazon	Support the ethnoenvironmental protection of isolated indigenous peoples and recent contact to ensure the physical limits and natural wealth of the areas where these populations live, contributing to reduce deforestation in the Amazon	12.23.2014	2020	R$ 19,043,330.00 US$ 7,514,829.72
Buriti Springs Municipality of Carlinda	Municipality of Carlinda	Support the strengthening of municipal environmental management via the physical structuring of the Municipal Secretariat of Environment and Tourism and support the recovery of 1,722 hectares of permanent preservation areas (APP) around springs	9.6.2011	2020	R$ 1.875.500,94 US$ 1,206,032.37
Small Eco-social Projects in the Amazon Society, Population and Nature Institute (ISPN)	Amazon biome areas in the states of Mato Grosso, Tocantins, and Maranhão	Hold four public calls to select and fund small socioenvironmental projects aimed at traditional communities, indigenous peoples, and family farmers in the Amazon biome areas in the states of Mato Grosso, Tocantins, and Maranhão	9.25.2012	2020	R$ 12.814.691,38 US$ 6,441,809.37
Amazon Backyards Center for the Study of Culture and the Environment of the Amazon (Rioterra)	State of Rondônia, in the municipalities of Machadinho d'Oeste, Cujubim, and Itapuã do Oeste	Helping family farmers and agrarian reform settlers in the state of Rondônia, in the municipalities of Itapuã do Oeste, Cujubim, and Machadinho d'Oeste, with the registration of rural properties in the Rural Environmental Registry (CAR), planting, and performance of research on agroforestry systems (SAF) for recovery of deforested and degraded areas	12.4.2013	2019	R$ 8.837.852,29 US$ 3,908,997.43
Forest Protection in the State of Tocantins State of Tocantins, having as executor the State of Tocantins Military Firefighters (CBMTO)	State of Tocantins, with emphasis on its north-central region, from the Environmental Protection Battalion, located in the municipality of Araguaína	Support actions to monitor, prevent, and combat the 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	8.9.2012	2019	R$ 4,958,910.00 US$ 2,733,235.96
Productive Sociobiodiversity in the Xingu Socioenvironmental Institute (ISA)	The Xingu River basin 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	Support the structuring and strengthening of the value chains of sociobiodiversity in the Xingu River 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	2.20.2014	2019	R$ 8,023,856.00 US$ 3,421,832.91

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Value Chains in Indigenous Lands in Acre Comissão Pró Índio do Acre (CPI-Acre)	Humaitá River Kaxinawá Indigenous Land (IL) and IL Rio Gregório (municipality of Tarauacá), IL Upper Purus River (municipalities of Santa Rosa do Purus and Manoel Urbano), and IL Humaitá Igarapé Arara (municipality of Porto Walter) in the state of Acre	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	12.29.2015	2019	R$ 3,091,111.21 US$ 885,476.87
Empowering Environmental Monitoring and Control in order to Combat Illegal Deforestation in the Brazilian Amazon Brazilian Institute of Environment and Renewable Natural Resources (Ibama)	The entire Brazilian Amazon	Support Ibama's environmental inspection and deforestation control activities in the Brazilian Amazon	11.3.2016	2019	R$ 56,295,964.63 US$17,662,033.20
Jacundá, Green Municipality Economy Municipality of Jacundá	Municipality of Jacundá	Support the strengthening of municipal environmental management through physical and operational structuring of the Municipal Department of Environment and Tourism	8.31.2012	2019	R$ 199,352.05 US$ 107,201.58
Forest Sentinels Vale do Amanhecer Farmers Cooperative (Coopavam)	Eight municipalities in the northwest of the state of Mato Grosso (Aripuanã, Brasnorte, Castanheira, Colniza, Cotriguaçu, Juara, Juína, and Juruena)	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	4.17.2014	2019	R$ 5,175,522.50 US$ 2,148,411.17
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

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
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 *campus* 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
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
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

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
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
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 a 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

