AMAZON FUND

15 YEARS

ACTIVITY REPORT 2022

Message from the minister Marina Silva

The year 2023 represents a symbolic and important moment in the history of the Amazon Fund. By resuming its activities, the fund retakes the role of supporting the conservation and sustainable development of the largest tropical forest on the planet.

This report is published at the same time as significant changes occur in Brazil and in the fund itself. By decision of President Lula, on his first day in office, the fund had its governance reactivated, ending four years without approval of projects and receipt of new resources. Thanks to Decree 11,368/2023, it was possible to recompose the Amazon Fund Steering Committee (COFA) which, at its first meeting of the year, approved the new guidelines for the application of resources to priority projects related to coping with deforestation and the indigenous humanitarian and health crisis.

The reinstatement of COFA and its resolutions recover the necessary link of the fund with the policies of the Federal Government linked to the reduction of deforestation and the sustainable development of the region, provided for in the actions of the Action Plan for Prevention and Control of the Legal amazon Deforestation (PPCDAm), also reinstated on the first day of the presidential term, through Decree 11,367/2023.

The Amazon Fund is the fruit of the results obtained by the Brazilian government in the historical deforestation reduction observed between 2004 and 2012, which led to the reduction of greenhouse gas emissions, providing an expressive contribution to the confrontation of climate change, one of humanity's most serious current challenges. Now, given the proof that the conservation of the Amazon has received due priority from the government, former partners who made the first contributions to the fund express their intention to make new financial contributions, as well as promising prospects for the accession of new donors. This unequivocally shows the recovery of Brazil's credibility with the international community.

I believe that the Amazon Fund will not only return strengthened, but that it will also significantly increase its fundamental role in supporting strategic actions necessary for the transition to a sustainable economy, with solutions based on nature and the promotion of sociodiversity and bioeconomy.

Marina Silva
MINISTER OF THE ENVIRONMENT

Message from the president

Humanity and the planet are facing one of its greatest challenges: the urgent need to combat and mitigate environmental crisis and climate emergencies. Science shows that greenhouse gas emissions and the resulting global warming are increasing the occurrence of extreme weather events. In Brazil, for example, thousands of cities have suffered from floods and landslides or droughts and dry spells—environmental disasters that result in compromised crops, food supply, energy, and water regime.

Brazil is the fifth largest emitter of greenhouse gases, half of which are caused by deforestation and fires. Our country is home to the richest biodiversity and largest rainforest in the world, which opens up a great window of opportunity but also increases our responsibility. We have a duty to preserve the Amazon and its populations, including traditional communities and indigenous peoples. The Amazon can either make or break Brazil.

Based on this mission, in the recent past, Brazil has become the leader of developing countries and has taken the forefront on low-carbon policies. We played a leading role in the Paris Agreement and established bold goals to curb global warming, inspiring other nations to forge a planetary alliance around the preservation of life in all its diversity. In other words, Brazil has already demonstrated its capacity to promote deforestation reduction and can once again lead global decarbonization efforts.

In the near future, Brazil will once again take over the BRICS presidency and the G20 leadership, and will host the important COP-30 event, reassuming a leading role in the environmental preservation agenda in the concert of nations. We must take advantage of this scenario to intensify our defense of the Amazon.

In our opinion, certain guidelines will be fundamental:

> rebuild conditions to combat deforestation via command and control operations;

> enable structural and scale projects that generate sustainable development and maintain the standing forest, protecting and providing emergency care to the most vulnerable groups; and

> develop infrastructure, clean industry and scientific research, generating new jobs and income opportunities for the region's 28 million inhabitants.

The year 2023 begins with good and new prospects for the Amazon Fund, the first step towards this necessary green transition. After a period of suspended approval of new projects following the extinction of the joint governance bodies, the time has come to rebuild this history of challenges and opportunities that celebrates its 15th anniversary.

Resisting the lack of new approved projects that marked the period from 2019 to 2022, the Amazon Fund maintained its support for projects already contracted before 2019 and, in the meantime, disbursed R$ 448 million to social and environmental projects, which represents an average of R$ 112 million per year in non-refundable financial resources. These significant values demonstrate the robustness of this successful experience developed by Brazil to raise and apply climate financing resources that resisted the disruption and shutdown of projects.

Governance is one of Amazon Fund's pillars. Based in the Guidance Committee (COFA), it is being resumed and strengthened with broad social participation, including the presence of representatives from Indigenous peoples, academia, small-scale farmers, industry and social and environmental organizations, in addition to federal and state government bodies, in a space for multilateral debate and dialogue guided by efficiency and equity in the use of essential resources for the Amazon.

Transparency and control in resource allocation is another non-negotiable commitment of BNDES. All projects supported by the Amazon Fund undergo standardized processes, documented and audited within the bank by professionals who perform their work following the highest standard of dedication and public spirit. The fund undergoes two external audits annually, and in recent years has been inspected by federal control bodies which have checked thousands of documents and found no irregularities.

This sum of joint efforts will enable our country to promote social inclusion and environmental conservation, valuing cultural diversity, without foregoing economic and scientific development.

BNDES has a pressing commitment to a sustainable economic, social, and environmental development model in which the Amazon plays a key role, and the Amazon Fund is a fundamental instrument to promote a fair and future-oriented ecological transition.

Aloizio Mercadante
PRESIDENT OF THE 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.

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

In 2021, it reached a total of:

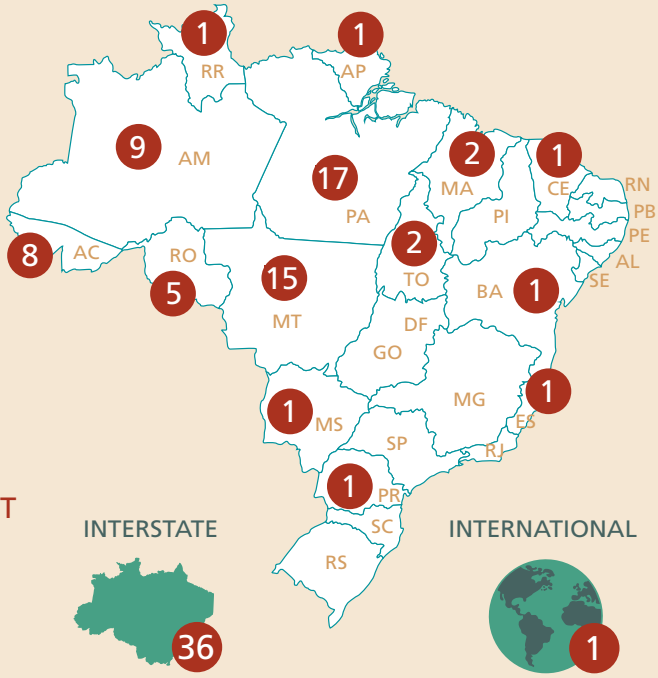
102 PROJECTS SUPPORTED

US$ **599** million IN DISBURSEMENTS

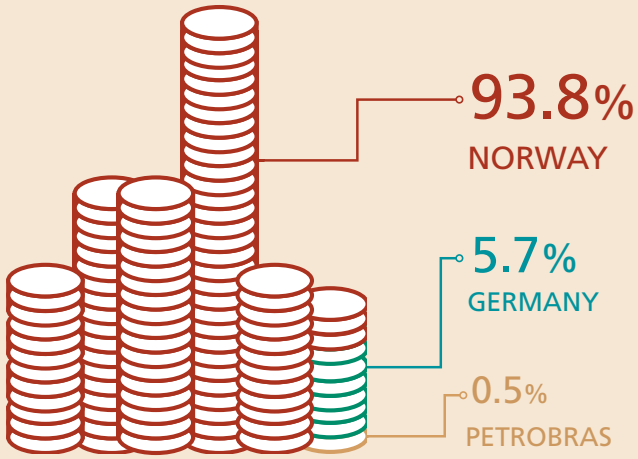
US$ **678** million IN TOTAL VALUE OF SUPPORT

US$ **1.3** billion IN DONATIONS RECEIVED

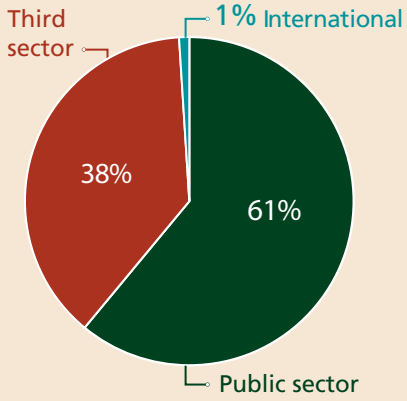
NUMBER OF PROJECTS SUPPORTED BY STATE



DONORS



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)

1,896 environmental inspection missions carried out

653 community organizations strengthened

241 thousand
people directly benefited from sustainable production activities

196
protected areas supported

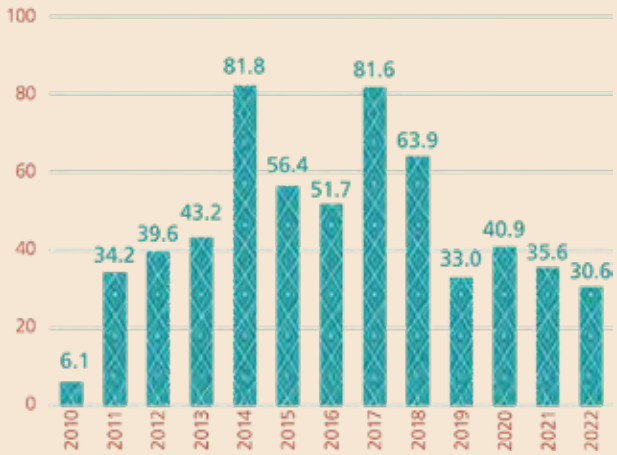
101 indigenous lands in the Amazon supported

603 scientific or informative publications produced

32,837 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 is composed 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

In 2022, 13 projects were concluded, totaling 60 concluded projects. There are four state government projects, three of which are related to the CAR. The other nine projects concluded were from third sector institutions and focused on promoting the region's forestry bioeconomy, supporting small farmers, indigenous peoples, and municipal environmental management.

Two new thematic evaluations carried out by independent consultants were also concluded, encompassing 11 projects, on indigenous projects and sustainable production chains, available in the external evaluations section of the fund's website.

The Amazon Fund's Effectiveness Assessment, carried out by independent experts, is also published on the fund's 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

Presentation

The Amazon Fund is an instrument 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), and its creation was authorized to the BNDES in 2008, by Presidential Decree 6,527. The fund was constituted to receive voluntary donations for non-refundable application in actions to prevent, monitor and combat deforestation, working towards the conservation and sustainable use of the Brazilian Amazon.

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

Regarding project support, the fund ends 2022 with a portfolio of 102 supported projects, of which 60 are completed. The financial resources allocated to the supported projects total about R$ 1.8 billion. Of this amount, 79.5% has already been disbursed. More expressive results were not achieved because, as a result of Decree 9,759, of April 11, 2019, the two committees that made up the governance of the Amazon Fund – the Amazon Fund Steering Committee (COFA) and the Amazon Fund Technical Committee (CTFA) – were extinguished and, consequently, the fund's donors suspended the flow of support for new projects by the BNDES. This condition was reversed only in early 2023, with the signing of Decree 11,368, of January 1, which resumed the fund's previous governance and allowed the reopening of the proposal analysis process by the BNDES.

Amazon Fund objectives

To achieve its objectives, the Amazon Fund supports projects in actions to prevent, monitor and combat deforestation and to promote the conservation and sustainable use of the Brazilian Amazon in the following thematic areas, as 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 (EEZ), territorial planning and land regularization;

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

VI. conservation and sustainable use of biodiversity; and

VII. recovery of deforested areas.

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

The Amazon Fund in the BNDES

The BNDES, a federal public company founded in 1952, operates in the financing of various segments of the Brazilian economy, such as infrastructure, industry, micro- and small-sized enterprises, among others, encouraging innovation, territorial development and good socio-environmental practices. In addition, it has as one of its strategic objectives to contribute to the modernization of the Brazilian State with the improvement of quality and efficiency in the provision of education, health and safety services.

The mission of the BNDES is to enable and propose solutions that transform the productive sector and promote the sustainable development of the country. Throughout its history, the Bank has presented a significant legacy of results for the development of Brazil.

The exercise of its various activities requires the permanent training of its employees, admitted through public bids at the national level. The BNDES' decisions are based on technical parameters and submitted to audit and control by external bodies.

For the BNDES, social, environmental and climate responsibility means valuing and integrating these dimensions in its strategy, policies, practices, procedures and all its activities, including its relationship with stakeholders: employees, customers and users of its products and services, investors, communities impacted by its performance, suppliers and other relevant partners. The current Social, Environmental and Climate Responsibility Policy (PRSAC) was by the BNDES Executive Board on April 7, 2022 and by its Board of Directors on June 13, 2022.[2]

The BNDES' statement of values and commitment to ethics 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 has a broad portfolio of financial instruments to promote sustainable development, offering more attractive conditions to support sectors with positive socioenvironmental externality, such as renewable energy, sanitation, urban mobility, forest restoration and sustainable agriculture. Its strategic guidelines for performance

2 Available at: https://www.bndes.gov.br/wps/portal/site/home/desenvolvimento-sustentavel/o-que-nos-orienta/prsac-e-seus-instrumentos/politica-responsabilidade-social-ambiental-climatica/

in the environmental theme are to contribute to the preservation of the country's socioenvironmental heritage and promote the just transition to a carbon-neutral, resilient and climate-adapted economy, fostering economic growth and placing Brazil in the pole position for sustainable investments in the international scenario. The Bank continues to prioritize support for renewable energy, which represented 41% of the share of disbursements destined for the green economy in 2022, totaling R$ 17.6 billion in disbursements. It is also the manager of the reimbursable part of the resources of the National Fund on Climate Change, better known as the Climate Fund, supporting projects on the most diverse fronts, such as Sustainable Cities and Climate Change, Efficient Machinery and Equipment and Solid Waste, among other subprograms.

As a most recent example of the Bank's performance in this agenda, the Floresta Viva initiative stands out, launched in 2021 to implement ecological restoration projects with native species and agroforestry systems in Brazilian biomes. In an unprecedented partnership with public and private companies and state governments, around R$ 700 million to be executed within a period of 7 years have been mobilized so far. The first notice of the Floresta Viva, Manguezais do Brasil, was launched at the end of 2022, aimed at the non-refundable support of projects to recover native vegetation in mangrove and restinga areas of the country. There will be R$ 44 million in resources to support up to nine projects from the three macro-regions (North Coast, Northeast/Espírito Santo and South/Southeast) defined in the PAN Mangrove Action Plan, of the Chico Mendes Institute for Biodiversity Conservation (ICMBio).

In addition to supporting projects, the BNDES acts in several national and international forums on the subject, such as the Financial Initiative of the United Nations Environment Program (UNEP FI) and the Climate Action in Financial Institutions (community of financial institutions, public and private, which aims to share good practices, tools and methodologies), for example. The BNDES has also signed partnerships with the International Finance Corporation (IFC) – of the World Bank group, a reference in socio-environmental risk assessment – and the British government, through the Partnership for Accelerated Carbon Transition (UK Pact) initiative, as well as participated in multisectoral forums, such as the Financial Innovation Laboratory (LAB), led by the Brazilian Securities and Exchange Commission (CVM) and the Brazilian Development Association (ABDE). It is also noteworthy that, in 2021, the BNDES formally adhered to the UN Global Compact, an initiative that involves more than 1,700 members in Brazil and more than 20,000 worldwide, contributing to the development of more sustainable business practices. All these forums help to seek solutions to the new challenges that arise.

In April 2022, Moody's ESG Solutions renewed the evaluation attributed to the BNDES in 2021, maintaining the A1+ rating, the highest of its scale. It also added one more point to the Bank's evaluation, positioning it in 86th place among the 4,890 companies participating in the world ranking. The BNDES ranked fourth among the 854 organizations analyzed in emerging markets, ranking among the top 2% of the world's most sustainable institutions.

Recent developments, challenges and perspectives

In 2022, the analysis activities and new project approvals continued to be suspended, with no significant progress in the talks between donors and the Brazilian government regarding the resumption of the fund's governance.

Even without approving new projects in the period between 2019 and 2022, the Amazon Fund disbursed R$ 448 million for projects already approved and contracted. This amount represents R$ 112 million per year on average in non-refundable financial resources for socio-environmental projects. These are significant values, which demonstrate the robustness of the model developed by Brazil for the collection and application of resources for climate financing.

In 2022, another 13 projects were completed, totaling 60 completed projects. There are four state government projects, three of them related to the Rural Environmental Registry (CAR) in the states of Roraima, Paraná and Mato Grosso do Sul. The fourth finalized state project was "Importance of Forest Environmental Assets" of the government of Acre, which promoted actions in integrated territorial management and promotion of agroforestry production chains and environmental services.

The other nine projects completed in the year were from institutions in the third sector and focused on promoting the region's forest bioeconomy, supporting small farmers, indigenous peoples and municipal environmental management. The institutions implementing these projects were: Instituto do Homem e Meio Ambiente da Amazônia (Imazon), Instituto Ouro Verde (IOV), Instituto de Desenvolvimento Sustentável Mamirauá (IDSM), Instituto Floresta Tropical (IFT), Instituto Socioambiental (ISA), Cooperativa Central de Comercialização Extrativista do Estado do Acre (Cooperacre), Instituto de Pesquisa Ambiental da Amazônia (IPAM), Instituto Peabiru and Operação Amazônia Nativa (Opan). More information about these projects is available in the chapter on completed projects.

In the theme of monitoring and evaluation, two more thematic evaluations were completed and encompassed 11 projects. The "Evaluation of the Effectiveness of Projects on Indigenous People under the Amazon/BNDES Fund" and the "Evaluation of Sustainable Productive Activities Projects within the scope of the Amazon Fund/ BNDES" are available in the external evaluations section of the fund's website.[3]

3 Available at: https://www.fundoamazonia.gov.br/en/monitoring-evaluation/independent-evaluations/

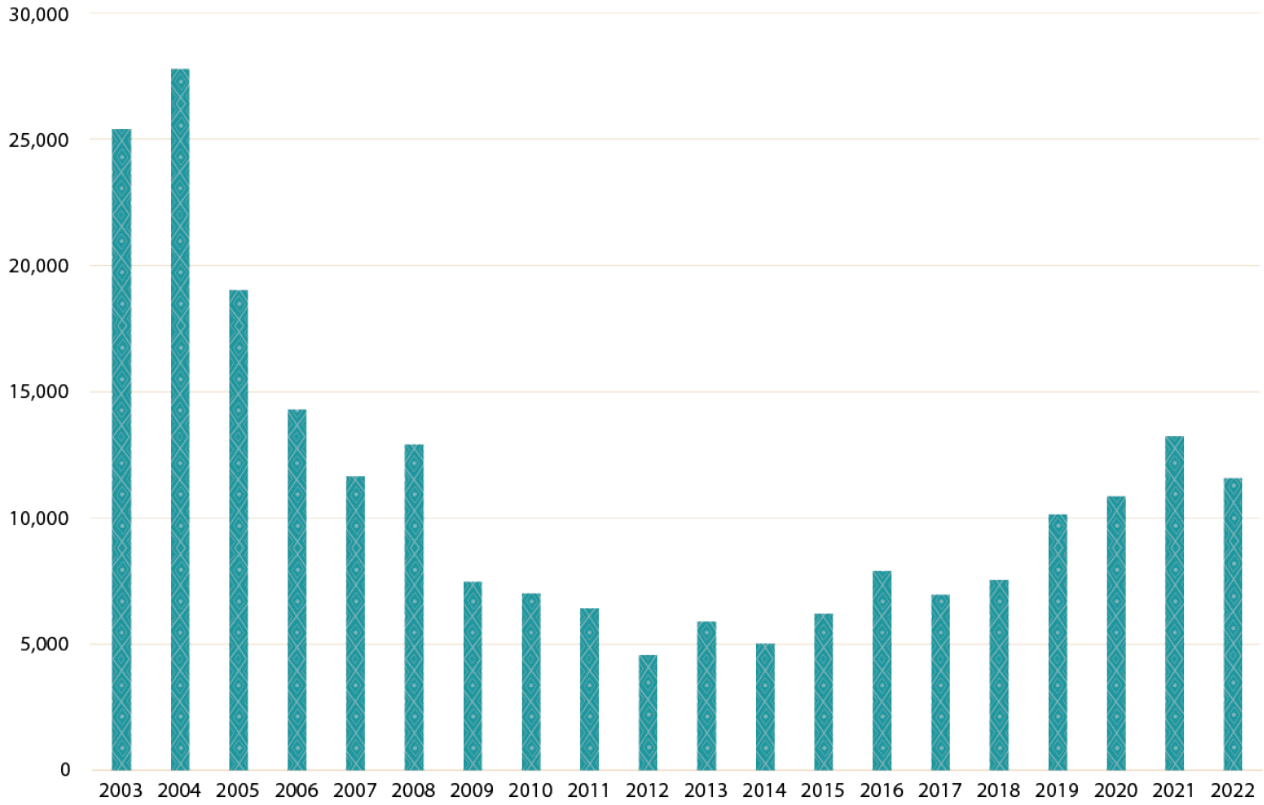
At the end of 2022, a new donation contract was signed, in the amount of € 35 million, from the German government through the German development bank KfW.

From the recomposition of the COFA, by Decree 11,368, of January 1, 2023, and the reformulation of the federal policy to combat deforestation through the elaboration of the Program for the Prevention and Control of Deforestation and Burning in Brazil (PPCD), the federal public policy that guides this agenda, in all Brazilian biomes, the operating bases of the Amazon Fund will be recreated so that Brazil achieves significant results in reducing deforestation, with social and economic progress for the populations of the Brazilian Amazon.

Data on deforestation in the Brazilian Amazon

In 2022, deforestation in the region[4] was 11,594 km², a 12.6% reduction compared to the previous year. This rate confirms the maintenance at a level above 10,000 km² in the last four years, a symbolic mark that had been beaten in 2009. Graph 1 presents the annual rate of deforestation in the Brazilian Amazon for the last twenty years.

GRAPH 1 › ANNUAL DEFORESTATION IN THE BRAZILIAN AMAZON, BY CLEAR CUT (KM²)



Source: BNDES.

4 Annual rates are estimated from the deforestation increments identified in each satellite image covering the Brazilian Amazon. The presentation of data is carried out at the end of each year, on a preliminary basis. The consolidated data is presented in the first half of the following year. This data is available at: http://terrabrasilis.dpi.inpe.br/.

Table 1 shows the 2022 deforestation rates in the states that make up the Brazilian Amazon compared to the deforestation rates of the previous year.

TABLE 1 › DEFORESTATION BY STATE

States	Deforestation 2021 (km²)	Deforestation 2022 (km²)	Deforestation variation 2022/2021 (%)
Acre	889	840	(5)
Amazonas	2,306	2,594	12
Amapá	17	14	(18)
Maranhão	350	271	(23)
Mato Grosso	2,213	1,927	(13)
Pará	5,238	4,162	(20)
Rondônia	1,673	1,480	(11)
Roraima	315	279	(11)
Tocantins	37	27	(27)
Brazilian Amazon	**13,038**	**11,594**	**(11)**

Source: Prodes/Inpe.

GOVERNANCE, FUNDRAISING AND COMMUNICATION

Governance of the Amazon Fund

The governance structure of the Amazon Fund is composed of two committees made up by representatives of the Federal Government, the governments of the states of the Brazilian Amazon, civil society and the scientific community. Until the end of 2022, as a result of Decree 9,759, of April 11, 2019, which extinguished collegiate bodies of the federal public administration (committees, commissions, etc.) created before January 1, 2019, the Amazon Fund committees remained extinguished. However, on January 1, 2023, this governance was reinstated through Decree 11,368.

FIGURE 1 › GOVERNANCE OF THE AMAZON FUND

Source : BNDES.

Amazon Fund Technical Committee

The Amazon Fund Technical Committee (CTFA) is responsible for attesting to the carbon emissions from deforestation calculated by the Ministry of Environment and Climate Change (MMA). To this end, it evaluates the methodology for calculating the deforested area and the amount of carbon per hectare used in the calculation of emissions.

The CTFA holds an ordinary meeting once a year and is formed by experts of notorious technical-scientific knowledge, designated by the MMA after consultation with the Brazilian Forum on Climate Change. Since the creation of the Amazon Fund, the CTFA has attested to the emission reduction values shown in 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	1.12.2009	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) is responsible for establishing the guidelines and criteria for the application of Amazon Fund resources, as well as approving the Amazon Fund Activity Report and information on the application of resources.

The COFA is formed by three benches of representatives, the first composed of ten Federal Government representatives; the second by nine representatives of the states of the Brazilian Amazon; and the third by six civil society representatives. The full list of organizations participating in the COFA can be found in Decree 6,527/2008 and amendments.[5]

5 Available at: http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2008/Decreto/D6527.htm.

Fundraising

Fundraising rules

Fundraising for the Amazon Fund is conditioned to the reduction of carbon emissions from deforestation, that is, Brazil must prove the reduction of deforestation in the Amazon to enable new funding.

To calculate the annual funding limit of the Amazon Fund, a simple and conservative method is adopted to ensure that emission reduction values are not overestimated. In summary, the calculation to obtain the reduction values of carbon emissions from deforestation starts from the difference between the historical average deforestation rate and the effectively deforested area measured in the year under evaluation. This result is multiplied by the amount of carbon present in the biomass, in tons of carbon per hectare. Thus, the calculation is performed by the following equation:

ED = (TDM - TD) × tC/ha	ED = reduction in carbon emissions from deforestation, in tons of carbon (tC) TDM = average deforestation rate (in hectares) TD = annual deforestation rate for the period (in 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 agency linked to the Ministry of Science, Technology and Innovation (MCTI). The MMA is responsible for defining the methodology for calculating the annual fundraising limit of the Amazon Fund. CTFA experts must attest to the effective reduction of carbon emissions from deforestation in a given period, evaluating the methodology for calculating the deforestation area and the amount of carbon per hectare used in the calculation of emissions.

Based on emission reduction data, BNDES is authorized to raise donations and issue diplomas recognizing the contribution of donors to the fund.

Formalized donations

Based on the annual funding limits attested by the CTFA, the Amazon Fund has already received donations from two foreign governments and one company. As shown in Table 3, by the end of 2022, donation commitments to the Amazon Fund expressed in three currencies were formalized: Norwegian krone (kr$ or NOK) for Norwegian donations; euro (€ or EUR) for Germany/KfW donations; and real (R$ or BRL) for Petrobras donations, 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 account.[6]

6 The conversions of the amounts of the donations to US$ and/or R$ present in this chapter were made based on the exchange rate of the respective dates of the actual receipt of the funds by BNDES, as expressed in the diplomas of donations.

On December 23, 2022, the BNDES and the German bank KfW signed donation contracts in the amount of up to € 35 million, aiming to expand the support of the German government to the Amazon Fund. These resources had not yet entered the country until the end of 2022.

As established in Decree 6,527/2008, the BNDES has the obligation to keep segregated, in its accounting records, the funds from donations, of which 3% are intended to cover operational costs and other expenses related to the Amazon Fund, including the contracting of audits.

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

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

Diplomas: acknowledgement of donor 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 their contribution to the effort to reduce carbon dioxide emissions. Table 4 shows data on resources already raised.

7 It is possible to check all the diplomas issued on the Amazon Fund website, as well as other information about the donations already received by the fund. Available at: https://www.fundoamazonia.gov.br/en/transparency/donations/.

TABLE 4 › FUNDS RAISED AND ENTERED

Donor	Installment	Date of entry of resources	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
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

(Continues)

(Continued)

Donor	Installment	Date of entry of resources	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	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	21st	7.30.2015	BRL 660,392.86	660,392.86	197,610.00	39,522.0	10,778.7	2006
Petrobras	22nd	7.30.2015	BRL 288,021.65	288,021.65	86,185.00	17,237.0	4,701.0	2006
Petrobras	23rd	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	4.06.2017	BRL 86,528.57	86,528.57	27,691.80	5,538.4	1,510.5	2006
Petrobras	26th	4.06.2017	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 values, as recorded in the diplomas issued by the Amazon Fund.

Institutional coordination and technical cooperation

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

Among these actions, it is worth mentioning the technical cooperation agreement between the 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 the resources of the German government itself. Within the scope of technical cooperation, several activities were carried out in 2022, among which the following stand out:

> The conduction of (in the conclusion phase) the thematic evaluation of projects aimed at strengthening municipal environmental management through the physical and operational structuring of municipal environmental secretariats in Mato Grosso, the recovery of permanent preservation areas (PPA), the regularization of rural properties of family agriculture, training and provision of technical assistance to the staff of the secretariats. The projects were: Buriti Springs, of Carlinda; Amazon's Water Springs – Phase II, of Alta Floresta; Preserving Porto dos Gaúchos, of Porto dos Gaúchos; Recovering Marcelândia, of Marcelândia; New Paths in Cotriguaçu, of Cotriguaçu; in addition to a transversal project dedicated to the development of capacities in the municipalities, called the Environmental Management Qualification Program, from the Brazilian Institute of Municipal Administration (Ibam);

- The conduction of (in the initial phase) two thematic evaluations of effectiveness:
    i. The first is focused on projects of the spatial planning axis. The projects are: Training to Conserve, of the Amazon Conservation Team (Ecam), and Strengthening Environmental Management in the Amazon, of the Institute of People and Environment of the Amazon (Imazon).
    ii. The other assessment is dedicated to sustainable production projects. The projects are: Strengthening the Forest Based Sustainable Economy, of the Central Cooperative for Extractive Marketing of the State of Acre (Cooperacre); Dema Fund, of the Federation of Organs for Social and Educational Assistance (FASE); Small Ecosocial Projects in the Amazon, of the Society Institute; Population and Nature (ISPN); and Materialize, of the Association of Small Agrosilviculturists of the Reca Project (Reca).
- The evaluation of the Importance of Forest Environmental Assets project, in the state of Acre, is being carried out, which aims to promote sustainable practices toward the payment for environmental services (PSA), valuing the environmental and forestry assets to consolidate an economy based on Ecological-Economic Zoning (EEZ);
- Preparation of a proposal for aggregate indicators to observe the Action Plans for the Prevention and Control of Deforestation and Burning (PPCDQ) of the states of the Amazon;
- Completion of support in updating the PPCDQ of the states of Acre, Amapá, Rondônia and Tocantins;
- Systematic support to the Amazon Fund team for monitoring and evaluating results; and
- Support in updating the Amazon Fund website, in addition to improving communication, aiming to disseminate the results of the Amazon Fund nationally and internationally, including the participation of the fund in international events.

Comunication

Among the instruments of transparency and dialogue, the following should be highlighted:

Website www.fundoamazonia.gov.br

Since 2010, the BNDES has maintained an updated website on the Amazon Fund, in Portuguese and with an English version. This website provides guidance on how to submit projects, the process for their approval and the documentation required at each stage of the process.[8] Updated information is also provided on fund governance, donations received, and monitoring and evaluation of results. The service to the

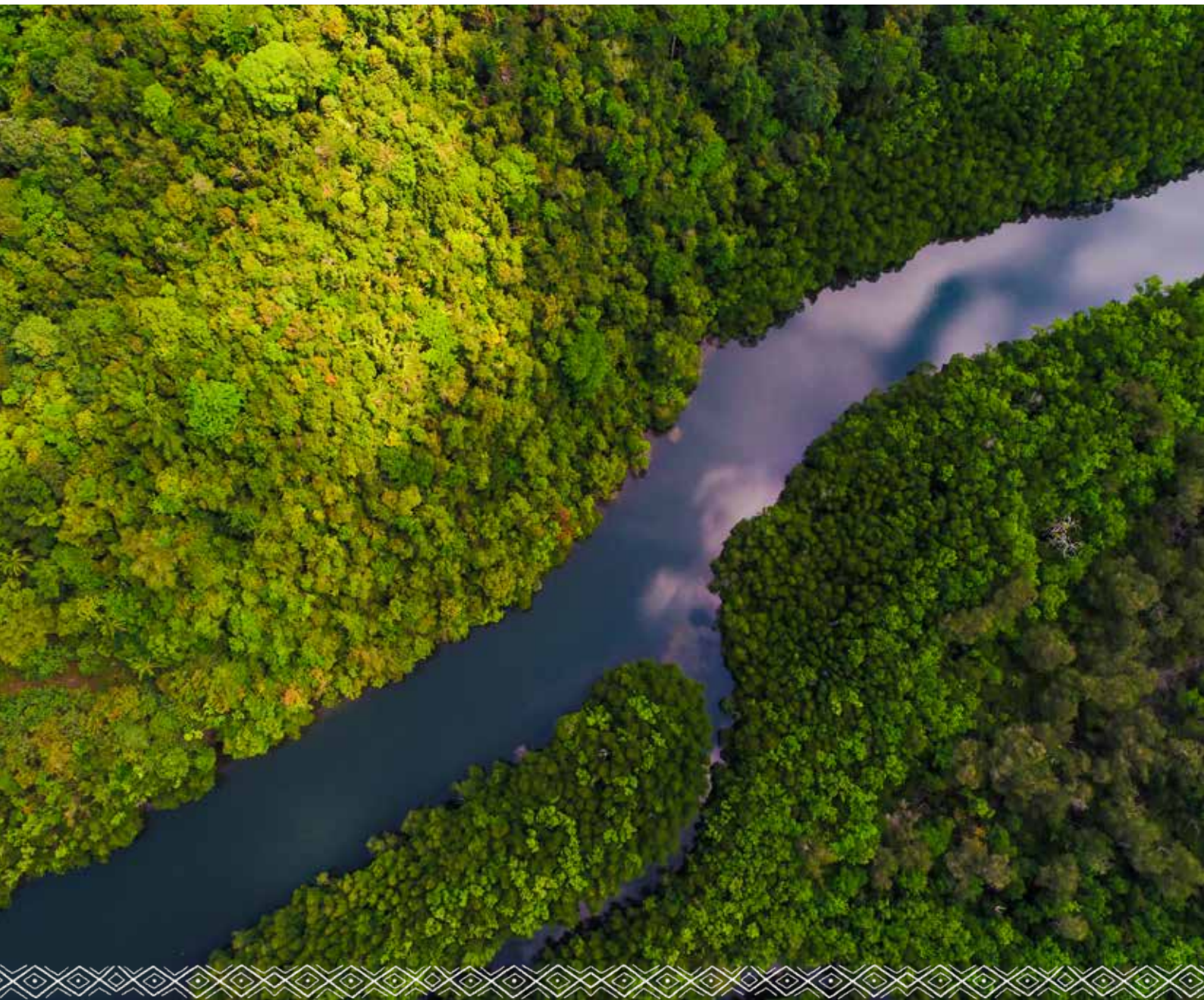
8 As of 12/31/2022, the analysis and approval of new projects by the Amazon Fund were suspended.

public is done through the Contact Us section (email), by telephone or by reading the "Frequently Asked Questions."

The portfolio of supported projects is disclosed, sharing, among other data, the name of the project and that of the person in charge, territorial scope, beneficiaries, objectives, total value of the project, value of support from the Amazon Fund, execution period and the dates of approval and hiring. Data is also published on the disbursements and activities carried out by each project and on how it contributes to the four axes of action of the Amazon Fund, organized from its logical framework. In 2019, advancing in transparency, the contracts and amendments of all projects in the fund's portfolio became available on the website.

Annual reports

In order to provide transparency to its activities, the Amazon Fund publishes its annual reports on its website. In addition to being instruments of accountability, the reports record and disclose to the society the actions and results of the fund.



OPERATIONAL PERFORMANCE

Project portfolio profile

The Amazon Fund concluded 2022 with a portfolio of 102 supported projects, totaling R$ 1,747,654,905.63. The number of projects supported to date and the total resources disbursed per year are presented in Table 5.

TABLE 5 › APPROVED, CANCELED, AND DISBURSED PROJECTS – 2009 TO 2022

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	119,891,704.35	69,248,454.83	11,105,966.90	6,108,472.74
2011	10	70,499,580.69	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
2022	–	–	-	90,466,219.65	30,553,197.89
Canceled projects*	(12)	(178,553,409.16)	(72,449,908.20)	N/A	N/A
Reduced balance*		(120,426,135.88)	(50,722,497.06)	N/A	N/A
Total	**102**	**1,747,654,905.92**	**676,183,793.40**	**1,511,528,971.29**	**598,821,216.50**

Source: BNDES

* See Annex 3 of this report for the list of projects canceled, supplemented and whose amounts have been changed.

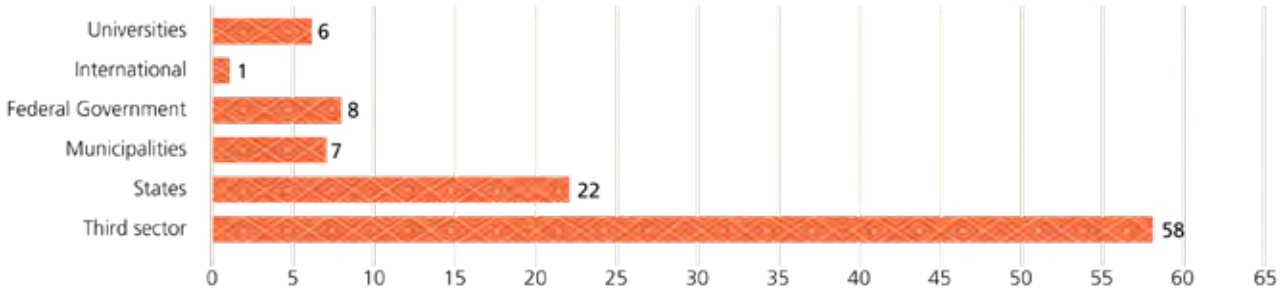
The disbursements for the supported projects occur in installments during their implementation and follow the deadlines established in the respective physical-financial schedules, which usually vary from one to six years.

Table 5 shows that the total disbursed to projects, until December 31, 2022, amounts to R$ 1,511,528,971.29, which corresponds to about 86% of the total amount of support from the Amazon Fund (R$ 1,747,654,905.92).

The amount disbursed in 2022 (R$ 90 million) was slightly lower than the amount disbursed in 2021 (R$ 117 million). Of the resources disbursed in 2022, 52% were allocated to third sector projects and 48% to public sector projects (24% to Federal Government projects and 24% to State Government initiatives).

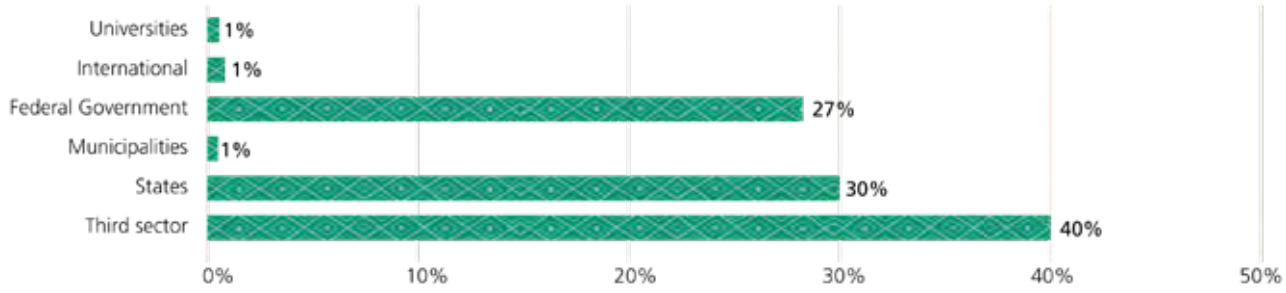
In addition to presenting projects that cover various actions, the Amazon Fund portfolio is also characterized by the different legal natures of those responsible for the projects, as shown in Graphs 2 and 3.

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



Source: BNDES.