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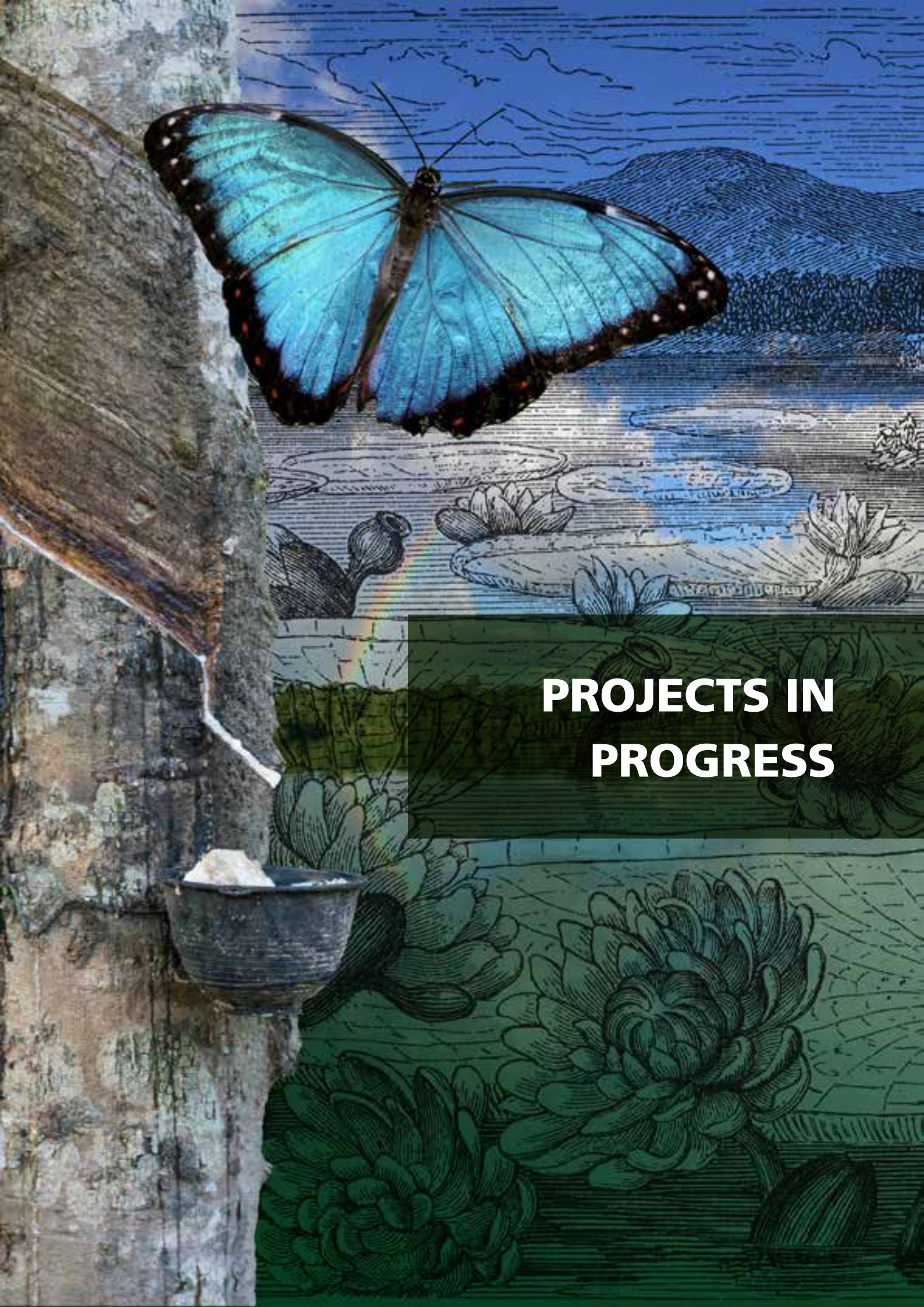
(Continuation)

Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
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
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 Ubiratã; and five municipalities in the state of Pará: Bannach, Cumaru 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 supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
Environmental Regularization Brazilian Foundation for Sustainable Development (FBDS)	Amazon biome	Support the environmental regularization process in the Amazon biome through: (i) land cover and use mapping; (ii) calculation of environmental liabilities in permanent preservation areas (APP) of water bodies and in potential areas for recovery in protected areas (PA) and indigenous lands (IL); 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	84%
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)	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	49%
Amazonia SAR Federal Government Operations and Management Center of the Amazonian Protection System (Censipam)	Around 950,000 km² will be monitored per year (23% of the Amazon biome): 764,000 km² of areas under greatest deforastation pressure; 144,000 km² 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$ 15,592,785.00 R$ 47,958,727.94	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 a scheme of payment for ecosystem services for families committed to reducing deforestation at National Institute of Colonization and Agrarian Reform (Incra) settlements	11.29.2011	US$ 11.657.650,95 R$ 23.425.282,04	100%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
Forest Assistance+ Program Foundation Sustainable Amazonas (FAS)	16 PAs in the state of Amazonas 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) systematizing and disseminating content, methodologies, lessons learned and innovative solutions; and (iv) launching a public call for small and medium income generating projects in the surrounding region	4.5.2016	US$ 8,786,621.50 R$ 31,518,490.00	100%
Family Farming Value Chains in the State of Mato Grosso Alternative Technology Center Foundation (CTA)	Regions of Portal da Amazônia, north-central and southwest of Mato Grosso	Support the strengthening of family farming in municipalities within the Amazon biome in southwestern Mato Grosso, by implementing and consolidating agroforestry systems (SAF), supporting collective structures for production processing and structuring commercialization channels for the SAF products	9.2.2014	US$ 1,447,876.95 R$ 3,238,032.00	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 develop the Northern Corridor in the state of Pará by implementing food processing units, SAF sapling nurseries, and community carpentry in quilombos and settlements	8.26.2014	US$ 1,452,506.58 R$ 3,312,877.00	100%
CAR Acre State of Acre	22 municipalities in the state of Acre	Support the implementation of the Rural Environmental Registry (CAR) and the enrollment to the Environmental Regularization Program (PRA) in the state of Acre	10.29.2013	US$ 7,707,589.49 R$ 16,838,000.00	100%
CAR Amazonas State of Amazonas	36 municipalities in the state of Amazonas	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	10%
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	100%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
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	77%
CAR Espírito Santo Institute of Agricultural and Forestry Defense of Espírito Santo (Idaf)	All municipalities of the state of Espírito Santo	Support the implementation of CAR in the state of Espírito Santo	6.19.2018	US$ 3,699,608.45 R$ 13,889,440.00	17%
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	Support 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$ 666,602.28 R$ 2,079,322.50	55%
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 state 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 a 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, Jutaí, Lábrea and Urucará	Support the stregthening of community forest management in the state of Amazonas by: (i) developing the Forest Cities platform to connect forest actors and support timber productive chains; and (ii) supporting the sustainable production and commercialization of wood and vegetable oils	12.27.2017	US$ 3,631,185.24 R$ 12,055,534.99	100%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
Consolidating Territorial and Environmental Management in Indigenous Lands Center for Indigenous Work (CTI)	Five ILs 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 ILs Vale do Javari (AM), Krikati (MA) and Governador (MA), and the development of PGTAs in ILs 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	100%
Indigenous Experiences of Territorial and Environmental Management in Acre Acre Pro-Indigenous People Commission (CPI-Acre)	Eight ILs in the state of Acre	Support the implementation of Territorial and Environmental Management Plans (PGTA) in eight ILs 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	78%
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) one federal settlement project (PA): Moju I and II	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	59%
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-extractivist 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%
Everlasting Forest Institute of Amazon People and Environment (Imazon)	Eastern 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	56%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
Communal Forests Tropical Forest Institute (IFT)	State of Pará	Support the implementation of new community forest management models for wood and açaí berry use and commercialization to strengthen social organization, generate income and contribute to deforestation reduction in PAs of sustainable use in the Marajó archipelago	4.6.2017	US$ 2,619,409.50 R$ 8,100,000.00	97%
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	98%
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 nuts 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 nuts 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) land-title diagnosis studies 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 towards PA management in the Northern Corridor region in the state of Pará	11.6.2015	US$ 3,194,485.79 R$ 12,104,865.00	100%
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	41%
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 sustainable use of the Amazon biome	5.15.2012	US$ 7,306,715.21 R$ 14,515,520.43	100%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
Kayapó Fund for Indigenous Land Conservation Brazilian Biodiversity Fund (Funbio)	ILs Kayapó, Menkragnoti, Baú and Badjonkôre, in southern Pará; and IL 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 Socioenviromental Institute (ISA)	Nine ILs in the Amazon biome, with a total area of more than 24 million hectares, benefitting more than 60,000 indigenous Individuals	Support the implementation of the PGTA for the Xingu Indigenous Park and the development of PGTAs for the IL 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 ILs in southern Amazonas, covering 1,095,169 hectares: ILs 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 ILs 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 IL Tenharim do Igarapé Preto in the Madeira River basin	11.1.2016	US$ 3,598,913.90 R$ 11,448,505.00	90%
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)	ILs Menkü, Manoki, Pirineus de Souza and Marãiwatsédé in the state of Mato Grosso	Conclude and implement a PGTA for the IL Marãiwatsédé and implement PGTAs for the ILs 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	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	43%
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	33%
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%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
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	73%
Environmental Monitoring of Brazilian Biomes Space Science, Applications and Technology Foundation (Funcate) and National Institute of Space Research (Inpe)	Deforestation monitoring 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	99%
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 land use and coverage studies in the Amazon biome, and 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 (OTCA)	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%
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	Support the consolidation of the production chain of Brazil nuts and strengthen productive activities related to açaí, cassava flour and natural rubber in two ILs and three extractive reserves in Rondônia	6.13.2018	US$ 2,348,558.47 R$ 8,700,000.00	99%