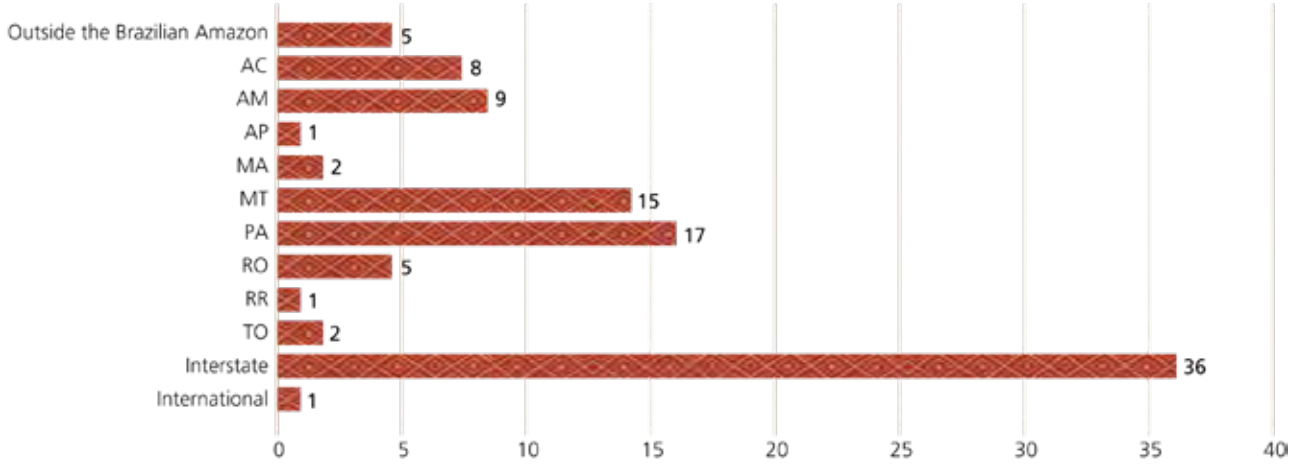
GRAPH 3 › PERCENTAGE VALUE OF TOTAL SUPPORT, BY LEGAL NATURE OF THE MANAGING ENTITY



Source: BNDES.

Graphs 4 and 5 depict the territorial scope of the supported projects and the percentage value of support by state. As shown, all states in the Brazilian Amazon have projects with support from the Amazon Fund. Together, the four states with the highest participation in the total amount of financial support (Acre, Amazonas, Mato Grosso, and Pará) have more than 77% of the total area of the Brazilian Amazon[9] and account for 69% of the fund's total support value.

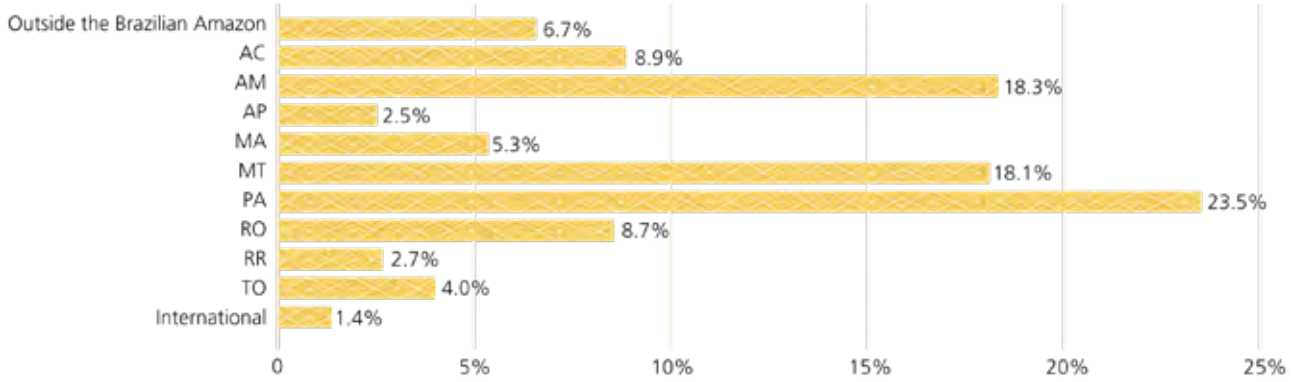
GRAPH 4 › NUMBER OF PROJECTS SUPPORTED, BY STATE



Source: BNDES.

9 Available at: http://www.ibge.gov.br.

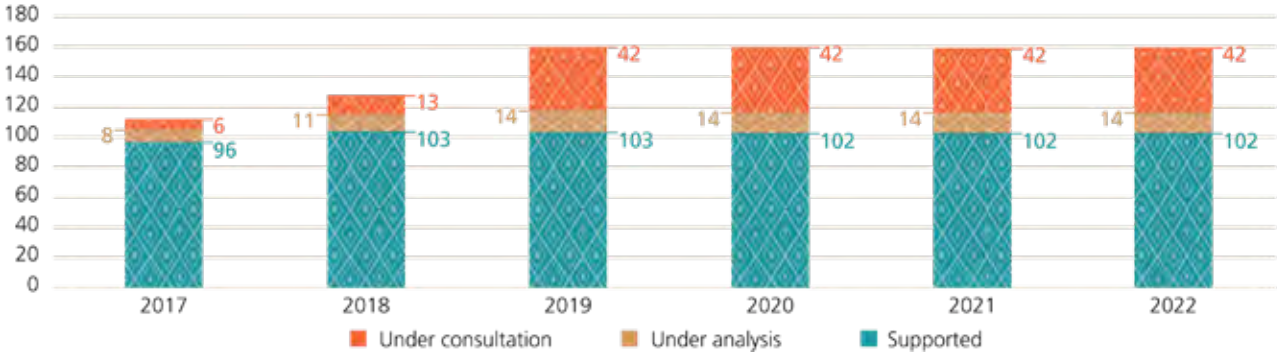
GRAPH 5 › PERCENTAGE VALUE OF TOTAL SUPPORT, BY STATE



Source: BNDES.

The annual evolution of the Amazon Fund's portfolio (projects in consultation, under analysis and supported) is represented in Graphs 6 and 7.

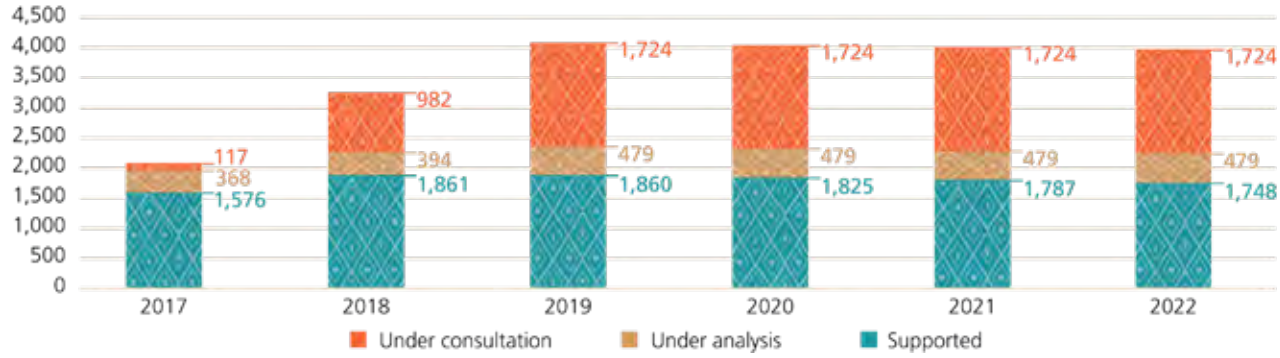
GRAPH 6 › EVOLUTION OF THE NUMBER OF PROJECTS, BY OPERATIONAL STAGE IN THE BNDES



Source: BNDES.

Note: For this calculation, each canceled project was deducted from the cumulative number of projects in the year of its cancelation (not the year of approval). For 2019, 2020, 2021, and 2022, the projects qualified in the public call Recovery of Vegetable Coverage were considered to calculate the number of projects in consultation at BNDES.

GRAPH 7 › EVOLUTION OF THE TOTAL AMOUNT OF SUPPORT FROM THE AMAZON FUND (R$ MILLION), BY OPERATIONAL SITUATION AT THE BNDES



Source: BNDES.

Note: This graph shows the net cumulative value in project cancelations and value changes. Reductions in project values and canceled project values in a given year are discounted in that same year. For 2019, 2020, 2021, and 2022, the values of the projects qualified in the public call Recovery of Vegetable Coverage were aggregated to calculate the value of the projects in consultation with the BNDES.

Note that, in 2022, the total value of supported projects decreased compared to 2021 (from R$ 1,787 million to R$ 1,748 million), due to cancelations of unused balances of projects and decrease in scope.[10] As mentioned in Chapter 1, as of 2019 no new projects were approved by the Amazon Fund.

The total funds received by the Amazon Fund, plus the income generated over the years and discounted from the amount segregated by the BNDES for its administration, amounts R$ 5,446 million, of which R$ 1,511 million was disbursed to projects. Therefore, the Amazon Fund has R$ 3,935 million to be disbursed 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, standardizes the accounting and independent auditing procedures adopted in Brazil. Through its collegiate and working groups, the CFC seeks to promote convergence between these procedures and the standards defined by international norms.

Tables 6 and 7 summarize the information contained in the audited financial statements and in their explanatory notes for the year 2022. The complete statements, accompanied by the opinion of the independent auditors, are set out in Annex 1.

TABLE 6 › BALANCE SHEET OF THE AMAZON FUND AS OF DECEMBER 31, 2022 (R$ THOUSAND)

Assets		Liabilities	
Current		**Current**	
Cash and cash equivalents	3,934,193	Resource for Projects	3,934,193
Prepaid expenses	88,616	Support Funds	88,616
		Net equity	
		Accumulated surplus	-
Total assets	**4,022,809**	**Total liability**	**4,022,809**

Source: BNDES.

Of the total current assets, R$ 3,934,193 thousand correspond to the amount available, on December 31, 2022, for disbursements to projects already supported or to new

10 Any differences between the current values and those referring to portfolio positions in previous periods are due to cancelation or changes in project values (see Annex 3).

projects. This amount is invested in Gaia and Gaia II funds, managed by Banco do Brasil. Such funds have a conservative profile (fixed income investments – Brazilian government bonds) and were contracted to maintain the 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 consideration is therefore recorded as a liability, under project resources. Thus, the donations received do not imply an increase in equity for the fund.

TABLE 7 › INCOME STATEMENT FOR THE YEAR 2022 (R$ THOUSAND)

Revenue	**531,576**
Revenue from donations for investments	90,470
Revenue from donations for funding	269
Financial revenue	440,837
(-) Expenses	**(531,576)**
Expenditure with donations for investment	(90,470)
Administrative Expenses	(269)
Expenses with remuneration of project resources	(440,837)
Surplus/deficit for the period	**0**

Source: BNDES.

While the balance sheet shows accumulated balances, the income statement considers only what occurred in a specific year. The total of R$ 90,470 thousand presented under the items "Revenue from donations for investments" and "Expenses with donations for investment" refers to the amounts effectively disbursed in 2022 to projects supported by the Amazon Fund.

The amount of R$ 269 thousand reported in Table 7 refers to the appropriation made by the BNDES, in 2022, of costs and expenses related to the Amazon Fund.

The income of Gaia and Gaia II funds, in the amount of R$ 440,837 thousand, are considered income and expense because they correspond to the remuneration of the resources available for disbursements to projects, presented in the balance sheet as a 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 integrate, on the date of their entry, the calculation basis of Income Tax (IR) and Social Contribution on Net Income (CSLL). For the 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 balances in the financial statements of BNDES; and
- compliance audit, to verify the compliance of the application of the financial resources disbursed to projects contracted by the BNDES under the Amazon Fund, to (i) the applicable rules and guidelines and (ii) the physical evidence of implementation of the projects, from the set of those who had disbursements in the year in question.

The financial audit procedures for 2022 were carried out by the company KPMG Auditores Independentes, which concluded that the financial statements presented by the BNDES were adequate. The opinion of the independent auditors can be found in Annex 1. The 2022 compliance audit was carried out by the company EY Auditores Independentes, which concluded that there is no such evidence that the procedures adopted by BNDES are not in compliance with the applicable standards and guidelines and the evidence of the implementation of projects, and its final opinion is in Annex 1.

All the opinions of the independent auditors as of 2010 are published on the Amazon Fund website.[11]

11 Available at: https://www.fundoamazonia.gov.br/en/transparency/audit/

MONITORING AND EVALUATION OF RESULTS

This chapter begins with a brief contextualization of the main vectors of deforestation, the intervention logic (theory of change) of the Amazon Fund and its logical framework. Then, the analysis of some regional indicators that allow for 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 implement environmental legislation.

The results of the indicators of effectiveness and effectiveness of the supported projects will be presented in a consolidated manner; the safeguards adopted by the Amazon Fund in supporting projects; the contribution of the fund to the achievement of 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 maintenance of the results achieved and the operation of the Amazon Fund, including 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 illicit acts, due to the low capacity of government agencies to supervise and punish such acts in a territory of continental dimensions;
- the existence of unintended public land and low legal certainty regarding property titles in the region, which leads to extra-legal occupation of public land, conflicts over land ownership and discouragement of private investments;
- the low economic attractiveness to keep the forest standing, due to the lack of adequate infrastructure and economic incentives to promote sustainable production chains; and
- the expansion of agriculture, driven by the growing demand for commodities in the globalized market.

We also identified a need for investments in innovation and scientific production aiming at monitoring and controlling deforestation, territorial planning and the sustainable use of the biodiversity in the Brazilian Amazon.

In the construction of the Amazon Fund's Logical Framework, we also considered the seven thematic areas defined in Decree 6,527/2008, which regulates the operation of the fund in the Brazilian Amazon, namely:

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

The decree authorizing the creation of the Amazon Fund determined that up to 20% of its resources may be used in the development of deforestation monitoring and control systems 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 complete document in 2010. In 2017, the framework was revised, due to changes in the practice of deforestation and the emphasis of public policies. Possibly, a new revision will be necessary to face the new deforestation dynamics presented in recent years.

The logical framework is a methodology used to ensure that the actions financed contribute to the general objective of a program (or project), and can be defined as a matrix in which strategic decisions on the application of resources in a program are inserted in an operational and organized manner, explaining where it is intended to be achieved (effects or objectives) and what is intended to be achieved (how).

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's Logical Framework.

FIGURE 2 › LOGICAL SEQUENCE OF THE AMAZON FUND

In defining the general objective of the Amazon Fund, it converged to a summarized proposition focused on the Brazilian Amazon, without prejudice to the authorization of support for the development of deforestation monitoring and control systems in other regions of Brazil and in other tropical countries. Thus, the Amazon Fund's general objective was defined as the "reduction of deforestation with sustainable development in the Brazilian Amazon."

In establishing the indirect effects to be achieved by the Amazon Fund, the seven thematic areas defined in Decree 6.527/2008 (listed above) were adopted as a 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+).[12]

Considering the scope of the Amazon Fund's areas of activity, its logical framework was structured into four components. More detailed information on the Amazon Fund's Logical Framework can be found on the internet,[13] in the document entitled *Amazon Fund's Logical Framework* – 2017. In it, the indicators selected to measure its results, the main risks (assumptions) that may affect its success, how the supported projects will be monitored and the fund's monitoring will be conceptualized.

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.

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12 Available at: http://redd.mma.gov.br/images/publicacoes/enredd_documento_web.pdf.

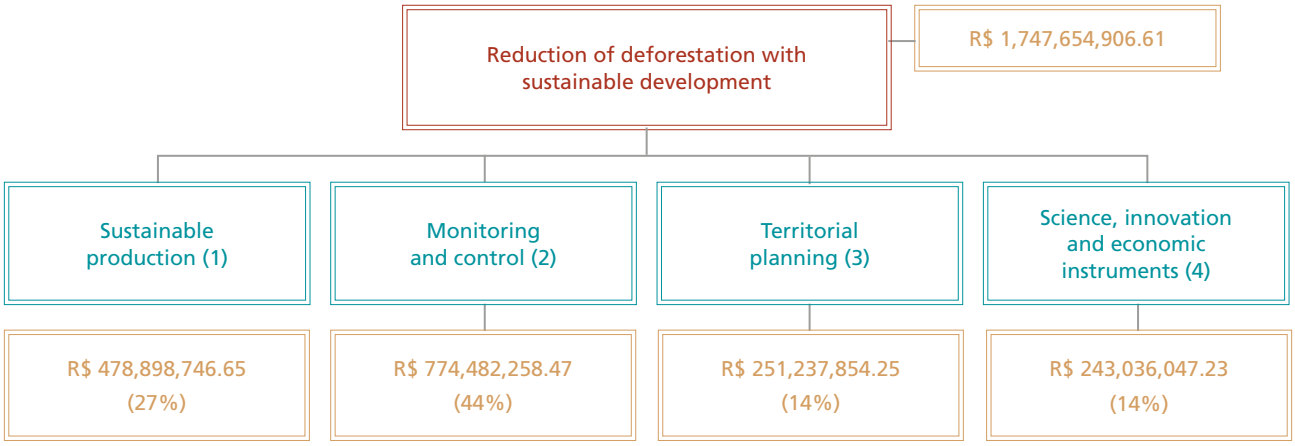
13 Available at: http://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/0.home/FA_Quadro_Logico_2017.pdf.

FIGURE 3 › AMAZON FUND'S LOGICAL FRAMEWORK

Distribution of resources by component of the logical framework

The Amazon Fund supported 102 projects up to 2022, totaling R$ 1,747,654,906.61, 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's Logical Framework has identified some regional indicators that relate to public policies to which it aims to contribute via the supported projects.

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 year for each indicator is 2009, when the first operations of the Amazon Fund were approved, even though no funds were disbursed for these projects in 2009.

The current year of evaluation is 2022. Whenever possible, a comparison is made with this year. In cases where 2022 information is not available, comparison with the latest data is made.

Furthermore, considering that the Amazon Fund suspended the analysis and the approval of new projects from 2019 to 2022—as highlighted in the initial chapter, in addition to the presentation of data for 2009 and 2022, the base year of the Amazon Fund and the year evaluated in this report, respectively, the data for 2018, the last year before the aforementioned stoppage, were also inserted. From then on, a period of less activity began for the fund, in which the project portfolio was reduced as the old contracts were terminated and no new hirings that could recycle or even expand it,

considering the accumulated learnings, were made. In parallel, the weakening and, in some cases, dismantling of other socio-environmental policies and institutions was observed in the period, which also directly impacted the results presented.

Note that the Amazon Fund is not the sole contributor to the results of the set of these indicators, although its contribution is identifiable and relevant, as attested by the evaluation of the projects concluded with the fund's support, adding to initiatives and actions of several public and private agents operating in the vast territory of 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 modeling studies analyze the impacts of deforestation of tropical forests on the climate, indicating that the reduction of these forests alters humid air flow and causes an increase in planet's temperature.

The deforestation in the Brazilian Amazon in 2022 was 11,594 km². This deforested area represents about 42% of the deforestation verified in 2004, the year in which the highest deforestation rate of the current century was verified. When comparing the deforestation rate of 2022 with that of 2009 (baseline), we observe a 55% increase in the deforestation rate in this period.

TABLE 8 › EVOLUTION OF DEFORESTATION IN THE BRAZILIAN AMAZON – 2004–2022, 2009–2022, AND 2018–2022

2004	2009	2018	2022	Variation (%) 2004/2022	Variation (%) 2009/2022	Variation (%) 2018/2022
27,772	7,464	7,536	11,594	(58)	55	54

Source: BNDES, based on INPE data.

TABLE 9 › EVOLUTION OF DEFORESTATION IN THE BRAZILIAN AMAZON – 2009/AVERAGE 2010-2022

Deforestation 2009 (A)	Average 2010–2022 (B)	Change (%) (B)/(A)
7,464	7,928	6

Source: BNDES, based on INPE data.

Another possible comparison is the average annual deforestation occurred from 2010 to 2022 with the baseline of the Amazon Fund (2009), which shows a 6% increase in the deforested area in this period.

Despite the reduction in 2022 indicated in the preliminary data, the trend presented in recent years, with the continuous increase in the rate of deforestation from 2015 onward constitutes a challenge to achieve the general objective of the Amazon Fund, regarding 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 GDP of the nine states of the Brazilian Amazon is compared with Brazil's GDP as a whole.

The GDP is 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 on positive socio-environmental externalities or any environmental liabilities generated.

Several international initiatives have been incorporating into national statistics the calculation of other variables of well-being and sustainability, aiming to 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.[14]

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 2020. In Table 10, 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, with a new increase of 1 percentage point in 2020.

14 For the new natural capital accounting methodologies see IBGE (2020) "Ecosystem accounts: land use in Brazilian biomes 2000-2018". Available at: https://biblioteca.ibge.gov.br/visualizacao/livros/liv101753.pdf.

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

(par value in R$ billion)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
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	7,609.6
GDP Brazilian Amazon States	310.0	362.3	399.3	449.4	486.2	506.7	546.3	584.2	623.2	659.3	763.7
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%	10.04%

Source: BNDES, based on the System of Regional Accounts/IBGE (2020).

Although the data still refer to 2020, it is important to highlight the advance of the GDP of the Brazilian Amazon compared to the previous year and to the national growth: while the national indicator rose 3% compared to 2019, the Brazilian Amazon increased by 15.7% in the annual comparison.

Indirect effect: (1) Activities that maintain the forest standing have economic attractiveness in the Brazilian Amazon ("sustainable production" component)

Indicator: Production of plant extraction and forestry

Indicator: Legal log production in the Amazon

The Amazon Fund prioritizes the structuring of the socio-biodiversity productive chains. This prioritization has been materialized in the fund's financial support to several projects, aiming to expand and to 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 the collection and distribution of products; the implementation or extension and modernization of processing units for these products; and the technical and managerial training of indigenous, extractive producers, and family farmers involved in the projects.

The monitoring of this component uses an indicator of plant and forestry production observed in the Brazilian Amazon states, which is based on an annual publication of the IBGE,[15] as well as an indicator that measures the 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

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

berry, Brazil nuts, native rubber, almonds, as well as other oilseeds and miscellaneous various, which are economically relevant and commercialized inside and outside Amazon. The evolution of these products' production and revenue is monitored by the Amazon Fund for their economic relevance in the region.

Regarding oilseeds, the extractive production of almonds of cumaru, pequi and copaiba, among other products, is being monitored. The evolution of the babassu production chain, whose oilseed (almond) is mainly used in the food industry, is also monitored. As babassu has a great relevance in the regional extractive economy, it was monitored separately from the other oilseeds. In the set of fibers, piassava and buriti palms are being monitored, among other products.

Table 11 shows the evolution of the physical production (in tons) of plant extraction of these products from 2009 to 2021 (last available data), in addition to a comparison of the last year with the previous year.

TABLE 11 › PRODUCTION OF PLANT EXTRACTIVISM IN THE BRAZILIAN AMAZON STATES (TONS)

Products	2009	2018	2020	2021	Var 2021/2009 (%)	Var 2021/2020 (%)
Açaí	115,767	221,646	220,490	227,250	96%	3%
Brazil nuts*	37,468	37,468	33,119	33,406	(11%)	1%
Rubber (coagulated latex and liquid)	3,458	838	899	934	(73%)	4%
Oilseeds**	1,239	983	923	1,147	(7%)	24%
Babassu	103,359	47,544	34,952	29,172	(72%)	(17%)
Fibers***	2,846	2,078	2,896	2,914	2%	1%
Total history	**264,137**	**310,557**	**293,279**	**294,823**	**12%**	**1%**

Source: BNDES, based on IBGE data.

* Or Pará nut, or Amazon nut. ** Includes copaiba (oil), cumaru, pequi and other products. Does not include babassu. *** Includes buriti, piaçava and other products.

Table 12 shows the evolution of these same products according to the revenue generated.

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

Products	2009	2009*	2018	2020	2021	Var 2021/2020 (%)	Var 2021/2009 (%)
Açaí	160,312	164,817	592,040	694,306	771,184	11%	368%
Brazil nuts**	52,261	53,730	130,910	98,552	142,367	44%	165%
Rubber (coagulated latex and liquid)	7,596	7,809	3,614	6,574	7,464	14%	(4%)
Oilseeds***	6,570	6,755	10,609	9,520	11,513	21%	70%
Babassu	114,847	118,074	84,393	64,529	59,710	(7%)	(49%)
Fibers****	4,495	4,621	4,538	8,372	9,677	16%	109%
Total history	**346,081**	**355,806**	**826,104**	**881,853**	**1,001,915**	**14%**	**182%**

Source: BNDES, based on IBGE data.

* Values updated to 2021 Reais by the variation of the Broad National Consumer Price Index (IPCA). ** Or Pará nut, or Amazon nut. *** Includes copaíba (oil), couaru, pequi and other products. **** Includes buriti, piaçava and other products.

Notably, the production of açaí berry, a fruit increasingly used in the manufacture of food and beverages, was increased by 96% in the Brazilian Amazon from 2009 to 2021, and the revenue, in updated values, increased by 137% in the same period, reaching R$ 771 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 2009-2021 period decreased by 11%. Annual revenue, however, grew 34% in the same period, reaching R$ 142 million in 2021.

The production volume and revenue from oilseeds, babassu and rubber (coagulated and liquid latex) decreased from 2009 to 2021. Fiber production remained practically stable throughout the period, surpassing the level of 2009 by 2%. However, when considering all monitored products, there was a 12% increase in the volume produced and 43% in the revenue generated.

By comparing 2021 and 2020, it is worth of note the 24% increase in the volume of oilseed production and the growth in aggregate revenue of the products considered in the Production of Plant Extraction and Forestry (Pevs), although 2021 was a challenging year for all economic sectors.

Indicator: Legal log production in the Amazon

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

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

State	2009	2018	2021	2022	Variation 2022 - 2009 (%)	Variation 2022 - 2021 (%)
Acre	277,489	162,374	395,486	484,564	75%	23%
Amazonas	355,113	870,965	482,970	690,051	94%	43%
Amapá	64,189	144,297	83,254	163,191	154%	96%
Maranhão	10,359	2,519	16,645	1,700	(84%)	(90%)
Mato Grosso	2,043	62,571	66,241	108,237	5198%	63%
Pará	9,041	1,340,753	3,349,024	3,829,927	42,262%	14%
Rondônia	–	1,736,622	1,198,469	1,032,347	–	(14%)
Roraima	89,502	277,608	118,394	205,287	129%	73%
Tocantins	21,366	3,304	3,868	6,855	(68%)	77%
Total	**829,102**	**4,601,014**	**5,714,352**	**6,522,159**	**687%**	**14%**

Source: BNDES, based on data from IBAMA.

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

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

State	2009	2009*	2018	2021	2022	Variation 2022-2009 (%)	Variation 2022-2021 (%)
Acre	10,095	21,662	93,072	26,153	44,585	106%	70%
Amazonas	19,633	42,128	67,407	73,075	92,786	120%	27%
Amapá	3,944	8,463	64,277	5,151	15,425	82%	199%
Maranhão	905	1,942	270	5,770	929	(52%)	(84%)
Mato Grosso	1,317	2,826	4,616	14,118	23,487	731%	66%
Pará	3,314	7,111	265,774	1,043,003	1,268,356	17,736%	22%
Rondônia	–	–	111,884	147,498	139,339	0%	(6%)
Roraima	4,153	8,911	17,899	7,250	12,680	42%	75%
Tocantins	7,314	15,694	81	1.45	0	(100%)	(100%)
Total	**50,675**	**102,786**	**625,281**	**1,322,020**	**1,597,587**	**1,454%**	**21%**

Source: BNDES, based on data from IBAMA.

* Updated values for 2021 Reais by the IPCA variation from 2010 to 2022.

Based on the analysis of the data of legal logging, it can be observed that, from 2009 to 2022, the volume of timber production grew 7.9 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 over R$ 1.6 billion in 2022 (1,454%).

In 2022, compared to the previous year, there was an increase in practically all the Brazilian Amazon states, with the exception of Maranhão (90% reduction) and Rondônia (14% reduction). This resulted in an increase for the region as a whole of around 14%, while revenue grew by 21%.

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 represent unfairly compete with sustainable forest management, which incur in higher costs, for complying with the law, and lower return, 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, in the years considered (2009 and 2021), there was a 43% increase in the revenue generated by these products. In turn, in a period with even more up-to-date information (2009–2022), there was a 1,454% growth in the revenue generated by logging. It can be concluded, therefore, that the evolution of these indicators suggests that the indirect effect "activities that maintain the forest standing have economic attractiveness in the Brazilian Amazon" is being achieved.

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

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

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

Indicator: Number of environmental 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 respectively 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 the more remote regions, which promotes a more efficient environmental management.

In turn, municipalities are responsible for the environmental licensing of projects and activities that cause or may cause local environmental impact, according to the typology defined by the respective state environmental councils, considering the size, polluting potential and nature of the activity.[17] The indicator that measures the number of municipalities able to license activities with local environmental impact aims to verify the degree of participation of municipalities in the implementation 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.

Considering the absence of public disclosure of information to monitor these indicators, Table 15 presents data obtained directly from the state environmental agencies (Oemas) in the Brazilian Amazon.

17 Complementary Law 140, December 8th, 2011.

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

States	No. of outposts of state environmental agencies (cumulative)*		No. of municipalities eligible to license activities with local environmental impact (cumulative)**		No. of environmental permits or licenses granted by the Oemas (annual)***	
	2009	2022	2009	2022	2009	2022
Pará	4	6	10	137	3,259	1,792
Acre	5	5	1	2	2,239	3,838
Amapá	–	5	–	14	–	42
Amazonas	0	4	2	1	2,723	5,297
Roraima	1	12	13	15	183	561
Tocantins	20	3	0	4	3,360	15,370
Mato Grosso	11	9	5	51	5,430	9,683
Rondônia	14	14	1	31	2,480	2,679
Maranhão****	1	1	0	36	0	0
TOTAL	**56**	**60**	**32**	**291**	**19,674**	**39,262**
Variation (%)	**7%**		**809%**		**100%**	

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. **** No updated information was received from the Maranhão status until the closing of this report. For the data referring to the number of outposts and of municipalities, the same value as in 2021 was used. For the number of licenses, it was considered that there were none in 2022.

A joint analysis of the indicators shows progress in two of the three dimensions monitored, highlighting a significant increase (809%) 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 100% increase in the monitored period (2009 and 2022), while the number of outposts of state environmental agencies increase by 7%, a reduction compared to 2021.

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 regional environmental agencies ; and decentralizing and strengthening municipal environmental management.

Indirect effect: (3) The Brazilian Amazon area is territorially planned ("land-use planning" component)

Indicator: Area of indigenous lands (IL) and federal protected areas (PA) in the Brazilian Amazon with territorial 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 wich 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 Conservation Units (Snuc). The PAs that compose 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 and federal protected areas in the Brazilian Amazon with land-use management tool" follows the evolution of the elaboration of territorial management instruments 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 the territorial protection and control, as well as being a guideline for public policies directed to these peoples.[18]

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18 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 16 › AREA OF FEDERAL PAS AND ILS IN THE BRAZILIAN AMAZON WITH LAND-USE MANAGEMENT INSTRUMENTS (MANAGEMENT PLANS OR PGTAS)

Protected Areas	Numbers of federal PAs and ILs with land-use management instrument				Variation 2022/2009 (%)	Variation 2022/2021 (%)	Area (km²) of federal PAs and ILs with land-use management instrument				Variation 2022/2009 (%)	Variation 2022/2021 (%)
	2009	2018	2021	2022			2009	2018	2021	2022		
Federal PAs	28	86	98	100	257%	2%	160,742	433,481	470,641	509,504	217%	8%
ILs	33	87	104	104	215%	–	75,741	371,628	590,659	590,659	680%	–
Total	**61**	**173**	**197**	**204**	**234%**	**4%**	**236,483**	**805,109**	**1,061,300**	**1,100,163**	**365%**	**4%**

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

* Revised data: area for PAs may vary according to new resolutions in their decrees. Thus, the increase for 2022 is not only related to the size of the two PAs that were enrolled, but also to the changed area values accrued until 2021.

Based on the analysis of the data in Table 16 on PAs with a land-use management tool in the period from 2009 to 2022, it can be verified that there was a considerable growth in both the number and the territorial extension of the protected areas with these instruments in the Amazon, mainly between 2009 and 2018.

In the period considered, the number of federal PAs and ILs that have a territorial management instrument tripled, from 61 to 204. In turn, the territorial extension of these areas with land-use management tools more than quadrupled, reaching 1.1 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 verifying whether 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).

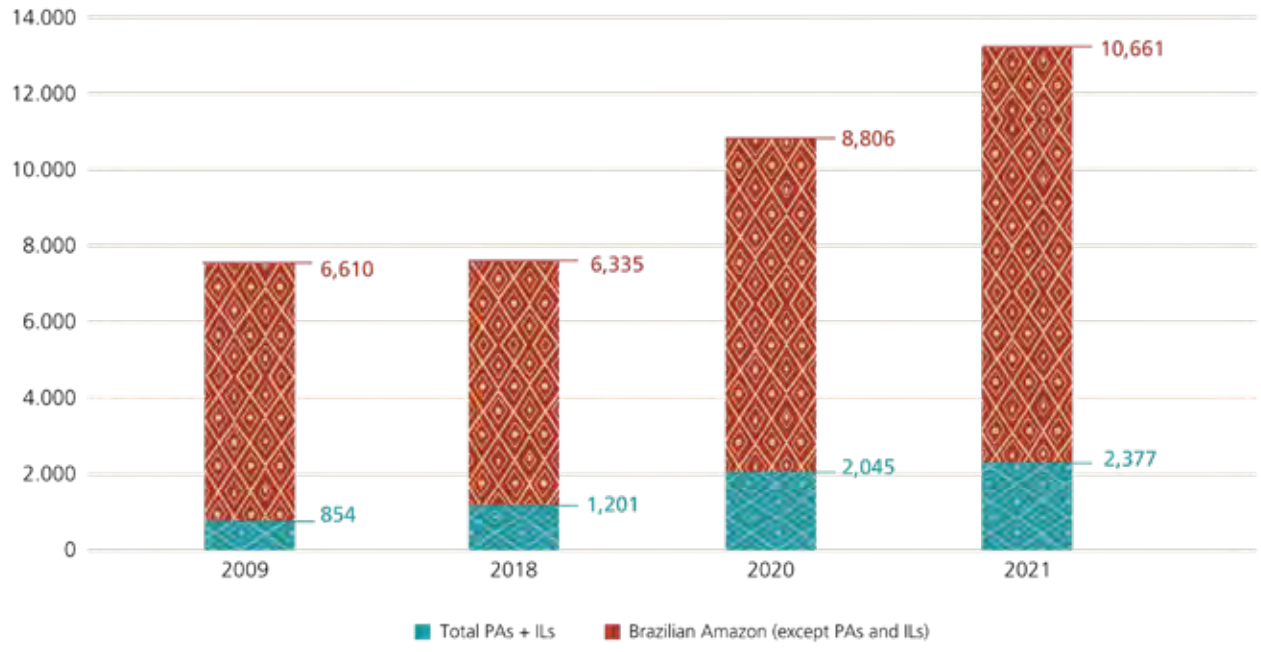
TABLE 17 › DEFORESTATION IN PROTECTED AREAS IN THE BRAZILIAN AMAZON

		Deforested area (km²)					
Protected Areas	**Nº. of protected areas**	**2009**	**2018**	**2020**	**2021**	**Var. 2021/2020 (%)**	**Var. 2021/2009 (%)**
Federal PAs	127	287	252	504	628	25%	119%
State PAs	178	320	694	1,110	1,377	24%	330%
Indigenous lands	386	247	256	432	373	(14%)	51%
Total history	**691**	**854**	**1,201**	**2,045**	**2,377**	**16%**	**178%**

Source: BNDES, based on INPE/Prodes data.

Table 17 shows that there was a 178% growth in deforested area in all these land categories, comparing 2009 and 2021. It should be noted that this growth is about 2.5 times higher than the increase in global deforestation in the Brazilian Amazon calculated by the INPE/Prodes for the same years (75%), with a negative emphasis on the state PAs category, in which deforestation increased 330% when compared to the Amazon Fund baseline (2009). The reduction of 14% in indigenous lands compared to the previous year is a positive outcome. The increase in the relative participation of PAs and ILs in total deforestation can be seen in Graph 8.

GRAPH 8 › DEFORESTATION IN PAS AND ILS IN TOTAL DEFORESTATION (KM²)



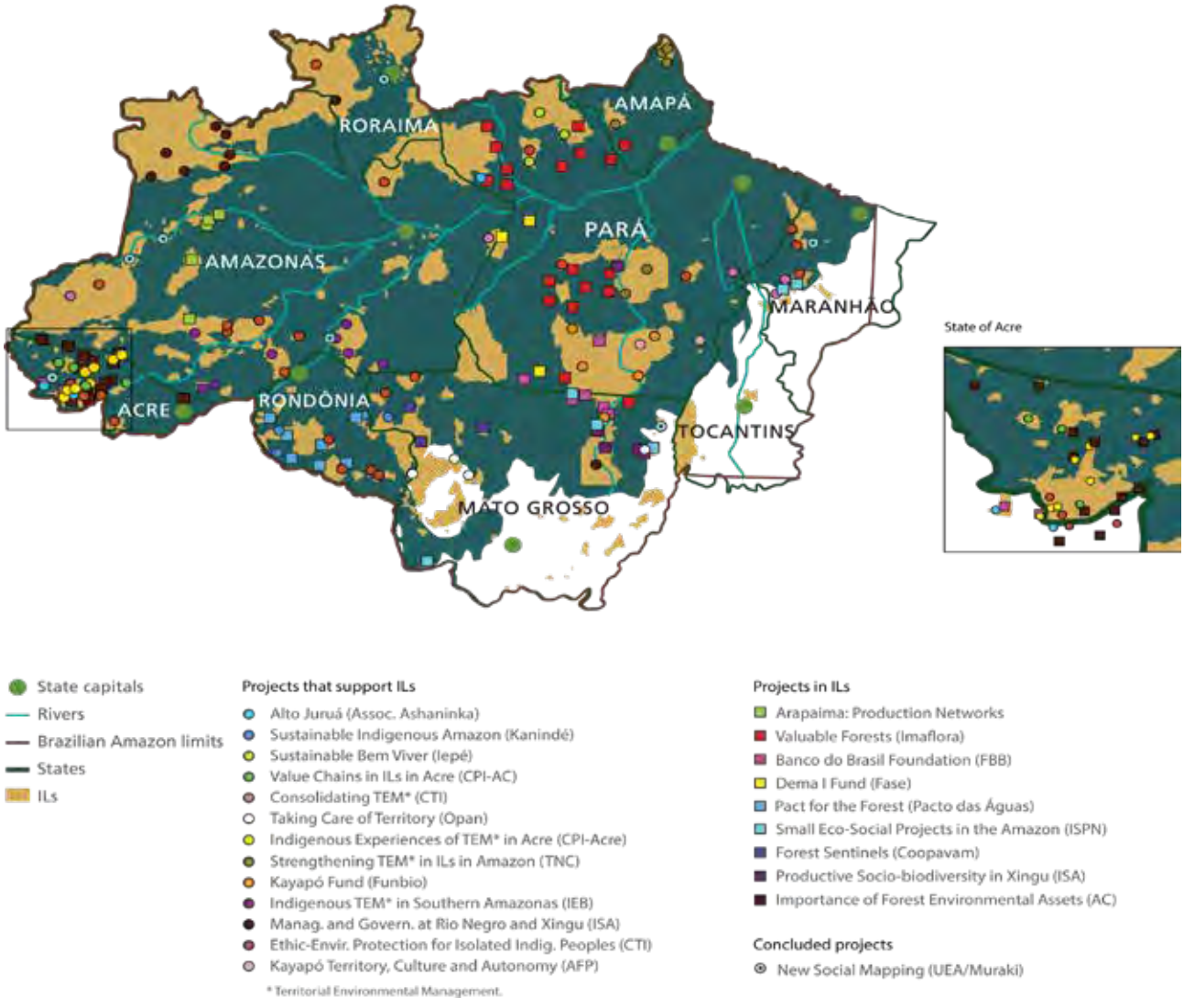
Source: BNDES, based on INPE/Prodes data.

It is worth mentioning that the deforested area in federal, state, ILs, and PAs represented about 18% of the deforestation measured in the Brazilian Amazon in 2021. 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 prevention of deforestation.