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Projects supported					
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	100%
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 Brazilian Amazon	Support structuring projects of sustainable production chains through public calls under the Small Eco-social Projects Program (PPP-Ecos)	9.18.2018	US$ 5,460,127.11 R$ 22,766,000.00	43%
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	100%
Profisc I - B Brazilian Institute of Environment and Natural Resources (Ibama)	Brazilian Amazon	Support the activities of Ibama for environmental monitoring and deforestation control in the Brazilian Amazon	3.19.2018	US$ 41,822,410.40 R$ 140,264,000.00	92%
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%
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	51%
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%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
Portal Seeds – Phase II Ouro Verde Institute (IOV)	Eight municipalities in the Portal da Amazônia region, located in northern 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 Extractivist Reserve	Support sustainable community-based forest production and contribute to the valorization and conservation of Tapajós region's natural resources	10.23.2017	US$ 5,916,859.55 R$ 18,835,139.00	67%
Land Regularization State of Mato Grosso – Office of Articulation and Regional Development (GDR/MT)	State of Mato Grosso	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 ILs in southern Pará (Kayapó and Las Casas), totaling 3.3 million hectares	Support the implementation and updating of the PGTA of the IL Kayapó and the implementation of the PGTA of the IL Las Casas, both located in the state of Pará, contributing to the protection and sustainable management of their 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	80%
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$ 31,090,420.18 R$ 52,934,549.42	100%
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 the stregthening of sustainable productive chains in the Amazon	12.11.2017	US$ 4,999,847.61 R$ 16,405,000.00	98%

ANNEXES

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, 2021 and 2020

Contents

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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 at December 31, 2021 and the related 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 accompanying financial statements present fairly, in all material respects, the financial position of Fundo Amazônia as at December 31, 2021, and its financial performance for the year then ended, in accordance with the accounting practices adopted in Brazil applicable to nonprofit entities (ITG 2002 R1).

Basis for opinion
Our audit was conducted in accordance with Brazilian and international standards on auditing. Our responsibilities under those standards are further described in the following section, titled "Auditor's Responsibilities for the Auditing of Financial Statements". We are independent of the Fund in accordance with 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.

Administrator's responsibility for the financial statements
The Fund's Administrator is responsible for the preparation and fair presentation of the financial statements in accordance with the accounting practices adopted in Brazil, applicable to nonprofit entities (ITG 2002 R1) and for such internal controls as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, regardless of whether caused by fraud or error.

KPMG

In the preparation of the 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 Fund 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 about whether the financial statements as a whole are free from material misstatements, regardless of whether caused by fraud or error, and to issue an auditors' that includes 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. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.
- Obtain an understanding of the internal controls relevant to the audit to design auditing procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Administrator.

- Conclude on the appropriateness of Administrator's basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Fund's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Fund to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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

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, April 14, 2022

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

José Claudio Costa
Accountant CRC 1SP-167720/O-1

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

STATEMENTS OF FINANCIAL POSITION
December 31, 2021 and 2020
(In thousands of reais)

	Note	12/31/2021	12/31/2020
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	4	3,583,826	3,549,553
Prepaid expenses	5	88,885	89,139
Total Assets		**3,672,711**	**3,638,692**
LIABILITIES AND NET ASSETS			
CURRENT LIABILITIES			
Funds to be allocated to projects	6	3,583,826	3,549,553
Support funds	7	88,885	89,139
NET ASSETS			
Accumulated surplus/(deficit)		-	-
Total liabilities and net assets		**3,672,711**	**3,638,692**

The accompanying notes are an integral part of financial statements.

6

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

STATEMENTS OF SURPLUS (DEFICIT)
Years ended December 31, 2021 and 2020
(In thousands of reais)

	Note	2021	2020
INCOME			
Revenues from donations to investments	6	117,491	130,999
Revenues from donations to support	7	254	350
Finance income	4	151,764	98,778
EXPENSES			
Expenses with donations to investments	6	(117,491)	(130,999)
Expenses with remuneration of available project funds	6	(151,764)	(98,778)
Administrative expenses	8	(254)	(350)
SURPLUS/(DEFICIT) FOR THE YEAR		-	-

The accompanying notes are an integral part of financial statements.

7

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, 2021 and 2020
(In thousands of reais)

	Surplus/ Accumulated (deficit)
Balance at January 1, 2020	-
Year 2020	-
Balance at December 31, 2020	-
Year 2021	-
Balance at December 31, 2021	-

The accompanying notes are an integral part of financial statements.

8

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, 2021 and 2020
(In thousands of reais)

	Note	12/31/2021	12/31/2020
Cash flows from operating activities			
Funds received			
Funds invested in projects	6	(117,491)	(130,999)
Financial income	4	151,764	98,776
(=) Net cash (consumed) generated by operating activities		**34,273**	**(32,223)**
Cash and cash equivalents at the beginning of the year		3,549,553	3,581,776
Cash and cash equivalents at the end of year	4	3,583,826	3,549,553

The accompanying notes are an integral part of financial statements.

9

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, 2021 and 2020
(In thousands of reais)

1. ACTIVITY CONTEXT

Fundo Amazônia was created by BNDES Resolution 1640, of September 3, 2008, and commenced its activities on the second half of 2009, engaged in raising donations to non-reimbursable investments in prevention, monitoring and combating against deforestation, and for encouraging conservation and sustainable use of forests in the Amazônia Legal biome, under Decree 6527/2008, amended by Decrees 6565/2008, 8773/2016 and 10223/2020.

Fundo Amazônia supports projects in the following areas:

- Management of public forests and protected areas;
- Environmental control, monitoring and surveillance;
- Sustainable forest management;
- Economic activities developed from sustainable use of vegetation;
- Ecologic and economic zoning, land use planning and land tenure;
- Conservation and sustainable use of biodiversity; and
- Recovery of deforested areas.

The management and administration of Fundo Amazônia are responsibility of Banco Nacional do Desenvolvimento Econômico e Social - BNDES, where among others it is responsible for fundraising, contracting and monitoring projects and supported actions, as well as operating as a legal representative.

The governance of Fundo Amazônia established by the Decree 6527/2008 provided for the existence of a Steering Committee - COFA, which is responsible for defining its guidelines and monitoring the results obtained. As a result of Decree 9759, dated April 11, 2019, this committee was extinguished as of June 28, 2019, and Decree 10223 of February 5, 2020, revoked the articles related to participation in the Steering Committee for Fundo Amazônia and its goals. This situation had no impact on the performance of projects that had already been contracted. Thus, Fundo Amazônia continues to operate normally, making releases and monitoring the performance of projects in progress. 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 2021 were suspended during the negotiation period. The Brazilian, Norwegian and German governments, donors of Fundo Amazônia, engaged to negotiations related to the redefinition of their governance, which were not concluded until December 31, 2021.

Fundo Amazônia has no legal personality, and its transactions are written up in specific accounts of BNDES.

10

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, 2021 and 2020
(In thousands of reais)

2. BASIS OF PREPARATION

The financial statements have been prepared and are being presented in accordance with Brazilian accounting practices for nonprofit 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 on the basis of 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.

c) Approval for issue

These financial statements were approved by Management on April 14, 2022.

3. SUMMARY 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

Cash and cash equivalents include high liquidity investments in two investments funds administered 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 variation of the quota of invested funds, as described in Note 4.

11

3.2 Funds to be allocated to projects

Refer to the balance of donations received and not yet allocated, including income from the investment of these resources.

According to Decree 6527/2008 and further amendments, 97% of the resources received are destined to projects. The amounts are recorded as liabilities, less the expenses incurred by each project, so that they do not result in increase or reduction of the net assets of the Fund, considering that the Fund is only the collecting and forwarding agent for execution of the projects.

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. Revenue from costing related to 3% of the donations is accounted for as "Support funds", 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 forwarding agent for these funds.

4. CASH AND CASH EQUIVALENTS

Composed as follows:

	12/31/2021	12/31/2020
Financial investment with the Administrator (*)	3,583,826	3,549,553
TOTAL	**3,583,826**	**3,549,553**

(*) 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 Brazilian government bonds, repurchase and resale agreements backed by Federal 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.