The significant rise of deforestation in protected areas, internationally recognized as strategic for forest conservation, reinforces the importance of supporting public policies and 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 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 for 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 2022 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

Year	2009	2018	2021	2022	Variation 2022/2021 (%)	Variation 2022/2009 (%)
Brazil	7,709	7,569	7,288	6,718	(8%)	(13%)
Amazon States						
Acre	3	10	10	2	(80%)	(33%)
Amazonas	63	28	29	34	17%	(46%)
Amapá	3	12	8	3	(63%)	0%
Maranhão	24	70	62	57	(8%)	138%
Mato Grosso	29	43	76	47	(38%)	62%
Pará	25	53	64	68	6%	172%
Rondônia	13	78	14	8	(43%)	(38%)
Roraima	1	8	2	10	400%	900%
Tocantins	8	15	17	12	(29%)	50%
Total	**169**	**317**	**282**	**241**	**(15%)**	**43%**

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 2022, there was an increase of 43%. Overall, Brazil presented a decrease of 13% 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 (3.6% of the total number of applications in Brazil in 2022). This shows the need to strengthen

this relevant theme for the knowledge and sustainable use of the region's resources, 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, renovating 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

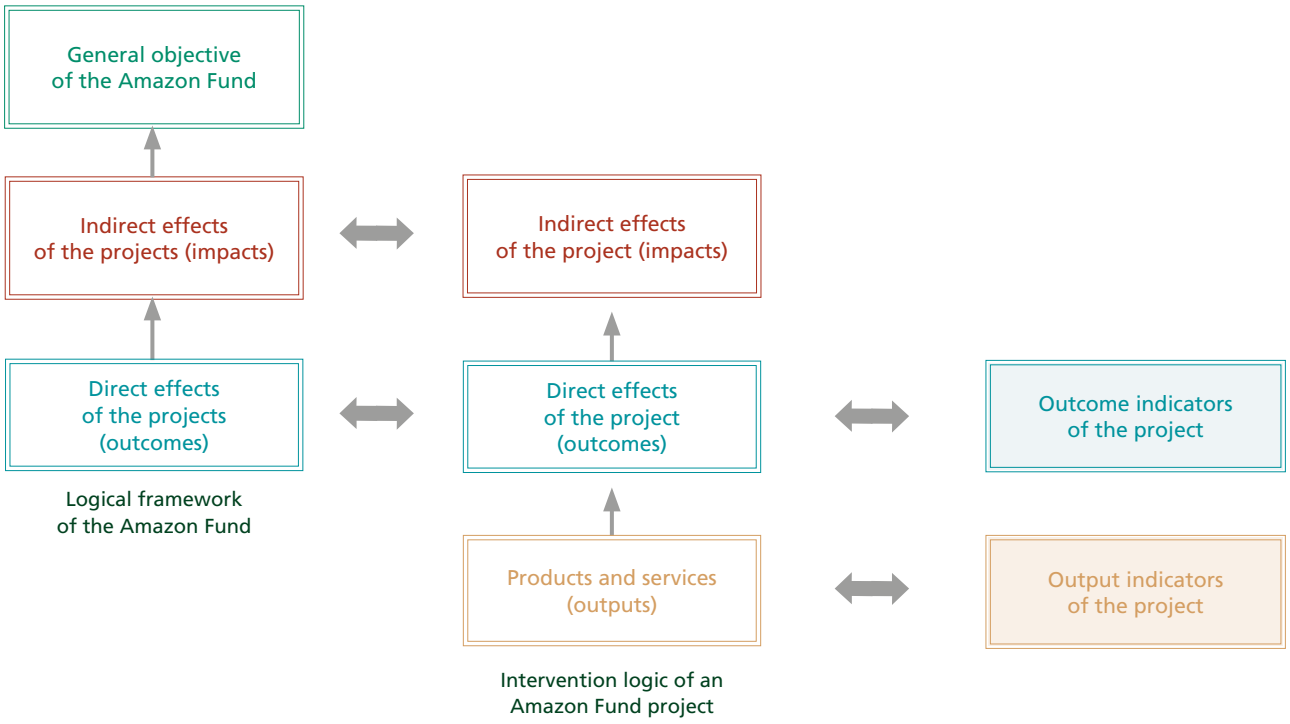
- Worsening of the indicator that measures the deforestation rate in the Brazilian Amazon, with a 55% increase in the deforested area in 2022 compared to the 2009 rate (in 2021 this increase was 77%). In turn, when comparing the average annual deforestation from 2010 to 2022 with deforestation in 2009 (baseline), there is a 6% increase in the deforested area.
- Continued growth in the relevance of the Amazon's GDP in Brazilian GDP, reaching a participation of 10% in 2020, compared to the 7.9% participation recorded in 2010, which is also a positive sign.
- Increase of 12% in the volume produced and 43% in the revenue generated by the extractivism products monitored by the Amazon Fund, considering 2009 and 2022, according to data from the IBGE's Pevs, and a 687% increase in the volume and 1,454% in the revenue generated annually by the legal logging between 2009 and 2022.
- Expansion of the number of state environmental agencies outposts by 60%, decentralization of environmental management to municipalities by 809% and the number of permits issued by environmental agencies by 100% from 2009 to 2022.
- Favorable increase of more than fourfold (365%) in the area of federal PAs and ILs with a land-use management tool (2009–2022) and worsening of the indicator that monitors deforestation in PAs, which indicates an 178% increase in deforestation in federal and state PAs and ILs (2009–2021).
- Growth of 43% in the number of patent applications filed with the INPI by residents in the states of the Brazilian Amazon (2009–2022).

Project results chart

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

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

FIGURE 6 › PROJECT INTEGRATION INTO THE AMAZON FUND'S LOGICAL FRAMEWORK



Monitoring of 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 to prevent or to 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 on site, when necessary. Each disbursement of resources is also subject to verification of compliance with relevant contractual standards and clauses.

At project completion, in addition to the accountability of the physical and financial execution of the project, the beneficiary submits an evaluation report of its results. The main objective of this report is to consolidate information about the implementation of the supported project and its results and impacts. The document must contain information about the progress of the project, the monitoring of its Logical Framework indicators, the future sustainability of its results, the 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 individually monitored. Project activities carried out during the execution phase are reported in the Amazon Fund's website,[19] which contains a specific section for each supported project, including, among other information: the name of the organization in charge of implementing the project; the project's territorial scope and its beneficiaries; the value of the project and of the Amazon Fund's financial support; the expected execution time; the amounts already disbursed and their 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, enabling their consolidation and providing 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 finished project. See "Concluded projects" chapter of this report for information about the 13 projects finished in this year, including an assessment of their results and impacts. Thus, from 102 supported projects, 60 were already finished and had their assessment published in the Amazon Fund's annual reports. Whenever possible, an analysis is made of the impacts of finished 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 (efficacy or effectiveness). The results of the projects completed in 2022 are summarized in this section and presented with more detail in the chapter "Concluded projects" of this report (see next chapter).

19 Available at: https://www.fundoamazonia.gov.br/en/carteira-de-projetos/.

The results presented, although relevant to confront deforestation and promote sustainable productive activities in the Amazon, could be even more significant if the Amazon Fund had not been suspended, which prevented the recycling and expansion of the project portfolio, including the incorporation of the lessons accumulated throughout the fund's history.

"Promotion of sustainable production activities" component

By the end of 2022, support for sustainable productive activities represented around 27% of the figures 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, 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 security initiatives (food production for own consumption), handicraft production, and community-based tourism. The products supported include rubber, seeds, handicrafts, 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

Sustainable production indicators (Component 1)	Until 2018 (accrued)	Until 2021 (accrued)	By 2022 (accrued)	Variation 2022/2021 (%)
Individuals trained to practice sustainable economic activities (total)	24,236	43,870	56,340	28
Individuals trained to practice sustainable economic activities (women)	878	7,487	8,341	11
Individuals trained to practice sustainable economic activities (indigenous)	2,544	4,641	5,108	10
Strengthened community organizations	434	507	653	29
Small projects (up to R$ 150 thousand) supported by umbrella entities*	2,659	2,679	2,679	0
Medium or large projects supported by umbrella entities	70	72	94	31
Rural properties with sustainable production projects	4,330	4,841	5,325	10
Rural properties (households) receiving technical assistance	7,801	9,956	12,527	26
Processing units for family farming and extractivism products implemented, expanded or reformed	357	377	539	43
Individuals directly benefiting from the supported activities (total)	162,195	207,345	240,801	16

(Continues)

(Continued)

Sustainable production indicators (Component 1)	Until 2018 (accrued)	Until 2021 (accrued)	By 2022 (accrued)	Variation 2022/2021 (%)
Individuals directly benefiting from the supported activities (women)	34,146	47,835	56,224	18
Area of forest directly managed as a result of supported projects (hectares)	22,026,165	74,685,538	75,380,952	1
Recovered area used for economic purposes (hectares)	12,274	15,452	17,039	10
Individuals trained to practice sustainable economic activities effectively using the knowledge acquired (total)	9,679	21,745	30,352	40
Increase in revenue obtained from the sale of in natura products (R$ thousand)	98,369	149,681	166,791	11
Increase in revenue obtained from the commercialization of processed products (R$ thousand)	44,084	104,784	127,161	21

Source: BNDES.

* The concept of project in this case comprises, for example, the simple acquisition of equipment for a productive activity that has been planned communally.

Color code/caption

Efficacy indicator
Effectiveness 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 the other business sectors of the country and with the centers of innovation and scientific and technological development.

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

The analysis of behavior 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 following table shows the consolidation of revenue results obtained from the commercialization of products by the supported projects from 2010 to 2022. Note that, once a project is finished, its revenues for subsequent years are no longer considered.

TABLE 20 › INDICATORS OF REVENUE OBTAINED FROM THE COMMERCIALIZATION OF PRODUCTS BY THE AMAZON FUND'S PROJECTS

Revenue from sustainable economic activity					
Products *in natura*			Processed products		
Baseline	Latest year (2022)	Increment	Baseline	Latest year (2022)	Increment
R$ 30.7 million	R$ 81.1 million	R$ 166.7 million	R$ 31.6 million	R$ 77.9 million	R$ 127.1 million

Source: BNDES.

In 2022, 13 projects were completed, six of them supported by more than one axis of the Amazon Fund.

The "Importance of Forest Environmental Assets" (VAAF) project in Acre aimed to valorize environmental and forestry assets through the strengthening of integrated land-use management, the promotion of forestry and agroforestry production chains and technical and financial support to environmental services, with the premise of linking the payment of these services to the adoption of sustainable practices and environmental criteria.

The initiative modernized the monitoring and control systems through the strengthening of the institutions responsible for land-use management, the promotion of sustainable productive practices and the forest management of timber and nontimber products, as well as the promotion of carbon capture via reforestation.

Finally, the project also supported indigenous associations in the elaboration of PGTAs, construction of surveillance outposts, formation of teams, and physical demarcation of the limits of 15 ILs.

The project "Strengthening Environmental Management in the Amazon" trained public servants of strategic municipalities in actions to prevent and control deforestation in the Amazon biome, in the use of geotechnology and forest monitoring. Technical assistance was also provided to these municipalities to improve their environmental management.

Analysis of the land conservation situation in the states of Amazonas, Mato Grosso, Pará and Rondônia was prepared, to support the formulation of public policies that allow progress in land regularization, in addition to promoting greater transparency to the activities carried out in this theme. The project also strengthened the management of state PAs in Calha Norte of Pará.

The second project implemented by the Instituto Ouro Verde, "Seeds of Portal II," promoted new agroforestry systems (SAF) planting in deforested areas and the insertion of species of economic interest in part of the areas already recovered in the previous project.

The development of marketing channels for agroforestry products was also encouraged and the consolidation of the network of native seed collectors and the generation of knowledge on agroforestry economics were supported.

The "Sustainable Settlements in the Amazon" project conducted by the Amazon Environmental Research Institute (IPAM) aimed to develop and implement a

demonstrative model of sustainable agricultural production and reward families committed to reducing deforestation in small rural properties in the Western region of the state of Pará with payments.

To achieve its objective, the project was structured into two components: (i) development and implementation of a sustainable production model in small rural properties located in three agrarian reform settlements (PAs) in municipalities in Western Pará; and (ii) payment for deforestation prevented by 350 families near the BR-230 - Trans-Amazonian Highway, as well as undertaking the preparatory steps for environmental regularization of these families' properties.

The project "Management of Indigenous Lands in the Rio Negro and Xingu Basins" supported the implementation of the PGTA of the Xingu Indigenous Park, as well as the preparation of PGTAs of the Yanomami IL and ILs located at the Upper Rio Negro region, with the systematization of knowledge and the strengthening of local governance structures and indigenous organizations.

The Xingu Indigenous Park in the state of Mato Grosso, created in 1961, is home to 16 indigenous peoples. This was the first indigenous land approved by the Brazilian government. In the following decades, three adjacent ILs were demarcated: Batovi, Wawi, and Pequizal do Naruvôtu.

Another project related to indigenous peoples, "IREHI – Caring for the Territories," aimed to support the conclusion and implementation of the PGTA for the Marãiwatsédé indigenous land and for the Manoki, Menkü, and Pirineus de Souza Indigenous Territories, located in the state of Mato Grosso.

It was structured into three components: (i) completion of the PGTA of Marãiwatsédé indigenous land; (ii) territorial protection, with the implementation of surveillance and monitoring systems of the indigenous lands benefited by the project, in addition to training the indigenous residents to operate the acquired equipment, arousing the interest of indigenous young people for the management of the territory; and (iii) economic, productive and cultural activities, with income generation and increased food security by cultural rescue of traditional practices and techniques.

Cultural activities related to land use have been implemented, such as cultural exchange for seedlings and seeds exchange, as a way to subsidize the implementation of agroforestry crops and gardens for generation of food and income, through the commercialization of surplus production.

In addition to the projects that contributed to more than one axis, three others collaborated exclusively for the sustainable productive activities axis.

The project "Strengthening the Forest Based Sustainable Economy" was selected under the public call for sustainable productive projects of the Amazon Fund and aimed to strengthen the productive chains of Brazil nuts and fruit pulp products.

The project was implemented through direct and indirect support actions to associations and cooperatives affiliated to Central Cooperative for Extractive Marketing of Acre (Cooperacre), which were organizations grouped according to the public call model.

The "Amazon's Nectar" project worked on strengthening and expanding the productive and processing infrastructure, valuing the final product and structuring the commercialization of honey from native bees maintained by traditional communities (riverine communities, extractive and small farmers) in the municipalities of Curuçá, Almeirim, and Monte Alegre, in the state of Pará; quilombolas in the municipality of Macapá and indigenous groups in the municipality of Oiapoque, the latter two in the state of Amapá, which borders French Guiana.

Lastly, the "Communal Forests" project aimed to develop sustainable management solutions for the communities that inhabit three federal preservation areas of the extractive reserves (Resex) category in the region of the Marajó Archipelago, in the state of Pará, namely Resex Arióca-Pruanã, Resex Mapuá, and Resex Terra Grande-Pracuúba, covering an area of more than 370,000 hectares, equivalent to about three times the area of the municipality of Rio de Janeiro.

"Monitoring and control" component

By the end of 2022, support for monitoring and control actions represented 44% of the amount of the Amazon Fund's project portfolio, that is, R$ 775 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 completed with exclusive support to this axis, both the "CAR – Roraima" action and the "CAR Mato Grosso do Sul" promoted the access of small rural producers and settlers from Roraima e Mato Grosso do Sul to environmental regularization, by registering their rural properties in CAR. In addition to improving the infrastructure and training responsible employees, actions were carried out to promote and support the registration in the CAR of the properties of small owners or rural squatters of up to four fiscal modules.

In the "CAR – Paraná" action, the main focus was supporting the analysis and validation of CAR in Paraná, with the promotion and support for the registration of properties in territories of traditional peoples and communities.

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

Monitoring and control indicators (Component 2)	Until 2018 (accrued)	Until 2021 (accrued)	By 2022 (accrued)	Variation 2022/2021 (%)
Strengthened environmental agencies (federal, state, and municipal)	304	326	326	0
Amount disbursed for projects to combat forest fires and illegal burn offs (R$ thousand)	74,349	77,345	77,228	0
Public employees trained in environmental management and/or deforestation monitoring technologies	6,091	10,893	11,197	3
Environmental monitoring missions carried out	687	1,706	1,896	11

(Continues)

(Continued)

Monitoring and control indicators (Component 2)	Until 2018 (accrued)	Until 2021 (accrued)	By 2022 (accrued)	Variation 2022/2021 (%)
Forest fires or illegal burn offs fought by Military Fire Brigades	23,630	29,637	32,837	11
Public employees effectively trained using the knowledge acquired (total)	5,329	4,828	4,584*	(5)
Rural properties registered in the Rural Environmental Protocol (CAR) – Protocol	746,905	1,075,770	1,062,666*	(1)
Area of rural properties registered in the CAR Protocol (hectares)	90,343,357	124,479,541	125,880,444	1
Area with vegetation cover recovered for conservation or environmental regularization –(regeneration in progress)	13,420	15,353	14,640*	(5)
Infraction notices (fines) issued for violations against flora	9,158	13,522	18,590	37

Source: BNDES.

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

Colors/Legend code

Efficacy indicator
Effectiveness indicator

Land-use planning component

At the end of 2022, support for land-use management actions represented 14% of the amount of the Amazon Fund's project portfolio, that is, R$ 251 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 "TERRITORIAL PLANNING" COMPONENT (3) – CUMULATIVE VALUES

Land-use planning indicators (Component 3)	Until 2018 (accrued)	Until 2021 (accrued)	By 2022 (accrued)	Variation 2022/2021 (%)
Preservation areas supported	190	195	196	1
Indigenous lands supported	101	101	101	0
Individuals trained in activities related to the management of public forests and protected areas (total)	3,177	3,716	3,592*	(3)
Individuals trained in activities related to the management of public forests and protected areas (indigenous)	1,311	1,922	1,922	0
Indigenous peoples directly benefited by the support of the Amazon Fund	49,318	59,755	61,048	2
Individuals trained in activities related to the management of public forests and protected areas effectively using the knowledge acquired	1,376	1,850	1,996	8
Area of PAs created (km²)	7,083	7,083	7,083	0
Extent of protected areas with infrastructure, environmental management and/or control of its territory strengthened (km²)	241,262	522,337	741,541	42

Source: BNDES.

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

Colors/Legend code

Efficacy indicator
Effectiveness 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

"Science, innovation and economic instruments" component

By the end of 2022, support for scientific and technological development actions and economic instruments to enhance the standing forest represented 14% 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 2018 (accrued)	Until 2021 (accrued)	By 2022 (accrued)	Variation 2022/2021 (%)
Total amount disbursed for scientific and technological research (R$ million)	134	149	149	0
Researchers and technicians involved in scientific and technological research activities residing in the Amazon region during the execution of the projects	368	387	2,159	458
Families benefiting from payment for environmental services	1,902	2,124	4,042	90
Scientific, pedagogical or informative publications produced	465	613	603*	(2)
Patents applied for or filed	2	2	2	0

Source: BNDES.

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

Colors/Legend code

Efficacy indicator
Effectiveness indicator

In the axis of science, innovation and economic instruments, the "Mamirauá" project was completed, implemented by the Mamirauá Sustainable Development Institute (IDSM), which supported actions of management and participatory management in the Mamirauá and Amanã sustainable development reserves (RDS), with research, development and dissemination of sustainable agricultural knowledge, forestry, and non-timber management, as well as education and environmental protection and monitoring.

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.

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, Brazil submitted to the United Nations (UN), in 2015, the 1st Summary of Safeguards.[20] In 2018, the 2nd Summary of Safeguards was submitted,[21] with information on how the safeguards of Cancun 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.

20 Available at: http://redd.mma.gov.br/images/publicacoes/salvaguardas_1sumario.pdf.

21 Available at: https://redd.unfccc.int/files/2sumariosalv_br_final.pdf.

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 indicators[22] for the pilot application of SISREDD+.

Advances in the subject and descriptive information on Brazil's implementation of the Cancún safeguards can be monitored on the MMA's REDD+ Brasil website[23].

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 (UNGA) that cover issues of economic growth, social inclusion and environmental protection. These SDGs were agreed upon the UN by 193 countries, after widespread participation of global civil society, and entered into force on 1 January 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 2022, about a quarter of the funds were used to promote sustainable production activities, contributing to the eradication of poverty

SDG 2 – End hunger and promote sustainable agriculture

The Amazon Fund supports not only production for commercialization but also actions aimed at food security (food production for own consumption) of traditional peoples. Support is given, among other initiatives, 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

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

22 Available at: http://redd.mma.gov.br/images/gtt-salv/indicadores-sisredd.pdf.

23 Available at: http://redd.mma.gov.br/pt/.

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 actions that promote socio-biodiversity productive chains, building capacities and skills to promote a viable economic model that is sustainable.

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. Thus, the fund 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

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 supporting the 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 several criteria, such as donations received and approved amounts to projects.[24] All resources invested by the fund must contribute, directly or indirectly, to the reduction of deforestation. Brazil's total greenhouse gas (GHG) emissions decreased from 3.47 billion tons of carbon dioxide equivalent (CO2eq) in 2004 to 1.46 billion tons of CO2eq in 2016.[25] This result represented a significant contribution of Brazil to the mitigation of global warming and stems mainly from the reduction of national GHG emissions due to the change in land and forests use, that is, from the reduction in deforestation rates.

SDG 15 – Protect and promote the sustainable use of terrestrial ecosystems

With the support of the Amazon Fund, actions were promoted in 196 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 Brazil 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 implemented by the Amazon Cooperation Treaty Organization (ACTO), aimed at monitoring forest cover in the Regional Amazon, that is, also beyond Brazil's borders.

Promoting gender equity in sustainable production projects

Achieving gender equality, ending all forms of discrimination against women, and ensuring equal opportunities, is one of the sustainable development goals (SDG 5). The Amazon Fund, through its support for projects that contribute to component 1

24 Available at: https://climatefundsupdate.org/the-funds/.

25 National Emissions Registry System (Sirene) – https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/sirene.

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 the managing the 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.[26]

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 Amazon Fund*,[27] 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, with a prominent participation in this reduction and in the sustainable use of forest resources. The study also showed that when women's income increases, they acquire new skills, knowledge, rights, and opportunities, improving their participation and visibility in different social spaces.

These results allowed for 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 60 have been concluded. The results and impacts of the concluded projects are evaluated by the Amazon Fund team and are disclosed in the Amazon Fund's annual reports (see chapter "Concluded projects") and on the fund's website.[28]

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

27 Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/biblioteca/GIZ-Estudo-genero.pdf.

28 Available at: https://www.fundoamazonia.gov.br/en/projetos/busca/index.html?reloaded&facet_Situacao_prop=conclu.

In 2016, with the technical support of German agency GIZ,[29] the conceptual framework was developed to be applied in the independent evaluations of the effectiveness of the projects implemented with resources from the Amazon Fund.[30]

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.[31]

In 2022, two thematic evaluations of effectiveness were published, one focused on projects supporting indigenous peoples and the other focused on projects of sustainable productive activities.

In the first evaluation, the projects "Alto Juruá," "Sustainable Indigenous Amazon," "Arapaima: Productive Networks," "Value Chains in Acre's Indigenous Lands," "Strengthening the Land-use Management of Indigenous Lands in the Amazon" and " Ethno-environmental Protection of Isolated Indigenous Peoples and Recent Contact in the Amazon," while in the second the results of the projects "APL Babaçu," " Sustainable Fisheries," "Amazon Backyards," "Sentinels of the Forest," and "Productive Socio-biodiversity in the Xingu" were evaluated.

Independent effectiveness assessments can be checked in their entirety on the Amazon Fund's website.[32] The conduction of these assessments 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's projects; and
- verify the projects' alignment with the PPCDAm and with the state plans for prevention and control of deforestation and ENREDD+.

The following are some conclusions of the effectiveness assessment of indigenous projects supported by the Amazon Fund,[33] published in 2022:

29 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

30 Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/FA-Marco-Conceitual-Avaliacao-Efetividade-Projetos_2016.pdf.

31 Available at: https://www.fundoamazonia.gov.br/en/monitoring-evaluation/independent-evaluations/.

32 Available at: https://www.fundoamazonia.gov.br/en/monitoring-evaluation/independent-evaluations/.

33 Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/Relatorio-Efetividade-Indigenas.pdf.

I. most of the goals have been met. The objectives were effective and had effectiveness. Projects have high relevance but low ability to sustain long-term results;

II. most projects supported by the Amazon Fund had a dual objective:

   > consolidate territorial and environmental management; and

   > promote economic activities that give sustainability to indigenous lands.

   Thus, by promoting economic-attractive activities, the analyzed projects constituted a sustainable alternative to deforestation on indigenous lands and contributed to maintain the forest standing. Furthermore, by instituting and strengthening the PGTAs of indigenous lands, the projects helped strengthen monitoring, prevention, and protection actions.

III. training was one of the central points of the supported projects, professionalizing the entities and changing the perspectives of the beneficiaries in relation to their performance and their role; and

IV. there were clear economic gains due to the increase in non-timber extractive products and the learning of new conservation techniques, made possible by the acquisition of cold rooms. These aspects tend to last, even after the conclusion of projects.

The following are some conclusions from the evaluation of the effectiveness of projects to support sustainable productive activities,[34] completed in 2022:

I. the investments of the Amazon Fund in the initial stage of the "sustainable production" component encompass a variety of organizations, chains, social groups, regions, and dynamics of preservation and deforestation. This strategy was considered appropriate and positive, as it interacts with the context of diversity present in the Amazon in these themes;

II. organizations representing vulnerable and small populations and territories, which alone would not be able to comply with the requirements of the proposals to the Amazon Fund, participated in all implementation arrangements, whether public call or spontaneous demand proposals. Thus, the projects contributed to expanding the capillarity of the Amazon Fund;

III. considering income generation as a central element for achieving the effects of increasing the economic attractiveness of the supported activities, the need to develop more specific conceptualizations and measurement methods to verify the effective impacts of support on the income of beneficiaries was recognized;

IV. the connections between the aspects of market access, commercialization, and understanding of the specificities and different maturities of the chains are themes that must be evolved in the approaches of the projects; and

V. regarding the perspectives of the projects after their completion, it is necessary to highlight that the evaluation took place at a critical time of the COVID-19 pandemic, concomitantly with a more comprehensive framework of fragility

34 Available at: https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/5.avaliacoes-externas/Relatorio-Efetividade-APS.pdf.

of public policies and economic crisis, affecting the evaluation itself. Some organizations have been hit hard, with some initiatives being terminated, while others have reports of adaptation and resilience.

It is worth mentioning that in 2019 a mid-term effectiveness assessment of the Amazon Fund was completed, covering the period from 2008 to 2018. Such 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 evaluation, has 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 fund has contributed to reducing deforestation in the Amazon. Both the evaluation and its complementary studies can be consulted on the Amazon Fund's website.[35]

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").

Some risks identified had their degree reassessed by the Amazon Fund in 2022.

35 Available at: https://www.fundoamazonia.gov.br/en/monitoring-evaluation/independent-evaluations/

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 Amazon territory has dynamic and itinerant migratory flows, aiming at the expansion of activities, especially those related to agriculture, illegal exploitation of natural resources and the opening of new settlements, as well as being a gateway for migrants fleeing poverty in neighboring countries, who then move to other regions of Brazil. In this context, Rondônia stands out, as it is the main source of migrants moving to other areas in the southwest of the Amazon, such as Acre and southern Amazonas. The surroundings of BR-319 (Manaus-Porto Velho) have facilitated the opening of new areas and migration to surrounding regions. This movement has been increasing continuously, as evinced by the recent expansion of deforestation in accessible parts of the south of the Amazon, such as Apuí, Humaitá, Lábrea, and Boca do Acre,[36] associated with a poor performance of the government in the land-use planning of the areas highlighted by Prodes/Inpe.[37] Thus, it is seen that the expansion fronts in the Amazon put pressure on natural resources, causing continuous deforestation. Another important front is the arrival of migrants through the state of Roraima, increasing pressure on public services and facilitating illegal activities. The Amazon Fund has acted with the objective of increasing sustainable production, monitoring and control, through its components, to fight deforestation in the region. **At this moment, the Amazon Fund reassesses the risk as low.**	The opening of new areas for agriculture or other purposes facilitates the advance of deforestation in the Amazon and the increase of business as usual activities, which do not contribute to the sustainable development of populations in the Amazon forests.
Offenders incorporate new strategies and technologies to illegal deforestation	According to the deforestation analysis in 2022, most of it occurred on the borders between Acre, Amazonas, Rondônia, and Mato Grosso, along the highways BR-230, 163, 364, and 317. Generally, there was a decrease in eight states, mainly in Pará, which registered a 21% reduction when compared to the previous year. In Mato Grosso, there was a decrease of almost 14%, confirming the downward trend in deforestation in the last decade in this state. Despite the small reduction of 5% in Acre, it is noted that deforestation has been increasing since 2018. Amazonas and Pará concentrated 11 municipalities that represented about 43% of deforestation for 2022. A remarkable characteristic of deforestation behavior was the average increase in deforestation polygons in recent years, indicating little concern of deforesters with the possibility of identification and possible sanctions from environmental agencies **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.

36 Available at: http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments.

37 Available at: http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes.

Changes in the Brazilian environmental legislation reduce the forest's protection	In 2022, legislative proposals that could have consequences on the advance of deforestation progressed in the National Congress. Bill (PL) 3,475/2021,[38] that establishes forms of payment of fines applied by IBAMA, was approved by the Senate and is in progress in the Chamber of Deputies. Bill (PL) 36/2021, which allows for the compensation of legal reserve areas deforested from 2008 to 2020 and the waiver of fines and embargoes applied for illegal deforestation in the same period, was effectively processed in the relevant committees and may be approved by the National Congress. Furthermore, Provisional Presidential Decree 1,150/2022 allows a new extension for registration in the CAR,[39] replacing Law 13,887/19, which guaranteed a period of two years for adherence to the registration. Also noteworthy are the Bills 1,282/2019, 2,374/2020 and 686/2022, which make the forest code more flexible (PL 12,651/2012). These bills propose the building of water reservoirs for irrigation and physical infrastructure projects in areas of permanent preservation of rural properties; regularization of rural properties outside the minimum legal reserve limits; and permission for cutting of secondary vegetation, without prior authorization from the state environmental agency, respectively. The discussion about the "Time Frame"[40] for demarcation and approval of indigenous lands may also compromise forests preservation. In the context of access to credit, the Federal Government established conditions for the production and implementation of sustainable practices, including the recovery of degraded areas and pastures and the implementation of crop-livestock-forest integration systems.[41] The results of 2022 general elections will enable an expanded dialogue of ongoing proposals and measures, enabling a better understanding of the needs for environmental adequacy and the disburse of financial resources. With the inauguration of the new government, greater concern for forests preservation and a public commitment to zero deforestation by 2030, it is expected that part of these bills will not be implemented. **The Amazon Fund assesses the risk as medium**	Uncertainties related to this legislation can negatively affect 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 through sustainable development in the Brazilian Amazon.
New governance and public policy priorities change the development model	In recent years, the strategies and priorities of the Federal Government have generated challenges to sustainability, the recognition and consolidation of new indigenous land and preservation areas and the fight against deforestation. In the context of the Executive Commission for the Control of Illegal Deforestation and Recovery of Native Vegetation (Conaveg), of the National Council of the Brazilian Amazon (CNAL),[42] Law and Order Guarantee operations (GLO) were suppressed and, in its place, the Ministry of Justice and Public Security was supported. Operation "Guardians of the Biome" was carried out,[43] important for actions to combat illegal deforestation, forest fires and illegal burn offs. Furthermore, the Nossa Amazônia Plan was instituted, which adds to the Amazon Plan 2021-2022 and the National Plan for Control of Illegal Deforestation and Recovery of Native Vegetation. These plans and operation had little effectiveness and face many obstacles in their implementation. For 2023, measures proposed by the elected government indicate possible suppression of part of these plans and actions and return of policies that had shown positive results in combating deforestation, associated with the sustainable development of the Amazon. At state level, the Interstate Consortium for the Sustainable Development of the Brazilian Amazon, formed by the nine Amazonian states, supported actions aimed at consolidating a regional strategy to combat deforestation. **The Amazon Fund continues to assess the risk as medium.**	The advance of illegal activities, which has caused pressure on forests, indigenous peoples, and traditional communities, hindering the implementation of programs to fight deforestation and support sustainable productive activities. Despite the review of policies initiated by the new elected government, there are still uncertainties about the deadline to identify the results and responses to the challenges in the fight against deforestation. The expansion and strengthening of governance tools, as well as a renewed focus on actions that contribute to the implementation of the Paris Agreement and the achievement of the voluntary goals proposed by Brazil are relevant signs that help reduce the risk of this indicator for the objectives of the Amazon Fund.

38 Available at: https://www25.senado.leg.br/web/atividade/materias/-/materia/150214.

39 Available at: https://www.camara.leg.br/noticias/931682-medida-provisoria-altera-prazo-para-inscricao-no-cadastro-ambiental-rural/.

40 Available at: https://redir.stf.jus.br/paginadorpub/paginador.jsp?docTP=AC&docID=630133.

41 Available at: https://www.gov.br/agricultura/pt-br/assuntos/noticias-2022/plano-safra-disponibiliza-r-340-8-bilhoes-para-o-setor-agropecuario.

42 Available at: https://www.gov.br/mma/pt-br/assuntos/servicosambientais/controle-de-desmatamento-e-incendios-florestais/comissao-executiva-para-controle-do-desmatamento-ilegal-e-recuperacao-da-vegetacao-nativa-conaveg/documentos.

43 Available at: https://www.gov.br/mj/pt-br/assuntos/sua-seguranca/operacoes-integradas/guardioes-do-bioma/operacao-guardioes-do-bioma.

Climate change causes prolonged droughts and forest fires	In total terms, GHG emissions have increased since 2017, due to the Land Use, Land Use Change and Forestry (LULUCF) sector.[44] In compliance with the provisions of Decree 9,578/2018, to monitor the national commitment voluntarily assumed to reduce emissions, the sectoral results and respective emission limits for 2020 demonstrated that total emissions stood at 1.67 billion tons of CO_2, that is, 48.2% below the emissions projected by the decree. Between 2021 and 2022, three reports referring to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change were prepared.[45] The results include a reduction in the deforestation rate by 11.27% from 2021 to 2022. 2021 was the year that registered the largest deforested area since 2006, 13,000 km². Currently, Brazil is the fifth largest emitter of greenhouse gases in the world and 70% of emissions are related to land use change (LULUCF),[46] to deforestation and, mainly, to forest fires in the Amazon. According to INPE data,[47] of 2022, the area burned in the Amazon biome was 76,818 km². These figures 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. The Amazon Fund supports projects that contribute to achieving the goals of the Paris Agreement, including restoring and reforesting, expanding the scale of sustainable native forest management systems, and preventing and fighting forest fires. **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 desertification and reduction of its functions for balancing the rainfall regime in the regions under its influence. Such 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	With the recovery of activities in the economic scenario, the Brazilian economy recorded GDP growth of 2.9% in 2022, below the 4.6% recorded in 2021. This result demonstrates the need for attention after the losses caused by the COVID-19 pandemic, which caused a 3.9% contraction of the economy in 2020. Although the main economic indicators of the North region have evolved positively in 2022, the general industry has not yet recovered its pre-pandemic levels.[48] Regarding the promotion of the production of plant extraction and forestry in 2021,[49] there is an increase in the production of acai, fiber, and oilseed crops in the Brazilian Amazon. This scenario tends to grow in 2022. Such chains are supported by the Amazon Fund, which has proven to be an essential instrument in the contribution and expansion of forest-based production chains and in the sustainability of agricultural activities of small rural producers. **The Amazon Fund reassesses the risk as medium**	The slight increase in the annual production volume of the basket of extractivism products, in line with revenue growth, indicates a possible recovery of value chains in the region, reinforcing the need for financial and technical support to producers of socio-biodiversity to avoid negative impacts on household income and the retention capacity of local populations.

44 Available at: https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/sirene/publicacoes/estimativas-anuais-de-emissoes-gee/arquivos/6a-ed-estimativas-anuais.pdf.

45 IPCC — Intergovernmental Panel on Climate Change.

46 Available at: http://seeg.eco.br/download.

47 Available at: https://queimadas.dgi.inpe.br/queimadas/portal-static/estatisticas_estados/.

48 Central Bank regional bulletin for the North region. Available at: https://www.bcb.gov.br/content/publicacoes/boletimregional/202211/br202211c1p.pdf.

49 Available at: https://sidra.ibge.gov.br/pesquisa/pevs/quadros/brasil/2021.

Component 2 – Monitoring and control		
Identified risk	**Response/mitigation**	**Impacts**
Agrarian reform policy inconsistent with the environmental policy	In 2022, bills such as 2,633/2020 and 510/2021, which propose to make land regularization criteria and rules more flexible, did not progress towards their consolidation, remaining in the process of reporting to the responsible committees. Bill 5,518/2020, which makes the bidding model and contracts for the concession of public forests milder, is in progress to be voted on in the Chamber of Deputies. The presence of bills not aligned with this area of activity in progress at the congress maintains the relevance of this risk for the objectives of the Amazon Fund. Furthermore, in the context of the general election, there was a reduction in the number of parliamentarians concerned with climate and environment agendas. Thus, the challenge of strengthening the environmental issue in the face of issues related to production and development will be permanent.[50] Future discussions on land legislation may support decision-making aimed at the Amazon Fund's projects. This legislation is key to further development of environmental policy and sustainable forest development.[51] The Amazon Fund has supported projects that strengthen actions to prevent, control and combat deforestation, in addition to the sustainable land-use. **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 the Provisional Presidential Decree 910/2019, whose validity has expired, suggests a maturing of the debate on the alignment of agrarian reform and environmental policies in the legislative branch. 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	Throughout 2022, MMA improved Sinaflor, with the implementation of the wood traceability system, in addition to hiring new public servants for ICMBio. However, the challenges to institute actions to combat illicit activities were permanent. In this context, the Guardians of the Biome program, coordinated by the Ministry of Justice, supported the fight against crime linked to forest products.[52] However, despite advances in partnership with other ministries and the small reduction in deforestation compared to 2021, the difficulties in combating illicit activities and the search for a more significant reduction in deforestation are permanent. For next year, MMA will have a budget of R$ 3.5 billion, a 16% increase over what is planned for 2022 (R$ 3 billion). For environmental control and inspection of IBAMA, while 2022 had R$ 155 million, R$ 222 million are foreseen for 2023. With the result of the general election and the new prioritization of actions under Decree 11,349/2023,[53] the ministry will have the challenge of supporting and leading relevant agendas to combat deforestation. **The Amazon Fund maintains the risk as high.**	Insufficient actions to monitor and repress deforestation represent a vacuum of the State's presence, which may lead to an advance in the occurrence of illegal activities that contribute to deforestation. Additionally, for the Amazon Fund, there is a risk of deterioration of the sustainability of results achieved by the supported projects.

50 Available at: https://www.idsbrasil.org/wp-content/uploads/2022/10/Analise-dos-resultados-da-eleicao-2022_.pdf.

51 Available at: https://valor.globo.com/politica/eleicoes-2022/noticia/2022/10/10/agenda-ambiental-tera-mais-resistencia-no-novo-congresso.ghtml.

52 Available at: https://www.camara.leg.br/noticias/894762 Ministro-do-meio-ambiente-diz-que-atua-para-coibir-desmatamento-e-crimes-ambientais/.

53 Available at: http://www.planalto.gov.br/ccivil_03/_ato2023-2026/2023/decreto/D11349.htm.

Component 3 – Territorial planning		
Identified risk	**Response/mitigation**	**Impacts**
Increased demand for new lands for cultivation and pasture	The constant pressure on Amazon forests to open new areas for agricultural production focuses on the advance of deforestation identified by INPE.[54] Despite the small reduction that occurred in 2022, the challenge of increasing productivity in a sustainable way in areas already converted remains, in addition to fostering forest recovery and restoration. This challenge is associated with the need to expand the supply of Ater to producers, especially family farmers. Within the scope of the Federal Government, instruments for transition to low-carbon agriculture have been supported through the Safra Plan and must be strengthened with the implementation of the Sectoral Plan for Adaptation and Low Carbon Emission in Agriculture.[55] The plan intends to contribute strategically to tackling climate change in the agricultural sector, with the objective of promoting adaptation to climate change and control of GHG emissions, through production efficiency. The Amazon Fund supports actions of sustainable productive activities, aimed at rural activities of low environmental impact and the recovery of vegetation cover, as well as projects to promote environmental regularization, such as support for CAR. **The Amazon Fund continues to assess the risk as high.**	The increased pressure for new land for cultivation, pasture, and speculation, associated with the non-use of already available areas, has the economic vector as a driver of deforestation. The opening of new areas and the updating of land legislation facilitate the consolidation of new deforestation fronts in the Amazon forests.