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, 2021 and 2020
(In thousands of reais)

Pursuant to Decree 6527/08 and further amendments, the percentage of 97% of the donations received is destined to projects. The Fund segregates these resources in specific investment account. The resources, while not allocated 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 Board Decision 832/2012, which established the accounting segregation of values obtained from Brazilian public sources, which cannot be destined to projects carried out by the Federal Government.

Until December 2021, the total financial revenues of the Fundo Amazônia applications since its inception totaled R$ 1,710,773 (R$ 1,559,009 until December 2020).

Changes in cash and cash equivalents are as follow:

12/31/2021				
	Total	Funds to projects (Gaia FI)	Funds to projects (Gaia II FIC)	Support funds
Balance at January 1, 2021	**3,549,553**	**3,528,169**	**21,384**	**-**
Income	151,764	150,850	905	-
Funds released	(117,491)	(117,491)	-	-
Balance at December 31, 2021	**3,583,826**	**3,561,528**	**22,289**	**-**

12/31/2020				
	Total	Funds to projects (Gaia FI)	Funds to projects (Gaia II FIC)	Support funds
Balance at January 1, 2020	**3,581,776**	**3,560,935**	**20,841**	**-**
Income	98,776	98,233	543	-
Funds released	(130,999)	(130,999)	-	-
Balance at December 31, 2020	**3,549,553**	**3,528,169**	**21,384**	**-**

13

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, 2021 and 2020
(In thousands of reais)

5. PREPAID EXPENSES

The balance of prepaid expenses is comprised of the equivalent to 3% of the value of donations, retained by BNDES to cover operating costs of Fundo Amazônia, net of amounts recognized as "Administrative Expenses" at Fundo Amazônia according to the use by BNDES.

6. FUNDS TO BE ALLOCATED TO PROJECTS

The balance of project funds 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 the available project funds are as follows:

	12/31/2021	12/31/2020
Balance at the beginning of the year	**3,549,553**	**3,581,776**
Income	151,764	98,776
Funds released	(117,491)	(130,999)
Donations received (*)	-	-
Balance at the end of the year	**3,583,826**	**3,549,553**

(*) Net amount of the portion of 3% destined to cover costs.

The amount of R$ 117,491 (R$ 130,999 as at December 31, 2020) is recorded in the statements of surplus (deficit) as "Revenue from donations to investments" and "Expenses with donations to investments", annulling each other because Fundo Amazônia is a nonprofit entity.

Fundo Amazônia did not receive donations in the years 2021 and 2020. Since the beginning of its activities to December 31, 2021, Fundo Amazônia received funds from the following donors:

Up to 12/31/2021			
Donor	**Support funds 3%**	**Project funds 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**

14

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, 2021 and 2020
(In thousands of reais)

Up to 12/31/2020			
Donor	Support funds 3%	Project funds 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 support funds refers to the portion of the donation (3%) retained by BNDES not yet recognized as "Revenue from donation". Revenue from donation is recognized according to the use of support funds by BNDES. In the years ended December 31, 2021 and December 31, 2020, no support amounts were allocated due to the lack of funds received from donations for the period.

8. ADMINISTRATIVE EXPENSES

In the year ended December 31, 2021, the amount of R$ 254 (R$ 350 as at December 31, 2020) was recognized as administrative expenses, where the most relevant ones are: publicity, travels and lodging, lecturers and events and audit 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 its own legal personality, and its transactions are written-up in specific bookkeeping accounts of BNDES.

Pis and Cofins

According to article 1 of Law 11828, of November 20, 2008, amended by Law 12810, of May 15, 2013, donations in cash received by public financial institutions controlled by the Federal Government and intended for actions to prevent, monitor, combat deforestation, including compensation programs for environmental services, and promoting conservation and sustainable use of Brazilian biomes are exempted from PIS-PASEP and from the Contribution for the Financing Social Security (COFINS).

15

Income and social contribution taxes

There is no income to be presented for taxation of income tax (IRPJ) and social contribution on net income (CSLL). The income from donation is recognized at the same time as the recognition of operating expenses with projects intended within the scope of Fundo Amazônia (as approved by inquiry 59 SRRF07/Disit, 08/06/2009, performed by BNDES to the Federal Revenue Department). The same occurred in relation to the financial income derived from investments in investment funds.

10. RELATED PARTIES

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, combating 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. NET ASSETS

The shareholder's equity of Fundo Amazônia is comprised of surplus/(deficit) for the years.

12. RISK MANAGEMENT

On December 31, 2021 and 2020, the Fund does not present material credit, liquidity, market and operating risks since it has very limited operations. The Fund presents a concentration of credit risk with its Administrator (invested funds) as Note 4 shows. The book values represent the amount related to Fund's credit risk as Note 1, the funds for the continuity and conclusion of the projects already contracted are guaranteed as provided for in the donation contracts.

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, 2021 and 2020
(In thousands of reais)

BOARD OF EXECUTIVE OFFICERS

Gustavo Henrique Moreira Montezano – President

Rodrigo Donato de Aquino

Lourenço Tigre

Bruno Laskowsky

Claudenir Brito Pereira

Fábio Almeida Abrahão

Bruno Caldas Aranha

Solange Paiva Vieira

Ricardo Wiering de Barros

Marcelo Sampaio Vianna Rangel

SUPERINTENDENT OF THE CONTROLLERSHIP AREA
Patrícia da Silva Barros

HEAD OF ACCOUNTING DEPARTMENT Marcos Paulo Pereira da Silva
Accountant - CRC-RJ 097.092/O-9

ANNEX 2

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 application of the Amazon Fund's resources in the Brazilian Amazon

Application	Application limit of the total resources available yearly	Tables
Projects in the Brazilian Amazon	No limits	A - F

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	Requirements
B1	Result indicators
B2	Applicants/executors
B3	Social participation
B4	Consistency with the Amazon Fund topics
B5	Consistency with the federal and 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 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 fauna and flora species.
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 forest hectares).