Component 4 – Science, innovation and economic tools		
Identified risk	**Response/mitigation**	**Impacts**
Qualified technical staff and researchers migrating	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. According to the Coordination for the Improvement of Higher Education Personnel (Capes) database, for 2021,[56] the Amazon concentrates only 6.7% of Brazil's graduate scholarships. Although the number of scholarships has increased by 1% compared to 2000, this percentage is lower than the volume of graduate scholarships granted by universities in the Southeast and South of Brazil country, which correspond to 52% and 24% of the total scholarships granted in Brazil in 2021. Federal spending on higher education in 2015 was R$ 15.67 billion, while in 2021 the total resources was R$ 5.5 billion. Institutions located in South-Central Brazil suffered less from the impacts of the reduced finances compared to those located in the Amazon states. This is due to the fact that the Southeast and South of Brazil concentrates the best graduate program evaluated by Capes. Moreover, in the North region, graduate programs are mostly newly created. Furthermore, Complementary Law 177/2021 was approved in 2021, which made the resources of the National Fund for Scientific and Technological Development (FNDCT), responsible for the largest source of resources destined for science in Brazil, non-contingent, thus aiming at reducing regional imbalances regarding research and development . According to data from the budgetary and financial execution of the FNDCT,[57] in 2022, the resources allocated to the Amazon totaled R$ 29 million, while states in the Southeast and South received R$ 548 million and R$ 131 million, respectively. Thus, the current Brazilian scenario is still one of low investment and budgetary cuts in Education. In this context, several regions of Brazil suffer from the "brain drain" and some regions are more affected than others. In the North region, where many graduate programs were recently created, grades are still lower than in the Southeast and South regions, according to the concepts of Capes.[58] **The Amazon Fund reassesses the risk as high.**	The continuing low investment scenario in RD&I in the Amazon limits the production and transfer of knowledge and technologies that can contribute to the recovery, preservation 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 RD&I projects and producing information and statistics necessary for the qualified design of public policies for the region.

54 Available at: http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes.

55 Available at: https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/plano-abc/arquivo-publicacoes-plano-abc/final-isbn-plano-setorial-para-adaptacao-a-mudanca-do-clima-e-baixa-emissao-de-carbono-na-agropecuaria-compactado.pdf.

56 Available at: https://geocapes.capes.gov.br/geocapes/.

57 Available at: http://finep.gov.br/a-finep-externo/fndct/execucao-orcamentaria-e-financeira/demonstrativos-da-execucao.

58 Available at: https://portal.sbpcnet.org.br/noticias/novos-cortes-debolsas-de-pos-graduacao-preocupa/.

Regarding the cross-cutting risks related to unintended consequences for women or gender equality, human rights and anti-corruption, 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 (PRSAC), which has as principles of action respect for human rights, gender equality and the appreciation of diversity. The most recent version of PRSAC was approved in 2022 by its Board of Directors.[59]

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 evince 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 hiring.

It should be noted that in 2021 – the year of the most recent BNDES annual report, available at the time of the preparation of the present report[60] – 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.

59 Available at: https://www.bndes.gov.br/wps/portal/site/home/desenvolvimento-sustentavel/o-que-nos-orienta/prsac-e-seus-instrumentos/politica-responsabilidade-social-ambiental-climatica/.

60 Available at: https://web.bndes.gov.br/bib/jspui/bitstream/1408/22344/3/PR__REL.ANUAL_2021.pdf.

CONCLUDED PROJECTS

Concluded projects are those that: (i) performed the planned activities; (ii) had their accountability approved; and (iii) had their results assessed.

Importance of Forest Environmental Assets

Project management
State of Acre

Territorial scope
State of Acre

Beneficiaries
Population of the state of Acre, with emphasis on the settlers of agrarian reform, family farmers, indigenous and traditional populations (riverside and extractive)

Objective
Foster sustainable deforestation reduction practices, with payment for environmental services, valuing environmental and forestry assets to consolidate a clean, fair and competitive economy, based on the Economic Ecological Zoning (ZEE)

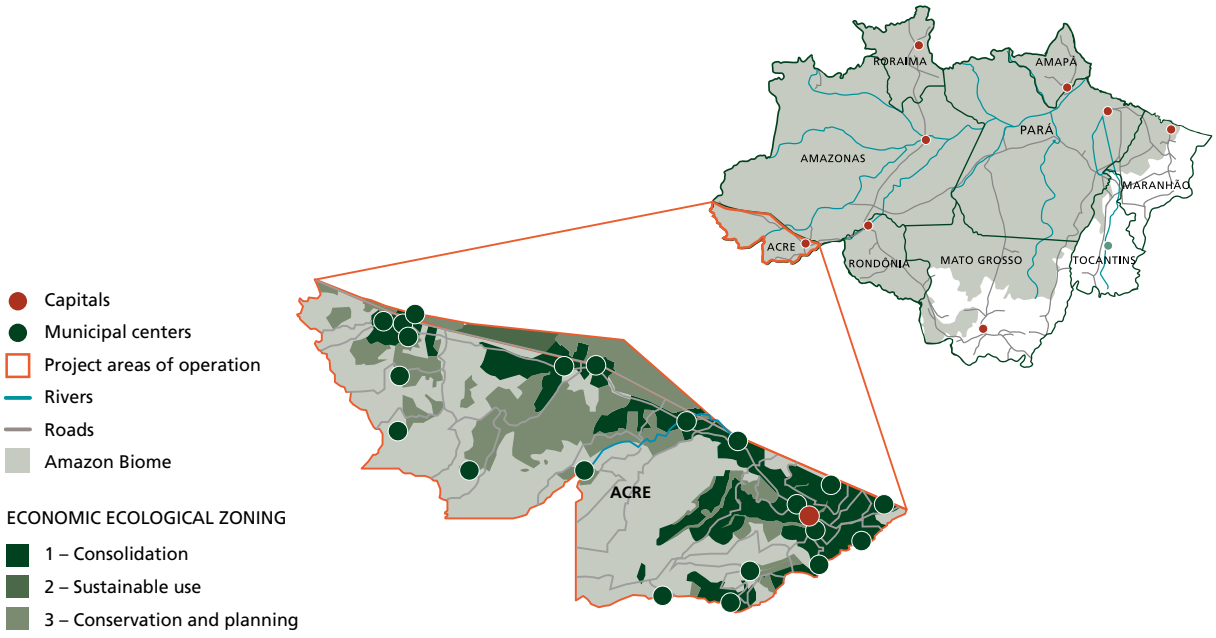
Total amount of the project
R$ 59,654,981.64
US$ 35,091,165.67

Amount of Amazon Fund support
R$ 52,930,867.68
US$ 31,088,257.77

Execution period[61]
From the second quarter of 2011 to the first quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
10.26.2010	11.19.2010	R$ 52,930,867.68 US$ 31,088,257.77	100%



61 The execution period includes, in addition to the physical and financial execution of the project, the preparation of the final monitoring and evaluation reports.

Context

The state of Acre has a population of approximately 906,000 inhabitants[62] and, since its formation, its economic development has been linked to the forest. The state sought to implement an integrated environmental and land-use management, with instruments to promote activities that incorporate, in a sustainable way, forest products and services. Forest production (timber and non-timber) is a relevant economic activity, representing about 17% of the gross value of the state's agricultural production.

The Forest Environmental Asset Appreciation Policy[63], from which the project received its name, was instituted by the state of Acre, in 2008, with a focus on promoting territorial planning and strengthening sustainable-based production chains.

The project

The project "Importance of Forest Environmental Assets (VAAF)" aimed to value the environmental and forestry asset through the strengthening of integrated land-use management, promotion of forest and agroforestry production chains and technical and financial support to environmental services. Its premise was to link the payment of these services to the adoption of sustainable practices and environmental criteria. The project also joined the strategy of consolidation of the territorial management of the state based on its ZEE.

The project included the modernization of monitoring and control systems through the strengthening of institutions responsible for land-use management, promotion of sustainable productive practices and forest management of timber and non-timber products, as well as the promotion of carbon capture via reforestation of degraded areas.

Finally, the project included supporting indigenous associations to develop territorial and environmental management plans (PGTA), building surveillance posts, forming teams and demarcating 15 indigenous lands (IL).

Intervention Logic

The VAAF project is part of the four components of the Amazon Fund's Logical Framework: "sustainable production" (1); "monitoring and control" (2); "territorial planning" (3); and "science, innovation and economic instruments" (4).

Its direct effects were defined as: "the economic activities of sustainable use of the forest and biodiversity identified and developed in the municipalities of Tarauacá, Feijó and Manoel Urbano" and "expanded managerial and technical capacities in the state of Acre for the implementation of agroforestry systems, forest management activities,

62 Source: Brazilian Institute of Geography and Statistics – estimates for 2021, based on the demographic census of 2010.

63 The policy included two programs: the Altered Areas Recovery Program (PRAA), which aimed to consolidate areas already deforested through sustainable practices, and the Forest Environmental Asset Program (PVAAF), which prioritized certification actions of sustainable production units for vegetation cover valorization practices, including through payment for environmental services.

agroextractive production and processing of agroforestry products" (component 1); "institutions for monitoring, control and environmental accountability of the state of Acre structured and modernized" (component 2); "strengthened management of 15 IL in the municipalities of Santa Rosa do Purus, Feijó, Tarauacá, Cruzeiro do Sul and Mâncio Lima" and "local territorial ordinances (municipal ZEE) implemented in six municipalities along BR-364 in the state of Acre" (component 3);"and knowledge and technologies in the production of seedlings of superior individuals for purposes of produced and diffused reforestation" (component 4).

Activities executed

The project was structured based on two axes, namely: (i) integrated land-use management and (ii) promotion and incentives for agroforestry production chains and environmental services.

I. Integrated land-use management.

The actions carried out under this axis of the project aimed to structure the government of the state of Acre to carry out support and inspection activities, strengthening the technical bases of the land-use management institutions of the state government, such as the Central Unit of Remote Geoprocessing and Sensing (Ucegeo), the Institute of Environment of Acre (Imac), in addition to the Secretariat of Forest Development, Industry, Trade and Sustainable Services (Sedens). The project also supported the structuring of municipalities and their integration into the Plan for the Prevention and Control of Deforestation in Acre (PPCD-AC).

The investments aimed at modernizing Ucegeo established conditions to store, integrate and manage the database generated under the SEZ of the state of Acre, focusing on monitoring deforestation and fires. Software licenses for digital processing of satellite data and images were acquired, as well as information technology and furniture equipment.

Thirty Ucegeo employees were trained in the area of geotechnologies to improve the analysis of high-resolution satellite and radar images, using tools such as Envi, Erdas ArcGis and PostGree.

Investments to strengthen Imac, in turn, made it possible to modernize environmental control in licensing, monitoring and inspection activities. The project support was employed to renovate the headquarters of Imac and acquire furniture, air conditioners, computers, servers and memory for servers, voltage stabilizers, notebooks and vehicles.

New modules were developed through consulting within the State Environmental Information System (Seiam), such as the Water Resources Granting Module and the Consultation Module to the Licensing System for the External Public.

Investments were made focused on improving the management of forest resources in the state of Acre and institutional strengthening of Sedens, through the acquisition, by this secretariat, of machinery, equipment, software, furniture and vehicles. In this context, the VAAF project supported the Forest Residency Program that allowed the

training of 38 forest engineers, through a graduate degree (*lato sensu*) in Forest Management from the Federal University of Paraná (UFPR) in partnership with the Federal University of Acre (UFAC), aimed at the sustainable use of native forest resources.

Actions aimed at strengthening municipal environmental management included support for the creation of Municipal Environmental Councils, as well as the structuring and physical adaptation of Municipal Environmental Secretariats, through the acquisition of various equipment, such as computers and 4x4 vehicles.

Community forest fire brigades were structured by providing fire-fighting kits and training 1,054 firefighters. In addition, 18 participatory workshops were held to prevent and control deforestation and fires.

The project also supported the formulation of municipal plans for the prevention and control of deforestation and burning for all municipalities that make up the state of Acre, with the objectives of promoting effective reductions in deforestation and burning rates and consolidating alternatives to the use of fire.

In order to establish the territorial planning of the municipalities of the state of Acre, several activities were developed, such as the formulation of the local territorial plans (LTO) of three municipalities (Manoel Urbano, Feijó and Plácido de Castro). The LTO is a territorial planning tool that takes into account, among other aspects, socio-environmental characteristics of the municipality and aims to guide the use of its territory, seeking the best occupation of space.

To structure the drought and flood early warning system, 46 hydrometeorological data collection platforms (PCD) were installed and maintained, which transmit information on river flow and environmental risks via satellite. Four platforms were acquired with funds from the Amazon Fund and the others were provided by the National Water Agency (ANA).

The project also trained employees of the Secretariat of Environment (Sema) of Acre for the use of geotechnology and geoprocessing resources.

The activities mentioned, implemented under the "integrated land-use management" axis, especially contributed to the Government of the State of Acre and municipal governments developing actions to prevent, monitor and combat deforestation.

II. Promotion and incentives for agroforestry production chains and environmental services.

The actions carried out under this axis of the project encouraged, in turn, the provision of environmental services, through actions to consolidate sustainable productive practices associated with endangered forests; support for the forest management of timber and non-timber products and carbon sequestration via the reforestation of degraded areas.

Under this axis, technical assistance and rural extension services (ATER) were provided to family farmers and extractivists involved in community forest management. These services were outsourced by the government of the state of Acre and included, among other activities, technical visits to small producers, exchanges and training. In total,

2,361 families were benefited, located mainly around BR-364, in the municipalities of Bujari, Sena Madureira, Manoel Urbano, Feijó and Tarauacá.

The implementation of agroforestry systems (SAF) and the development of management plans for multiple use of certified production forests were supported. Among other activities, the forest inventory of the state forest complex of the Gregório River (state forests of the Liberdade River, Mogno and the Gregório River) was established.

This particular activity is part of the strategy of promoting the sustainable economic use of public forests through forest concessions. In the forest concession, a company (or productive association) receives authorization from the government to exploit, with sustainable forest management practices, the products of a public forest for a certain time and through the payment of a financial amount to the government.

To implement the SAFs, small family producers were provided with agricultural equipment, inputs (seedlings and seeds) and small animals (free-range chickens), as well as deforestation and mechanized harrowing services.

The project paid bonuses to 2,198 families of small producers who have certified properties, according to criteria of the Certification Program of Production Units, based on State Law 2,025/2008, with the objective of encouraging the reduction of emissions from deforestation in areas of threatened forests.

In addition, a bonus was paid for the reduction of emissions from deforestation for 953 families living, in public forests, that participate in the Community Forest Management Program of the State of Acre.

The project promoted the training of indigenous associations for the elaboration of management plans in ILs and the formation of surveillance teams, in addition to supporting the implementation of surveillance actions, demarcation of these lands and construction of surveillance posts on indigenous lands.

Fourteen IL surveillance and inspection workshops were held, training 360 indigenous individuals for monitoring and protection activities against invasions and forest fires, including knowledge on environmental legislation, use of GPS devices and preparation of surveillance plans.

In addition to the construction of surveillance posts in the ILs, equipment and support material were acquired, such as boats and boat motors, personal protective materials, opening of trails and clearings and mobile campsites.

Finally, the installation of the "Biofactory – Genetic Improvement Laboratory and Clones of the Forest Nursery" was supported. This initiative was the result of a partnership between the Brazilian Agricultural Research Corporation (Embrapa) and the Government of the state of Acre. The project delivered a fully equipped and functioning laboratory.

Result and impact indicators

The project activities contributed to the results related to the components "sustainable production" (1), "monitoring and control" (2), "territorial planning" (3) and "science, innovation and economic instruments" (4) of the Logical Framework of the Amazon Fund.[64]

The results of the main indicators agreed for the monitoring of the foreseen direct effects were:

Direct effect 1.1: Economic activities of sustainable use of forest and biodiversity identified and developed.

> Revenue obtained (effectiveness indicator)

  Target: R$ 10 million | Result achieved: R$ 49.1 million

The result achieved for new revenues, R$ 49.1 million in total, refers to the period from 2011 to 2018. This measurement included subsistence consumption, which was valued at the local market price.

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

> Number of individuals trained to implement SAFs, forest management, agroextractive production and processing of agroforestry products effectively using the knowledge acquired (effectiveness indicator)

  Target: 2,280 | Result achieved: 2,280

> Number of sustainable production specialists trained (efficiency indicator)

  Target: 40 | Result achieved: 38

> Number of families with forest and agroforestry production served by ATER network (efficiency indicator)

  Target: 2,080 | Result achieved: 2,361

> Number of Sustainable Property Certification plans developed (efficiency indicator)

  Target: 2,080 | Result achieved: 2,361

> Number of community organizations strengthened (effectiveness indicator)

  Target: 8 | Result achieved: 8

Direct effect 1.4: Deforested and degraded areas recovered and used for economic and ecological conservation purposes.

> Number of rural properties benefiting from Community sustainable forest management APSs (efficiency indicator)

  Target: 919 | Result achieved: 953

64 Available at: http://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/monitoramento-avaliacao/0.home/FA-Arvore_de_objetivos_2018.pdf.

- Number of households benefiting from payment for environmental services (effectiveness indicator)

  Target: 2,860 | Result achieved: 3,151

In general, the indicators related to the sustainable production component presented results equal to or higher than the established goals, leaving an important legacy in supporting small producers in the training actions, continued technical assistance and bonus for the environmental benefits of their activities.

Direct effect 2.1: Structured and modernized environmental monitoring, control and accountability institutions.

- Number of regional units of the environmental agency benefited (effectiveness indicator)

  Target: 6 | Result achieved: 66

- Number of employees effectively trained using the knowledge acquired (effectiveness indicator)

  Target: 120 | Result achieved: 132

- Number of municipalities in the state of Acre with a Deforestation Prevention and Control Plan (PPCD) prepared and with the respective operational structures implemented (effectiveness indicator)

  Target: 22 | Result achieved: 22

The results obtained in this component reveal the strengthening of environmental protection institutions in the state of Acre in the dimensions of technical training of government workers and the dissemination of competences by all the municipalities that make up the state.

Direct effect 3.2: Protected areas with infrastructure, territorial protection and consolidated management.

- Area of indigenous lands with control of its strengthened territory (effectiveness indicator)

  Target: 1.4 million ha | Result achieved: 2.3 million ha

Initially, training workshops for surveillance and inspection actions were planned in three ILs. This number was increased throughout the execution of the project, allowing, in the end, the 34 ILs of the state to benefit from training activities and the consolidation of their management by means of surveillance, signaling, and communication equipment.

Direct effect 4.1: Knowledge and technologies aimed at the conservation and sustainable use of biodiversity, monitoring and control of deforestation and spatial planning produced, disseminated and used.

- Number of researchers and technicians involved in research, development and innovation (RD&I) activities established in the region (effectiveness indicator)

  Target: 10 | Result achieved: 10

> Laboratory area built, expanded or modernized (m²) (efficiency indicator)

Target: 180 | Result achieved: 290

The installation of the biofactory allowed the adoption of new reforestation technologies in partnership with Embrapa-AC, signaling a change of level in relation to traditional seedling propagation techniques, which produce high genetic variability and higher incidence of pests and diseases. At the same time, this activity represented an important step in the qualification of professionals and in the advancement of regional research.

Table 24 shows the evolution of deforestation in the state of Acre in the last 12 years

TABLE 24 › EVOLUTION OF DEFORESTATION IN THE STATE OF ACRE IN THE LAST 12 YEARS

Deforestation (km²)	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Acre	871	706	682	444	257	372	264	309	221	305	280	259
Brazilian Amazon	13,235	10,851	10,129	7,536	6,947	7,893	6,207	5,012	5,891	4,571	6,418	7,000
Acre/total (%)	6.6%	6.5%	6.7%	5.9%	3.7%	4.7%	4.3%	6.2%	6.2%	6.2%	6.2%	6.2%

Source: BNDES based on Prodes/Inpe data.

The deforestation verified in 2010, the project's baseline, was 259 km², while in 2018 (the last year of the project's physical execution) it was 444 km². This fact reveals a 71% increase in the rate of deforestation in the period in question, signaling that, despite the positive results generated by the project, they were not enough to compensate for the other vectors responsible for the increase in deforestation, which was also observed in the Amazon as a whole in the same period.

The 2021 deforestation rate (871 km²) is the highest observed since 2003 (1,078 km²). It is the fourth highest rate of deforestation measured in the state of Acre since 1998, the year in which this practice began to be monitored by satellites (INPE/Prodes Project).

Institutional and administrative aspects

Considering the values involved and the comprehensive scope of the project, it was necessary to mobilize a set of partnerships and competencies for its proper execution.

Within the scope of the state government itself, it was announced in 2012 the merger of the Secretary of State for Forestry – SEF with the Secretary of State for Development, Industry, Commerce, Service and Technology – Sedict. This merger resulted in Sedens.[65]

Despite this administrative reorganization, there was concern on the part of Sedens to create specific lines of action to prevent the merger of the secretariats from harming the actions of preservation and sustainable management of the forest and, by extension, the objectives of the project. For this, it was essential to use the Project Management Unit (UGP) linked to the Planning Secretariat, which acted in the coordination and articulation of the state agencies involved in the execution of the project.

65 In 2019, Sedens underwent a new reorganization, merging with the new State Secretariat for Industry, Science and Technology (Seict).

Within the scope of the partnerships, it is worth mentioning the conclusion of a technical cooperation agreement between the state of Acre and Embrapa-AC for the realization and monitoring of research, generation and transfer of technologies aimed at the operationalization of the biofactory of forest and fruit seedlings. Through this agreement, it was also possible to make available the LIDAR tool[66] to improve forest management planning.

Risks and lessons learned

In general terms, the project was properly executed and reached the main goals established. The period of its implementation was longer than initially foreseen due to administrative transitions, a common feature in projects with the public sector. As it encompassed an inter-institutional arrangement, additional articulation and management efforts were expended.

The main lessons identified by the executors illustrate the difficulties faced in projects aimed at populations residing in places far from urban centers, often in situations of vulnerability and often without basic elements of citizenship. In this regard, the lack of certified documentation of the properties of the beneficiaries of the program, such as simple personal documents or land regularization, was reported. This resulted in problems in receiving the bonus payment for environmental services, since many did not have access to the banking network.

Likewise, the difficulty of access by car or boat to the most remote municipalities in the state, such as Santa Rosa do Purus, Porto Walter, Jordão, and Marechal Thaumaturgo, which do not have adequate road connections and suffer with the low level of the rivers, required the eventual use of aircraft and the support of the Brazilian Army and ICMBio for some actions of the project.

Sustainability of results

Most of the actions supported were focused on 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.

The results achieved by the various training actions were incorporated into the benefited public, expanding their knowledge on the implementation of SAFs and sustainable management. These capacities tend to produce lasting and expanded effects as SAFs consolidate as an income option for these populations.

In turn, the implementation of the "Biofactory – Laboratory of Genetic Improvement and Clones of the Forest Nursery" enables the local acquisition of technical knowledge, with great potential to spread within the territory and attract researchers and medium and large producers interested in investing in reforestation for economic purposes.

66 Laser profiling LIDAR (light detection and ranging) is a tool for planning and monitoring tropical forests, which has a wide variety of applications. More information available at: https://www.embrapa.br/busca-de-solucoes-tecnologicas/-/produto-servico/4124/uso-do-lidar-como-ferramenta-para-o-manejo-de-precisao-em-florestas-tropicais.

Strengthening the Forest-Based Sustainable Economy

Project management

Central Cooperative for Extractive Marketing of the State of Acre (Cooperacre)

Territorial scope

14 municipalities in the administrative regions of Alto Acre, Baixo Acre and Purus

Beneficiaries

Small family landowners and extractivists

Objective

Contribute to the strengthening of the Brazil nut and fruit pulp chains in the state of Acre through: (i) recovery of degraded and/or altered areas located in small farms or family rural possessions; (ii) optimization of the logistics of storage of Brazil nuts and fruit transportation; (iii) improvement of the processing process of Brazil nuts; (iv) aggregation of value and diversification of products; (v) improvement of the marketing strategy of products; and (vi) training of the affiliate network

Total amount of the project

R$ 5,190,901.39
US$ 2,171,925.26

Amount of Amazon Fund support

R$ 4,981,614.66
US$ 2,086,977.24

Execution period

From the 2nd quarter of 2015 to the 1st quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
9.23.2014	11.24.2014	R$ 4,981,614.66 US$ 2,086,977.24	100%

Project selected under the Public Call for Sustainable Productive Projects of the Amazon Fund

Context

The strengthening of the forest bioeconomy and the sustainable generation of income contribute to the reduction of deforestation. Cooperacre operates in the organization of the production of a network of about 25 cooperatives and producer associations, to which about two thousand families are directly linked, in addition with another thousand families not formally affiliated, but which are benefited by the purchase of their production.

The main activities developed by the cooperative include the acquisition, logistical support, processing, and commercialization of extractive production. Cooperacre operates in the production chain of Brazil nuts, its main product, fruit pulp, latex and, to a lesser extent, copaiba oil.

The project

The project "Strengthening the Forest Based Sustainable Economy" was selected under the Public Call for Sustainable Productive Projects of the Amazon Fund and aimed to strengthen the productive chains of Brazil nuts and fruit pulp.

It was implemented through direct and indirect support actions to associations and cooperatives affiliated to Cooperacre, which were organizations grouped according to the public call model.[67]

Regarding direct support actions, the following were carried out: (i) installation of two community warehouses and availability of polypropylene boxes to improve fruit transport conditions; (ii) expansion of the number of cooperatives and associations agglutinated with organic certification of chestnut production; and (iii) recovery of degraded and/or altered areas in small farms or family rural possessions.

The transversal actions included: (i) provision of ATER services; (ii) optimization of Cooperacre's beneficiation structure, through the installation of two new drying ovens and the installation of briquettes (equipment that transforms the residual bark of Brazil nuts into compacted biomass of high calorific value); (iii) development of feasibility studies for product diversification; (iv) training of representatives of agglutinated organizations, Cooperacre technicians and the ATER team; and (v) investment in communication and marketing.

67 The proposing "agglutinating" institution coordinates an integrated arrangement of subprojects of other organizations, called agglutinated, oriented towards the development of value chains based on the sustainable use of natural resources. The public call notice is available at: http://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/chamada-publica/Chamada_Publica_APS_04_2012.pdf.

Intervention Logic

The project is part of the "Sustainable Production" component (1) of the Amazon Fund Logical Framework. Its direct effects were defined as: "extractive activities for the sustainable use of the expanded forest associated with Cooperacre (agglutinated)"; "chains of Brazil nuts and fruit pulp with expanded added value"; "expanded managerial and technical capacities in good extractive practices, implementation of SAFs and administrative and financial management for the technical staff of the associates, extension technicians and families affiliated with those agglutinated"; and "deforested and degraded areas recovered through SAFs in rural properties of families affiliated with the agglutinated."

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

Activities executed

The project was carried out through direct actions in the united associations or cooperatives and through transversal activities.

As part of the direct activities, two community warehouses measuring 300 m^2 with a capacity of 15 tons were built for the use of rural producers' associations located in Xapuri.

In addition, a refrigerated box truck and medium and small vehicles were purchased to facilitate the flow of production. For the packaging and transportation of fruits between producers and Cooperacre, 1,000 boxes of polypropylene, with individual capacity of 25 to 30 kg of fruits, were purchased.

Another relevant activity of the project aimed to renew and expand the certifications of the agglutinated associations. Organic certification is a guarantee for the verification of origin and trajectory, from the collection of nuts to the final processing. Among other awareness and training actions, waste minimization workshops were held in the communities, one of the most recurrent obstacles to obtaining certification. As a result of this action, the number of certified associations doubled from seven to 14.

The project also supported the implementation of 602 hectares of SAFs in degraded areas, through the consortium planting of fruit species, chestnut and rubber trees, annual crops and green manures, benefiting 291 producers distributed in 16 communities.

The cross-sectional activities included the modernization of two nut processing units. The plant located in Xapuri received four new greenhouses, whereas the one in Rio Branco benefited from the use of briquettes[68] produced from shells and chestnut residues, which allowed to reduce the use of certified firewood to supply the boiler by 70%.

68 Briquettes are remnants of wood or other organic materials ground and pressed into small tubes, replacing the use of firewood as a fuel.

ATER services occurred through the hiring of two teams responsible for all monitoring of beneficiary producers. Each team consisted of two mid-level forestry technicians and an agronomist.

Activities were developed such as georeferencing of the areas, planning for the implementation of the SAFs, distribution of seedlings and green manures, monitoring of agricultural mechanization, monitoring of the implanted areas and the agroecological practices adopted, as well as support to the beneficiaries for registration in the Rural Environmental Registry (CAR). To support ATER's activities, vans, motorcycles, notebooks, GPS devices, multimedia projectors and cameras were acquired.

The communication and marketing actions also had support from the Amazon Fund. The strategy of disseminating the project and raising awareness among producers involved printing and distributing 25,000 newsletters, 10,000 folders, 1,000 booklets and 5,000 posters of good practices.

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:

> Revenue obtained from the commercialization of Brazil nuts and fresh fruits (effectiveness indicator).

  Target: not defined | Result achieved: R$ 20.1 million

> Revenue obtained from the commercialization of Brazil nuts and processed fruits (effectiveness indicator).

  Target: not defined | Result achieved: R$ 34.9 million

Although no targets have been established for marketing revenue, the amounts achieved exceeded those observed in the years prior to the execution of the project, consolidating Cooperacre's revenue at higher levels.

> Number of *in natura* product storage structures built (efficiency indicator)

  Target: 2 | Result achieved: 2

The construction of community warehouses was of great importance for the production chain, since the harvest period coincides with that of the rainy season, making it impossible to move on the extensions and roads for the transport of production.

> Number of individuals trained in sustainable management and production techniques (efficiency indicator).

  Target: 180 | Result achieved: 293

> Number of individuals trained in sustainable management and production techniques effectively using the knowledge acquired (effectiveness indicator).

  Target: not defined | Result achieved: 219

The overcoming of the training goal represented an important result of the project and allowed the representatives of the associations to perform their administrative functions with greater clarity and understanding, highlighting the emphasis on the principles adopted by cooperativism.

- Number of new certified communities in organic production of Brazil nuts (efficiency indicator)

  Target: 7 | Result achieved: 7

- Number of communities with renewed certification in organic production of Brazil nuts (efficiency indicator)

  Target: 7 | Result achieved: 7

- Area (ha) of deployed SAFs (efficiency indicator)

  Target: 600 ha | Result achieved: 602.5 ha

- Number of properties with SAFs deployed (efficiency indicator)

  Target: 291 | Result achieved: 291

Table 25 shows the evolution of deforestation in the state of Acre in the last eight years.

TABLE 25 › EVOLUTION OF DEFORESTATION IN THE STATE OF ACRE IN THE LAST EIGHT YEARS

Deforestation (km^2)	2021	2020	2019	2018	2017	2016	2015	2014
Acre	871	706	682	444	257	372	264	309
Brazilian Amazon	13,235	10,851	10,129	7,536	6,947	7,893	6,207	5,012
Acre/total (%)	6.6%	6.5%	6.7%	5.9%	3.7%	4.7%	4.3%	6.2%

Source: BNDES based on Prodes/Inpe data.

Institutional and administrative aspects

The project had important partnerships in the actions of recovery of degraded or altered areas and technical assistance. With Embrapa Acre's experience in organizing production systems in protected areas for sustainable use, it was possible to strengthen exchanges between local producers and project beneficiaries, who experienced successful experiences over six years in pasture areas abandoned by the practice of extensive livestock.

Cooperacre has also established other partnerships with organizations of the state and federal public sector, and it is worth mentioning: (i) State Secretariat for the Environment (Sema), which has been developing agroforestry education work with traditional populations since 2008, through the methodology of the "Agroforestry Educator's Backpack"; (ii) State Secretariat for Agroforestry and Family Extension (SEAPROF), aiming to support families for the purpose of issuing a Declaration of

Fitness to Pronaf (DAP)[69]; and (iii) Institute for Colonization and Agrarian Reform (Incra), with the information and documentation related to the Settlement Projects (PA) of the beneficiaries.

Also note the partnership with the non-governmental organization WWF Brazil, which technically supported the realization of "Agroforestry Efforts" for the implementation of SAFs in the Amoprex community, located in the Chico Mendes Extractive Reserve, in the municipality Xapuri.

Risks and lessons learned

One lesson learned concerns obtaining the license to build one of the community warehouses supported by the project. Since it is located in a conservation area under the management of ICMBio, it was necessary to submit the licensing request to Ibama in Brasilia, which resulted in a delay of approximately six months for the start of construction.

Likewise, the recovery actions of degraded areas depended on the registration of the properties in the National Rural Environmental Registration System (Sicar). Although the project had the support of Sema to assist producers, there was also a delay in starting this activity.

These episodes, although they represent an important lesson in order to evaluate in advance the time required to meet the legal requirements for the execution of projects in the region, did not prevent the satisfactory execution of the activities or the achievement of the desired results.

Sustainability of results

The actions supported were focused on sustainable production and income generation for local populations. This characteristic contributes to the results achieved being maintained over time and even expanded in the most successful cases. The achievement of the goals agreed upon after the execution of the project suggests that the investments and the new techniques introduced were well assimilated by the families.

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69 The National Program for Strengthening Family Farming (Pronaf) offers funding and investments aimed at generating income and improving the use of family labor.

Strengthening Environmental Management in the Amazon

Project management

Amazon Institute of People and the Environment (Imazon)

Territorial scope

Several municipalities in the states of Amazonas, Mato Grosso, Pará and Rondônia

Beneficiaries

Local population and civil servants of the municipalities included in the list of the Ministry of the Environment (MMA) as priorities for deforestation prevention and control activities, in addition to residents of the PAs covered by the project in Calha Norte of Pará

Objective

Support: (i) the strengthening of environmental management in priority municipalities for the development of policies for the prevention and control of deforestation in the Amazon biome; (ii) studies to carry out land diagnostics in the states of Amazonas, Mato Grosso, Pará and Rondônia; and (iii) the improvement of the management of PAs in Calha Norte of the state of Pará

Total amount of the project

R$ 12,717,670.00
US$ 3,355,585.75

Amount of Amazon Fund support

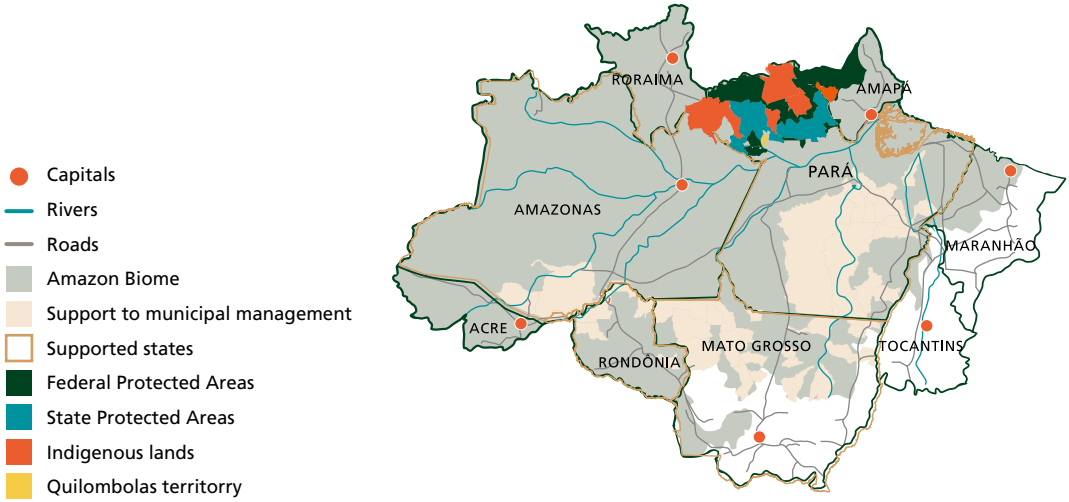
R$ 12,104,865.00
US$ 3,194,485.79

Execution period[70]

From the 1st quarter of 2016 to the 2nd quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
11.6.2015	12.29.2015	R$ 12,104,865.00 US$ 3,194,485.79	100%



70 The execution period includes, in addition to the physical and financial execution of the project, the preparation of the final monitoring and evaluation reports.

Context

The annual deforestation rate in the Brazilian Amazon dropped 77% in the period from 2004 to 2015, that is, it went from 27,772 km² to 6,207 km². Some initiatives of the Brazilian government were inducers of this reduction, especially the Plan of Action for the Prevention and Control of Deforestation of the Brazilian Amazon (PPCDAm). Organized civil society was also important in this regard. One of the institutions active in the theme is Imazon, with research activities and support for the formulation of public policies related to land use and the conservation of natural resources in the Amazon, notably in the state of Pará.

Imazon had its first project supported by the Amazon Fund in the period from 2011 to 2014. Its actions were implemented in the state of Pará, highlighting the mobilization of the municipalities of 11 municipalities and the State Government, as well as rural producers and their unions, to accelerate adherence to the CAR, as well as monitor deforestation through satellite images.[71]

Imazon is a research institute whose mission is to promote sustainable development in the Amazon through studies, support for the formulation of public policies, dissemination of information and professional training. The institute was founded in 1990 and its headquarters is in Belém, in the state of Pará. In more than 30 years of existence, Imazon has published 648 technical papers, of which about a third were published as articles in international scientific journals.

The project

The project "Strengthening Environmental Management in the Amazon trained public officials of priority municipalities for actions to prevent and control deforestation in the Amazon biome, and for the use of geotechnology and forest monitoring. In addition, technical assistance was provided to these municipalities to improve their environmental management.

A diagnosis of the land situation was prepared in the states of Amazonas, Mato Grosso, Pará and Rondônia to support the formulation of public policies that make it possible to advance in land regularization, in addition to promoting greater transparency to the activities carried out in this theme. The project also strengthened the management of state PAs in Calha Norte of Pará.

Intervention Logic

The project is part of the "Monitoring and Control" (2), "Territorial Planning" (3) and "Science, Innovation and Economic Instruments" (4) components of the Amazon Fund Logical Framework.

71 Available at: https://www.fundoamazonia.gov.br/en/projeto/Socioenvironmental-Management-in-Municipalities-of-Para/.

Its direct effects were defined as: "structured and modernized municipal environmental agencies in the states of Amazonas, Mato Grosso, Pará and Rondônia"; "expanded access of rural producers to the environmental regularization of their properties in municipalities in the states of Amazonas, Mato Grosso, Pará and Rondônia"; "consolidated management of the state forests of Faro, Trombetas and Paru in the state of Pará"; and "knowledge and technologies aimed at monitoring, control and territorial planning produced and disseminated in the states of Amazonas, Mato Grosso, Pará and Rondônia."

Through actions aimed at improving municipal environmental management, transparency of land regularization and consolidation of state PAs, the project aimed to contribute to the general objective of the Amazon Fund of "reducing deforestation with sustainable development in the Brazilian Amazon."

Activities executed

The project was implemented at three geographical levels: (i) municipal level – related to actions to improve municipal environmental management, covering 38 municipalities that, in 2015, were part of the MMA list of priority municipalities for actions to prevent, monitor and control deforestation; (ii) state level – referring to procedures aimed at transparency of land regularization; and (iii) regional level – related to consolidation actions of state PAs of Calha Norte in Pará, within the scope of a mosaic of protected areas that encompass seven municipalities.

The main activities carried out by the project are highlighted below. The environmental management systems of 45 municipalities[72] in the states of Amazonas, Mato Grosso, Pará and Rondônia were evaluated and, in the portal "Strengthening Environmental Management in the Amazon,"[73] diagnoses of these municipalities in the land, deforestation and the CAR aspects were prepared.

Technical workshops were held to strengthen municipal environmental management, based on the evaluation of environmental regulatory frameworks and state resolutions on the decentralization of this management.

The project also held three seminars. The first, called "Environmental embargo: procedures and opportunities for the adequacy of embargoed areas," was attended by 66 people and aimed to broaden the understanding of the environmental embargo of rural properties, with emphasis on the performance of the municipal environmental agency. In the seminar "Environmental management: a decade of learning and challenges," 151 individuals participated. Both were held in Belém, in the state of Pará. The third seminar, called "1st meeting of community environmental agents in the North of Pará," addressed the management of protected areas and was promoted in the municipality of Oriximiná, in Pará.

72 The group of 45 municipalities includes the 38 priority municipalities for actions to prevent, monitor and control deforestation in the states of Amazonas, Mato Grosso, Pará and Rondônia, as well as the seven municipalities in which the protected areas of Calha Norte of Pará are located.

73 See data portal: https://gestaoambiental.org.br.

To support the review of the environmental regulatory frameworks of 33 municipalities in the states of Amazonas, Mato Grosso, Pará and Rondônia, the analysis of compliance of the municipalities with the requirements for the practice of decentralized environmental management was made, as well as two workshops were organized to return these analyses with the interested municipalities. This action of the project was inserted in the context of Complementary Law 140/2011, which established the hypotheses in which municipalities have competence to promote the environmental licensing of activities or enterprises that cause or may cause local environmental impact.

Six geotechnology training courses applied to environmental management were also carried out: two field deforestation verification training and three field inspection training, in addition to training technicians from institutions that work in priority municipalities for deforestation monitoring and control actions in the states of Amazonas, Mato Grosso, Pará and Rondônia.

With the support of the project, several publications were prepared on the relationship between the lack of ownership of rural properties and deforestation, as well as the book "Transparency of state land agencies in the Brazilian Amazon."[74] In this book, the results of the evaluation promoted by the project on whether state land agencies in eight of the nine states of the Brazilian Amazon meet the Access to Information Law (LAI)[75] in active transparency (when data disclosure should occur regardless of request) and passive transparency (when the agency discloses upon a request for information) were presented. It is worth clarifying that the state of Rondônia was not evaluated, since the action for rural land regularization in its territory is primarily of the Federal Government.

To contribute to increasing the transparency of state land agencies, the authors prepared, as one of the appendices of this book, a "Term of reference for active transparency of state land agency," which may be used by these entities in their management improvement processes.

To strengthen the management of state PAs in Calha Norte of Pará, 166 volunteer environmental agents were trained to carry out monitoring and surveillance activities. Two territorial protection plans were prepared (with partial support from the project) with the objective of promoting joint actions for the management of the protected areas of the Calha Norte: one of integrated actions between ICMBio and the Institute for Forestry and Biodiversity Development of the State of Pará (Ideflor-Bio) and another with integrated actions between the municipalities that make up the territory.

The area called Calha Norte of Pará has the largest forest massif of tropical protected areas in the world and is located on the left bank of the Amazon River, in the state of Pará. It brings together a continuous mosaic of indigenous lands, federal PAs, state PAs and quilombola lands.[76]

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74 Available at: https://imazon.org.br/publicacoes/transparencia-de-orgaos-fundiarios-na-amazonia-legal/#:~:text=A%20transpar%C3%AAncia%20nas%20a%C3%A7%C3%B5es%20dos,and%20property%20de%20im%C3%B3veis%20rurais.

75 Law 12,527, of November 18, 2011.

76 Quilombos are communities formed by descendants of escaped slaves before the abolition of slavery in Brazil in 1888.

Finally, the project contributed to the realization of a seminar to enable greater rapprochement between environmental managers in the region: the "First meeting of the environmental secretaries of Calha Norte," held in the municipality of Óbidos, also in the state of Pará.

Result and impact indicators

The project activities contributed to the results related to the components "Monitoring and Control" (2), "Territorial Planning" (3) and "Science, Innovation and Economic Instruments" (4) of the Amazon Fund Logical Framework.

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

- Number of municipal servers trained in geotechnology tools to improve environmental management and deforestation control (efficiency indicator)

  Target: 152 | Result achieved: 263 (ninety women and 173 men)

- Number of municipal servers trained in the participatory mapping methodology for rural environmental registration purposes (efficiency indicator)

  Target: 76 | Result achieved: 176 (sixty women and 116 men)

- Number of rural properties enrolled in the CAR (effectiveness indicator)

  Target: not defined | Result achieved: from 72,200 (2015) to 121,708 (2019)

- Area of rural properties registered in the CAR (effectiveness indicator)

  Target: 80% of the area registered in the CAR | Result achieved: 84% of the registerable area

- Number of volunteer environmental agents trained and specified by gender (efficiency indicator)

  Target: 30 | Result achieved: 166 (72 women and 94 men)

- Extent of protected areas with strengthened environmental management and/or with the control of their strengthened territory (effectiveness indicator)

  Target: 7.6 million ha | Result achieved: 22 million ha

- Number of scientific, pedagogical or informative publications (indicator of effectiveness)

  Target: 9 | Result achieved: 23

The measurements of the defined indicators show that all expected values were exceeded.

Institutional and administrative aspects

To execute the project, Technical Cooperation Agreements (ACT) were signed with the city governments of 24 municipalities, in the states of Amazonas, Pará, Mato Grosso, and Rondônia, aiming to implement actions to promote the strengthening of municipal environmental management.

In addition, ACT was signed with the Institute of Lands of Pará (Iterpa), with the intervention of the following secretariats of the State Government: State Secretariat for Agricultural and Fisheries Development (Sedap); State Secretariat for Economic Development, Mining and Energy (Sedeme); and State Secretariat for Environment and Sustainability (Semas). This ACT had as its purpose the preparation and implementation of the Rural Land Registry (CARF) to improve the process of land regularization of Iterpa in areas under the jurisdiction of the government of the state of Pará.

In addition, an ACT was signed with Ideflor-Bio, with the participation, in addition to Imazon, of other civil society organizations, namely: International Conservation of Brazil (CI Brasil); Amazon Conservation Team (Ecam); Indigenous Research and Training Institute (Iepé); Tropical Forest Institute (IFT); and Institute for Forest and Agricultural Management and Certification (Imaflora). This ACT aimed to develop the thematic components related to the management and monitoring of state PAs in Pará, through technical and scientific support.

With the State Secretariat of the Environment of the State of Amazonas, an ACT was also signed, with the objective of implementing the Sustainable Municipalities program (MS Amazonas), through joint actions of training, technical advice, information exchange and technology transfer applied to environmental management.

In addition to these Acts, informal partnerships were established with the Institute of Technical Assistance and Rural Extension – Emater and with the Municipal Secretariats of Environment of Oriximiná, Óbidos and Monte Alegre, as well as with the Municipal Secretariat of Agriculture of Oriximiná, all in the state of Pará, which supported the process of training and monitoring the activities of voluntary environmental agents in these respective municipalities.

Risks and lessons learned

In the actions aimed at strengthening the environmental management of priority municipalities, different strategies and levels of implementation of national public policies regarding the decentralization of environmental management and monitoring and control of deforestation were identified.

In the state of Amazonas, there was great synergy between the project agenda and that of the Sustainable Municipalities program (MS Amazonas), with priority actions benefiting seven municipalities in the south of the state, which were also incorporated into the project, although initially it was planned to act only in Boca do Acre and Lábrea.

In Pará, due to the history of decentralization of state management to municipalities, project adherence was also high. In Rondônia, decentralization seemed more incipient, but the four target municipalities joined the project. In the state of Mato Grosso, the period of implementation of the project coincided with restructuring in the state secretariat and with the discussion on strategies for decentralization of environmental management. In this context, the project was joined by five municipalities in Mato Grosso.

The provision of environmental information to municipal managers was an important point of the project since some municipalities lacked information and resources to understand their own territory in land and protected areas.

In the actions related to the land theme, it was verified that the theme of transparency remains challenging, because it depends on the progress in the organization of the databases of the land agencies and because it demands the prioritization of this activity by its managers. In this sense, there is a risk that many states will continue with little progress on this agenda if there is no greater demand from society and its control bodies.

A lesson learned from the partnership with the Instituto de Terras do Pará was the importance of adopting a participatory process (with its employees) to diagnose the points to be improved in the land regularization procedures, as well as the collective construction of a project for information management software in the agency.

The Community Environmental Agents Program was found to raise broad community adherence and engagement.

Sustainability of results

The people who received training through the project – environmental managers and technicians, leaders and community entrepreneurs – reside and work in the region. It is understood that the knowledge acquired will continue to be used and replicated, generating favorable socio-environmental impacts even after the completion of the project.

The publications, in addition to disseminating results, recorded the experiences and ways to update this information, thus allowing the continuity of its effects.

Finally, the project's implementation strategy and the nature of its products and services favor the sustainability of its results. The project was implemented in cooperation with governmental and non-governmental institutions, which are part of the governance structure of the territories or which act consistently in the region. Thus, the inputs generated by the project and appropriated by this contingent of organizations will continue to be used and shared, generating impacts after its completion.

Portal Seeds – Phase II

Project management
Instituto Ouro Verde (IOV)

Territorial scope
Eight municipalities in the region known as Portal da Amazônia, in the far north of Mato Grosso: Apiacás, Alta Floresta, Carlinda, Colíder, Nova Canaã do Norte, Nova Guarita, Nova Santa Helena and Terra Nova do Norte

Beneficiaries
Family farmers in the state of Mato Grosso

Objective
Support the recovery of degraded areas and the strengthening of family farming in the region of Portal da Amazônia, in the state of Mato Grosso, through the implementation and consolidation of SAFs, with planting and enrichment of agroforestry, structuring of channels for marketing products and seeds and conducting research

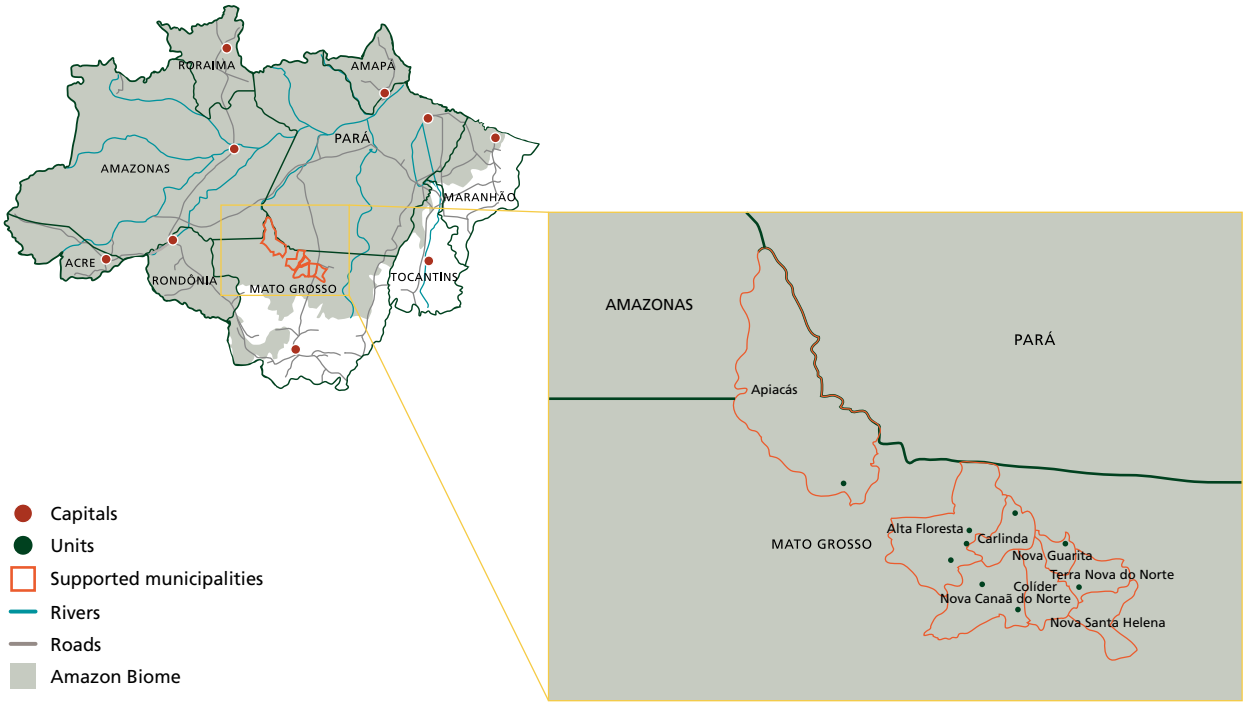
Total amount of the project
R$ 16,553,250.64
US$ 7,422,982.35

Amount of Amazon Fund support
R$ 16,086,000.00
US$ 7,213,452.91

Execution period[77]
From the 1st quarter of 2014 to the 3rd quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
10.1.2013	12.5.2013	R$ 16,086,000.00 US$ 7,213,452.91	100%



77 The execution period includes, in addition to the physical and financial execution of the project, the preparation of the final monitoring and evaluation reports.

Context

Instituto Ouro Verde (IOV) is a civil society organization, headquartered in the municipality of Alta Floresta, in the state of Mato Grosso. From 2010 to 2014, the first IOV project was implemented, with support from the Amazon Fund, in the region of Portal da Amazônia, in the state of Mato Grosso. Its actions promoted the restoration of deforested areas through SAFs and the revaluation of family farming in six municipalities in the north of Mato Grosso.

SAFs integrate the simultaneous cultivation of agricultural crops and forest species. During the first project, it was realized that SAFs represent a sustainable productive alternative for family farmers in the region.

The project

The second project implemented by IOV, Portal Seeds – Phase II, promoted the planting of new SAFs in deforested areas and the insertion of species of economic interest in part of the areas already recovered in the previous project.

In addition, it stimulated the development of marketing channels for agroforestry products and supported the consolidation of a network of native seed collectors and the generation of knowledge about agroforestry economics.

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: "expanded managerial and technical capacities for the implementation of SAFs and processing of agroforestry products and seeds"; "deforested and degraded areas recovered and used for economic purposes through SAFs"; "seed and agroforestry product chains with increased added value"; and "knowledge and technologies aimed at SAFs and forest seeds produced and disseminated."

Through actions aimed at reforestation, the economic valorization of the standing forest and the research and dissemination of new knowledge on agroforestry systems, the project contributed to the general objective of the Amazon Fund to "reduce deforestation with sustainable development in the Legal Amazon."

Activities executed

1,550 hectares of degraded areas were recovered by planting agroforestry systems and enriched 400 ha of plantations already carried out in the previous project with the insertion of species of economic interest. The activities of planting new SAFs and enriching pre-existing SAFs were implemented in 777 rural properties.

This action required the preparation of individual projects of each SAF through technical support provided by the project. The planting was carried out by the

farmers with inputs provided by the project, such as wire and chips for isolation of the areas, as well as seeds collected within the scope of the project itself. Crosswise, the project promoted training and provided technical assistance during the preparation and planting stages of agroforestry.

To consolidate the collection network created in the first project, community seed houses were built and renovated, which are the physical structures for seed storage and processing, totaling 13 spaces in eight municipalities. The seed collection activities involved 120 collectors, 46% of whom were women.

The registration of seed collectors in the National Register of Seeds and Seedlings (Renasem) was supported, aiming to enable them before the Ministry of Agriculture, Livestock and Supply to carry out the activities of seed collectors and producers. Technical assistance was also provided for the collection activity, species identification, cleaning procedures and seed storage.

To strengthen the marketing channels of agroforestry products and the development of the forest seed market, the project implemented municipal fairs for the sale of products from the SAFs, expanded farmers' access to the government procurement market – Food Acquisition Program (PAA) and National School Feeding Program (PNAE) – and supported the articulation and access to markets of collector groups through the Seed Network of the Amazon Portal, which even instrumentalized the sale of seeds through its website.[78]

Regarding training, courses and workshops were held, among others, for planting SAFs, harvesting practices and management of forest seeds, legalization and certification of seeds, silvopastoral systems, production of dehydrated fruits and fiber handicrafts, as well as regional exchanges.

A network of communicators was created to disseminate information among the groups involved, including the dissemination of 23 editions of the newspaper "Muvucando," with a circulation of approximately 1,500 copies per edition. These communicators are young people who were responsible within their communities for building communication materials, such as videos and journalistic articles.

In the theme of knowledge generation on agroforestry economics, in 2014, the project supported the creation of the Agroforestry Research Center, coordinated by IOV, as a multi-institutional space aimed at systematizing and producing knowledge to strengthen agroforestry value chains in northern Mato Grosso.

The support was given through the hiring of researchers and research financing, in addition to improvements in infrastructure. The topics addressed by the researchers covered, among others, monitoring of areas of planting of SAFs with direct sowing of forest seeds, laboratory tests of germination of forest seeds, tests with tree species as a forage option for cattle, in addition to the germination tests carried out in the nursery of the research center.

78 Available at: http://www.sementesdoportal.com.br/sementes/.

These activities resulted in the production of technical and scientific works related to SAFs, including the publication by the University of the State of Mato Grosso (Unemat), a partner of the Center for Research in Agroforestry, of a book entitled "On the path of changes: science and resilience of family farming in the northern Amazon of Mato Grosso."[79]

Result and impact indicators

The project activities contributed to the results related to the "Sustainable Production" (2) and "Science, Innovation and Economic Instruments" component (4) of the Amazon Fund Logical Framework.

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

- Number of individuals trained to practice sustainable economic activities (efficiency indicator)

  Target: 424 | Result achieved: 2,352

- Area recovered through SAFs used for economic purposes (effectiveness indicator)

  Target: 1,550 ha | Result achieved: 1,550 ha

- Area of SAFs enriched with productive species (effectiveness indicator)

  Target: 400 ha | Result achieved: 400 ha

- Number of seed houses built (efficiency indicator)

  Target: 7 | Result achieved: 5

- Number of seed houses remodeled (efficiency indicator)

  Target: 14 | Result achieved: 13

- Number of young people trained in social mobilization for participatory management of agroforestry projects (efficiency indicator)

  Target: 70 | Result achieved: 71

- Revenue obtained from the marketing of agroforestry products (effectiveness indicator)

  Target: not defined | Result achieved: R$ 6.9 million

Over approximately six years of execution of the project, R$ 6.9 million in revenue was obtained from commercialized products – half came from sales in local and regional markets and the rest from government purchases (PAA and PNAE).

- Number of surveys conducted on seed collection, processing and storage and on agroforestry monitoring (efficiency indicator)

  Target: 10 | Result achieved: 64

79 Available at: http://portal.unemat.br/media/files/Editora/NA%20TRILHA%20DAS%20MUDAN%C3%87AS.pdf.

The measurements of the agreed indicators show that practically all expected values were reached or exceeded. Regarding the areas recovered and enriched through SAFs, which, individually, are relatively small, on the whole (about two thousand hectares) have a relevant impact to improve the environmental quality of the region, increasing the connectivity of forest fragments and, mainly, protecting springs and watercourses.

Institutional and administrative aspects

Management councils were created in the supported communities, as well as a general project council, involving both IOV technicians and farmers. The project periodically promoted meetings of the councils, the technical team, and regional meetings for integration and articulation between the communities of the eight municipalities covered.

In this sense, it is worth highlighting the work carried out in promoting the involvement of young people and women in the project. Women represent 47% of the total direct beneficiaries of the project (3,905 women out of 8,246 people).

In the technical dimension, a partnership was established with Herbário da Amazônia Meridional no Campus Universitário de Alta Floresta – Unemat, which was instrumental for the identification of native species and the consolidation of the Seed Network of the Portal of the Amazon.

Within the scope of the activities of the Agroforestry Research Center, partnerships were established with several institutions, especially the Luiz de Queiroz School of Agriculture (ESALQ) and Unemat.

Risks and lessons learned

An important factor for the success of the project was the involvement of family farmers at all stages, including in its conception, that is, the project was the result of collective planning.

Among the various challenges and obstacles encountered, the advancement of soybean and corn farming in the region covered by the project can be mentioned, as well as the aerial spraying of agricultural pesticides that harmed some areas with implemented AFSs.

In the project execution process, it was observed that the most successful areas were inhabited by more engaged communities, with active groups, which reinforced the importance of local councils, seed houses, marketing groups, among others. As a result of this finding, the project, after its initial phase, focused on communities in which a social web pre-existed or there was interest in its formation.

The silvopastoral systems, which integrate crop-livestock-forest (ILPF) and consist of a combination of trees, pastures and cattle in the same area and at the same time,[80] have emerged as a new way of thinking about agroforestry, in addition to serving as

80 Source: Embrapa.

motivators for the accession of more farmers, since livestock stands out in the territory as the main income generating activity for family farming. It is believed that the area has the potential to generate future developments regarding the continuity of the planting of these systems throughout the region.

Originally, as a condition for the support of the Amazon Fund to the actions of implementation of the SAFs, all the properties or possessions benefited should be registered in the CAR until the end of the project (except for the settlements of the agrarian reform). However, throughout the execution of the project, this condition was identified as being of excessive difficulty since it was restricting the adherence of farmers to the project. Thus, this obligation was changed, requiring registration in the CAR of at least 50% of the rural properties benefited, and no longer its entirety.

Sustainability of results

The aspects worked on by the project directly affect the dynamics of deforestation, since they include trees and forests in the production logic. Its actions supported the generation of work and income in various activities and the fight against food insecurity, in addition to the recovery of degraded areas and the changes to the landscape.

The emphasis on the integration of young people and their training in various topics, including participatory management of agroforestry projects, is an important legacy that will unfold in results and impacts beyond its execution period.

Finally, the project, in addition to fulfilling its direct goals, contributed to the appreciation of family farming, considering the family and local culture. In view of the nature of the actions supported, aimed at sustainable production and income generation for local populations, it is believed that this characteristic contributes so that the results achieved can be sustained over time and even expand.

Sustainable Settlements in the Amazon

Project management

Amazon Environmental Research Institute (Ipam)

Territorial scope

Western Pará, municipalities of Anapu, Pacajá, Senador José Porfírio, Mojuí dos Campos and Aveiro

Beneficiaries

Agrarian reform settlers from the National Institute for Colonization and Agrarian Reform (Incra)

Objective

Support Incra's settlements, in western Pará, the development of a demonstrative experience of sustainable production and the implementation of payment for environmental services (PSA) to families committed to reducing deforestation

Total amount of the project

R$ 24,397,144.00
US$ 13,116,744.09

Amount of Amazon Fund support

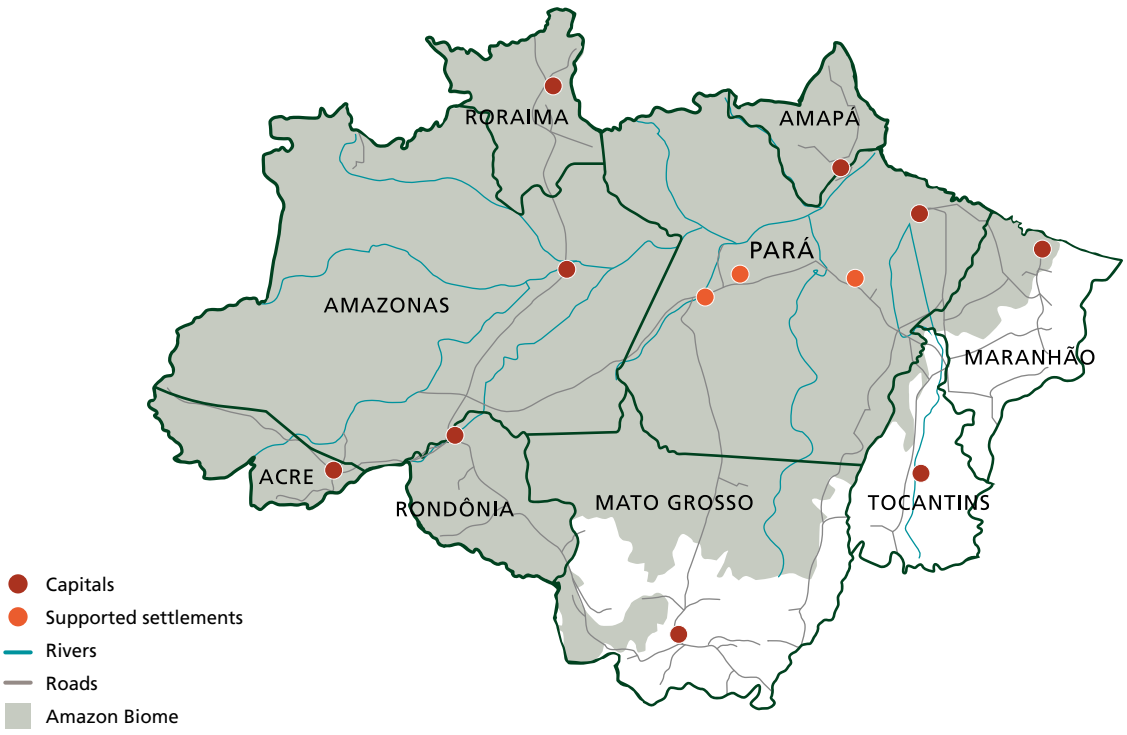
R$ 23,408,189.46
US$ 12,587,755.14

Execution period

From the 1st quarter of 2012 to the 3rd quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
11.29.2011	2.14.2012	R$ 23,408,189.46 US$ 12,587,755.14	100%



Context

The National Institute for Colonization and Agrarian Reform (Incra) has already created and recognized around 9,400 projects for agrarian reform settlements throughout the country.

The settlements can be divided into two groups: (i) those created through land acquired by Incra, in the traditional form, called settlement projects (PA), which include environmentally unique ones; and (ii) those implemented by government institutions and recognized by Incra, for the purpose of access to public policies of the National Agrarian Reform Program.[81]

About 8% of the territory of the Amazonian states is destined for 3,589 agrarian reform settlements.[82] Settlements have shown high rates of deforestation when compared to other land categories in the Amazon.

The Amazon Environmental Research Institute (Ipam) is a non-profit organization founded in 1995, based in Belém, in the state of Pará, that develops activities to promote a new model of Amazon development.

The project

The "Sustainable Settlements in the Amazon" project aimed to develop and implement a demonstrative sustainable agricultural production model and payment for environmental services to families committed to reducing deforestation in small rural properties in the western region of Pará.

To achieve these purposes, the project was structured in two components: (i) development and implementation of a sustainable production model in small rural properties located in three PAs of agrarian reform in municipalities in western Pará; and (ii) payment for avoided deforestation for 350 families around BR-230, Transamazônica highway, as well as carrying out preparatory steps for environmental regularization of these family properties.

Intervention logic

The project is part of the "sustainable production" (1); "monitoring and control" (2); and "science, innovation and economic instruments" (4) components of the Amazon Fund Logical Framework.

The expected direct effects were defined as follows: "economic activities of sustainable use of forest and biodiversity identified and developed in settlements"; "chains of agroforestry products of settlements with expanded added value"; "expanded management and technical capacity for the implementation of agroforestry systems, forest management activities and agroextractivism production in settlements"; and "expanded access of the settlements to environmental regularization."

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81 Available at: https://www.gov.br/incra/pt-br/assuntos/reforma-agraria/assentamentos.

82 Source: Publication "Deforestation in Amazon settlements" by Ipam.

Thus, the project was able to foster productive activities that keep the standing forest economically attractive, encouraging models that preserve the forest, as well as sequester carbon with recovery of the vegetation cover in deforested areas.

In the "monitoring and control" component, the project increased the access of rural producers toward environmental regularization of their properties in the state of Pará by supporting their registration in the CAR.

Finally, by using economic instruments aimed at the conservation and sustainable use of biodiversity, through the payment to small farmers for avoided deforestation, the project contributed to the general objective of the Amazon Fund, of "reducing deforestation with sustainable development in the Brazilian Amazon."

It should be noted that the project also intended to support the expansion of land areas with valid land tenures near the BR-230 highway; however, this component was reformulated in actions for environmental regularization in this territory, being integrated to the environmental regularization component.

Activities executed

The "Sustainable Settlements in the Amazon" project implemented its actions in small rural properties in three agrarian reform settlements, created by Incra in the last decade of the last century, in the state of Pará, namely: (i) PA Bom Jardim, designed with a capacity to serve 876 families; (ii) PA Moju I and II, with a capacity to serve 1,590 families; and (iii) PA Cristalino, with a capacity to serve 116 families.

Additionally, it structured and operationalized a payment program for environmental services benefiting families located in other settlements along the Trans-Amazonian highway, in the state of Pará.

The actions consisted of supporting the environmental regularization of the territories, through registration in the CAR; provision of ATER to families, aiming to increase productivity in open areas; preparation of plans for uses for properties; training for the adoption of management techniques in forest areas; improvement of productive infrastructure, through the supply of inputs and equipment; insertion of production in local and institutional markets; and institutional strengthening of representative organizations of the settlements with training of their leaders for management and associativism. The following are some of the activities performed.

Management courses were promoted with the participation of more than 60 leaders of the supported settlements, enabling the creation of three support groups dedicated to participatory planning and project implementation.

The georeferencing of 2,710 lots was carried out and data was collected to prepare a socioeconomic and environmental diagnosis, aiming at both planning and analyzing the effectiveness of the project's actions. In partnership with the Federal Rural University of the Amazon, a market study of family farming products in western Pará was prepared to define the productive activities to be supported.

Also worth mentioning are the georeferencing and preparation of environmental recovery plans (PRA) for two settlements. Agricultural technicians visited the properties that joined the project to assess the vocation of each of the farmers among a list of supportable activities already identified in the market study.

In addition, several training sessions were held, such as workshops on sustainable management, seminars on productive improvements and access to institutional markets, as well as field days to exchange experiences.

The project supported the environmental regularization of 1,300 properties by registering them in the CAR, corresponding to an area of 101 thousand hectares of rural properties where the environmental regularization process has been initiated.

In the payment for environmental services component, a document describing this financial mechanism was prepared. Initially, the project included 348 families, who started to receive benefits for maintaining the standing forest. Payments to these families were made in quarterly installments through transfers made by the Post Office.

The criteria considered in the project for participation in its environmental service payment project were: conservation and/or recovery of forest cover of the lot, conservation and/or recovery of the permanent protection area (PPA) and compliance with the productive improvements agreed upon in its use plans.

To implement community forest management, forest management plans were developed, benefiting three communities of PA Moju I and II, in addition to a structure for storage and drying of production.

To improve agricultural practices, the project developed 650 plans for the use of lots in the settlements and provided technical assistance. Initially, analyses of soil samples were performed. Next, guidance was provided on soil correction, area preparation, planting, planning for recovery and rotation of pastures, seedling production, treatment of vegetables and fruits, and construction of aviaries and tanks for fish farming.

The project also distributed various inputs, such as fertilizer, limestone, wire for fences, agricultural implements and provided leased machine services. In addition, it supported 57 hectares of mechanized fields for planting short-cycle crops (corn, rice, beans, etc.); recovered 163 hectares of pasture with the adoption of rotation in livestock through the implementation of fences; built 69 aviaries; recovered cocoa, passion fruit and açaí crops; deployed 19 tanks for fish farming; and supported swine farming.

Nurseries were set up to support the recovery of PPA and the restoration of a degraded legal reserve, identified in the plans for the lots and in the registration process in the CAR.

The project supported the reforestation of 113 hectares with SAFs, promoting diversification of production, food security and income expansion.

It also contributed to the implementation of 19 small processing structures, four collective and 15 family members, for the processing of cassava, fruit and milk. All initiatives had business plans prepared with project resources.

Free fairs were organized for the products from the settlements in Anapu and Pacajá to be sold, with an average participation of 22 farmers at each fair. The project also participated in the creation of the first Solidarity Trade Network of Tapajós. This network directly connected suppliers from PA Cristalino II and surrounding areas to solidarity consumers. The project made packaging, thermal boxes, baskets for products, Styrofoam and freezers available as well as the creation of a logo, among other resources.

The technical team of the project also supported the families of PA Moju I and II in the re-registration process in PAA – a government program through which food produced by family farming is purchased.

Result and impact indicators

The project activities contributed to the results related to the "sustainable production" (1); "monitoring and control" (2) and "science, innovation and economic instruments" component (4) of the Amazon Fund Logical Framework.

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

- Number of use plans prepared at the level of the property (efficiency indicator)

  Target: 350 | Result achieved: 650

- Number of sustainable management workshops (efficiency indicator)

  Target: 9 | Result achieved: 10

- Number of settlers trained in sustainable management practices (efficiency indicator)

  Target: 90 | Result achieved: 206

- Number of settlers participating in project dissemination activities (efficiency indicator)

  Target: 500 | Result achieved: 1,633

- Number of structures to improve the production of the assembled settlements (efficiency indicator)

  Target: 20 | Result achieved: 19

- Number of community nurseries built (efficiency indicator)

  Target: 7 | Result achieved: 7

- Number of properties supported by technical assistance (efficiency indicator)

  Target: 650 | Result achieved: 616

- Area reforested with ASF (effectiveness indicator)

  Target: 90 ha | Result achieved: 113 ha

- Area recovered and used for economic purposes (effectiveness indicator)

  Target: 900 ha | Result achieved: 1,139 ha

> Revenue obtained from economic activities of sustainable use (effectiveness indicator)

  Target: 30% increase | Result achieved: 135% increase

Regarding the "revenue obtained from economic activities of sustainable use" indicator, the definition of income generation capacity of these activities was adopted, also considering the subsistence consumption. The baseline of this indicator was defined from an initial assessment made with 629 families in the 2013/2014 harvest.

To monitor this indicator, we selected a sample of 318 families in the regions where the project operates to monitor their income in two harvests: 2014/2015 and 2015/2016. The result showed an increase in the average annual income of families of 70% in the 2014/2015 harvest and 135% in the following harvest.

> Number of properties with georeferencing and georeferenced forest cover limit (efficiency indicator)

  Target: 650 | Result achieved: 2,710

> Number of properties with georeferenced mapping carried out and registered in the CAR (effectiveness indicator)

  Target: 350 | Result achieved: 1,300

> Area of rural properties registered in the CAR (effectiveness indicator)

  Target: 58,955 ha | Result achieved: 101,657 ha

> Number of payment contracts for environmental services signed (efficiency indicator)

  Target: 350 | Result achieved: 256

Initially, 348 families joined the payment program for environmental services. However, the number of beneficiary families participating in the program decreased throughout the project for several reasons, such as voluntary dismissal, non-compliance with agreed goals or death of the main beneficiary.

> Organized seminars (efficiency indicator)

  Target: 4 | Result achieved: 4

It should be noted that one of the activities carried out by the project was the production of the book "Sustainable Settlements in the Amazon – Family Farming and Environmental Sustainability in the Largest Tropical Forest in the World,"[83] which reports the experience of its execution and the results achieved.

In addition, a documentary video[84] and a final diagnostic seminar of the project were prepared, which was attended by 112 people.

As can be seen, most of the targets foreseen in the project have been achieved and, in some cases, even exceeded.

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83 Available at: https://ipam.org.br/wp-content/uploads/2020/05/IPAM-Livro-Projeto-Assentamentos-Sustentaveis-na-Amazo%CC%82nia.pdf.

84 Available at: http://www.fundoamazonia.gov.br/pt/projeto/Assentamentos-Sustentaveis-na-Amazonia/#iframe-2.

Institutional and administrative aspects

The project established relations with dozens of private and public institutions. It is worth mentioning the strategic partnerships established with the Living, Producing and Preserving Foundation (FVPP) and Incra.

The partnership with the FVPP was established through a cooperation agreement, with the objectives of strengthening rural family production and consolidating a sustainable policy for agrarian reform settlements in the Amazon.

The FVPP already worked in the region of the project and, therefore, was able to support the actions developed, even participating in the selection process of the beneficiary families, since it maintained contact with them.

The partnership with Incra had been formalized in 2012 through a technical cooperation term, with the objective of building parameters for the development of settlements in the Brazilian Amazon.

Incra participated in the planning of the project and its execution, including the presence of its technicians in the meetings held with the communities of the settlements, the issuance of DAP and the availability of documents necessary for the preparation of the PRAs, among other activities.

Risks and lessons learned

In some places, there were difficulties in establishing partnerships with families. This fact occurred due to unfulfilled commitments and expectations of improvement of living conditions not achieved by other agents. The initial resistance was overcome with dialogue, involvement of families from the communities in the discussions about the project and with the participation of the settlement leaders in the project's support groups.

In order to operationalize the payment system for environmental services, Correios's Electronic Mail Voucher service, which allows money transfers, was considered the best option. Nevertheless, technical challenges arose that led to the delay in the transfer of amounts. One of the solutions found, for example, was to develop an interface in the system for registering producers and their resource transfer data in a format compatible with that used by Correios.

Sustainability of results

Difficulty in accessing bank credit and the precarious logistic infrastructure in the Amazon region remain as obstacles to the consolidation of family farming and small enterprises on a sustainable basis.

The supported project followed a planning and execution structure that can serve as a reference for other interventions that intend to act in settlements, since it encompasses diagnostic actions, planning, environmental regularization, improvement of agricultural

production and development of local production marketing channels associated, in a pioneering way, with economic incentives through payment for environmental services.

In addition to the favorable impacts already achieved in the communities benefiting from the project, it is believed that the sustainability of its results will be observed over time, as the innovations implemented and the lessons learned from this demonstration experiment of sustainable production are incorporated by public policies, as well as by initiatives of other organizations that work with agrarian reform settlements.

Amazon's Nectar

Project management
Peabiru Institute

Territorial scope
States of Amapá and Pará

Beneficiaries
30 rural communities (quilombolas, indigenous, riverside and extractive) make up a target audience of 373 individuals

Objective
Strengthen the production chain of honey from native bees to constitute a sustainable economic alternative to deforestation

Total amount of the project
R$ 2,072,901.00
US$ 933,739.19

Amount of Amazon Fund support
R$ 2,030,000.00
US$ 915,899.66

Execution period[85]
From the 4th quarter of 2014 to the 2nd quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
5.13.2014	8.27.2014	R$ 2,030,000.00 US$ 915,899.66	100%

85 The execution period includes, in addition to the physical and financial execution of the project, the preparation of the final monitoring and evaluation reports.

Project selected under the Public Call for Sustainable Productive Projects of the Amazon Fund

Context

The project focused on the creation of melipone bees, a term used to name the species of stingless bees native to the Amazon. Honey extraction from these bees is called meliponiculture and is part of traditional local practices, usually for earmarked food consumption and popular pharmacy.

Meliponiculture, in addition to providing benefits to the community by being an alternative complementary income and contributing to food security, has relevant environmental effects. The native bee is an important pollinating agent, contributing directly to tree pollination and, consequently, to forest renewal and ecosystem stability.

The traditional communities involved in the project have been working with honey production since 2006, under the Peabiru Institute's Native Bees Program. This institute is a civil society organization of public interest (Oscip), based in Belém, Pará, with more than two decades of operation, whose mission is to foster the protagonism of social groups in the Amazon to promote full access to their fundamental rights.

The project

The "Amazon's Nectar" project worked on strengthening and expanding the productive and processing infrastructure, valuing the final product and structuring the marketing of honey from native bees produced by traditional communities (riverside population, extractive and small farmers) in the municipalities of Curuçá, Almeirim and Monte Alegre, in the State of Pará; quilombolas in the municipality of Macapá and indigenous in the municipality of Oiapoque, the latter two in the state of Amapá, which borders French Guiana.

Intervention Logic

The "Amazon's Nectar" project is part of the "sustainable production" component (1) of the Amazon Fund's Logical Framework. Its direct effects were defined as: "productive chain of honey from native bees with expanded scale and added value" and "managerial and technical capacities of traditional communities expanded to act in the production chain of honey from native bees."

The actions supported favored the valorization of the standing forest by promoting income generation with environmental sustainability for local populations, thus contributing to the general objective of the Amazon Fund of "reducing deforestation with sustainable development in the Brazilian Amazon."

Activities executed

The project contributed to increasing the installed capacity to a total of 4,075 boxes with colonies, of which 1,800 hives had already been deployed in the previous phase. All meliponarians served by the project received wildlife management authorization from the National Wildlife Management System (Sisfauna).

Four hectares of SAFs integrated with the meliponarians were implemented. The project also identified a private company as a potential outsourced processing unit for honey from stingless bees. In addition, it worked in partnership with its technical staff in successfully meeting the requirements necessary to obtain the registration of honey from stingless bees with the Federal Inspection Service (SIF) of the Ministry of Agriculture, Livestock and Supply (MAPA).

The project promoted training events on the management of stingless bees, in the form of courses, workshops, evaluation meetings and a symposium. The symposium on stingless bees was supported by the Goeldi museum and mobilized 262 participants. The event was an opportunity to discuss the value chain of stingless bees, with the participation of family producers and researchers from Embrapa, the Federal University of Pará (UFPA) and the Vale Technological Institute (ITV).

A series of researches and other activities were developed based on a technical cooperation contract signed between the Peabiru Institute and Embrapa Amazônia Oriental, highlighting: (i) study of the benefits of meliponiculture for communities and the environment; (ii) cataloguing the species of flora that bees visit; (iii) study and improvement of the honey dehydration process for commercialization without refrigeration, with a humidity index of 20%; and (iv) barcode of Pará bees – genetic sequencing of stingless bees commonly used in production. The last activity was developed with the collaboration of the UFPA genetics team, still within the scope of the partnership with Embrapa.

With the support of the project, a demonstrative meliponary for pedagogical activities for students and producers in the vicinity was also installed at the Castanhal Campus of the Federal Institute of Pará (IFPA). With the creation of the meliponary on the Campus, the discipline of meliponiculture was included in the technical course in agriculture.

Finally, the project prepared the first business plan (Master Business Plan of the honey production chain of native bees), adopting as its base core the meliponiculturists supported by the project. The dimensions of prices, processing, storage, expenses with logistics, competition, product differentials, marketing channels and marketing strategies for honey from native bees were analyzed.

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.

- Number of hives in production (efficiency indicator)

  Target: 10,000 | Result achieved: 4,075

- Revenue obtained (effectiveness indicator)

  Target: R$ 400 thousand | Result achieved: R$ 30.9 thousand

Both results achieved fell short of the target. One explanation for the low revenue generation is that, to implement the project, it was necessary to promote the multiplication of hives – and while this process occurs, there is no honey production to commercialize.