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 peoples 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 No. 6,527/2008.
B5 – Consistency with the PPCDAm, the PPCDs, and the Proveg
Projects must demonstrate clear coherence with actions foreseen in the Plan for the Prevention and Control of Deforestation in the Brazilian 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 from Deforestation and Forest Degradation, and the role of Conservation of Forest Carbon Stocks, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks (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; • Budget variation of the responsible institution or government body compared to the budget variation 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).

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(Continuation)

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 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 individual appropriation of benefits by the target population of the Amazon Fund (item A4); • 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).

(Continues)

(Continuation)

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 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

Maximum share of the Amazon Fund:

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 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 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 F1.
- 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 Law No. 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 No. 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 applicable, 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 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 that 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 an agreement between all partners and co-executors.
G7 – Social participation
Projects must have a monitoring phase featuring governmental entities and civil society. Projects involving the development of monitoring systems should have a monitoring phase that 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. When 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; budget variation of the responsible institution or government body compared to the budget variation 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.

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G11 – Territorial base
Projects must 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 established.
RESOURCE APPLICATION MODALITY
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 government spheres (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 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 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) images of the Earth's surface (aerial or satellite) for the purpose of mapping land cover and use, deforestation, forest degradation and 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; budget variation of the responsible institution or government body compared to the budget variation 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 providing 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.

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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 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 impacts of the project with regard to Brazil's foreign relations.
RESOURCE APPLICATION 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 government spheres (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

I1 – Focuses for 2017 and 2018

The following items define the Amazon Fund's focus for the biennium 2017-2018 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 new guidelines.

I2 – Requirements for supporting states

Support for new projects presented by state governments will be conditional on the concerned state 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 integrated or in the process of being integrated into the National Forest Control Origin System (Sinaflor), in compliance with article 35 of Law No.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.

I3 – Exception to the requirement of resource additionality in the Brazilian Amazon

Projects related to item I12 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 B8. 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

I4 – 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.

I5 – Structuring projects

Structuring project is one that cumulatively meets 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; (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.

I6 – 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 federal and state governments.

The Amazon Fund will be permanently open to submissions by partner institutions of requests for financial collaboration that seek support for public calls for projects, focusing on the actions prioritized for the biennium 2017-2018 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 that of the partner institutions responsible, as applicable.

BRAZILIAN AMAZON – MONITORING AND CONTROL
I7 – Inspection and control of environmental crimes and infractions
Promote inspection, investigation, and combat of environmental crimes and 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.
I8 – Implementation and execution of the Rural Environmental Registry (CAR) and environmental regularization
Promote 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 quilombos; (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 or family farms; and (vi) support for structuring and operationalizing the monitoring of the environmental regularity of rural properties. Support 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 not included in state-run projects may also receive support.
I9 – Preventing and combating the occurrence of forest fires
Support 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 indigenous lands. Promote the integration of information on fire authorizations issued by the states with the National Fire Information System – Sisfogo, through support to the integration of systems.
I10 – Improvement and strengthening of plant cover monitoring
Support the monitoring of deforestation, the dynamics of land use change, forest degradation and burn-off in the Brazilian Amazon.

BRAZILIAN AMAZON – FOSTERING SUSTAINABLE PRODUCTION ACTIVITIES
I11 – 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.
I12 – 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.
I13 – Restoration of degraded and altered areas
Support 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
I14 – Land-title regularization
Support 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.
I15 – Territorial planning
Support the elaboration, revision and detailing of ecological-economic zoning (ZEE), including training actions for government and civil society managers and technicians, 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.

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I16 – Indigenous lands
Support the elaboration and implementation of territorial and environmental management plans for indigenous lands, aligned with the National Policy for the Territorial and Environmental Management of Indigenous Lands (PNGATI), including protection and surveillance of indigenous lands.
I17 – Protected areas
Support the creation, recognition and consolidation of protected areas (nature conservation units and indigenous lands). Support 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 item I13; and (iv) the formalization of agreements to maintain corridors. Support 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).
I18 – Settlements
Support 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
I19 – New products from socio-biodiversity
Support 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.
I20 – Sustainable production activities
Support 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.
I21 – Systems for monitoring and control of deforestation, forest degradation and fires
Support 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.
I22 – Studies, projections and simulations
Support 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.
I23 – Community financing
Support the structuring and contribution to community financial resources revolving funds or similar instruments to enable the expansion of the value chains of forest management, socio-biodiversity and agroecology.
I24 – Promotion of public procurement policy
Support the expansion of public procurement policies for products originating from forest management, socio-biodiversity and agroecology, aiming to give them support and a greater scale.
I25 – Economic instruments and impact investment
Support the development of a social and environmental impact investment ecosystem and other impact initiatives in the Brazilian Amazon, as well as 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

I26 – Rural Environmental Registry (CAR) and environmental regularization of rural properties

Promote 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 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. For 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 the applicable legislation.

I27 – Deforestation monitoring systems

Support 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 G1 TO G20).

Support protection and surveillance on indigenous lands.

Promote integrated computerization of state forest management data into the National Forest Control Origin System (Sinaflor), including authorizations for suppression of vegetation and management plans.

AMAZON FUND'S SUPPORT IN OTHER TROPICAL COUNTRIES

I28 – Deforestation monitoring systems in other tropical countries

Support 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 H1 to H17).