- Number of individuals trained in native bee breeding, agroecological practices, business management and production processes (efficiency indicator)

  Target: 310 | Result achieved: 373

- Number of community organizations strengthened (effectiveness indicator)

  Target: 6 | Result achieved: 1

In general, the planned goals were not achieved, although the project's actions were implemented satisfactorily, signaling, above all, the disconnection of the project with the result of these activities during the monitoring period.

In this context, it is worth mentioning that meliponiculture is a challenging field of action, as it is a pioneering production chain, especially in its commercial dimension. However, the results were very important to consolidate meliponiculture in the states of Pará and Amapá and to advance the structuring of the marketing of honey from stingless bees in the formal market.

Finally, the project benefited 45 indigenous individuals and 52 women from a total of 373 individuals directly benefited..

Institutional and administrative aspects

The Peabiru Institute entered into a technical cooperation agreement with Embrapa Amazônia Oriental to survey floristic ethno-knowledge about plants of meliponicultural interest in areas of action of the Peabiru Institute and to disseminate meliponicultural technologies. Within the scope of this partnership, as already mentioned, research was carried out, including with the participation of the UFPA genetics team. The "Amazon's Nectar" project financed research grants and transportation expenses for Embrapa and UFPA scholarship holders.

Embrapa Amazônia Oriental is one of Embrapa's 42 decentralized units, linked to MAPA. The research center was created in 1975 in the municipality of Belém, in the state of Pará, inheriting the structure of the former Agronomic Institute of the North (IAN), founded in 1939.[86]

86 Source: Embrapa – https://www.embrapa.br/amazonia-oriental/apresentacao.

Risks and lessons learned

Among the lessons reported, we highlight the recommendation that demonstrative fields of meliponiculture be implemented in the vicinity of the territory for about a year, sufficient time to ascertain the safety of the project in terms of biological threats, especially if there is the presence of "pillaging" bees (Lestrimelitta limao), which plunder the nests of other species to remove honey, pollen and wax.

Another lesson learned is to estimate a lower production of honey and a longer breeding time of hives in areas historically deforested and/or with strong vectors of deforestation, which can decrease the pasture for bees.

Sustainability of results

The actions supported were aimed at consolidating the value chain of stingless bees, promoting food security and generating income for local populations.

The financing of the Amazon Fund allowed the multiplication of parent hives and generated a squad available to the families involved that will possibly allow an increase in honey production.

The project also contributed to formalize this activity in the Amazon, by obtaining registration with SIF, which benefit the commercialization of honey produced under the project and in the region. In addition, it obtained wildlife management authorization from Sisfauna for all meliponarians served.

Finally, the project collaborated to expand and disseminate knowledge about the value chain of stingless bees. It is worth highlighting the differentiated price that honey from native bees already reaches in the national and international market, even being demanded by fine cuisine.

CAR Roraima

Project management

State Foundation for the Environment and Water Resources of Roraima (known as Femarh)

Territorial scope

State of Roraima

Beneficiaries

Small family landowners or rural squatters who develop agro-silvopastoral activities in the state of Roraima.

Objective

Support the implementation of the CAR in the state of Roraima.

Total amount of the project

R$ 1,490,055.10
US$ 600,828.67

Amount of Amazon Fund support

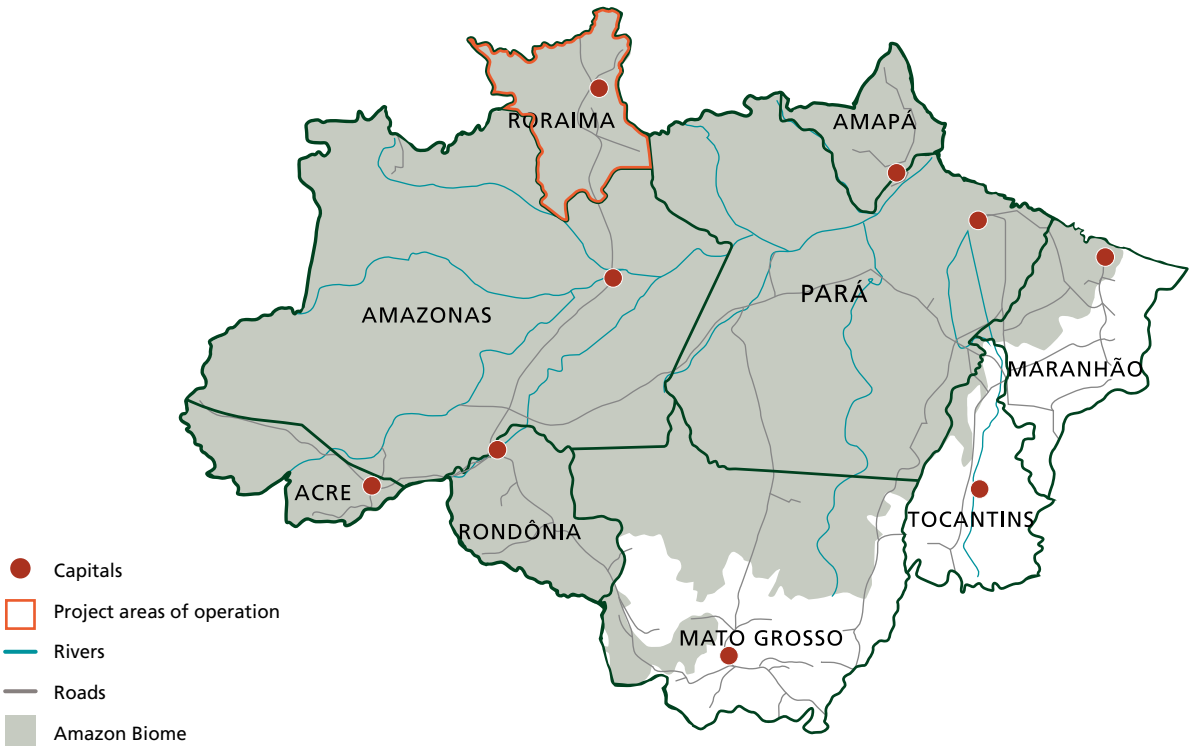
R$ 1,414,308.37
US$ 569,390.22

Execution period

From the 2nd quarter of 2017 to the 3rd quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
11.4.2014	6.29.2016	R$ 1,414,308.37 US$ 569,390.22	100%



Context

The state of Roraima, located in the northern region of the country, borders internationally with Venezuela and Guyana, and internally with the states of Amazonas and Pará. In 1988, Roraima ceased to be a federal territory and became one of the 27 federal states of Brazil. It has an area of 223,000 km^2 and is the least populous state in the country, with a population of 652,000 people (2021).[87]

Of its territory, approximately 46% are indigenous lands and 8% are protected areas, that is, more than half of the state of Roraima is constituted by protected areas.[88] Its vegetation cover is characterized by the presence of the Amazon rainforest, meadows and savannahs. At the northern end of the state, is situated Mount Roraima, with 2,734 meters of altitude.

The State Foundation for the Environment and Water Resources of Roraima (Femarh), responsible for the execution of the project, is a foundation of the state government that aims to promote, prepare, manage, coordinate and execute the policy of the environment and water resources of Roraima.

The project

The "CAR Roraima" project promoted the access of small rural producers and settlers in the state of Roraima to environmental regularization, through the registration of their rural properties in the CAR. Its actions consisted of (i) improving Femarh's infrastructure for the implementation and management of the CAR and (ii) promoting and supporting the registration in the CAR of the properties of small owners or rural squatters of up to four fiscal modules.[89]

The CAR is a national electronic public registry created in 2012 with the purpose of integrating the environmental information of rural properties and possessions, composing a database for control, monitoring, environmental and economic planning and for combating deforestation. Registration in the CAR is the first step towards the environmental regularization of rural properties and is carried out through an electronic system with the competent state agency.

Intervention logic

The project is part of the "monitoring and control" component (2) of the Amazon Fund Logical Framework. Its direct effects were defined as follows: "institutions for environmental monitoring, control and accountability, in Roraima, structured and modernized for the implementation and management of the CAR" and (2.2) "expanded access of rural producers in the municipalities of Roraima to the environmental regularization of their properties."

87 Source: IBGE

88 Source: website of the Government of the State of Roraima.

89 Fiscal module is a unit of measurement, in hectares, whose value is fixed by Incra for each municipality, considering several factors. The value of the fiscal module in Brazil ranges from 5 to 110 hectares (Source: Embrapa).

The strengthening of the state environmental agency of the state of Roraima (Femarh) and the expanded access of small producers to the environmental regularization of their properties and rural possessions directly contribute to the adequacy of anthropogenic activities to environmental legislation, which, in turn, contributes to the general objective of the Amazon Fund of "reducing deforestation with sustainable development in the Brazilian Amazon."

Activities executed

To improve Femarh's infrastructure for the CAR deployment and management, office furniture, Datashow and various technology equipment such as computers, servers, switches and printers were purchased.

Actions were implemented to promote and support the CAR registration of properties and rural possessions of up to four fiscal modules, located inside and outside agrarian reform settlements. The activities carried out covered nine municipalities in the state of Roraima: Amajari, Boa Vista, Bonfim, Caroebe, Rorainópolis, Iracema, Mucajaí, Alto Alegre and Cantá.

Among these activities, the following stand out: (i) mobilization actions aimed at sensitizing the target audience to the importance of the public policy of environmental regularization; (ii) active search for properties to be registered; (iii) field activities, such as visits to properties, collection of documents and geographic information; and (iv) office activities, including processing of spatial data, classification of documentation, sequencing, organization and storage in a digital bank, as well as registration of rural properties in the CAR.

The actions to support the registration in the CAR of rural properties began in the first half of 2020, when the COVID-19 pandemic broke out in Brazil.

In addition to the advent of the pandemic, several issues impacted the project, with emphasis on the impossibility of finalizing the registration process of properties located in settlements in Sicar, given that, until the end of the project execution period, Incra in Roraima had not made available access to the computerized system (the CAR Lot System) for registration and generation of the receipt of registration of properties in agrarian reform settlements.

This obstacle was overcome through the preparation of a strategy, in partnership with Incra, which defined that the documentation of the properties located in the settlements would be received by Femarh together with Incra for processing when the CAR Lot module was available.

Indicators of efficacy and effectiveness

The project activities contributed to the results related to the "monitoring and control" component (1) of the Amazon Fund Logical Framework.

The following are the results of some agreed indicators for monitoring the expected effects.

- Number of rural properties of up to four fiscal modules and lots in settlements that had their application to join the CAR filed (effectiveness indicator)

  Target: 14,249 | Result achieved: 11,519

- Area of rural properties of up to four fiscal modules and lots in settlements that had their application to join the CAR filed (effectiveness indicator)

  Target: not defined | Result achieved: 671,877 hectares

- Annual deforestation in Roraima (effectiveness indicator)

  Target: not defined | Result achieved: 315 km²

TABLE 26 › EVOLUTION OF DEFORESTATION IN THE STATE OF RORAIMA IN THE LAST FOUR YEARS

Deforestation (km²)	2021	2020	2019	2018
Roraima	315	297	590	195
Brazilian Amazon	13,038	10,851	10,129	7,536
Roraima/total (%)	**2.42%**	**2.74%**	**5.82%**	**2.59%**

Source: BNDES based on Prodes/Inpe data.

The deforestation verified in 2018, the project's baseline, was 195 km², while in 2021 it was 315 km². This fact reveals a 61% increase in the rate of deforestation in the period in question, signaling that, despite the positive results generated by the project, they were not sufficient to compensate for the other vectors responsible for the increase in deforestation. This was also observed in the same period in the Amazon as a whole, which showed a 73% increase in the deforestation rate.

It should be noted that the scope of the project was originally broader, also providing support for the adequacy of the state legal basis and the preparation of the PRA of the state of Roraima, in addition to the training of public agents for the implementation and management of the CAR and development of the Computerized System for Regularization and Environmental Licensing of Roraima (SirlarI/RR). However, due to difficulties presented by the beneficiary to carry out the project activities, the BNDES was requested to reduce its scope and readjust its goals, as well as the value of support from the Amazon Fund.

Institutional and administrative aspects

Considering that a significant part of the properties registered in the CAR with the support of the project are in agrarian reform settlements, Femarh signed a technical cooperation agreement (ACT) with Incra with the objective of joining efforts to promote the integration of actions, aiming to receive, analyze and approve information and data for registration and rectification of the CAR of the properties that make up the agrarian reform settlement projects in the state of Roraima.

The project also had the support of representatives of the municipal governments in the field work, mainly to mobilize and sensitize family farmers aiming at the registration of their properties in the CAR. Finally, it should be mentioned that Femarh hired a

specialized company, with the financial support of the Amazon Fund, to promote and support the CAR registration implemented by the project.

Risks and lessons learned

The project underwent a significant reduction in its scope and the amount of support from the Amazon Fund throughout its execution. Several factors contributed to this, such as management difficulties presented by Femarh to carry out operational and administrative procedures and successive changes in the team responsible for project management.

The advent of the COVID-19 pandemic in 2020 also hampered the execution of the project. The pandemic resulted in difficulties for holding meetings and collective registrations, in view of the impossibility of agglomerations due to the advance of the disease.

Due to insufficient prior information, there was also an overestimation of the original goals of properties to be registered in the CAR. Throughout the registration process, lots for sale were identified, as well as lots that became farms after the acquisition by third parties (remembrance), becoming, consequently, unfit for the registration promoted by the project because they have a dimension greater than four fiscal modules. In addition, in some cases, the owners of the lots were not found.

There were also cases of disinterest of the occupants in joining the CAR, as the registration is a declaratory act of the owner or squatter. In addition to circumstances in which rural properties not yet dismembered from plots were in process and conference process by the Institute of Lands and Colonization of the State of Roraima (Iteraima).

Sustainability of results

The project's support for the improvement of Femarh's physical infrastructure for the implementation and management of the CAR provided operational support for its execution and may continue to directly benefit the state and its population in the implementation of CAR-related activities.

An additional result of the project was the internalization of environmental management, since the registration of properties of up to four fiscal modules allowed small farmers in the state's rural area to have access to information on the requirements of the Forest Code.

Another legacy was the advance in the articulation between different government agencies with emphasis on the cooperation between Femarh and Incra.

With the project, the possibility of access of small producers to rural credit increased, since, by legal provision, financial institutions only grant agricultural credit, in any of its modalities, to owners of rural properties registered in the CAR.

It should be noted that the project, by supporting the registration of rural properties in the state of Roraima in the CAR, promoted the identification of their owners or possessors, as well as contributed to the construction of a georeferenced forest

database, including information on the areas already deforested and the remnants of native vegetation in the properties.

This database becomes a relevant asset for government and society. Such information can be useful for environmental management and deforestation control actions and for creating opportunities for the valuation of ecosystem services, including through the implementation of payment strategies for environmental services to preserve the standing forest.

Management of Indigenous Lands in the Rio Negro and Xingu Basins

Project management

Instituto Socioambiental (ISA)

Territorial scope

Nine ILs in the Brazilian Amazon, located in the state of Mato Grosso, Roraima and Amazonas

Beneficiaries

Population of ILs served by the project representing about 60 thousand indigenous people

Objective

Support the implementation of the Territorial and Environmental Management Plan (known as PGTA) of the Xingu Indigenous Park and the preparation of PGTAs for Yanomami ILs and the Upper Rio Negro region, with the systematization of knowledge and strengthening of local governance structures and indigenous organizations

Total amount of the project

R$ 12,302,481.90
US$ 3,639,787.54

Amount of Amazon Fund support

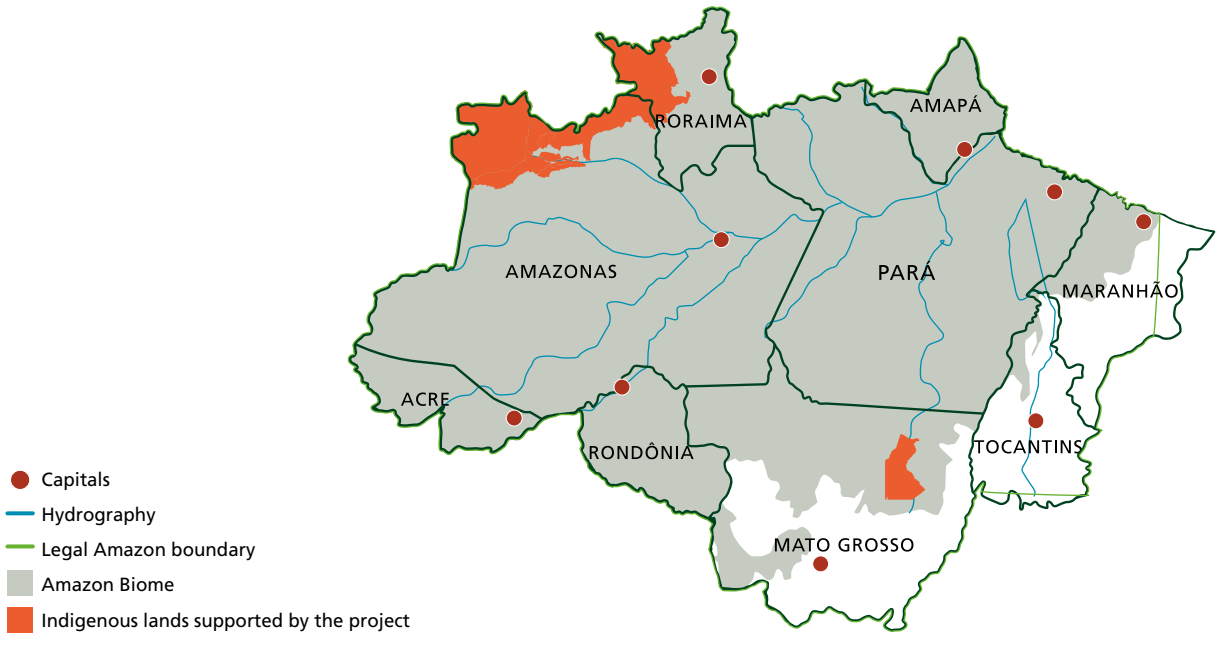
R$ 11,685,843.14
US$ 3,457,350.04

Execution period

From the 4th quarter of 2016 to the 4th quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
27.6.2016	19.8.2016	R$ 11,685,843.14 US$ 3,457,350.04	100%



Project selected under the Public Call for Support for Territorial and Environmental Management in Indigenous Lands

Context

The 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 protagonism, autonomy and self-determination of indigenous peoples. The PGTA materializes the planning, agreed by the entire indigenous community of the use of its territory for cultural, environmental and economic purposes.

The institution responsible for the execution of the supported project, the Socio-Environmental Institute (ISA), is an Oscip, non-profit. Founded in 1994 and based in São Paulo (SP), ISA works alongside indigenous, quilombola and extractive communities and has subsidiaries in Manaus (AM), São Gabriel da Cachoeira (AM), Boa Vista (RR), Altamira (PA), Canarana (MT), Brasília (DF) and Eldorado (SP).

The project

The project "Management of Indigenous Lands in the Rio Negro and Xingu Basins" supported the implementation of the PGTA of the Xingu Indigenous Park, as well as the preparation of PGTAs of the Yanomami IL and ILs of the Upper Rio Negro region, with the systematization of knowledge and strengthening of local governance structures and indigenous organizations.

The Xingu Indigenous Park, created in 1961 and located in the state of Mato Grosso, is home to 16 indigenous peoples. This was the first indigenous land approved by the Brazilian government. In the following decades, three adjacent ILs were demarcated: Batovi, Wawi and Pequizal do Naruvôtu.

The Yanomami IL is located in the states of Roraima and Amazonas, on the border with Venezuela. The Upper Rio Negro, Rio Apapóris, Cué-Cué Marabitanas, Balaio, Middle Rio Negro I, Middle Rio Negro II and Rio Tea ILs are located in the state of Amazonas.

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: "activities for the sustainable use of the forest and biodiversity identified and developed in the Xingu Indigenous Park"; "expanded managerial and technical capacities for sustainable production in the Xingu Indigenous Park"; and "Xingu Indigenous Park with territorial protection and consolidated infrastructure and Yanomami indigenous lands and in the Upper Rio Negro region with defined territorial and environmental management."

Indigenous lands are among the least deforested territorial categories in the Amazon. The project "Management of Indigenous Lands of the Negro and Xingu River Basins,"

by supporting the implementation of the PGTA of the Xingu Indigenous Park and the elaboration of the PGTAs of the Yanomami Indigenous Lands and of the upper Negro River region, contributed directly to the Amazon Fund's overall objective: "reducing deforestation with sustainable development in the Legal Amazon."

Activities executed

The project was structured along two axes. The first supported the implementation of PGTA actions in the Xingu Indigenous Park and the second axis promoted the preparation of PGTAs in ILs in the Upper Rio Negro Region and in the Yanomami IL. The main activities carried out are highlighted below.

1. Implementation of Actions of the Territorial and Environmental Management Plan of the Xingu Indigenous Park.

Meetings and workshops were held to define priorities and detail strategic themes of the Xingu Indigenous Territory Management Plan.[90]

These meetings were attended by approximately 1,600 indigenous people to discuss topics such as forest restoration actions, territory inspection activities and development of economic alternatives, among other important issues for the implementation of the Xingu Indigenous Territory Management Plan.

There was support for small projects selected through two public calls carried out by ISA and implemented by several associations and indigenous communities. The supported actions promoted: i) cultural integrity, ii) food security, iii) management of strategic resources and iv) economic alternatives. This support encouraged associations and communities of each ethnicity to progressively assume the implementation of the PGTA, contributing to its protagonism and independence in the defense of their rights and interests.

These two public calls, under the "Support for community initiatives (AIC)," financed 35 small projects of 11 indigenous peoples, ranging between R$ 10,000 and R$ 50,000 each project. Among other actions, the following were supported: construction of a nursery for the production of fruit trees; construction of a flour house for the production of flour and powder for consumption and commercialization; training of beekeepers and the implementation/expansion of apiaries; construction and equipping of a house for honey processing; construction of a house for the production and exhibition of handicrafts; and raising of chickens for consumption and income generation.

In addition, there was financial support for cultural integrity projects, through the implementation of several actions to rescue traditional knowledge, such as: rescue of traditional corners, the diversity of farm products, traditional handicrafts, the making of baskets and the tradition of body painting, in addition to the production of traditional canoes.

90 The Xingu Indigenous Territory is formed by the Xingu Indigenous Park and three other indigenous lands: Wawi, Batovi and Pequizal do Naruvôtu.

Two audiovisual training workshops were held, which resulted in the production of eight films made from student records, highlighting a 42-minute film, which reports seven projects executed within the scope of these two public calls for "Support for community initiatives."[91]

As part of the project, three new properties were built, totaling 830m2 of area. A building with an auditorium has been allocated to house the Association of the Indigenous Land of Xingu (known as Atix), in the municipality of Canarana, in the state of Mato Grosso. This association brings together 16 indigenous peoples since its creation in 1995.

The project was responsible for the construction of two sets of an auditorium, office and kitchen, including the acquisition of furniture and equipment, to serve the Kikatxi pole, in Querência, and the Pavuru pole, in the municipality of Feliz Natal, both in the state of Mato Grosso. These auditoriums and kitchens are used for meetings and courses in the eastern and middle Xingu regions and the offices are intended for the use of Atix in the region.

There were improvements in three properties used by indigenous associations in the area of operation of the project, one in the municipality of Gaúcha do Norte, in the Upper Xingu region, and two in the municipality of Canarana, all in the state of Mato Grosso. As part of the institutional support for Atix, a 4x4 truck and a light truck were purchased.

Aiming to strengthen the infrastructure of the four poles of the indigenous territory of Xingu, the project invested in the acquisition of seven boats and four outboard engines; more than two dozen computer equipment, such as desktops, notebooks and projectors. Seven digital cameras, microphones, two radios for long-distance communication, electric power generation equipment were also acquired in addition to a motor generator, a photovoltaic generator and two stationary batteries.

A participatory organizational diagnosis workshop was held for Atix's strategic project, in addition to several training events for project preparation, management and accountability. The objective was to encourage indigenous associations and communities to develop and implement the projects supported by the two public calls and to empower them to create new community projects and raise new resources for their implementation.

To strengthen the indigenous surveillance services and territorial monitoring of the Xingu Indigenous Park, 22 indigenous surveillance expeditions were carried out, as well as field activities for pesticide monitoring. The Xingu Indigenous Park is surrounded by municipalities that concentrate much of the Brazilian soybean production. The use of pesticides exposes indigenous communities, especially those neighboring large soybean producers, to the pesticides used in this crop, which are often sprayed by air in regions near the villages.

91 Available at: https://www.youtube.com/watch?v=fxDg3jlFCBg. The audio of this video is partly in Portuguese and partly in indigenous languages, and the subtitles are in Portuguese.

2. Preparation of territorial and environmental management plans for Indigenous Lands in the Upper Rio Negro region and Yanomami Indigenous Land

The formulation of PGTAs and indigenous macro-regional management plans encompass extensive processes of gathering information, conducting courses, inter-institutional meetings, workshops and consultations in communities, working groups and other moments of socialization and debates on territorial and environmental management.

Participatory PGTAs were produced with local perspectives and macro-regional indigenous management plans, with context, diagnosis and recommendations for territorial, environmental and cultural management, listed below. These plans can be consulted on the Amazon Fund website, in the section dedicated to this project.[92]

The following PGTAs, and related instruments, were implemented by the project with the support of the Amazon Fund: PGTA of the Yanomami Indigenous Land; PGTA of the Alto Rio Negro Indigenous Land; PGTA of the Balaio Indigenous Land; PGTA of the Cué Cué Marabitanas Indigenous Land; PGTA of the Middle Rio Negro I, Middle Rio Negro II and Rio Téa Indigenous Lands; PGTA CAIARNX – Coordination of the Upper Rio Negro and Xié Indigenous Associations; PGTA Nadzoeri – Baniwa and Koripako Nadzoeri Organization; PGTA COIDI – Coordination of the Indigenous Organizations of the District of Iauaretê; PGTA Wasu – Upper and Middle Rio Negro Indigenous Management Plan and Recommendations for Territorial and Environmental Management of the Rio Apapóris and Entorno Indigenous Land – Rio Traíra Region.

Additional videos and documents (executive reports and governance bulletins), prepared within the scope of the project, were also published on the Amazon Fund website.

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: Sustainable forest and biodiversity use activities identified and developed in the Xingu Indigenous Park (PIX).

> Number of small projects implemented (efficiency indicator)

  Target: 20 | Result achieved: 35

> Revenue generated from economic activities of sustainable use – products benefited (effectiveness indicator)

  Target: bee honey: R$ 8 thousand/year | Result achieved: R$ 8,953.00/year

92 Available at: https://www.fundoamazonia.gov.br/en/projeto/Management-and-Governance-of-Indigenous-Lands-in-the-Rio-Negro-and-Xingu-Basins-PGTAs/

Direct effect 1.3: Expanded managerial and technical capacities for sustainable production in the Xingu Indigenous Park.

> Number of indigenous communities and associations trained to prepare and implement small projects (efficiency indicator)

  Target: 10 | Result achieved: 31

> Number of indigenous people trained in PIX in sustainable productive activities effectively using the knowledge acquired (effectiveness indicator)

  Target: 120 | Result achieved: 161

Direct effect 3.2: Xingu Indigenous Park with territorial protection and strengthened infrastructure and Yanomami indigenous lands and in the Upper Rio Negro region with defined territorial and environmental management.

> Extension of the PIX under Community protection and surveillance – km^2 (effectiveness indicator)

  Target: 27,974 km^2 | Result achieved: 27,974 km^2

> Number of workshops and meetings with indigenous leaders for the preparation of the Life Plan, PGTAs and management guidance documents in the Upper Rio Negro Region (efficiency indicator)

  Target: 25 | Result achieved: 45

> Extension of indigenous lands with strengthened environmental and territorial management in the Upper Rio Negro region and Yanomami IL – km^2 (effectiveness indicator)

  Target: 126,428 km^2 | Result achieved: 126,428 km^2

The productive activities supported by the project had a strong food security component, that is, they were largely destined for the consumption of the indigenous populations themselves. One of the activities supported, production and marketing of honeybees (Apis mellifera), had the marketing of its production impaired as a result of the COVID-19 pandemic. This production was directed to domestic consumption. It is worth noting that the honey chain has been structured for many years in the indigenous territory of Xingu – the honey produced in this place is even marketed with organic product certification.

The project achieved all the desired results and even exceeded the targets in some agreed indicators.

Institutional and administrative aspects

In the indigenous territory of Xingu, the main partnership in the development of the project was with Atix and Funai's Xingu Regional Coordination (CRXingu).

In addition, the following Community associations were involved: Tapawia Indigenous Association (AIT), of the Kawaiwete people; Kisêdjê Indigenous Association (AIK), of the Kisêdjê people; Moygu Indigenous Association of the Ikpeng people (AIMCI);

Tulukai Indigenous Association and Batovi Indigenous Land Association (ATIB), both of the Waurá people; Matipu Indigenous Association (Aima), of the Matipu people; Kuikuro Indigenous Association of the Upper Xingu (Aikax) and Ahukugi Indigenous Association, of the Kuikuro people; Kuluene Yanumaka Association, of the Kalapalo people; and Yawalapiti Awapá Association (AYA), of the Yawalapiti people.

In the Upper Rio Negro region, the project had the existing partnership between ISA and the Federation of Indigenous Organizations of the Rio Negro (Foirn), as well as maintained cooperation with ICMBio, in addition to formalizing, with the participation of Foirn, a technical cooperation agreement with Funai. This ACT signed by ISA, Foirn and Funai established the basis for cooperation between these institutions, aiming at territorial management, sustainability and governance of the indigenous peoples of the Rio Negro over their territories.

In addition, Foirn, ISA, Funai and ICMBio created, during the project, the governance commission for the preparation of PGTAs of the indigenous lands of the Upper and Middle Rio Negro.

Risks and lessons learned

The costs of implementing the governance structure of the indigenous territory of Xingu were higher than those originally foreseen by the project. This dimension is fundamental to the success in the implementation of PGTAs, which should enable indigenous people to meet, align understandings and access qualified information to decide on territory management.

During the execution of the project, it was found that the meetings were more extensive and expensive than originally planned. Thus, it was necessary for the ISA to seek additional sources to implement this activity.

At the end of the project's execution, the COVID-19 pandemic dramatically affected the Upper and Middle Rio Negro region, especially in mid-2020 and early 2021. The final edition, layout and printing of the PGTAs of the indigenous lands of Rio Negro took longer than expected, considering that the professionals involved in these actions, as well as local partners, prioritized acting on the emergency agenda to confront COVID-19 and support the indigenous peoples of Rio Negro.

Sustainability of results

The training of indigenous people and their leaders, the operational structuring of their associations and the cultural recovery of their ancestral practices, together, are a legacy of the project that, by their nature, are not exhausted with the completion of their activities.

Regarding the action "Support for community initiatives," which supported 35 small indigenous projects, it is worth noting that it was associated with training actions for indigenous people in project preparation, management and accountability. The training and experience acquired by associations and communities with the two calls

implemented by the project allowed a third notice to be launched, with a fundraising process with other partners.

The drafting of the Yanomami IL PGTA, where the Yanomami and Ye'kwana peoples live, as well as isolated indigenous groups, provides a long-term benefit to indigenous communities and organizations in their search for dialogue with non-indigenous people and respect for their rights.

The Yanomami Indigenous Land Leadership Forum, as a result of the construction process of this PGTA, has a permanent advantage as it is the largest instance of Yanomami IL representation. This indigenous land is the largest in Brazil, with more than 9.6 million hectares, an area that corresponds to more than twice the size of a country like Switzerland.

In turn, the formulation of the PGTAs of the ILs of the Upper and Middle Rio Negro benefits the local population in the long term by legitimizing, organizing and formalizing instruments of internal dialogue between residents and associations and dialogue with the government and partners, in favor of the conservation of their territories and the well-being of their families, based on the local reality and the ways of life of the 23 indigenous peoples of the region.

CAR Mato Grosso do Sul

Project management

Institute of Environment of Mato Grosso do Sul (Imasul)

Territorial scope

State of Mato Grosso do Sul

Beneficiaries

Owners or squatters of family farming properties with up to four fiscal modules and settlements located in rural areas of the state of Mato Grosso do Sul

Objective

Promote the implementation of the CAR in the state of Mato Grosso do Sul

Total amount of the project

R$ 5,341,785.98
US$ 2,235,056.90

Amount of Amazon Fund support

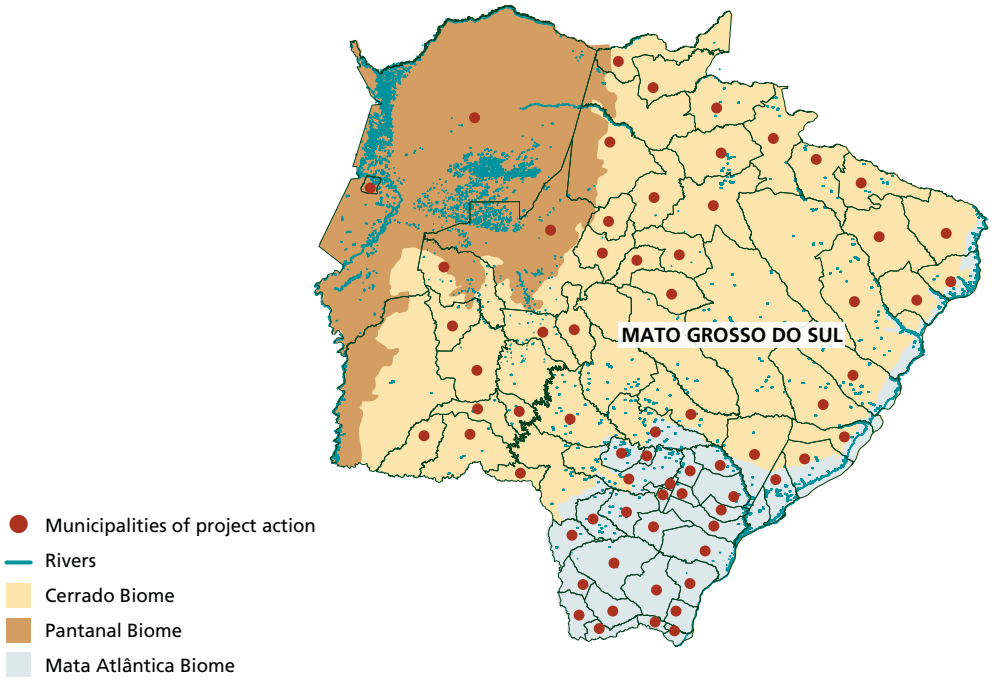
R$ 4,575,359.30
US$ 1,914,376.28

Execution period[93]

From the 4th quarter of 2015 to the 4th quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
9.23.2014	12.2.2014	R$ 4,575,359.30 US$ 1,914,376.28	100%



93 The execution period includes, in addition to the physical and financial execution of the project, the preparation of the final monitoring and evaluation reports.

Context

The state of Mato Grosso do Sul, located in the central-western region of the country, has an area of 357,000 km² and a population of 2.8 million people (2021).[94] Agricultural activity has great relevance in the territory, with emphasis on soybean cultivation and beef cattle ranching. The state covers three important Brazilian biomes: Cerrado, Mata Atlântica and Pantanal.

The Forest Code (Law 12,651/2012) defines CAR as the electronic public registry of national scope, mandatory for all rural properties, with the purpose of integrating the environmental information of rural properties and possessions, composing a database for control, monitoring, environmental and economic planning and combating deforestation.

The state of Mato Grosso do Sul has been developing initiatives to improve environmental monitoring and control, including investments in the modernization of its environmental management and licensing systems, such as the development of the Imasul System for Registration and Strategic Environmental Information (Siriema). This project, through support for the implementation of the CAR, was a new step in the state's environmental regularization policy, acting as a tool to monitor and support the recovery of environmental liabilities of rural properties.

Imasul is a state autarchy linked to the State Secretariat of Environment, Economic Development, Production and Family Agriculture, whose mission is to promote environmental management, proposing and implementing policies and actions aimed at the sustainable development of the state of Mato Grosso do Sul.

The support of the Amazon Fund to the project was framed in the forecast of its regulations that up to 20% of its resources can be used in the development of systems for monitoring and controlling deforestation in other Brazilian biomes and in other tropical countries.

The project

The project aimed to promote the implementation of the CAR in the state of Mato Grosso do Sul and was structured into two components: (i) improvement of infrastructure and training of public agents for the implementation of the CAR and (ii) promotion and support for registration and validation in the CAR.

The project's target audience consists of owners or squatters of rural properties with up to four fiscal modules, state and federal rural settlements and the state of Mato Grosso do Sul, with actions to train public agents and improve infrastructure.

94 Source: IBGE

Intervention logic

The project is part of the "monitoring and control" component (2) of the Amazon Fund Logical Framework. Its direct effects were defined as: "institutions for environmental monitoring, control and accountability in the state of Mato Grosso do Sul structured and modernized for the implementation and management of the CAR" and "expanded access of rural producers in the state of Mato Grosso do Sul to the environmental regularization of their properties."

The strengthening of the state environmental agency of the state of Mato Grosso do Sul (Imasul) and the registration of rural properties in the CAR directly contribute to the adequacy of anthropogenic activities to environmental legislation, which, in turn, contributes to the objective of the Amazon Fund to reduce deforestation with sustainable development.

Activities executed

To improve Imasul's infrastructure for the implementation of the CAR, notebooks, high-resolution monitors, multimedia projectors, GPS devices, memory modules, audio conferencing devices, fifty microcomputers and two pickup trucks were acquired.

The project hired a consultancy that carried out 22,910 registrations of rural properties with up to four fiscal modules, where agropastoral activities are developed in the state of Mato Grosso do Sul, covering all 79 municipalities in the state.

The training provided for in ArcGIS was not carried out, since the application was updated and the training was included in the service, generating savings for the project. In addition, the last action planned was not carried out, which would be the analysis of the registrations of properties registered in the CAR.

Indicators of efficacy and effectiveness

The project activities contributed to the results related to the "monitoring and control" component (1) of the Amazon Fund Logical Framework.

The following are the results of some agreed indicators for monitoring the expected effects.

> Rural real estate number of up to four fiscal modules that had their application to join the CAR filed in the state of Mato Grosso do Sul (effectiveness indicator)

  Target: 26,155 | Result achieved: 22,910

> Rural real estate area of up to four fiscal modules that had their application to join the CAR filed in the state of Mato Grosso do Sul (effectiveness indicator)

  Target: not defined | Result achieved: 545,348 hectares

The goal of properties registered in the CAR was partially achieved (88%). However, this fact resulted from the absence of the need to use project resources for this

purpose, since a part of the small rural owners registered their properties with their own resources, simultaneously with the execution of the project.

From this perspective, the goal of just over 26,000 properties of small rural producers enrolled in the CAR was fully achieved, with savings of resources for the project, since at the end of its execution more than 40,000 properties of up to four fiscal modules had been enrolled in the CAR.

Institutional and administrative aspects

A Technical Cooperation Agreement was signed between Imasul and the Agrarian Development and Rural Extension Agency – Agraer, an autarchy of the state of Mato Grosso do Sul, aiming to conduct actions for promoting and supporting the environmental regularization of rural properties.

This cooperation was important for the project especially with regard to the actions of adhesion and registration of properties in the CAR.

Risks and lessons learned

The project has undergone a reduction in its scope and the value of support from the Amazon Fund. The last action planned was not carried out, which would be the analysis of the registrations of properties registered in the CAR to verify the declared data and its adequacy to the Brazilian forest legislation.

Several factors contributed to this. The first was the time required to complete the dynamic analysis module of the CAR, developed by the Brazilian Forest Service – SFB, a federal public administration body.

This tool aims to speed up the analysis of the more than six million registrations registered at the Sicar base, throughout the national territory, using georeferencing technologies to automatically verify the information declared in the CAR.

Once the aforementioned module of dynamic analysis of the CAR was developed by the SFB, it was necessary to conclude a technical cooperation agreement between Imasul and the SFB, in order to enable the execution of the analysis of rural environmental records by the project. This step of signing the cooperation agreement also required an extended period.

Finally, Imasul faced difficulties in arranging the bidding for the contracting of the company that would provide the services to support the analysis of the registrations of the properties registered in the CAR in the state of Mato Grosso do Sul.

Sustainability of results

After the completion of the project, Imasul continued activities related to the implementation of the CAR, highlighting the procedures to establish the analysis of the properties registered in the CAR.