ANNEX 3 – 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 toward 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
Environmental Operations Company	Federal Government (Ministry of Justice)	30,631,480.00	2020
TOTAL	-	**178,553,409.16**	-

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)	6,601,699.07	9,347,384.00	(2,745,684.93)
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	52,934,549.42	60,000,000.00	(7,065,450.58)
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	Municipality of Alta Floresta	7,146,563.54	7,182,970.00	(36,406.46)
Green Municipalities Program	State of Pará	75,296,569.12	82,378,560.00	(7,081,990.88)
CAR Roraima	State of Roraima	3,075,205.25	10,820,500.00	(7,745,294.75)
Nontimber Products Value Chains	SOS Amazon Association	9,938,777.00	9,993,000.00	(54,223.00)
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)	8,837,852.29	9,117,000.00	(279,147.71)
Forest Sentinels	Farmers' Cooperative of Vale do Amanhecer (Coopavam)	5,175,522.50	5,288,817.00	(113,294.50)
Strengthening 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)
Sustainable Indigenous Amazon	Association of Ethno-environmental Defense Kanindé	7,352,757.03	8,188,872.44	(836,115.41)

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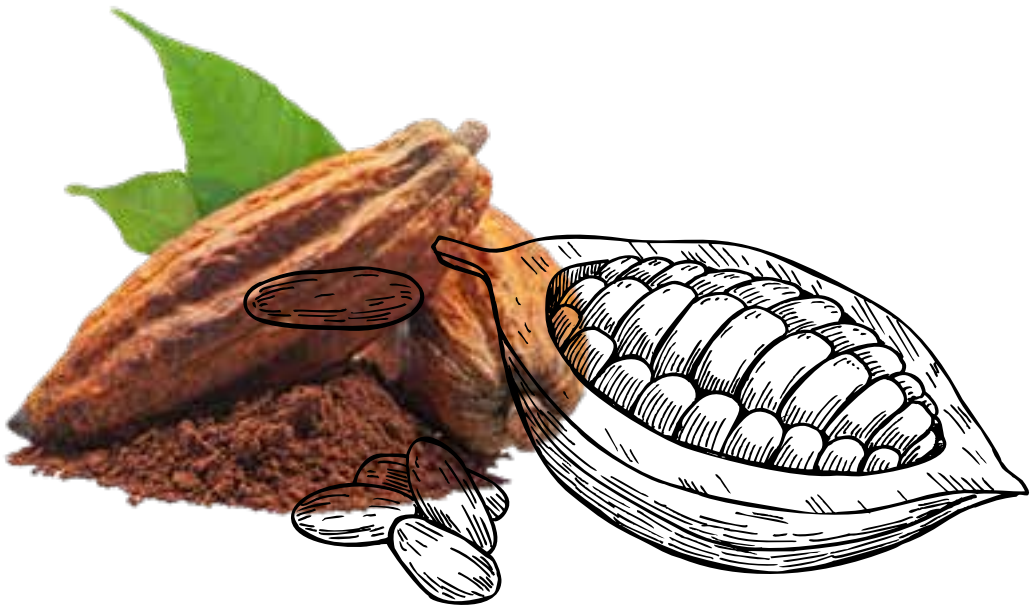
Project	Project management	Value of the support (R$)	Original value of the support (R$)	Value of the change* (R$)
New Paths in Cotriguaçu	Municipality of Cotriguaçu	1,567,845.25	1,981,511.00	(413,665.75)
APL Babassu	Association of Settlement Areas in the State of Maranhão (Assema)	4,897,085.37	5,286,300.00	(389,214.63)
Small Eco-Social Projects in the Amazon	Society, Population, and Nature Institute (ISPN)	12,814,691.38	12,843,876.04	(29,184.66)
Strengthening Territorial and Environmental Management of Indigenous Lands in the Amazon	The Nature Conservancy of Brazil (TNC Brasil)	15,487,682.61	15,750,406.00	(262,723.39)
Sustainable Settlements in the Amazon	Amazon Environmental Research Institute (Ipam)	23,425,282.04	24,939,200.37	(1,513,918.33)
CAR Paraná	Paraná Environmental Institute (IAP)	2,079,332.50	14,110,253.86	(12,030,921.36)
Amazonia SAR	Federal Government Operations and Management Center of the Amazonian Protection System (Censipam)	47,958,727.94	63,923,626.00	(15,964,898.06)
Using Social Technologies to Reduce Deforestation	Interstate Agricultural Development Association (Adai)	9,059,718.63	9,075,000.00	(15,281.37)
Sustainable Tapajós	Conservation International of Brasil (CI-Brasil)	18,835,139.00	23,679,628.00	(4,844,489.00)
Forest Cities	Institute of Conservation and Sustainable Development of the Amazon (Idesam)	12,055,534.99	12,092,485.00	(36,950.01)
Training to Conserve	Amazon Conservation Team (Ecam)	1,404,360.67	1,452,000.00	(47,639.33)
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		**506,108,056.49**	**586,833,674.11**	**(80,725,617.62)**

* 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 4

Result 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/ 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/ 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 over R$ 150,000 (number of projects)	Transportation equipment purchased for sustainable production activities – boats/cars/trucks/tractors/ motorcycles (number of pieces of equipment)
	Sustainable production studies conducted – diagnostics/business plans/ communication plans (number of studies)	Medium and large projects supported by cooperative entities – projects over 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 over R$ 150,000 (number of projects)

(Continues)

(Continuation)

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 projects supported by cooperative entities – projects over 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 – in natura 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 burn-offs – 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 burn-offs or integrated fire management – public servants (number of individuals)	

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(Continuation)

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 burn-offs or integrated fire management – public servants (number of individuals)	
	Operations to combat forest fires and unauthorized burn-offs 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)	

(Continues)

(Continuation)

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 burn-offs fought by the Fire Brigade (number of fires)	
	Individuals trained in prevention and combat of forest fires and unauthorized burn-offs 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 burn-offs or in integrated fire management that effectively apply the acquired knowledge – female public servants (number of individuals)	
	Individuals trained in techniques of controlled burn-offs 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 burn-offs 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)	

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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/motorcycles (number of pieces of equipment)	Transportation equipment purchased for land-use planning purposes – boats/cars/trucks/tractors/motorcycles (number of pieces of equipment)	Transportation equipment purchased for land-use planning purposes – boats/cars/trucks/tractors/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/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)	

(Continues)

(Continuation)

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 projects supported by cooperative entities – projects over 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)		

(Continues)

(Continuation)

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 with 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)		

(Continues)

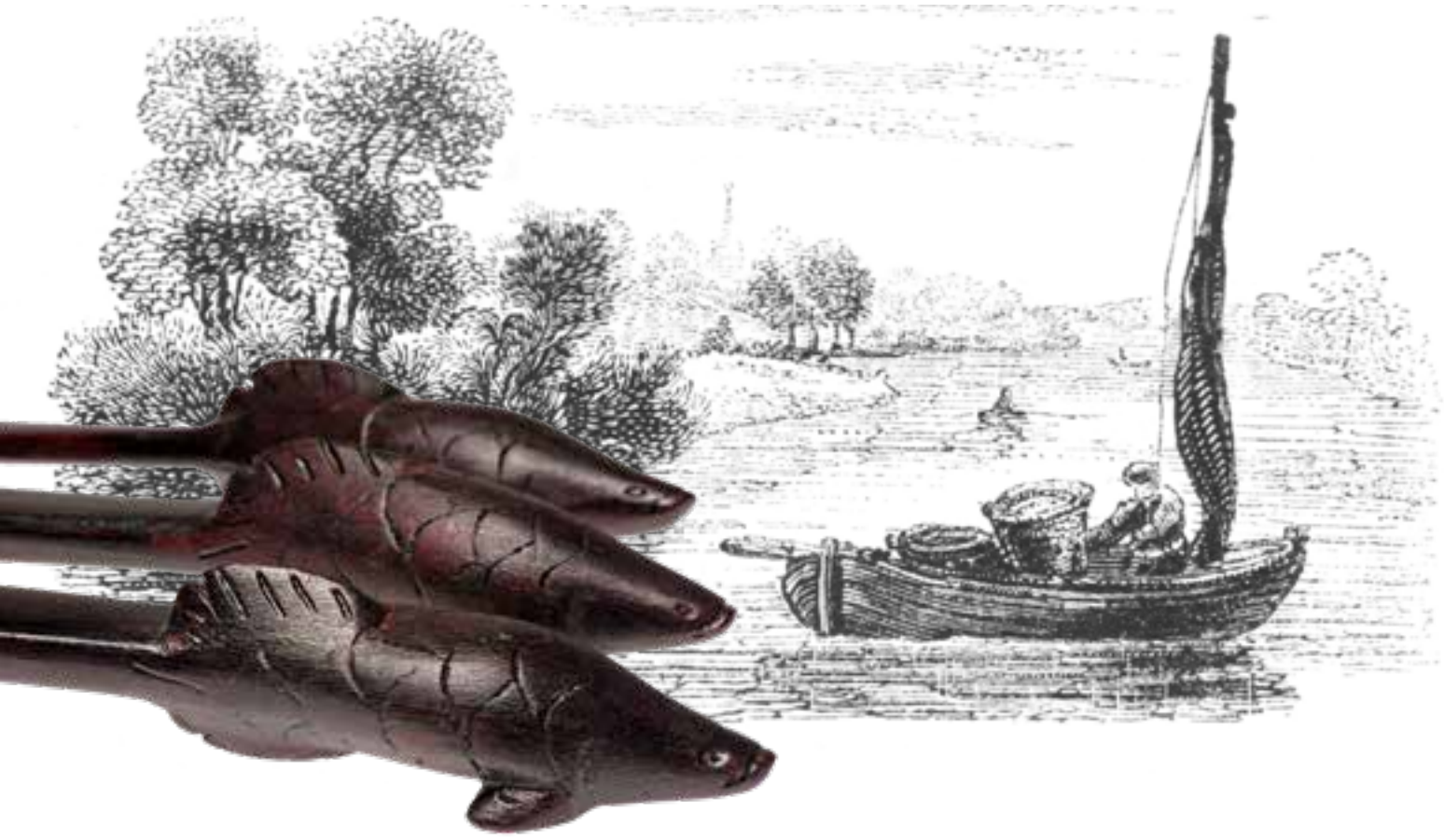
(Continuation)

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)
	Researchers and technicians involved in scientific and technological research activities residing in the Amazon region for the execution of the project – total (number of individuals)	Mapping of social- and environmental-oriented business opportunities carried out (number of mapping activities)
	Female researchers and technicians involved in scientific and technological research activities residing in the Amazon region for the execution of the project (number of individuals)	
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.) by use of 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)
		Production entities that have sold products under government programs (number of entities)
		Individuals that have sold products under government programs (number of individuals)

(Continues)

(Continuation)

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 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)



PROJECTS INDEX

Credits

(composition of positions in December 31, 2021)

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Joaquim Leite

MINISTER OF ECONOMY

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The world supports it.
Everyone wins.

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