With the project, the possibility of access of small farmers to rural credit increased, since, by legal provision, financial institutions only grant agricultural credit, in any of its modalities, to owners of rural properties registered in the CAR.

IREHI – Taking Care of the Territories

Project management

Native Amazon Operation (Opan)

Territorial scope

Four ILs in the Brazilian Amazon, located in the state of Mato Grosso

Beneficiaries

Population of ILs served by the project

Objective

Complete and implement the PGTA of the Marãiwatsédé IL and institute the PGTAs of the Manoki, Menkü and Pyrenees de Souza ILs

Total amount of the project

R$ 8,144,618.70
US$ 2,092,172.60

Amount of Amazon Fund support

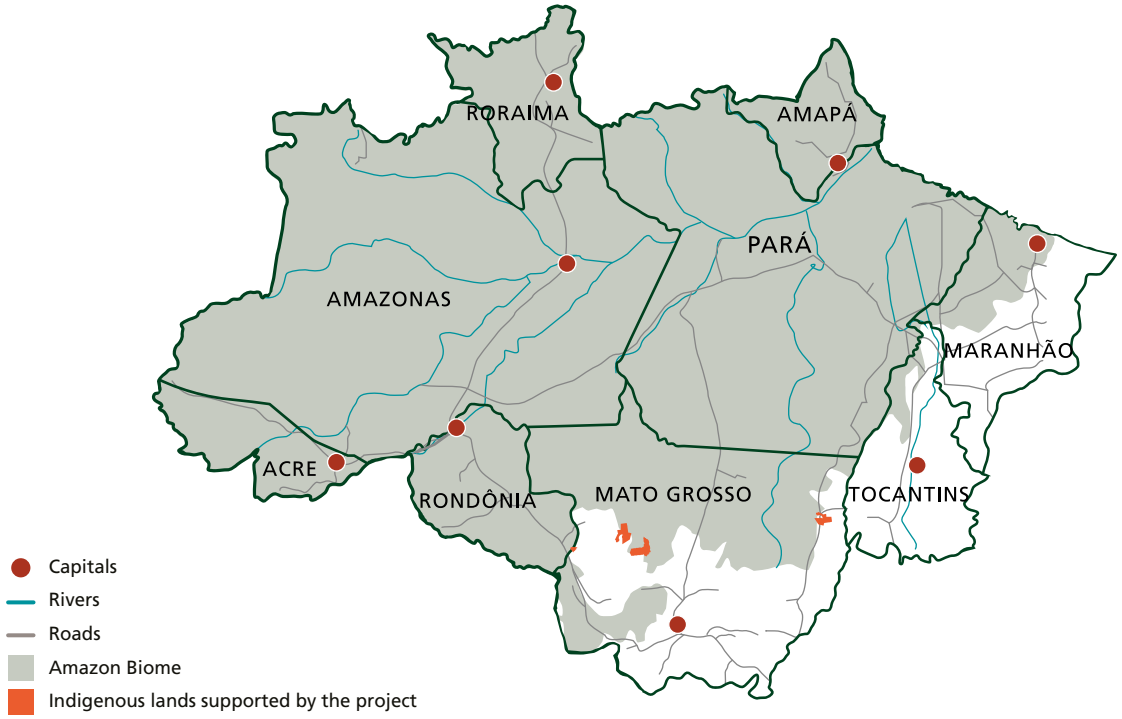
R$ 8,144,618.70
US$ 2,092,172.60

Execution period

From the 2nd quarter of 2016 to the 4th quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
12.18.2015	2.19.2016	R$ 8,144,618.70 US$ 2,092,172.60	100%



Project selected under the scope of the Public Call for Support for Territorial and Environmental Management Plans in Indigenous Lands

Context

The PGTA is a dynamic PNGATI instrument designed to express the protagonism, autonomy and self-determination of indigenous peoples. The PGTA materializes the planning, agreed by the entire indigenous community of the use of its territory for cultural, environmental and economic purposes.

Opan, the institution responsible for implementing the supported project, was founded in 1969 as the first indigenous organization in Brazil, constituted in the form of a civil association active in strengthening the participation of the indigenous population in the policies that influence and impact their territories.

Based in Cuiabá, in the state of Mato Grosso, Opan has three regional offices: in Brasnorte (MT), São Félix do Araguaia (MT) and in Lábrea, in the state of Amazonas (AM).

The project

The project "IREHI[95] – Taking care of the Territories" aimed to support the conclusion and implementation of the PGTA for the Marãiwatsédé indigenous land and the establishment of PGTA for the Manoki, Menkü and Pyrenees de Souza indigenous lands, located in the state of Mato Grosso.

It was structured into three components: (i) completion of the PGTA of the Marãiwatsédé IL, supporting its printing and dissemination, within the first months of the project's execution. The other components meet the four ILs benefited by the project and aim to implement their PGTAs: (ii) territorial protection, with the implementation of surveillance and monitoring systems of the indigenous lands benefited by the project, in addition to training the indigenous themselves in the operation of the acquired equipment, arousing the interest of indigenous young people for the management of the territory; and (iii) economic, productive and cultural activities, with income generation and increased food security from the cultural rescue of traditional practices and techniques.

Cultural activities related to land use have been developed, such as cultural exchange for the exchange of seedlings and seeds, as a way to subsidize the implementation of agroforestry crops and gardens for food generation as well as income, through the commercialization of surplus production.

Intervention Logic

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

95 The I'rehi are the Xavante warriors who carry out surveillance of the territory.

Its direct effects were defined as: "sustainable use of forest and biodiversity activities developed in supported ILs" and "territorially protected supported ILs."

Indigenous lands play an important and strategic role in the conservation of the country's biodiversity and natural resources. Considering that their survival depends essentially on the forest, the resistance that its inhabitants put up in defense of the territories they occupy contributes in a relevant way to the maintenance of the Brazilian biomes.

By supporting the implementation of the PGTAs of the four indigenous lands, the project directly contributed to the general objective of the Amazon Fund: "reduction of deforestation with sustainable development in the Brazilian Amazon."

Activities executed

The project was structured along three axes. The first consisted of the conclusion of the PGTA of the Marãiwatsédé IL, which had been initiated by Opan in previous years, finalizing its formalization and presentation. The second concerned the development of territorial protection activities and monitoring of the territory. Finally, the third referred to economic, productive and cultural rescue activities.

1. Completion of the PGTA of the Marãiwatsédé IL

Activities were carried out to support the consolidation of the work of preparing the PGTA, with the printing and dissemination of the final document, in addition to a launch event that took place in 2016 at the Museu do Índio in Rio de Janeiro.

2. Territorial protection of the four indigenous lands involved in the project

The regions where the ILs supported by the project are located reflect the land reality of the Brazilian Amazon: a place with several disputes and diversity of interests, in which we can highlight the pressure for the opening of new areas for planting and raising cattle and exploiting natural resources.

ILs become green cores amid exploited areas, with preservation of the forest and native vegetation. In this sense, the monitoring and surveillance of these areas are increasingly relevant.

Several meetings were held with the ILs supported by the project for agreement and planning of activities, in addition to training workshops on the use and maintenance of surveillance equipment.

Another relevant aspect concerns the permanence of these activities, only possible if there is continuity within the indigenous community itself. It is extremely important to awaken in indigenous youth the interest in maintaining these actions and preserving their culture. The PGTAs are beacons of the future of the territory and depend on new generations to be implemented.

Ten meetings were held on territorial management, involving the various ILs and young leaders, in addition to the production of books and videos on territorial management and cultural expressions.

3. Economic, productive and cultural activities

This component aimed to strengthen community-based production and marketing networks for agroforestry products. It is important to remember that the productive activities of indigenous peoples are strongly linked to their culture and that it cannot be disregarded in the design of project activities.

It is not enough to increase the production and availability of food, it is also necessary to promote cultural rescue to ensure the continuity of knowledge of each ethnicity.

The project organized several meetings between the four ILs to exchange techniques and rituals, in addition to implementing new fields and areas for banana planting in the ILs. It is also worth mentioning the realization of seed collection expeditions in the Marãiwatsédé indigenous land.

The project left a legacy of infrastructure and acquired equipment, such as vehicles (three boats, two trucks and three pickup trucks), equipment (six radios, six antennas, six metal towers and three sets of energy-generating equipment) and civil works (construction of the culture house in the Pyrenees de Souza IT, with an area of 109 m^2, a support house with 79 m2 and two surveillance centers, one with 66 m^2 and another with 74 m^2).

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: Sustainable use of forest and biodiversity activities developed in the supported ILs.

> Measurement of the volume of fresh products generated with the economic activities of sustainable use supported by the project – banana (effectiveness indicator)

  Target: 47 tons | Result: 68.53 tons

> Number of artesian wells drilled in the Marãiwatsédé IL (efficiency indicator)

  Target: 4 wells | Result: 4 wells

The planting and production of food in the ILs directly impact the health and well-being of communities, by reducing the consumption of industrialized products and allowing the commercialization of production surpluses, generating additional income to communities. The performance of rituals related to land use is amplified by increasing its own production, helping to maintain the traditions of each people.

Direct effect 3.2: Supported ILs territorially protected.

> Number of indigenous people trained for territorial surveillance – Geographic Information System (GIS) and GPS operation, audiovisual registration and maintenance of vehicles and electronic equipment (efficiency indicator)

  Target: 115 indigenous people | Result: 200 indigenous people

- Monitoring and surveillance bases equipped in the four LIs (efficiency indicator)

  Target: 2 | Result: 2

- Extension of protected areas supported by the project under community protection and surveillance (effectiveness indicator)

  Target: 344,082 hectares | Result: 412,000 hectares

The total number of indigenous people directly benefited by the actions of the project was 400 individuals, of which 159 are women.

Institutional and administrative aspects

The public call for projects aimed at supporting territorial and environmental management plans on indigenous lands supported nine projects, including in the vicinity of the IREHI project's area of operation. This proximity and circumscription of scope allowed the identification of some similar activities in more than one project, evidencing the need for coordination between proposals to maximize their reach.

On the other hand, this same similarity serves to gain scale in geographically close activities, allowing the support of a network made up of nearby ILs and the entities involved.

Risks and lessons learned

The IREHI project was successful in achieving the agreed targets, often exceeding the expected result.

The proper diagnosis assists in the definition of feasible goals and consistent with the reality of the territory and the ILs involved. It is important to emphasize that the relative geographical proximity (even in a region with displacement difficulties) may have contributed to the positive results on occasions when they depended on interaction between the four supported ILs. Even so, it was necessary to renegotiate some indicators, which were impacted by events external to the project.

Sustainability of results

The training of indigenous people, their leaders and their young people, with the objective of continuing the implementation of the PGTAs, contributes to the sustainability of the project's results. The cultural recovery of their ancestral practices and the awakening of the interest of indigenous young people are key to ensuring the continuity of the project's legacy, even after the completion of its activities.

The seminars, exchanges and ritualistic meetings fulfilled the role of bringing together the various ILs of different ethnicities. The union of these peoples served to exchange experiences on topics addressed by the project, such as the security of their territory and the challenge of producing sustainably to maintain their food sovereignty and commercialize the surplus.

Finally, the strengthening of the surveillance structure and the training of indigenous people in the operation and maintenance of the equipment will contribute, even after the completion of the project, to guarantee the safety of the ten indigenous peoples who inhabit the four benefited indigenous peoples.

Mamirauá

Project management

Mamirauá Sustainable Development Institute (IDSM)

Territorial scope

Mamirauá Sustainable Development Reserve (RDS), Amanã RDS and Municipality of Tefé, in the state of Amazonas

Beneficiaries

Local communities of the Mamirauá and Amanã RDS, scientific community, managers of protected areas and other communities benefiting from the knowledge produced under the project

Objective

Support actions of management and participatory management in the Mamirauá and Amanã RDS, with research, development and dissemination of knowledge on the following topics: sustainable agriculture, sustainable forestry, sustainable non-timber forest management, environmental education, environmental protection and monitoring

Total amount of the project

R$ 8,706,257.00
US$ 4,165,673.21

Amount of Amazon Fund support

R$ 8,504,678.54
US$ 4,068,834.82

Execution period[96]

From the 3rd quarter of 2013 to the 4th quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
12.18.2012	8.7.2013	R$ 8,504,678.54 US$ 4,068,834.82	100%

96 The execution period includes, in addition to the physical and financial execution of the project, the preparation of the final monitoring and evaluation reports.

Context

The Mamirauá and Amanã RDS are located in the state of Amazonas and have a total area of about 3.5 million hectares of floodable forests and dryland forests.

They are part of the legal category of protected areas, whose basic objective is to make nature conservation compatible with the sustainable use of part of its natural resources. These reserves house traditional populations whose existence is based on sustainable systems of exploitation of natural resources, developed over generations and adapted to local ecological conditions.

Therefore, because they are classified as RDS, in Mamirauá and Amanã, scientific research is encouraged and the residence of local populations and the use of available natural resources are allowed, provided that they are according to the management plan and the zoning system elaborated for this purpose.

IDSM shares the management of these two reserves with the Sema of the state of Amazonas, where it carries out research and supports the management of natural resources and participative management.

The performance of the IDSM in the Mamirauá and Amanã RDS contributes to the generation of technologies and knowledge on resource management and management of protected areas, collaborating in increasing the effectiveness of these units for the protection and sustainable management of natural resources.

The project

The "Mamirauá" project, implemented by IDSM, supported actions of management and participatory management in the Mamirauá and Amanã RDS, with research, development and dissemination of knowledge on the following topics: sustainable agriculture, sustainable timber forest management, sustainable non-timber forest management, environmental education, environmental protection and monitoring.

The actions implemented included the training of individuals for the implementation of SAFs and for the practice of sustainable livestock and timber and non-timber forest management. The project provided technical assistance for the sustainable production and processing of socio-biodiversity products. Environmental education activities and training of voluntary environmental agents were developed, as well as environmental protection missions, field monitoring and satellite-based monitoring of changes to land use.

Intervention Logic

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

Its direct effects were defined as: "knowledge and technologies aimed at sustainable use in PAs of the Amazon biome produced and disseminated" and "knowledge and technologies aimed at monitoring and control in PAs of the Amazon biome produced and disseminated."

The project aimed to contribute to the general objective of the Amazon Fund of "reducing deforestation with sustainable development in the Brazilian Amazon" through actions aimed at generating knowledge and technologies to improve the management of PAs in the Amazon, as well as through support for ecologically sustainable exploitation, by traditional populations residing in the Mamirauá and Amanã RDS, of components of the natural ecosystems of these reserves under sustainable management.

Activities executed

Below are some activities carried out by the project. In the agricultural component, aiming to promote productive diversification and the generation of sustainable economic alternatives, 11 areas of SAFs were implemented, which integrate the simultaneous cultivation of agricultural crops and forest species. In addition, the project trained 60 farmers to manage these systems.

Four workshops were held for 33 livestock farmers to guide the implementation of Voisin Rational Grazing technology[97] and disseminate agroecological management practices in pasture areas, reducing the need to open new areas for this purpose. The project carried out more than 160 technical assistance actions with farmers and livestock farmers in management practices.

Still in the agricultural component, the production of fruit pulps was strengthened through the acquisition of equipment that was installed in a fruit processing unit (Fruit Pulp House), including freezers for cooling and conditioning of production. In addition, there were training workshops for farmers and provision of technical advice on this topic.

In the community timber forest management component, the project trained technicians and managers and provided technical advice for timber management, in addition to having acquired equipment and organized meetings for the commercialization of timber production.

Studies on the dynamics of tropical forests were also developed, with the preparation of forest inventories and the monitoring of the number of individuals and forest species in the Mamirauá RDS. Research was carried out in germination ecology and ecological restoration, aimed at providing information for the construction of germination protocols, seed storage and ecological restoration models, until then nonexistent in this forest typology.

In the non-timber forest management component, four workshops were held on oilseed management, totaling 86 trained individuals. There was production of research projects that aimed to develop local ecological knowledge about the species of andiroba and copaíba, the productivity of andirobeira and copaibeira trees and the commercial aspects of the products of these species.

97 Voisin Rational Grazing is a soil-plant-animal management method that consists of direct grazing and grazing rotation. The area is subdivided into pickets that allow cattle to be directed; the method seeks to maintain the balance between the soil, grass and cattle.

A solar-powered andiroba oil extraction machine was also installed. Aiming at strengthening the production chain of this plant and diversifying products, a candle production machine was acquired with the lees from the mass of andiroba seeds (which is the leftover after collecting the oil) and a workshop of good production and marketing practices of its products and by-products was held.

In the environmental education component, young people and children were involved in the experimentation activity to recompose forest areas. Training workshops were held with teachers in the Amanã and Mamirauá RDS and three hundred seedlings were planted during the playful activities developed in the context of the project.

The project offered activities with forest managers, such as meetings, participatory mapping and seed collection. Also on the theme of education and training, there were workshops on several topics, such as natural resource management, income generation, leadership training and strengthening of community organizations. Finally, booklets, a guide to participatory tools and studies related to environmental education were prepared and published.

In the environmental protection component, the project implemented five inspection missions, with the participation of public environmental inspection agencies, which mainly covered areas of the Mamirauá, Amanã and surrounding RDS, covering a total of approximately 3,900 km. In these inspection missions, more than 25 tons of illegal fish, about 600 kg of game meat and 15 whole animals were seized, as well as several equipment and ten boats. A total of 438 vessels were inspected and fines were imposed, totaling about R$ 1.3 million.

Still in the environmental protection component, the project offered training workshops for voluntary environmental agents (AAV), training 298 individuals. From this action, in addition to the environmental education described above, the activities to protect the RDS have spread in the communities.

In the monitoring component, areas were monitored in the field and by satellite images. By remote sensing, about 6,800 hectares of converted (deforested) areas were identified and mapped. Field monitoring covered 193 hectares, and maps were made identifying the communities that develop agricultural activity. At the end of the project, a remote and field monitoring system was consolidated, which allows the monitoring of the areas used for agricultural activity in the Amanã RDS.

The project produced documents and videos, such as a bilingual book (in Portuguese and English) entitled "Protagonists: Conservation Reports From the Western Amazon." Part of these documents and videos, including the book mentioned, can be accessed on the page dedicated to this project on the Amazon Fund website,[98] where it is possible to consult information on all projects supported with resources from the Amazon Fund, both ongoing and completed.

98 Available at: https://www.fundoamazonia.gov.br/en/home/; https://www.fundoamazonia.gov.br/en/projeto/Mamiraua/; https://www.fundoamazonia.gov.br/export/sites/default/pt/.galleries/documentos/acervo-projetos-cartilhas-outros/Mamiraua-Protagonistas.pdf.

Result and impact indicators

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

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

- Number of scientific, pedagogical or informative publications (efficiency indicator)

  Target: not defined | Result achieved: 77

- Number of integrating events (seminars and forums) aiming to disseminate the knowledge produced (efficiency indicator)

  Target: 5 | Result achieved: 28

- Number of individuals trained as AAV effectively using the knowledge acquired (effectiveness indicator)

  Target: 40 | Result achieved: 298

- Number of environmental education workshops held (efficiency indicator)

  Target: not defined | Result achieved: 73

- Number of individuals participating in environmental education workshops (efficiency indicator)

  Target: not defined | Result achieved: 1,777

- Number of protection missions carried out (efficiency indicator)

  Target: 20 | Result achieved: 5

The measurements of the agreed indicators show that all expected values were exceeded, except for the number of protection missions carried out, which were suspended due to safety issues.

Institutional and administrative aspects

The project established a partnership with the Municipality of Maraã, which supported the initial renovation carried out at the Fruit Pulp House so that the site could receive the equipment acquired with project resources.

The Amazonas Sustainable Foundation (FAS) also supported the group of producers in the purchase of some equipment and materials to assist in the processing of production. Finally, there was a partnership with the Institute of Agricultural and Sustainable Forestry Development of the State of Amazonas (Idam) to support the group of producers of the Fruit Pulp House in the processes of disposal and commercialization of production, to provide pulps for school feeding in Maraã.

Partnerships were established with the Tropical Forest Institute (IFT) for the training of the technicians of the Community Forest Management Program and with the Manacapuru Wood and Furniture Association (Apoman) for the distribution of the managed wood production.

The actions of the AAV training project took place in the context of the Voluntary Environmental Agent Program of the Government of the State of Amazonas. This program aims to involve all individuals, who have the necessary profile, to aid in environmental education activities, monitoring, preservation and conservation of natural resources in state protected areas, as well as in other areas of relevant protection interest in the state of Amazonas and, in particular, those of collective use of natural resources.

Risks and lessons learned

The main unmanageable risks that affected the execution of the project were climate and public safety risks. The region benefited by the project is part of the Amazon basin, which is the basin with the largest volume of fresh water on the planet. Many local communities organize their routines according to the rivers of the region, using them for the transport of people and cargo.

In hydrological systems, it is normal to alternate between periods of flooding and periods of ebb. However, in 2015, much of the plantation areas supported by the project (fields and agroforestry sites) were flooded by the region's rivers, which had a higher elevation than in previous years.

This fact compromised the agricultural production of families in 2015 and 2016, resulting in delays in the execution of several project activities, including the full operationalization of the Fruit Pulp House, since the supply of fruits for this processing unit was compromised.

In turn, the environmental protection missions were suspended, in view of the risks involved in their continuity. The situation of insecurity in the region is a challenge when planning an activity that seeks to act in the prevention of illicit acts.

Sustainability of results

The participation of the traditional communities involved in the project activities, with the joint definition of objectives and goals that should be met, strengthened the autonomy of the communities for their management and the continuity of activities after their completion.

Throughout the project, the community members were trained to manage the implemented areas and technologies. Their leaders were inserted whenever possible in decision-making spaces and were encouraged to continue the activities, seeking partnerships that went beyond the actions supported by the project.

This materialized, for example, in the case of the group of the Fruit Pulp House, from the community of Boa Esperança, in Amanã RDS, which, in the period, consolidated its partnership with Idam – an institution that promotes rural extension actions and technical assistance in Amazonas.

Finally, the knowledge and new technologies generated and disseminated by the project, aimed at the sustainable use of natural resources and for monitoring and control in PAs in the Amazon, will continue producing results even after the completion of the project activities.

CAR Paraná

Project management

Instituto Água e Terra – IAT (Water and Land Institute)

Territorial scope

State of Paraná

Beneficiaries

State of Paraná, through support for the CAR validation. Traditional peoples and communities were also directly benefited by rural environmental registration actions

Objective

Support the implementation of the CAR in the state of Paraná

Total amount of the project

R$ 4,640,011.30
US$ 1,487,183.11

Amount of Amazon Fund support

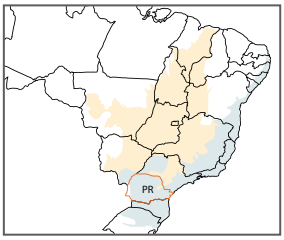
R$ 1,084,473.01
US$ 347,587.50

Execution period

From the 3rd quarter of 2017 to the 3rd quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
26.10.2016	13.6.2017	R$ 1.084.473,01 US$ 347,587.50	100%



Project areas of operation
Cerrado Biome
Mata Atlântica Biome

Context

The state of Paraná, located in the southern region of the country, has an area of 199,000 km², a population of 11.6 million people (2021) and the fourth largest GDP of the 27 units of the Brazilian federation.[99]

With the enactment of the current Forest Code (Law No. 12,651/2012), the CAR was instituted as an electronic public registry of national scope, mandatory for all rural properties, with the purpose of integrating the environmental information of rural properties and possessions, composing a database for control, monitoring, environmental and economic planning and combating deforestation.

Brazilian legislation provides that, after the registration of rural properties in the CAR, the competent environmental agency must analyze and validate these registrations, and, if pending issues or inconsistencies are detected in the declared information or documents presented, they must notify the applicant to provide additional information or promote the correction and adequacy of the information provided.

One of the great benefits of the implementation of the CAR in the state was the integration of the information contained in Sicar with the state environmental management system, which will subsidize the preparation and implementation of environmental policies in the state of Paraná.

The IAT, successor of the IAP, is a state authority linked to the State Secretariat for Sustainable Development and Tourism (Sedest) of the state of Paraná, whose mission is to protect, preserve, conserve, control and recover the environmental heritage of Paraná.

The support of the Amazon Fund to the project was framed in the forecast of its regulations that up to 20% of its resources can be used in the development of systems for monitoring and controlling deforestation in other Brazilian biomes and in other tropical countries.

The project

The project was part of the strategy of the state of CAR implementation, since it aimed to analyze 67,788 rural environmental registries in the state of Paraná and support the registration in the CAR of rural properties in territories of traditional peoples and communities. The project was structured in three components: (i) support for the analysis and validation of the CAR; (ii) promotion and support for the registration of properties in territories of traditional peoples and communities in the CAR; and (iii) infrastructure for analysis and validation of the car.

The support to the first component included the contracting of support services for the analysis of registrations. The second component covered actions to register traditional peoples and communities, while the third aimed to improve the infrastructure of the IAT and train public agents.

99 Source: IBGE

Intervention logic

The project is part of the "monitoring and control" component (2) of the Amazon Fund Logical Framework. Its direct effects were defined as: "IAT structured and modernized for analysis, validation and management of the CAR" and "expanded access of rural producers in Paraná to the environmental regularization of their properties and territories for collective use."

The strengthening of the state environmental agency of the state of Paraná (IAT) and the expanded access of rural producers to the environmental regularization of their properties and rural possessions collaborate directly to the adequacy of anthropogenic activities to environmental legislation, which, in turn, contributes to the general objective of the Amazon Fund of "reducing deforestation with sustainable development in the Brazilian Amazon."

Activities executed

The project was structured in three components: (i) support for the analysis and validation of the CAR; (ii) promotion and support for registration in the CAR; and (iii) infrastructure for the analysis and validation of the CAR.

Component 1 – Support for the CAR analysis and validation

The project aimed to analyze and validate 67,788 rural environmental registrations in the State of Paraná. Initially, 11,088 analyses and validations were carried out within the scope of the project, through a management contract signed with the Paraná Environmental Technology and Monitoring System – Simepar.

The subsequent stage, to analyze 56,700 records, should have been carried out by a service provider to be selected by public bidding, taking advantage of the methodology developed and tested by SIMEPAR and IAT in the previous stage.

Considering that there was no hiring of a company to previously analyze the registrations, in addition to the work already carried out by Simepar, the expected value of CARs verified in this component was frustrated, resulting in the analysis of about 16% of the total originally foreseen.

Component 2 – Promotion and support for the CAR registration

The objective in this component of the project was to reduce the deficit in the registration of traditional peoples and communities that make collective use of their territory in areas considered priority for conservation in the state of Paraná.

Initially, a study was carried out to identify and locate these traditional peoples and communities. The research consolidated the legal framework related to the rights of these populations in relation to CAR and detailed their location, estimated population, number of families by segments and socioeconomic, land, territorial and domain aspects.

Finally, this study indicated the methodology to be followed in the registration process of the territories of traditional peoples and communities, respecting family and collective uses.

It is worth mentioning that traditional peoples and communities are defined as "culturally differentiated groups that recognize themselves as such, that have their own forms of social organization, that occupy and use territories and natural resources as a condition for their cultural, social, religious, ancestral and economic reproduction, using knowledge, innovations and practices generated and transmitted by tradition," according to the National Policy for the Sustainable Development of Traditional Peoples and Communities[100].

Subsequently, there was the hiring of companies that would be responsible for registering the territories of traditional peoples and communities of the state of Paraná in Sicar. 165 collective rural environmental registrations of traditional communities in Sicar were carried out, with a total area of 191,147 hectares in properties and possessions and 372,712 hectares in a declared area of territories of traditional peoples and communities, totaling 2,340 registered people.

Component 3 – CAR analysis and validation infrastructure

There was preparation of a technical manual and methodological roadmap for analyzing the CAR and training 45 IAT professionals, including technicians and operational managers, for assisted implementation in the SICAR module and in federal and state forest legislation.

To organize and systematize databases distributed in various agencies of the state of Paraná, aiming at their adaptation to the computational architecture and conceptual model of the platform of the State Environmental Management System of the IAT and Sicar, 15 thematic bases were compatible, among which: municipal limits, road network, river basins, altimetric map, land structure, protected areas and images of various satellites.

In addition, the project developed new thematic bases to establish land use and coverage and improve the identification of drains and springs on properties. Slope maps were created, which were not available in Sicar at the time, allowing the identification of permanent preservation areas with slope greater than 45°, slope between 25° and 45°, edges of trays and plateaus, hilltops and areas with altitude above 1,800 meters.

Among the thematic bases and maps prepared by the project, the following are mentioned: map of restrictions on use; map of land-use and coverage generated from the mosaic of Landsat 8 images; and map of land-use and coverage produced from the mosaic of ALOS images, adapted to the classes of Sicar.

These thematic bases were made compatible with the official layers existing in the State and organized on a webgeo platform called GeoSICAR PR.

Aiming at the integration and advancement of systems, a new functionality was developed in Sicar, through the creation of the Geo Administrator profile, which allows the insertion of vector layers and reference geographical information in the analysis module, without the need to open demands with the Sicar administrator. In addition,

100 Decree 6,040 of February 7, 2017.

two additional performance profiles were created, which allow the generation of management reports to identify the number of registrations analyzed by institution.

There was provision for the acquisition of furniture, vehicles and computer equipment, among others, for better operational structuring of the IAT. However, only one multimedia projector, the projection screen and its support, a laser pointer, HDMI cable and other items were purchased for this purpose.

Indicators of efficacy and effectiveness

The project activities contributed to the results related to the "monitoring and control" component (1) of the Amazon Fund Logical Framework.

The following are the results of some agreed indicators for monitoring the expected effects.

- Number of trained public agents specified by gender (efficiency indicator)

  Target: 42 | Result achieved: 45 (30 men and 15 women)

- Area of rural properties occupied by traditional peoples and communities enrolled in the CAR (effectiveness indicator)

  Target: not defined | Result achieved: 191,147 hectares

- Number of rural properties with validated registration in the state of Paraná (effectiveness indicator)

  Target: 67,788 | Result achieved: 11,088

The result achieved from analysis and validation of the CAR in the state of Paraná fell short of the expected value, as a consequence of low physical and financial execution of the project. Nevertheless, most of the system developments originally foreseen in the project were implemented, the thematic bases were developed and made compatible, all training activities and registration services for traditional peoples and communities were carried out, in addition to the partial realization (about 16%) of the analyses of rural environmental registries.

Institutional and administrative aspects

For its implementation, the project had some partnerships and service contracts. It is worth mentioning the hiring of the Foundation for Scientific and Cultural Development (FUNDECC) of the Federal University of Lavras – UFLA to prepare a technical manual, a methodological roadmap for analyzing the CAR and to provide training for IAT professionals.

The creation and compatibility of the thematic databases and the analyses for validation of the CAR within the scope of the project were carried out through a management contract signed with Simepar.

Although the project has advanced in the CAR analyses made through a management contract with Simepar, there were limitations, such as the insufficient number of

analysts in the environmental agency to finalize the analyses in Sicar. This insufficiency in terms of staff at the IAT also made it impossible to hire a company to previously evaluate the registrations, in addition to Simepar's work.

Finally, the acquisition of furniture, vehicles and computer equipment for the operational structuring of the IAT did not occur due to difficulties in the bidding process.

Risks and lessons learned

The project has undergone a significant reduction in its scope and the value of support from the Amazon Fund throughout its execution. Several factors contributed to this, such as the lack of analysts in the IAT.

From the initial stages of implementation of the project, there was the prospect of holding a public tender to hire professionals who would dedicate themselves to the implementation of the CAR. However, such a call for bidding was not carried out during the period of implementation of the project.

Sustainability of results

After the completion of the project, the IAT continued activities related to the implementation of the CAR, highlighting the implementation of the pilot project of dynamized analysis (automated analysis) of registrations in the municipality of Terra Rica, from 2021, in the state of Paraná.

The project promoted the expansion of access of traditional peoples and communities to rural credit, since, by legal provision, financial institutions only grant agricultural credit, in any of its modalities, to owners of rural properties registered in the CAR.

Finally, it is worth mentioning that the project, by supporting the preparation and compatibility of thematic bases, contributed to the consolidation of the State Environmental Management System of IAT and Sicar, facilitating future analysis of the CAR and other actions of IAT.

Communal Forests

Project management

Tropical Forest Institute (IFT)

Territorial scope

Three Extractive Reserves (Resex) in the region of the Marajó Archipelago, in the state of Pará, namely Arióca-Pruanã, Mapuá and Terra Grande-Pracuúba

Beneficiaries

Peoples and communities residing in the Resex served by the project

Objective

Support the implementation of community forest management models for the use and commercialization of timber and açaí to strengthen social organization, generate income and contribute to the reduction of deforestation in Sustainable Use PA in the Marajó archipelago, in the state of Pará

Total amount of the project

R$ 11,976,427.21
US$ 3,875,866.41

Amount of Amazon Fund support

R$ 8.100.000,00
US$ 2,621,359.22

Execution period

From the 3rd quarter of 2017 to the 4th quarter of 2022

PROJECT EVOLUTION

Approval date	Contracting date	Total amount disbursed	Total percentage disbursed of Amazon Fund support
4.6.2017	7.26.2017	R$ 8.100.000,00 US$ 2,621,359.22	100%

Context

The communities that inhabit the Extractive Reserves of the Marajó Archipelago, a region with one of the lowest human development indexes (HDI) in the country, have aptitude for logging and for the production of açaí, a food highly valued by local culture. However, the members of these communities have little knowledge about the good practices of sustainable management of timber and açaí, in addition to being poorly organized for its commercialization, which hinders access to fairer and more formal markets.

In addition, logging activity in the country faces serious problems due to illegal exploitation, which has so far been combated with inspection. However, little has been done regarding the commercial exploitation of wood in a sustainable way, especially considering community management.

The project

The "Communal Forests" project aimed to develop sustainable management solutions for the communities that inhabit three federal protected areas of the Resex category in the region of the Marajó archipelago, in the state of Pará – Resex Arióca-Pruanã, Resex Mapuá and Resex Terra Grande-Pracuúba – covering more than 370 thousand hectares, equivalent to about three times the area of the municipality of Rio de Janeiro.

The project consisted of the implementation of community forest management plans and was composed of three products/services, structured by activities to be carried out successively: (i) preparation for community forest management; (ii) implementation of community forest management; and (iii) communication and dissemination of project results.

IFT has extensive experience in sustainable forest management and was able to work with communities, focusing its actions on technical assistance activities and the preparation of cooperatives for the commercialization of forest products.

Intervention Logic

The project is part of the "Sustainable Production" component (1) of the Amazon Fund Logical Framework.

Its direct effects were defined as: "economic activities based on the sustainable use of forest and biodiversity identified and developed in the supported Resex"; "forest and biodiversity product chains with increased added value in the supported Resex"; and "expanded managerial and technical capacities for the implementation of forest management activities in the supported Resex."

Extractive Reserves are among the least deforested territorial categories in the Amazon. The Communal Forests project, by supporting the implementation of sustainable forest management in the Resex of the Marajó region, directly contributed to the general objective of the Amazon Fund, namely, "reduction of deforestation with sustainable development in the Legal Amazon."

Activities executed

The project was organized into three components: (i) preparation for community forest management; (ii) implementation of community forest management; and (iii) communication and dissemination of project results. The following is a brief description of the activities developed by the project in these three components.

It should be noted that, with the impact of the COVID-19 pandemic, some actions foreseen in the project were impacted, but without prejudice to the purpose or results of the project.

The main objective of component 1 was to prepare the community for the implementation of community and family forest management in the area covered by the project, through the creation and strengthening of cooperatives, the training of residents of Resex and the preparation of the necessary documents for approval of forest management.

In 2017, the Community Forest Caravan took place in the three Resex, to sensitize the population to the project. The following activities were carried out: (i) the presentation of the project to residents of Resex and interested parties; (ii) the awareness of traditional populations for community forest management and the importance of strengthening community organizations; and (iii) the presentation of the actors involved in the project strategy.

In this process of dialogue and validation of the project strategy, it was possible to gather important information about community organizations and the value chains of açaí and timber. The caravan mobilized 1,035 beneficiaries and produced the document "Ground zero diagnosis of the açaí and wood production chains of the Resex do Marajó," which subsidized the other actions of the project.

Through the project, two cooperatives were created and an existing cooperative was strengthened. At Resex Arióca Pruanã, the Agroextractive Mixed Cooperative of Resex Arióca Pruanã was created, which also had its internal regulations prepared. At Resex Terra Grande Pracuúba, the Agroextractive Cooperative of Resex Terra Grande Pracuúba, Agronatu, was established. The cooperative of Resex Mapuá, which had existed since before the beginning of the project, had its internal regulations prepared and its strategic planning developed.

The project worked on training in administrative and financial management of community organizations. The "Administrative and financial management" workshops were attended by the boards of the associations: (i) Association of Residents of Resex Arióca Pruanã (Amoreap); (ii) Cooperative of Resex Arióca Pruanã (Cooprunã); (iii) Cooperative of Residents of Rios Aramã and Mapuá (Coama); and (iv) Association of Residents of Resex Terra Grande Pracuúba (Amoretgrap). During the workshops, 26 people were trained (21 men and five women), all members of the boards of these organizations.

Regarding forest management, the project offered several courses on açai tree management, good harvesting practices, marketing and others, in addition to courses

focused on low-impact timber management, totaling 2,250 people trained in activities related to timber and/or açai forest management. In addition, about 1,700 hectares of productive forests for community forest management were inventoried in the Resex Mapuá and Arióca Pruanã, which provided two forest harvests throughout the project.

Six business plans were developed: three for the timber production chain and three for the açaí production chain. These documents are used by community organizations to improve the production processes and planning of the harvests of these products. Two sustainable forest management plans (PMFS) were prepared and approved for Resex Mapuá and Arióca Pruanã, valid for 10 and 25 years. With the valid PMFS, the Annual Operational Plans (POA) are made to enable the sustainable exploitation of native timber.

Component 2 aimed to implement the forest management plans prepared, through the acquisition of equipment and materials, the installation of infrastructures for the transport of forest products and technical assistance to monitor the activities and guide the cooperative members.

The implementation of forest management was carried out in two annual production units (UPA), one in Mapuá and another in Arióca Pruanã, totaling an area of 660 hectares of forest managed in the first harvest licensed in these units. The technical monitoring was carried out by IFT throughout the years 2020, 2021 and 2022, both for açaí and timber. Forest management in Resex Mapuá resulted in the commercialization of about 1,500 m³ of timber. At Resex Arióca Pruanã, whose timber production was estimated at about 5,200 m³, it was expected that the commercialization would be carried out at the end of 2022, after the last monitoring of the project by BNDES.

The support for the preparation of contracts and commercialization of forest products made it possible to enter into two timber marketing contracts signed in 2020, one in Resex Mapuá by the Cooperative of producers of the Mapuá and Aramã Rivers (Coama), and another in Resex Arióca Pruanã by the Association of residents of Resex Arióca Pruanã (Amoreap). At the end of the whole commercialization process, the estimated revenue from the sale of the timber production in the two units is about R$ 2 million, being approximately R$ 500,000 for the Mapuá Resex and about R$ 1.5 million for the Arióca Pruanã Resex. For the açaí harvest, Coama signed a contract to sell the product, with the commercialization of a little more than 11,000 cans.

During the execution of the project, some adjustments were made, as in the case of the communities of Resex Terra Grande Pracuúba (TGP), which decided not to carry out forest management for the production of timber, so that the actions planned for this territory were redirected to other areas or replaced by other activities.

Component 3 provided for communication and dissemination of information. Throughout the project, there was an exchange on community forest management initiatives in the Amazon region, which included the participation of extractive communities from three Amazonian states (Acre, Amazonas and Pará), including the Marajó Resex. Due to the COVID-19 pandemic, there were no press visits to Resex, however, local media published several articles about the actions of the project.

Many publications were prepared during the execution of the project, such as the booklet "Agroextractive cooperatives: step-by-step guide to the creation of a community business" and the technical bulletins "100% forest inventory and vine cutting," "Planning and construction of infrastructure, roads and storage yards," "Special techniques for cutting trees and safety at work," "Practical guide for preparing a simplified forest inventory," among others.

A documentary on community forest management in the Resex covered by the project was released in October 2022. The documentary is available on IFT's Youtube channel.[101]

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 following are the results of some agreed indicators for the monitoring of the expected direct effects.

Direct effect 1.1: Economic activities based on the sustainable use of forest and biodiversity identified and developed in the supported Resex.

- Revenue generated from economic activities of sustainable use (in natura products) - native timber (effectiveness indicator)

  Target: R$ 1,900,000.00 | Result achieved: R$ 2,000,000.00

- Revenue generated from sustainable economic activities (in natura products) - açaí (effectiveness indicator)

  Target: R$ 1,500,000.00 | Result achieved: R$ 840,000.00

- Number of sustainable forest management plans developed (wood) (efficiency indicator)

  Target: 3 | Result achieved: 2

- Number of business plans for marketing wood and açaí prepared (efficiency indicator)

  Target: 3 | Result achieved: 6

The indicators of the sustainable production activities developed demonstrate that the project fully met its main objective of implementing forest management activities in the territory.

Direct effect 1.2: Forest and biodiversity product chains with increased added value in the supported Resex.

- Number of community organizations strengthened/created (effectiveness indicator)

  Target: 3 | Result achieved: 5

- Number of boats for disposal of products from family farming and extractivism acquired (efficiency indicator)

  Target: 3 | Result achieved: 3

101 Available at: https://www.youtube.com/watch?v=X0RqkxHtIE4.

> Total number of members in cooperatives created and strengthened (efficiency indicator)

  Target: 110 | Result achieved: 98

The strengthening of community associations is the basis for the sustainability of project activities, not only environmental, but also social and economic.

Direct effect 1.3: Expanded managerial and technical capacities for the implementation of forest management activities in the supported Resex.

> Total number of individuals trained in forest management techniques (efficiency indicator)

  Target: 620 people, 120 of whom are women | Result achieved: 633 people, 118 of whom are women

> Total number of individuals trained in administrative management of cooperatives (efficiency indicator)

  Target: 30 people, 15 of whom are women | Result achieved: 26 people, 5 of whom are women

The technical, operational and managerial training of forest management is the specialty of IFT, a reference in the theme.

Institutional and administrative aspects

In partnership with the agricultural implements company Stihl, IFT strengthened the socio-productive action of the association and the cooperative of the Arióca Pruanã Resex through the donation of equipment, such as chainsaws, speedboat, personal protective equipment (PPE) and others.

The complete execution of the project suffered some delays, mainly due to the COVID-19 pandemic and other complications, which generated administrative and financial impacts. Relocations were necessary, as well as some changes in products and activities, without, however, causing losses to the project objectives. With the delay, the technical and administrative teams were modified throughout the execution. At the end of the project, part of the technical team had to be disconnected, overloading the remaining personnel.

Risks and lessons learned

The biggest obstacle faced was the COVID-19 pandemic, as the restrictions recommended for the containment of the virus – such as the prohibition of meetings of people at various times in 2020 and 2021 – impacted several actions of the project, since 90% of the activities took place in the field. In this sense, the project schedule was impaired, as actions that should have occurred in 2020 were postponed. There was a delay of at least six months in the production of the forest inventory of the management areas in the Arióca Pruanã Resex and the Mapuá Resex, which compromised the approval of the exploration authorizations (Autex) and postponed the management activities for the following year.

IFT has implemented some measures to reduce the negative impact on communities due to this delay. Instead of approving only one Annual Operating Plan (POA) in each of the two Resex, the institute built two POAs for each of these units. Thus, two harvests will be guaranteed, even after the end of the project.

An important lesson, which should be highlighted and observed in socio-environmental projects in protected areas, is the time it takes to obtain environmental licenses, as two civil construction activities planned to be carried out during the project had to be replanned. Ideally, when these activities are planned, they should be carried out in the first years of such projects.

Sustainability of results

The expectations of the communities served by the project are positive, in the three territories. Leadership training activities allowed people to take better ownership of the productive activities of their territories. In the communities of the Terra Grande Pracuúba Resex, from the creation of the cooperative and the donation of a boat, the creation of an açaí fund began, through resources separated by the community for the maintenance of the organization and the vessel. In the future, such actions are expected to contribute to the construction of the cooperative's headquarters.

Regarding the association of residents of the Arióca Pruanã Resex, holder of the management plan, marketing goals for açaí were established. A mapping of the açai palm of the Resex is being made that will make it possible to sign a contract with companies benefiting from the fruit. The work developed by the project is a basis for new actions.

In addition, IFT is seeking new financing from other institutions to continue its actions in the Marajó region. Two proposals for socio-environmental projects were submitted: one for the company Stihl and another for the CLUA Foundation, in addition to a proposal under preparation that will be destined to the Vale Fund, all aimed at the continuity of actions in these territories.

Projects concluded by 2021

In addition to the projects completed this year, there are 47 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 2021 and at fundoamazonia.gov.br/en.

Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Sustainable Bem Viver Institute of Research and Indigenous Education (Iepé)	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)	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)	1.7.2016	2021	R$ 11,858,793.87 US$ 3,127,236.59
Value Chains of Nontimber Forest Products SOS Amazon Association	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	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	5.13.2015	2021	R$ 9,938,777.00 US$ 3,825,922.81
Training to Conserve Amazon Conservation Team (Ecam)	Protected areas (PA) in the state of Amapá	Train environmental agents and managers aiming to strengthen protected areas in the state of Amapá	12.2.2014	2021	R$ 1,404,360.67 US$ 608,294.93
Knowing to Preserve The Amazon Museum (Musa)	Municipality of Manaus, state of Amazonas	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	9.1.2011	2021	R$ 9,984,629.00 US$ 5,302,059.59
Dema Fund Federation of Agencies for Social and Educational Assistance (Fase)	Traditional communities in the state of Pará, focusing on the area affected by the Transamazon and BR-163 highways, as well as in the lower Amazon region	Supporting low-amount socioenvironmental projects through public call	6.14.2011	2021	R$ 6,601,699.07 US$ 4,579,312.13
Environmental Management Qualification Program Brazilian Institute of Municipal Administration (Ibam)"	Municipalities of the Amazon Biome	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	2.5.2013	2021	R$ 18,853,482.32 US$ 9,019,941.79

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Greener Rondônia State of Rondônia, with the Military Fire Department of the State of Rondônia (CBMRO) as executor	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 JiParaná, 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	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	12.21.2012	2021	R$ 15,040,500.00 US$ 7,430,709.95
Using Social Technologies to Reduce Deforestation Interstate Agricultural Development Association (Adai)	Communities in the areas of influence of the hydroelectric projects in the states of Pará, Mato Grosso, Rondônia, and Tocantins	Implement family agroecological production units, contributing to food security and income generation of riverine people and family farmers in an environmentally sustainable manner	7.31.2017	2021	R$ 9,059,718,63 US$ 2,779,183.85
Materialize Association of Small Agro-farmers of the Reca Project	The Ponta do Rio Abunã – municipalities of Porto Velho (RO) and Acrelândia (AC)	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	1.19.2015	2020	R$ 6,422,748.00 US$ 2,411,118.40
News Paths in Cotriguaçu Municipality of Cotriguaçu"	Municipality of Cotriguaçu, in the northwest of the State of Mato Grosso	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	12.2.2014	2020	R$ 1,567,845.25 US$ 705,029.79
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

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
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
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

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
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
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

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
Biodiversity Federal University of Pará (UFPA) and Research Development and Support Foundation (Fadesp)	State of Pará	Expand UFPA's research infrastructure focused on the study of biodiversity, comprising: (i) construction and structuring of the Advanced Biodiversity Studies Center (Ceabio); and (ii) renovation of the Drug Planning Laboratory and the Molecular and Cellular Neurochemistry Laboratory and acquisition and installation of equipment for research in biotechnology	10.2.2012	2018	R$ 4,639,706.98 US$ 2,459,556.29
Amazon Bioactive Compounds Federal University of Pará (UFPA) and Research Development and Support Foundation (Fadesp)	State of Pará	(i) Install a pilot plant in the UFPA food laboratory to produce and characterize extracts rich in bioactive compounds and (ii) develop new products and technological applications using bioactive compounds extracted from native plants and fruits from the eastern Amazon	8.21.2012	2018	R$ 1,352,368.48 US$ 723,849.75
Mangrove Forests Federal University of Pará (UFPA) and Research Development and Support Foundation (Fadesp)	Municipality of Bragança, state of Pará	(i) Construction and equipment of a laboratory for research on mangrove ecology on the UFPA 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

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
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
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

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Project/ Management	Territorial scope	Objective	Date of contract	Year of conclusion	Amazon Fund support
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
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	100%
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	55%
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$ 15,592,84.71 R$ 47,958,727.94	100%
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%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
Family Farming Value Chains in the State of Mato Grosso Alternative Technology Center Foundation (CTA)	Regions of Portal da Amazônia, 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$ 12,602,676.26 R$ 29,298,701.78	100%
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: 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%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
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%
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$ 3,664,795.98 R$ 11,858,546.84	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	100%
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%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
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	50%
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%
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	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	100%
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%
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 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$ 3,471,376.60 R$ 11,042,796.11	100%

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Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
National Forest Inventory – The Amazon Federal Government (Brazilian Forest Service)	Amazon biome	Implement the Forest Inventory in the Amazon biome to produce information on forest resources, carbon stocks and how populations in the region use their territory	7.31.2012	US$ 31,999,485.61 R$ 65,000,555.12	59%
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	77%
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%
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	82%
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' CO2 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 Funcate and Inpe	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%
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$ 2,323,723.11 R$ 8,607,999.88	100%

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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	93%
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$ 6,202,873.49 R$ 14,600,323.63	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	100%
Green Municipalities Program State of Pará	100 municipalities in the state of Pará	Support the implementation and consolidation of the CAR of rural properties and strengthen municipal environmental management, contributing to deforestation and forest degradation combat in the state of Pará	12.10.2013	US$ 19,630,418.62 R$ 45,591,647.24	100%
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	86%
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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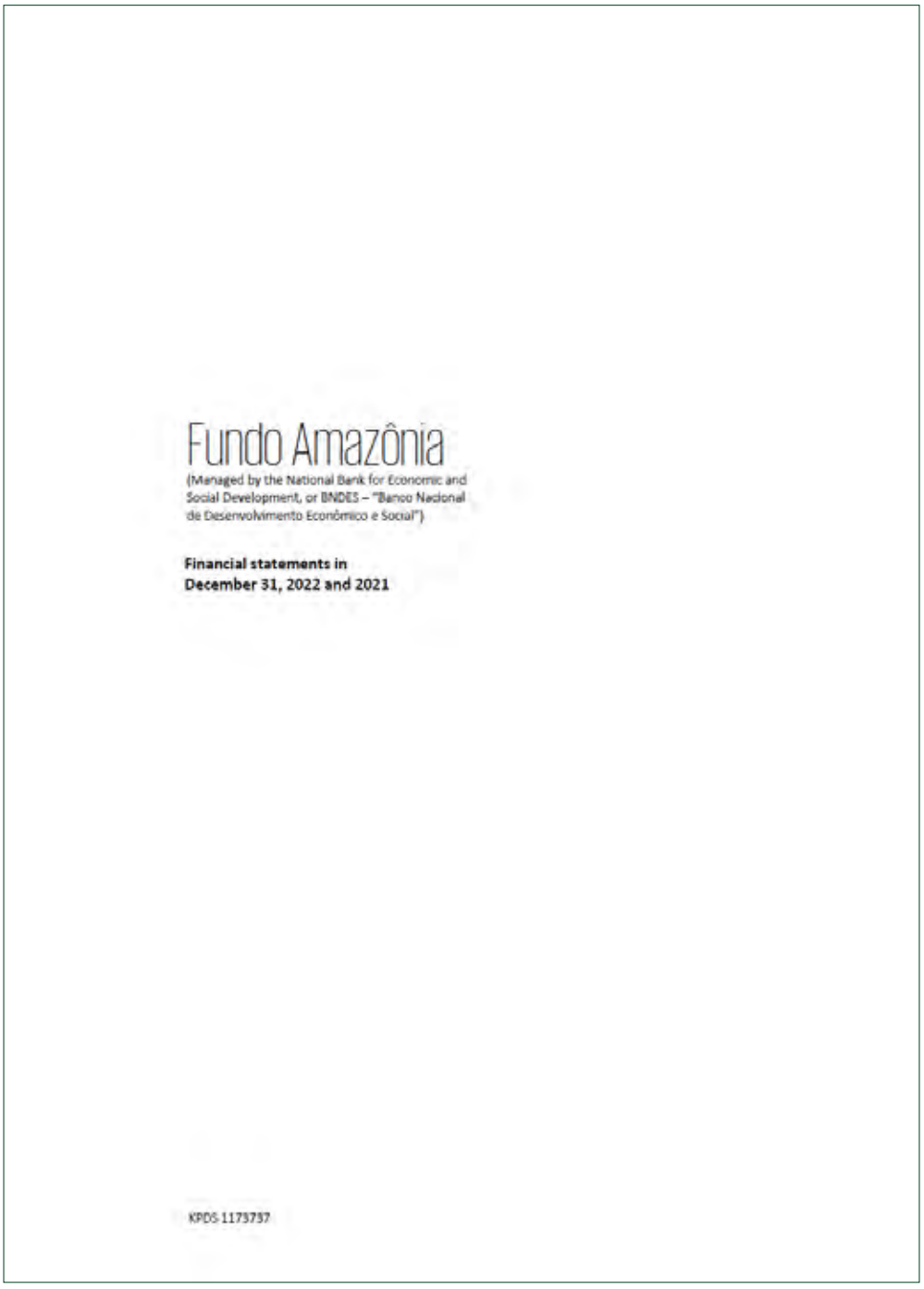
Projects supported					
Project/ Management	**Territorial scope**	**Objective**	**Date of approval**	**Amazon Fund support value**	**Percentage disbursed**
Sustainable Tapajós Conservation International of Brazil (CI-Brasil)	Municipalities of Santarém, Aveiro, Belterra, Itaituba, Jacareacanga, Placas, 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	93%
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	18%
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%
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	100%

ANNEXES

Annex 1

Independent auditor's report and the financial statements and limited assurance report



Fundo Amazônia

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

Financial statements in
December 31, 2022 and 2021

KPDS 1173737

Contents

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Report of the independent auditors on the financial statements

To the Administrator of
Fundo Amazônia
Brasilia - DF - Brazil

Opinion
We have examined the financial statements of the Fundo Amazônia ("Fund"), which comprise the balance sheet as at December 31, 2022 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 the Fundo Amazônia as at December 31, 2022 and its financial performance for the year then ended, in accordance with the accounting practices adopted in Brazil applicable to non-profit entities (ITG 2002 R1).

Basis for opinion
Our audit was conducted in accordance with Brazilian and international auditing standards. Our responsibilities, in accordance with such standards, are described in the following section entitled "Auditors' Responsibilities for Auditing Financial Statements." We are independent of the Fund in accordance with the relevant ethical principles set forth in the Accountant's Code of Professional Ethics and professional standards issued by the Federal Accounting Council, and we comply with other ethical responsibilities in accordance with these standards. We believe that the audit evidence obtained is sufficient and appropriate to provide a basis for our opinion.

Administrator's responsability 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 non-profit entities (ITG 2002 R1) and for the 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.

In preparing the financial statements, the Administrator is responsible, within the prerogatives set forth in NBC TG 26, for assessing the ability of the Fund to continue as a going concern, disclosing where applicable, the matters relateing to its going concern and the use of this accounting basis in the preparation of the financial statements, unless the

Administrator intends to wind-up the Fund or cease operations, or have 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 audit report containing our opinion. Reasonable assurance is a high level of assurance, but not a guarantee that the audit conduct 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 aggregated, may influence, from a reasonable perspective, the economic decisions of users taken based on such financial statements.

As part of the audit conducted in accordance with Brazilian and international auditing standards, we exercise professional judgment, and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement in the financial statements, whether due to fraud or error, design and perform audit procedures in response to such risks, and obtain appropriate and sufficient audit evidence to substantiate our opinion. The risk of non-detection of material misstatement resulting from fraud is greater than that arising from error, as fraud may involve circumventing internal controls, collusion, falsification, omission, or intentional misrepresentations.

- Obtain an understanding of the internal controls relevant to the audit to plan audit procedures appropriate to the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal controls.

- Evaluate the appropriateness of the accounting policies used and the reasonableness of the accounting estimates and respective disclosures made by the Administrator.

- Conclude on the appropriateness of the Administrator's use of the operational continuity accounting basis and, based on the audit evidence obtained, whether there is material uncertainty regarding events or conditions that may raise significant doubt regarding the Fund's ability to continue operating. If we conclude that material uncertainty exists, we should draw attention in our audit report to the respective disclosures in the financial statements or include modification in our opinion if the disclosures are inappropriate. Our conclusions are based on the audit evidence obtained up to the date of our 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 corresponding transactions and events in a manner consistent with the purpose of appropriate presentation.

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

We also provide the Administrator with a statement that we comply with the relevant ethical requirements, including the applicable independence requirements, and communicate any possible relationships or matters that could significantly affect our independence, including, where applicable, the respective disclaimers.

Rio de Janeiro, 10 of april of 2023

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

Jose Claudio Costa
Counter CRC 1SP-167720/O-1

FUNDO AMAZÔNIA
(Managed by the National Bank
for Economic and Social Development - BNDES)

STATEMENTS OF FINANCIAL POSITION
December 31, 2022 and 2021
(In thousands of Reais)

	note	31/12/2022	31/12/2021
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	4	3.934.193	3.583.826
Prepaid expenses	5	88.616	88.885
Total Assets		**4.022.809**	**3.672.711**
LIABILITIES AND NET ASSETS			
CURRENT LIABILITIES			
Funds to be allocated to projects	6	3.934.193	3.583.826
Support funds	7	88.616	88.885
NET ASSETS			
Accumulated surplus/(deficit)		-	-
Total Liabilities and net assets		**4.022.809**	**3.672.711**

The accompanying notes are an integral part of the financial statements.

FUNDO AMAZÔNIA
(Managed by the National Bank
for Economic and Social Development - BNDES)

STATEMENTS OF SURPLUS (DEFICIT)
Years ended December 31, 2022 and 2021
(In thousands of reais)

	Explanatory Note	2022	2021
INCOME			
Revenues from donations to investments	6	90.470	117.491
Financial income	4	440.837	151.764
Revenues from donations for support	7	269	254
EXPENSES			
Investment donation expenses	6	(90.470)	(117.491)
Remuneration of available project funds expenses	6	(440.837)	(151.764)
Administrative expenses	8	(269)	(254)
SURPLUS/(DEFICIT) FOR THE FINANCIAL YEAR		-	-

The accompanying notes are an integral part of the financial statements.

FUNDO AMAZÔNIA
(Managed by the National Bank
for Economic and Social Development - BNDES)

STATEMENTS OF CHANGES IN NET ASSETS
December 31, 2022 and 2021
(In thousands of reais)

	Surplus/ (Deficit) accumulated
Balance at January 1, 2021	-
Financial year 2021	-
Balance at December 31, 2021	-
Financial year 2022	-
Balance at December 31, 2022	-

The accompanying notes are an integral part of the financial statements.

FUNDO AMAZÔNIA
(Managed by the National Bank
for Economic and Social Development - BNDES)

STATEMENTS OF CASH FLOWS
Years ended December 31, 2022 and 2021
(In thousands of reais)

	Explanatory Note	31/12/202	31/12/2021
Cash Flow from Operating Activities			
Funds received			
Funds invested in projects	6	(90.470)	(117.491)
Financial income	4	440.837	151.764
(=) Net Cash (Consumed) / Generated by Operating Activities		**350.367**	**34.273**
Cash and cash equivalents at the beginning of the financial year		3.583.826	3.549.553
Cash and cash equivalents at the end of the year	4	3.934.193	3.583.826

The accompanying notes are an integral part of the financial statements.

AMAZON FUND
(Managed by the National Bank for Economic and Social Development - BNDES)

Notes to the Financial Statements
As of December 31, 2022 and 2021
(In thousands of reais)

1. CONTEXT OF ACTIVITIES

Fundo Amazônia was created by BNDES Resolution No. 1,640, of September 3, 2008, starting its operational activities in the second half of 2009, with the purpose of raising donations to carry out non-reimbursable applications in actions to prevent, monitor and combat deforestation, and to promote the conservation and sustainable use of the forests of the Legal Amazon, pursuant to Decree No. 6,527/2008, as amended by Decrees No. 6,565/2008, 8,773/2016 and 10,223/2020.

The Fundo Amazônia supports projects in the following areas:

- Management of public forests and protected areas;
- Environmental control, monitoring and 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 management and administration of the Fundo Amazônia are the responsibility of the National Bank for Economic and Social Development - BNDES, with the task, among others, of raising funds, contracting and monitoring the projects and actions supported, as well as operating as a legal representative.

The governance of the Fundo Amazônia established by Decree No. 6,527/2008 was modified by Decree No. 9,759/2019, which extinguished the Steering Committee of the Fundo Amazônia – COFA, as well as by subsequent decrees that introduced other changes, including the extinction of the Technical Committee of the Fundo Amazônia – CTFA. However, this situation did not represent an impact on the execution of the projects that had already been contracted, considering that the resources for the continuity and completion of the projects already contracted are guaranteed as provided for in the donation contracts. The Federal Supreme Court – STF, within the scope of the Direct Action of Unconstitutionality by Omission ("ADO") 59, ordered the Federal Government to adopt the administrative measures necessary for the reactivation of the Fundo Amazônia, within the limits of its competences, according to explanatory note No. 13.

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Fundo Amazônia does not have its own legal personality, and its transactions are carried in specific accounts of BNDES accounting.

2. BASIS OF PREPARATION

The financial statements were prepared and are presented in accordance with the accounting practices adopted in Brazil for non-profit entities, in accordance with ITG Interpretation 2002 (R1), approved by Resolution No. 1,409, 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 financial investments, recorded as "Cash and cash equivalents" and measured at fair value through profit and 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 in 10 of april of 2023.

3. SUMMARY OF KEY ACCOUNTING PRACTICES

The accounting policies, described in detail below, have been applied consistently to all years presented in these financial statements.

3.1 Cash and cash equivalents

They include immediate liquidity financial investments in two funds managed by BB Gestão de Recursos - Distribuidora de Títulos e Valores Mobiliários S.A. - BB DTVM, which have a conservative investment portfolio with low risk of variation in the market value of investments. The income from investments made with BB DTVM is linked to the variation in the share of the invested funds, as described in Note 4.

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 No. 6,527/2008 and subsequent amendments, 97% of the funds received are destined to projects. These amounts are recorded in the liabilities and deducted from the expenses incurred by each project, so that they do not result in an increase or reduction in shareholders' equity, given that the Fund is only the collecting agent and transferor for the execution of the projects.

3.3 Donations for support

According to § 3 of article 1 of Decree No. 6,527/08 and subsequent amendments, BNDES must segregate the amount equivalent to 3% of the value of donations to cover its operating costs and expenses related to the Fundo Amazônia. The costing revenue referring to the 3% of the donations is counted as "Resources for Costing", and the revenue is recognized according to the use of the resources by the BNDES. The record of the transfer of the 3% to the BNDES is presented as "Anticipated Expenses" and appropriated as "Administrative Expense" according to the use by 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 operational activities, considering that the Fund acts as a collecting agent and transferor of these resources.

4. CASH AND CASH EQUIVALENTS

Composed as follows:

	31/12/2022	31/12/2021
Financial investment with the Administrator (*)	3.934.193	3.583.826
TOTAL	**3.934.193**	**3.583.826**

(*) The Administrator maintains the Fund's resources invested with the BB Gaia Fixed Income Investment Fund ("BB Gaia FIRF"), which has a portfolio concentrated in Brazilian government bonds, committed operations backed by federal government bonds, and BB Gaia II Investment Fund in Fixed Income Investment Fund ("BB Gaia II FIC FIRF"), which concentrates at least 95% of its equity in BB Gaia FIRF quotas. Both funds have a daily liquidity clause.

According to Decree No. 6,527/08 and subsequent amendments, the percentage of 97% of the donations received is intended for application in projects. The Fund shall segregate these resources into a specific investment account. The funds, while not directed to projects, are invested by BNDES in the exclusive funds mentioned above, managed and managed by BB DTVM, being remunerated based on the yield index of each of them.

In addition, the exclusive BB Gaia II FIC FIRF fund was created in compliance with Board Decision No. 832/2012, which determined the accounting segregation of the amounts raised from Brazilian public sources, which cannot be destined to projects executed by the Federal Government.

Until December 2022, the total financial revenues from the Fundo Amazônia's investments since its inception totaled R$ 2,151,610 (R$ 1,710,773 until December 2021).

Below is the movement of Cash and Cash Equivalents:

31/12/2022				
	Total	**Resources for projects (Gaia FI)**	**Resources for projects (Gaia II FIC)**	**Resources for costing**
Balance at January 1, 2022	**3.583.826**	**3.561.528**	**22.289**	-
Income	440.837	438.122	2.715	-
Funds released	(90.470)	(90.470)	-	-
Balance at December 31, 2022	**3.943.193**	**3.909.180**	**25.004**	-

31/12/2021				
	Total	**Resources for projects (Gaia FI)**	**Resources for projects (Gaia II FIC)**	**Resources for costing**
Balance as of 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**	-

5. PREPAID EXPENSES

The balance of prepaid expenses is composed of the equivalent of 3% of the value of the donations, retained by BNDES to cover the operating costs of the Fundo Amazônia, net of the amounts recognized as "Administrative Expenses" in the Fundo Amazônia according to the use by BNDES.

6. RESOURCES 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 intended for specific projects linked to the objective of the Fundo Amazônia.

Below is the movement of project resources:

	31/12/2022	31/12/2021
Balance at the beginning of the financial year	**3.583.826**	**3.549.553**
Income	440.837	151.764
Funds released	(90.470)	(117.491)
Donations received (*)	-	-
Balance at the end of the financial year	**3.943.193**	**3.583.826**

(*) Net value of the 3% portion intended to cover costs.

The amount of R$ 90,470 (R$ 117,491 as of 12/31/2021) is recorded in the profit account under the headings "Revenue from donations for investments" and "Expenses with donations to investments", canceling out because the Fundo Amazônia is non-profit.

The Fundo Amazônia did not receive donations in fiscal years 2022 and 2021. From the beginning of its activities until December 31, 2022, the Fundo Amazônia received funds from the following donors:

Until 31/12/2022			
Donor	**Resources for costing 3%**	**Project resources 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**

Until 31/12/2021			
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**

On December 23, 2022, the Fundo Amazônia signed a new donation contract for the entry of new resources to which they will be added to the amounts already received by the Fundo Amazônia, still without a date scheduled for implementation.

7. SUPPORT FUNDS

The balance of support funds refers to the portion of the donation (3%) retained by BNDES not yet recognized as "Donation Revenue". Revenue from donation is recognized according to the use of support funds by BNDES. In the years ended December 31, 2022 and December 31, 2021, no support amounts were allocated due to the absence of funds received from donations in the period.

8. ADMINISTRATIVE EXPENDITURE

In the year ended December 31, 2022, the amount of R$ 269 (R$ 254 on 12/31/2021) was recognized as administrative expenses, the most relevant being advertising, travel and daily, seminars and events and audit services.

9. TAXES

All tax obligations that may exist on account of operations under the Fundo Amazônia are the responsibility of BNDES, since the Fund does not have its own legal personality, and its transactions are recorded in specific accounts in BNDES accounting.

PIS and COFINS

In accordance with Article 1 of Law No. 11,828, of November 20, 2008, as amended by Law 12,810, of May 15, 2013, donations in kind received by public financial institutions controlled by the Union and intended for prevention actions are exempt from the incidence of the PIS-PASEP Contribution and the Contribution to the Financing of Social Security (COFINS), monitoring and combating deforestation, including

compensation programs for environmental services, and promoting the conservation and sustainable use of Brazilian biomes.

Income Tax and Social Contribution

There is no result to be offered to the taxation of IRPJ and CSLL, because the donation revenue is recognized in the result at the same time as the appropriation of operating expenses with projects idealized under the Fundo Amazônia, according to the approval of the consultation solution No. 59 SRRF07/Disit, of 08/06/2009, carried out by BNDES with the Federal Revenue Department. The same occurs in relation to the financial result from investments in investment funds.

10. RELATED PARTIES

The Fundo Amazônia has a relationship with BNDES, which is authorized to allocate the amount of donations received in kind to carry out non-reimbursable applications in actions of prevention, monitoring, combating deforestation and promoting the conservation and sustainable use of the Amazon biome. The mentioned relationship refers to the amounts corresponding to "Cash and cash equivalents" (according to Explanatory Note No. 4), which are in bank accounts, owned by BNDES.

In addition, BNDES retains the amount equivalent to 3% of the value of donations to cover its operating costs and expenses related to the Fundo Amazônia, see further explanations in Explanatory Note No. 5 "Anticipated expenses".

11. NET ASSETS

The Shareholders' Equity of the Fundo Amazônia is composed of surplus/(deficit) of the fiscal years.

12. RISK MANAGEMENT

As of December 31, 2022 and 2021, the Fund does not present significant credit, liquidity, market and operational risks as it has very limited operations. The Fund has a concentration of credit risk with its Administrator (invested funds) as demonstrated in Note 4. The book values represent the amount of the Fund's credit risk According to Explanatory Note No. 1, the resources for the continuity and completion of the projects already contracted are guaranteed as provided in the donation contracts.

AMAZON FUND
(Managed by the National Bank
for Economic and Social Development - BNDES)

Notes to the Financial Statements
As of December 31, 2022 and 2021
(In thousands of reais)

13. SUBSEQUENT EVENT

In January 2023, Decree No. 11,368/2023 was issued, which updated the wording of Decree 6,527/2008 and, among other measures, fully re-established the governance of the Fundo Amazônia with the reestablishment of its Steering Committee

BOARD OF DIRECTORS

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Luiz Augusto Fraga Navarro de Britto Filho

SUPERINTENDENT OF THE CONTROLLERSHIP AREA
Marco Aurelio Santos Cardoso

HEAD OF THE ACCOUNTING DEPARTMENT
Marcos Paulo Pereira da Silva
Counter - CRC-RJ-097092 / O-9

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INDEPENDENT AUDITOR'S LIMITED ASSURANCE REPORT ON THE APPLICATION OF FINANCIAL RESOURCES FOR PROJECTS SUPPORTED BY THE AMAZON FUND

BNDES – Banco Nacional de Desenvolvimento Econômico e Social

Coverage of disbursements for projects occurred between January 2022 and December 2022.

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Independent auditor's limited assurance report

To the management of
Banco Nacional do Desenvolvimento Econômico e Social ('BNDES')
Rio de Janeiro - RJ

Scope
We have been engaged by BNDES to perform a limited assurance engagement, as defined by International Standards on Assurance Engagements, here after referred to as the engagement, to report on the BNDES's destination of financial resources to the projects supported by Amazon Fund, considering its applicable standards and guidelines and the physical evidences of implementation of such projects between January 1st, 2022 and December 31st, 2022.

The Amazon Fund aims to raise donations for non-reimbursable investments in actions to prevent, monitor and combat deforestation, and to promote conservation and sustainable use of the Legal Amazon. It also supports the development of deforestation monitoring and control systems in other Brazilian biomes and in other tropical countries.

Management's Responsibilities
BNDES Management is responsible for preparing and presenting supporting information related to the services provided, in all material aspects. This responsibility includes establishing and maintaining internal controls, maintaining records and other documents such as manuals, normative, agreements, analysis and communicate any instructions or procedures about project-related topics, such that its free from material misstatement, whether due to fraud or error.

Independent auditor's responsibilities
Ernst & Young Auditores Independentes S.S is responsible to express a conclusion through a limited assurance report on the information that supports the compliance of the Amazon Fund projects, regarding the applicable standards and guidelines of the BNDES Amazon Fund based on the evidence we have obtained.

Our engagement was conducted in accordance with the Standard NBC TO 3000 – Assurance Engagement Different from Audit and Review, issued by the Brazilian Federal Accounting Council (CFC – Conselho Federal de Contabilidade) which is equivalent to the International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ('ISAE 3000'). The applicable procedures do not represent an exam according to the financial statements' audits standards.

Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

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Our Independence and Quality Control

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants and have the required competencies and experience to conduct this assurance engagement.

EY also applies International Standard on Quality Control 1, Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, our procedures were designed to obtain a limited level of assurance on which to base our conclusion. Furthermore, the rules that govern this limited assurance process require compliance with ethical requirements, including independence requirements and that the work be performed with the objective of obtaining limited assurance that the information of projects supported with resources from the Amazon Fund, are free from material misstatements.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the information related to destination of the financial resources to the projects supported by BNDES Amazon Fund and applying analytical and other appropriate procedures.

Our procedures included:

(a) Planning of the work, considering the relevance, coherence, and volume of quantitative and qualitative information, in accordance with the guidelines of the (i) Action Plan for the Prevention and Control of Deforestation in the "Legal Amazon" (PPCDAM), (ii) of the Sustainable Amazon Plan (PAS), (iii) of the National Strategy for Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Management of Forests and Increase in Forest Carbon Stock (ENREDD+) and the actions provided by the decree no. 6,527/2008.

(b) Analysis of supporting documentation prepared by BNDES related to each of the projects that received disbursements in 2022, which are: Analysis Report (Ran), Non-reimbursable financial collaboration agreement signed between BNDES and the beneficiaries, documents proving any changes in the conditions of the contracted operation and Monitoring Reports (RACs).

(c) In-loco inspection, on a sample basis, for the set of projects that received disbursements from the Amazon Fund to obtain physical evidence of their existence.

We also performed such other procedures as we considered necessary in the circumstances.

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Emphasis of matter
The procedures performed and the criteria for issuing this report include certain inherent limitations that may influence the completeness of the information regarding the objective of the report and, consequently, errors or fraud may occur not be detect.

Other Matters
The in-loco inspections performed by EY were based on the simple confirmation of the existence of the project in its location.

It was not part of the scope of this limited assurance, and it was not EY's role to (i) perform inquiries or inspections of financial documents or documents of any other nature during the visit to the projects selected for analysis or to (ii) monitor compliance by the project beneficiaries, on the obligations contracted by BNDES.

Conclusion
Based on the evidence obtained and the procedures performed, we are not aware of any fact that would lead us to believe that the procedures adopted by BNDES are not in compliance, in all material aspects, with the applicable standards and guidelines and the evidence of the destination of the financial resources to the projects supported by the Amazon Fund in 2022.

Restricted use
This report is intended for information and use by the BNDES in fulfilling its duty of transparency towards donors, control bodies and other stakeholders.

Rio de Janeiro, May 17th, 2023

ERNST & YOUNG
Auditores Independentes SS
CRC-2SP034519/O-6

Francesco Giglio Bottino

Francesco Bottino
Accountant CRC-RJ-65.261/O-3

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 Nº 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).

(Continues)

(Continued)

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).
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.
H9 – Project sustainability

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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:

- Contributes to the implementation of a public policy.
- Will have a decisive impact to solve the problem situation.
- 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: Lawful Tocantins	State of Tocantins	26,800,000.00	40,504,400.00	(13,704,400.00)
Importance of Forest Environmental Assets	State of Acre	52,930,867.68	60,000,000.00	(7,069,132.32)
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	45,591,647.24	82,378,560.00	(36,786,912.76)
CAR Roraima	State of Roraima	1,414,380.37	10,820,500.00	(9,406,191.63)
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$)
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)	23,408,189.40	24,939,200.37	(1,531,010.97)
CAR Paraná	Paraná Environmental Institute (IAP)	1,084,473.01	14,110,253.86	(13,025,780.85)
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
Prevfogo	Brazilian Institute of the Environment and Renewable Natural Resources (Ibama)	14,600,323.63	14,717,270.00	(116,946.37)
CAR Mato Grosso do Sul	Environmental Institute of the State of Mato Grosso do Sul (Imasul)	4,575,35.30	8,789,800.00	(4,214,440.70)
CAR Bahia	Institute of Environment and Hydric Resources of the State of Bahia (Inema) – State of Bahia and State Secretariat for the Environment (Sema)	2,929,870.78	31,671,000.00	(2,372,298.22)
Consolidating Territorial and Environmental Management in Indigenous Lands	Center for Indigenous Work (CTI)	11,858,546.84	11,934,540.00	(75,993.16)
"IREHI – Taking Care of Territory"	Native Amazon Operation (Opan)	8,144,618.70	8,160,140.00	(15,521.30)
Indigenous Land Management in the Rio Negro and Xingu Basin	Socioenviromental Institute (ISA)	11,685,843.13	11,712,000.00	(26,156.87)
Indigenous Territorial Management in the South of Amazonas State	International Education Institute of Brazil (IEB)	11,042,796.11	11,448,505.00	(405,708.89)
Pact for the Forest	Elaboration and Development of Socioenvironmental Projects (Pacto das Águas)	8,607,999.88	8,700,000.00	(92,000.12)
TOTAL		**573,540,793.23**	**693,966,929.11**	**(120,426,135.88)**

* 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)

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Objectives (direct effects)	1.1 Economic activities for the sustainable use of the forest and biodiversity identified and developed – "sustainable production"	1.2 Expansion of the added value of the agroforestry and biodiversity production chains – "sustainable production" component	1.3 Expansion of managerial and technical capabilities for the development of economic activities for the sustainable use of the forest and biodiversity – "sustainable production" component	1.4 Recovery of deforested and degraded areas and their use for economic purposes and ecological conservation – "sustainable production" component
	"Sustainable production" component			
How can deliveries (effectiveness) associated with each objective be measured?	Medium and large 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)			

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Objectives (direct effects)	1.1 Economic activities for the sustainable use of the forest and biodiversity identified and developed – "sustainable production"	1.2 Expansion of the added value of the agroforestry and biodiversity production chains – "sustainable production" component	1.3 Expansion of managerial and technical capabilities for the development of economic activities for the sustainable use of the forest and biodiversity – "sustainable production" component	1.4 Recovery of deforested and degraded areas and their use for economic purposes and ecological conservation – "sustainable production" component
	"Sustainable production" component			
How can 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)	

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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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)	

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Objectives (direct effects)	2.1 Monitoring, control, and environmental accountability institutions structured and modernized – "monitoring and control" component	2.2 Increased access of rural producers to environmental regularization of their properties – "monitoring and control" component
	"Monitoring and control" component	
How can the expected effects (effectiveness) of projects deliveries be measured?	Women trained in firefighting techniques for the creation of civilian fire brigades that effectively apply the acquired knowledge – women (number of individuals)	
	Heat sources – the first measurement is the average number of heat sources in the five years prior to the implementation of the project (number of heat sources)	
	Heat sources verified by Fire Brigade field operations (number of heat sources)	
	Forest fires or unauthorized 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)	

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)	

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Objectives (direct effects)	3.1 Expansion of public forests and protected areas – "land-use planning" component	3.2 Protected areas with infrastructure, territorial protection, and consolidated management – "land-use planning" component	3.3 Expansion of areas with regularized land titles – "land-use planning" component	3.4 Expansion of areas with their territorial organization established by ecological-economic zoning (EEZ)
		"Land-use planning" component		
How can deliveries (effectiveness) associated with each objective be measured?		Training in management or territorial protection of protected areas – public servants (number of individuals)	Indigenous people directly benefited by the project – land-use planning (number of individuals)	
		Training in management or territorial protection of protected areas – female public servants (number of individuals)		
		Area mapped with georeferencing for land-use planning purposes (hectares)		
		Area with completed actions to recover vegetation cover with native species – planting, enrichment, or densification (hectares)		
		Area with completed actions to recover vegetation cover with native species – management of natural regeneration (hectares)		
		Area with completed actions to recover vegetation cover – agroforestry systems (SAF) (hectares)		
		Small-sized projects supported by cooperative entities – projects up to R$ 150,000 (number of projects)		
		Medium and large 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)

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Objectives (direct effects)	3.1 Expansion of public forests and protected areas – "land-use planning" component	3.2 Protected areas with infrastructure, territorial protection, and consolidated management – "land-use planning" component	3.3 Expansion of areas with regularized land titles – "land-use planning" component	3.4 Expansion of areas with their territorial organization established by ecological-economic zoning (EEZ)
		"Land-use planning" component		
How can the expected effects (effectiveness) of projects deliveries be measured?	Area of protected areas created (hectares)	Protected areas (PA) with environmental and territorial management tool under implementation (number of PA)	Rural properties with regularized land titles (number of properties)	Area with territorial organization established 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)		

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)	

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Objectives (direct effects)	4.1 Knowledge and technologies for biodiversity conservation and sustainable use, deforestation monitoring and control, and land-use planning developed, disseminated and applied – "science, innovation, and economic instruments" component	4.2 Economic instruments for biodiversity conservation and sustainable use, deforestation monitoring and control, and land-use planning developed, disseminated and applied – "science, innovation, and economic instruments" component
	"Science, innovation, and economic instruments" component	
How can the expected effects (effectiveness) of projects deliveries be measured?	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)
		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

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The Amazon Fund.
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The world supports it.
Everyone wins.

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